J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

REGULATORY DISCLOSURE PREPARED UNDER THE BANKING (DISCLOSURE) RULES

31ST DECEMBER 2017

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED (UNAUDITED)

Regulatory capital instruments

Main features and Full terms and conditions

		Share capital
1	Issuer	J.P. Morgan Securities (Asia Pacific) Limited
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	NA
3	Governing law(s) of the instrument	Hong Kong Law
	Regulatory treatment	
4	Transitional Basel III rules	NA
5	Post-transitional Basel III rules	Common Equity Tier 1 capital
6	Eligible at solo/group/group & solo	Solo
7	Instrument type (types to be specified by each jurisdiction)	Ordinary shares
8	Amount recognized in regulatory capital (as of most recent reporting date)	US$527,000,000
9	Par value of instrument	NA
10	Accounting classification	Shareholders' equity
11	Original date of issuance	Shares were issued in the following years: 1987, 2001, 2002, 2008, 2017
12	Perpetual or dated	Perpetual
13	Original maturity date	No maturity
14	Issuer call subject to prior supervisory approval	No
15	Optional call date, contingent call dates and redemption amount	NA
16	Subsequent call dates, if applicable	NA

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Regulatory capital instruments

Main features and Full terms and conditions (continued)

	Coupons / dividends	
17	Fixed or floating dividend/coupon	Floating
18	Coupon rate and any related index	NA
19	Existence of a dividend stopper	No
20	Fully discretionary, partially discretionary or mandatory	Fully discretionary
21	Existence of step up or other incentive to redeem	No
22	Noncumulative or cumulative	Noncumulative
23	Convertible or non-convertible	Non-convertible
24	If convertible, conversion trigger (s)	NA
25	If convertible, fully or partially	NA
26	If convertible, conversion rate	NA
27	If convertible, mandatory or optional conversion	NA
28	If convertible, specify instrument type convertible into	NA
29	If convertible, specify issuer of instrument it converts into	NA
30	Write-down feature	No
31	If write-down, write-down trigger(s)	NA
32	If write-down, full or partial	NA
33	If write-down, permanent or temporary	NA
34	If temporary write-down, description of write-up mechanism	NA
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	NA
36	Non-compliant transitioned features	No
37	If yes, specify non-compliant features	NA

On 28th February 2017, 9,687,500 ordinary shares have been issued with total value of US$125,000,000 which were converted from subordinated loan notes.

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CAPITAL DISCLOSURE TEMPLATE

Capital base of the Company as at 31st December 2017 is shown below (expressed in US$'000 unless otherwise stated).

	CET1 capital: instruments and reserves		**Reference to Balance Sheet reconciliation**
1	Directly issued qualifying CET1 capital instruments plus any related share premium	527,000	(2)
2	Retained earnings	324,619	(3)
3	Disclosed reserves	67,959	(4)
4	Directly issued capital subject to phase out from CET1 capital (only applicable to non-joint stock companies)	NA	
5	Minority interests arising from CET1 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in CET1 capital of the consolidation group)	NA	
6	**CET1 capital before regulatory deductions**	919,578	
	CET1 capital: regulatory deductions		
7	Valuation adjustments	NA	
8	Goodwill (net of associated deferred tax liability)	NA	
9	Other intangible assets (net of associated deferred tax liability)	NA	
10	Deferred tax assets net of deferred tax liabilities	16,393	(1)
11	Cash flow hedge reserve	NA	
12	Excess of total EL amount over total eligible provisions under the IRB approach	NA	
13	Gain-on-sale arising from securitization transactions	NA	
14	Gains and losses due to changes in own credit risk on fair valued liabilities	NA	
15	Defined benefit pension fund net assets (net of associated deferred tax liabilities)	NA	
16	Investments in own CET1 capital instruments (if not already netted off paid-in capital on reported balance sheet)	NA	
17	Reciprocal cross-holdings in CET1 capital instruments	NA	

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CAPITAL DISCLOSURE TEMPLATE (continued)

	CET1 capital: regulatory deductions		**Reference to Balance Sheet reconciliation**
18	Insignificant capital investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	NA	
19	Significant capital investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	NA	
20	Mortgage servicing rights (amount above 10% threshold)	NA	
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability)	NA	
22	Amount exceeding the 15% threshold	NA	
23	of which: significant investments in the common stock of financial sector entities	NA	
24	of which: mortgage servicing rights	NA	
25	of which: deferred tax assets arising from temporary differences	NA	
26	National specific regulatory adjustments applied to CET1 capital	NA	
26a	Cumulative fair value gains arising from the revaluation of land and buildings (own-use and investment properties)	NA	
26b	Regulatory reserve for general banking risks	NA	
26c	Securitization exposures specified in a notice given by the Monetary Authority	NA	
26d	Cumulative losses below depreciated cost arising from the institution's holdings of land and buildings	NA	
26e	Capital shortfall of regulated non-bank subsidiaries	NA	
26f	Capital investment in a connected company which is a commercial entity (amount above 15% of the reporting institution's capital base)	NA	
27	Regulatory deductions applied to CET1 capital due to insufficient AT1 capital and Tier 2 capital to cover deductions	NA	
28	**Total regulatory deductions to CET1 capital**	16,393	
29	**CET1 capital**	903,185	

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CAPITAL DISCLOSURE TEMPLATE (continued)

	AT1 capital: instruments		**Reference to Balance Sheet reconciliation**
30	Qualifying AT1 capital instruments plus any related share premium	NA	
31	of which: classified as equity under applicable accounting standards	NA	
32	of which: classified as liabilities under applicable accounting standards	NA	
33	*Capital instruments subject to phase out arrangements from AT1 capital*	NA	
34	AT1 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in AT1 capital of the consolidation group)	NA	
35	of which: AT1 capital instruments issued by subsidiaries subject to phase out arrangements	NA	
36	**AT1 capital before regulatory deductions**	NA	
	AT1 capital: regulatory deductions		
37	Investments in own AT1 capital instruments	NA	
38	Reciprocal cross-holdings in AT1 capital instruments	NA	
39	Insignificant capital investments in AT1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	NA	
40	Significant capital investments in AT1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	NA	
41	National specific regulatory adjustments applied to AT1 capital	NA	
42	Regulatory deductions applied to AT1 capital due to insufficient Tier 2 capital to cover deductions	NA	
43	**Total regulatory deductions to AT1 capital**	NA	
44	**AT1 capital**	NA	
45	**Tier 1 capital (Tier 1 = CET1 + AT1)**	903,185	

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CAPITAL DISCLOSURE TEMPLATE (continued)

	Tier 2 capital: instruments and provisions		**Reference to Balance Sheet reconciliation**
46	Qualifying Tier 2 capital instruments plus any related share premium	NA	
47	Capital instruments subject to phase out arrangements from Tier 2 capital	NA	
48	Tier 2 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in Tier 2 capital of the consolidation group)	NA	
49	of which: capital instruments issued by subsidiaries subject to phase out arrangements	NA	
50	Collective impairment allowances and regulatory reserve for general banking risks eligible for inclusion in Tier 2 capital	NA	
51	**Tier 2 capital before regulatory deductions**	NA	
	Tier 2 capital: regulatory deductions		
52	Investments in own Tier 2 capital instruments	NA	
53	Reciprocal cross-holdings in Tier 2 capital instruments	NA	
54	Insignificant capital investments in Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	NA	
55	Significant capital investments in Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	NA	
56	National specific regulatory adjustments applied to Tier 2 capital	NA	
56a	Add back of cumulative fair value gains arising from the revaluation of land and buildings (own-use and investment properties) eligible for inclusion in Tier 2 capital	NA	
57	**Total regulatory deductions to Tier 2 capital**	NA	
58	**Tier 2 capital**	NA	
59	**Total capital (Total capital = Tier 1 + Tier 2)**	903,185	
60	**Total risk weighted assets**	2,225,991	

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CAPITAL DISCLOSURE TEMPLATE (continued)

Capital ratios (as a percentage of risk weighted assets)		
61	CET1 capital ratio	40.3%
62	Tier 1 capital ratio	40.3%
63	Total capital ratio	40.3%
64	Institution specific buffer requirement (minimum CET1 capital requirement as specified in s.3B of the BCR plus capital conservation buffer plus countercyclical buffer requirements plus G-SIB or D-SIB requirements)	5.829%
65	of which: capital conservation buffer requirement	1.25%
66	of which: bank specific countercyclical buffer requirement	0.079%
67	of which: G-SIB or D-SIB buffer requirement	NA
68	CET1 capital surplus over the minimum CET1 requirement and any CET1 capital used to meet the Tier 1 and Total capital requirement under s.3B of the BCR	32.3%
National minima (if different from Basel 3 minimum)		
69	National CET1 minimum ratio	NA
70	National Tier 1 minimum ratio	NA
71	National Total capital minimum ratio	NA
Amounts below the thresholds for deduction (before risk weighting)		
72	Insignificant capital investments in CET1 capital instruments, AT1 capital instruments and Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	NA
73	Significant capital investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	NA
74	Mortgage servicing rights (net of related tax liability)	NA
75	Deferred tax assets arising from temporary differences (net of related tax liability)	NA

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CAPITAL DISCLOSURE TEMPLATE (continued)

Applicable caps on the inclusion of provisions in Tier 2 capital		
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to the basic approach and the standardized (credit risk) approach (prior to application of cap)	NA
77	Cap on inclusion of provisions in Tier 2 under the basic approach and the standardized (credit risk) approach	NA
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to the IRB approach (prior to application of cap)	NA
79	Cap for inclusion of provisions in Tier 2 under the IRB approach	NA
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2018 and 1 Jan 2022)		
80	Current cap on CET1 capital instruments subject to phase out arrangements	NA
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	NA
82	Current cap on AT1 capital instruments subject to phase out arrangements	NA
83	Amount excluded from AT1 capital due to cap (excess over cap after redemptions and maturities)	NA
84	Current cap on Tier 2 capital instruments subject to phase out arrangements	NA
85	Amount excluded from Tier 2 capital due to cap (excess over cap after redemptions and maturities)	NA

CAPITAL DISCLOSURE TEMPLATE (continued)

Notes to the template:

Elements where a more conservative definition has been applied in the BCR relative to that set out in Basel III capital standards:

<table>
<tr><th>Row no.</th><th>Description</th><th>Hong Kong basis</th><th>Basel III basis</th></tr>
<tr><td rowspan="2">10</td><td>Deferred tax assets net of deferred tax liabilities</td><td>16,393</td><td>-</td></tr>
<tr><td colspan="3"><u>Explanation</u>
As set out in paragraphs 69 and 87 of the Basel III text issued by the Basel Committee (December 2010), DTAs that rely on future profitability of the bank to be realized are to be deducted, whereas DTAs which relate to temporary differences may be given limited recognition in CET1 capital (and hence be excluded from deduction from CET1 capital up to the specified threshold). In Hong Kong, an AI is required to deduct all DTAs in full, irrespective of their origin, from CET1 capital. Therefore, the amount to be deducted as reported in row 10 may be greater than that required under Basel III.

The amount reported under the column "Basel III basis" in this box represents the amount reported in row 10 (i.e. the amount reported under the "Hong Kong basis") adjusted by reducing the amount of DTAs to be deducted which relate to temporary differences to the extent not in excess of the 10% threshold set for DTAs arising from temporary differences and the aggregate 15% threshold set for MSRs, DTAs arising from temporary differences and significant investments in CET1 capital instruments issued by financial sector entities (excluding those that are loans, facilities and other credit exposures to connected companies) under Basel III.</td></tr>
<tr><td colspan="4">Remarks:

The amount of the 10% / 15% thresholds mentioned above is calculated based on the amount of CET1 capital determined under the Banking (Capital) Rules.</td></tr>
</table>

Abbreviations:

CET1: Common Equity Tier 1
AT1: Additional Tier 1

CAPITAL DISCLOSURE TEMPLATE (continued)

Reconciliation of regulatory capital showing in capital disclosure template to balance sheet is disclosed as follows:

Balance Sheet Reconciliation

	Balance sheet as in financial statements As at 31st December 2017 US$'000	Under regulatory scope As at 31st December 2017 US$'000	Reference to capital disclosure template
ASSETS			
Balances with banks	1,283,233	1,283,233	
Financial assets at fair value through profit or loss	30,447	30,447	
Deferred tax assets	16,393	16,393	(1)
Other assets	175,275	175,275	
Fixed assets	1,688	1,688	
Total assets	1,507,036	1,507,036	
EQUITY			
Share capital	527,000	527,000	(2)
Reserves	392,578	392,578	
of which: retained earnings	-	*324,619*	(3)
disclosed reserves	-	*67,959*	(4)
Total equity	919,578	919,578	
LIABILITIES			
Deposits and balances from banks	283,752	283,752	
Trading liabilities	3,469	3,469	
Other liabilities	293,968	293,968	
Taxation payable	6,269	6,269	
Total liabilities	587,458	587,458	
Total equity and liabilities	1,507,036	1,507,036	

LEVERAGE RATIO SUMMARY COMPARISON TABLE

Leverage ratio of the Company as at 31st December 2017 is shown below (expressed in US$'000 unless otherwise stated).

	Item	Leverage ratio framework
1	Total assets as per published financial statements	1,507,036
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	-
3	Adjustment for fiduciary assets recognised on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure	-
4	Adjustments for derivative financial instruments	7
5	Adjustment for securities financing transactions (i.e. repos and similar secured lending)	-
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	-
7	Other adjustments	(16,393)
8	**Leverage ratio exposure**	1,490,650

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LEVERAGE RATIO COMMON DISCLOSURE TEMPLATE

	Item	Leverage ratio framework
	On-balance sheet exposures	
1	On-balance sheet items (excluding derivatives and SFTs, but including collateral)	1,507,036
2	Less: Asset amounts deducted in determining Basel III Tier 1 capital (reported as negative amounts)	(16,393)
3	Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 and 2)	1,490,643
	Derivative exposures	
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	-
5	Add-on amounts for PFE associated with all derivatives transactions	7
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the operative accounting framework	-
7	Less: Deductions of receivables assets for cash variation margin provided in derivatives transactions (reported as negative amounts)	-
8	Less: Exempted CCP leg of client-cleared trade exposures (reported as negative amounts)	-
9	Adjusted effective notional amount of written credit derivatives	-
10	Less: Adjusted effective notional offsets and add-on deductions for written credit derivatives (reported as negative amounts)	-
11	Total derivative exposures (sum of lines 4 to 10)	7

LEVERAGE RATIO COMMON DISCLOSURE TEMPLATE (continued)

Securities financing transaction exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	-
13	Less: Netted amounts of cash payables and cash receivables of gross SFT assets (reported as negative amounts)	-
14	CCR exposure for SFT assets	-
15	Agent transaction exposures	-
16	Total securities financing transaction exposures (sum of lines 12 to 15)	-
Other off-balance sheet exposures		
17	Off-balance sheet exposure at gross notional amount	-
18	Less: Adjustments for conversion to credit equivalent amounts (reported as negative amounts)	-
19	Off-balance sheet items (sum of lines 17 and 18)	-
Capital and total exposures		
20	Tier 1 capital	903,185
21	Total exposures (sum of lines 3, 11, 16 and 19)	1,490,650
Leverage ratio		
22	**Basel III leverage ratio**	**60.1%**

As of 31st December 2016, the leverage ratio was 49.1%. The net Tier 1 capital amounted to USD663,035,000 and the total adjusted on- and off-balance sheet assets amounted to USD1,349,882,000.

The leverage ratio increased by 11%. This is mainly driven by increase in Tier 1 capital for USD240,150,000, in which USD125,000,000 from conversion of Tier 2 capital to Tier 1 capital on 28th February 2017 and remaining from profits made in 2017.

COUNTERCYCLICAL CAPTIAL BUFFER (CCyB) RATIO STANDARD DISCLOSURE TEMPLATE

Geographical breakdown of risk-weighted amounts (RWA) in relation to private sector credit exposures (expressed in US$'000 unless otherwise stated).

		As at 31st December 2017			
	Jurisdiction (J)	Applicable JCCyB ratio in effect	Total RWA used in computation of CCyB ratio of AI	CCyB ratio of AI	CCyB amount of AI
1	Hong Kong	1.25%	4,319		
2	Australia	0%	448		
3	India	0%	840		
4	Japan	0%	775		
5	Korea	0%	1,940		
6	Malaysia	0%	163		
7	Netherlands	0%	1,662		
8	New Zealand	0%	5		
9	Singapore	0%	3,332		
10	Taiwan	0%	1,541		
11	Thailand	0%	2		
12	United Kingdom	0%	11,025		
13	United States	0%	42,390		
	Total		68,442	0.079%	54

1 Overview of risk management

As part of overall corporate governance, risk management mechanisms have been established at different levels throughout JPMorgan Chase & Co. (the “Group” or the “Firm”). These mechanisms define authority levels, oversight responsibilities, policy structures and risk appetite parameters and tolerances to manage the risks that arise in connection with the business activities. On a day-to-day basis, business units have primary responsibility for managing specific risk exposures. This is supplemented by active management involvement, effective internal controls and audits performed by the Internal Audit Department.

At Company level, the Board of Directors have delegated daily management and oversight of various risks to the Hong Kong Risk/ Asset and Liability Management Committee (“HKRALCO”) and the Hong Kong Location Operating Committee (“HKLOC”), which regularly review and report to the Board of Directors as appropriate on matters related to the Company.

The HKRALCO consists of representatives of various lines of business, risk, treasury, finance, country governance, compliance and other relevant functions. The HKRALCO meets on at least a monthly basis to discuss risk related topics such as liquidity and funding strategy, any stress test results, risk management monitoring and capital and interest rate risk in the banking book. The HKRALCO provides oversight of the risk identified in market risk, credit risk, liquidity risk and interest rate risk and risk governance frameworks for operational risk, compliance and fiduciary risk. Other risks including reputation risk is managed by Asia Pacific Risk Committee and strategic risk is managed by the Board of Directors.

The HKLOC is responsible for the oversight and control of operating risk within the location. HKLOC meetings are held on a monthly basis to review all operating risk matters. The respective operation area managers are responsible to escalate to their line regional managers and the Hong Kong Senior Country Business Manager. In case of a reportable operational risk event, businesses operating in J.P. Morgan Securities (Asia Pacific) Limited (“JPMSAPL”) are responsible for filing and error report for input into the Firm’s risk event database.

New initiatives are governed by the New Business Initiative Approval (“NBIA”) framework, a global business driven risk review and approval process. It is implemented in accordance with the Global Investment Banking NBIA policy. The aim of the policy and process is to identify, evaluate and manage the risks associated with the introduction of new, expanded or changed products, services, or related activities provided to clients or customers, or executed with trading counterparties.

Leveraging on the infrastructure setup of the Group and various management committees operating in Hong Kong, the Board of Directors monitors various risks inherent to the businesses conducted by the Company on a regular basis.

All decision making made by JPMSAPL’s senior management is within the governance framework laid down in the form of various committees, which are responsible to ensure adherence to various risk policies such as market risk management policy, interest rate risk policy, liquidity risk oversight policy, stress testing policy, and etc.

Stress testing is an integral part of the Group’s risk management. The Group regularly performs stress-tests on the principal risks where appropriate.

Liquidity stress tests are intended to ensure sufficient liquidity for JPMSAPL under a variety of adverse scenarios. Results of stress tests are therefore considered in the formulation of JPMSAPL’s funding plan assessment of its liquidity position. Liquidity outflow assumptions are modelled across a range of time horizons and contemplate both market and idiosyncratic stress. Standard stress tests are performed on a regular basis and ad hoc stress tests are performed in response to specific market events or concerns.

1 Overview of risk management (continued)

Liquidity stress tests assume JPMSAPL's contractual obligations are met and then take into consideration varying levels of access to unsecured and secured funding markets. Additionally, assumptions with respect to potential non-contractual and contingent outflows are contemplated.

Stress testing is important in measuring and managing credit risk in the Firm's credit portfolio. The process assesses the potential impact of alternative economic and business scenarios on estimated credit losses for the Firm. Economic scenarios and the underlying parameters are defined centrally, articulated in terms of macroeconomic factors, and applied across the businesses. The stress test results may indicate credit migration, changes in delinquency trends and potential losses in the credit portfolio. In addition to the periodic stress testing processes, management also considers additional stresses outside these scenarios, including industry and country-specific stress scenarios, as necessary. The Firm uses stress testing to inform decisions on setting risk appetite both at a Firm and LOB level, as well as to assess the impact of stress on industry concentrations.

The Group 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. The features of the credit, liquidity, market and operational risk management systems are as follows:

Credit risk measurement

The Credit Risk Management function measures, limits, manages and monitors credit risk across our businesses. To measure credit risk, the Group employs several methodologies for estimating the likelihood of obligor or counterparty default. Methodologies for measuring credit risk vary depending on several factors, including type of asset (e.g., consumer versus wholesale), risk measurement parameters (e.g., delinquency status and borrower's credit score versus wholesale risk-rating) and risk management and collection processes (e.g., retail collection center versus centrally managed workout groups). Credit risk measurement is based on the probability of default of an obligor or counterparty, the loss severity given a default event and the exposure at default.

The Group 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 line of businesses.

1 Overview of risk management (continued)

Liquidity risk measurement

The Firm has an independent liquidity risk oversight function whose primary objective is to provide assessment, measurement, monitoring, and control of liquidity risk across the Firm including JPMSAPL. Liquidity risk oversight is managed through a dedicated Firmwide Liquidity Risk Oversight group, reporting into the Chief Investment Office ("CIO"), Treasury and Corporate Chief Risk Officer. Liquidity Risk Oversight's responsibilities include but are not limited to:

- Establishing and monitoring limits and indicators;
- Defining, monitoring and reporting internal firmwide and legal entity stress tests and regulatory defined stress testing;
- Approving or escalating for review new or updated liquidity stress assumptions;
- Defining, monitoring, and reporting liquidity risk metrics that provide insight and control into liquidity risk activities;
- Reporting and monitoring liquidity positions, balance sheet variances and funding activities; and
- Conducting ad hoc analysis to identify potential emerging liquidity risks.

Market risk measurement

Because no single measure can reflect all aspects of market risk, the Group uses various metrics, both statistical and non-statistical, including:

(i) Non-statistical risk measures

Non-statistical measures other than stress testing include net open positions, basis point values, option sensitivities, market values, position concentrations and position turnover. These measures provide granular information on the Group's market risk exposure. They are aggregated by line of business and by risk type, and are used for monitoring limits, one-off approvals and tactical control.

(ii) Statistical risk measures - Value-At-Risk ("VAR")

The Group's primary statistical risk measure, VAR, estimates the potential loss from adverse market moves in an ordinary market environment and provides a consistent cross-business measure of risk profiles and levels of diversification. VAR is used for comparing risks across businesses, monitoring limits, and as an input to economic capital calculations. VAR provides risk transparency in a normal trading environment.

To calculate VAR, the Group uses historical simulation, which measures risk across instruments and portfolios in a consistent and comparable way. This approach assumes that historical changes in market values are representative of future changes. The simulation is based upon data for the previous twelve months.

1 Overview of risk management (continued)

Operational risk measurement

In addition to the level of actual operational risk losses, operational risk measurement includes operational risk based capital and operational risk losses under both baseline and stressed conditions. 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. As required under the Basel III capital framework, the Firm's operational risk-based capital methodology, which uses the Advanced Measurement Approach, 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 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 Review ("CCAR") and Internal Capital Adequacy Assessment Process ("ICAAP") processes.

2 Overview of RWA

Overview of RWA disclosures as required by section 16C of the Banking (Disclosure) Rules (expressed in US$'000 unless otherwise stated).

		RWA		Minimum capital requirements
		31st December 2017	30th September 2017	31st December 2017
1	Credit risk for non-securitization exposures	536,342	551,301	42,907
2	Of which STC approach	536,342	551,301	42,907
2a	Of which BSC approach	-	-	-
3	Of which IRB approach	-	-	-
4	Counterparty credit risk	1	3	-
5	Of which SA-CCR	-	-	-
5a	Of which CEM	1	3	-
6	Of which IMM(CCR) approach	-	-	-
7	Equity exposures in banking book under the market-based approach	-	-	-
8	CIS exposures – LTA	-	-	-
9	CIS exposures – MBA	-	-	-
10	CIS exposures – FBA	-	-	-
11	Settlement risk	-	-	-
12	Securitization exposures in banking book	-	-	-
13	Of which IRB(S) approach – ratings-based method	-	-	-
14	Of which IRB(S) approach – supervisory formula method	-	-	-
15	Of which STC(S) approach	-	-	-
16	Market risk	28,172	15,010	2,254
17	Of which STM approach	28,172	15,010	2,254
18	Of which IMM approach	-	-	-
19	Operational risk	1,661,476	1,616,448	132,918
20	Of which BIA approach	1,661,476	1,616,448	132,918
21	Of which STO approach	-	-	-
21a	Of which ASA approach	-	-	-
22	Of which AMA approach	N/A	N/A	N/A
23	Amounts below the thresholds for deduction (subject to 250% RW)	-	-	-
24	Capital floor adjustment	-	-	-
24a	Deduction to RWA	-	-	-
24b	Of which portion of regulatory reserve for general banking risks and collective provisions which is not included in Tier 2 Capital	-	-	-
24c	Of which portion of cumulative fair value gains arising from the revaluation of land and buildings which is not included in Tier 2 Capital	-	-	-
25	Total	2,225,991	2,182,762	178,079
N/A: Not applicable in the case of Hong Kong				

3 Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories

Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories as required by section 16D of the Banking (Disclosure) Rules (expressed in US$'000 unless otherwise stated).

	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Carrying values of items:				
			subject to credit risk framework	subject to counterparty credit risk framework	subject to the securitization framework	subject to market risk framework	not subject to capital requirements or subject to deduction from capital
Assets							
Balances with banks	1,283,233	1,283,233	1,283,233	-	-	-	-
Financial assets at fair value through profit or loss	30,447	30,447	-	-	-	30,447	-
Deferred tax assets	16,393	16,393	-	-	-	-	16,393
Other assets	175,275	175,275	173,925	-	-	186	1,164
Fixed assets	1,688	1,738	1,738	-	-	-	-
Total assets	**1,507,036**	**1,507,086**	**1,458,896**	**-**	**-**	**30,633**	**17,557**
Liabilities							
Deposits and balances from banks	283,752	283,752	-	-	-	-	283,752
Trading liabilities	3,469	3,469	-	-	-	3,469	-
Other liabilities	293,968	293,968	-	-	-	21	293,947
Taxation payable	6,269	6,269	-	-	-	-	6,269
Total liabilities	**587,458**	**587,458**	**-**	**-**	**-**	**3,490**	**583,968**

The difference between carrying values as reported in published financial statements and scope of regulatory consolidation is driven by historical audit adjustment which accounts for 0.003% of total assets and considered not material.

4 Main sources of differences between regulatory exposure amounts and carrying values in financial statements

Main sources of differences between regulatory exposure amounts and carrying values in financial statements as required by section 16E of the Banking (Disclosure) Rules (expressed in US$'000 unless otherwise stated).

		Total	Items subject to:			
			credit risk framework	securitization framework	counterparty credit risk framework	market risk framework
1	**Asset carrying value amount under scope of regulatory consolidation**	1,489,529	1,458,896	-	-	30,633
2	Liabilities carrying value amount under regulatory scope of consolidation	3,490	-	-	-	3,490
3	Total net amount under regulatory scope of consolidation	1,486,039	1,458,896	-	-	27,143
4	Off-balance sheet amounts	7	7	-	7	-
5	*Differences due to non-positive current exposure*	(1,730)	(1,730)	-	-	-
6	*Differences due to consideration of provisions*	573	573	-	-	-
7	**Exposure amounts considered for regulatory purposes**	**1,484,889**	**1,457,746**	**-**	**7**	**27,143**

The difference between accounting and regulatory exposure amounts is due to non-positive current exposures included in carrying value of assets, whereas only positive current exposures is included in the calculation of regulatory exposure amount under Banking (Capital) Rules.

5 General information about credit risk

Credit risk is the risk of loss arising from the default of a customer, client or counterparty. The Group provides credit to a variety of customers, ranging from large corporate and institutional clients to individual consumers and small businesses. In its wholesale businesses, the Group 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), securities financing activities, investment securities portfolio, and cash placed with banks.

Credit risk management framework of the Company

Credit risk management is an independent risk management function that monitors and measures credit risk throughout the Firm and defines credit risk policies and procedures. The credit risk management function is overseen in Hong Kong by the Hong Kong Chief Risk Officer who is co-chairman of the HKRALCO. Reporting to the Chief Risk Officer are Credit Officers who are responsible for analyzing and managing the credit risk associated with specific portfolios of clients, negotiating credit documentation and assisting in the execution of transactions.

5 General information about credit risk (continued)

Credit risk organization

The Group's credit risk management governance includes the following activities: (i) establishing a comprehensive credit risk policy framework; (ii) monitoring and managing credit risk across all portfolio segments, including transaction and exposure approval; (iii) setting industry concentration limits and establishing underwriting guidelines, (iv) assigning and managing credit authorities in connection with the approval of all credit exposure; (v) managing criticized exposures and delinquent loans; and (vi) estimating credit losses and ensuring appropriate credit risk-based capital management.

Risk identification and measurement

The Credit Risk Management function measures, limits, manages and monitors credit risk across our businesses. To measure credit risk, the Group employs several methodologies for estimating the likelihood of obligor or counterparty default. Methodologies for measuring credit risk vary depending on several factors, including type of asset (e.g., consumer versus wholesale), risk measurement parameters (e.g., delinquency status and borrower's credit score versus wholesale risk-rating) and risk management and collection processes (e.g., retail collection center versus centrally managed workout groups). Credit risk measurement is based on the probability of default of an obligor or counterparty, the loss severity given a default event and the exposure at default.

Risk monitoring and management

The Group 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 line of businesses.

Risk reporting

To enable monitoring of credit risk and effective decision making, aggregate credit exposure, 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 geographic concentrations occurs monthly, 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 Board of Directors as appropriate.

6 Credit quality of exposures

Credit quality of exposures as required by section 16H of the Banking (Disclosure) Rules (expressed in US$'000 unless otherwise stated).

	Gross carrying amounts of		Allowances / impairments	Net values
	Defaulted exposures	Non-defaulted exposures		
Loan	-	-	-	-
Debt Securities	-	29,648	-	29,648
Off-balance sheet exposures	-	675	-	675
Total	-	30,323	-	30,323

7 Changes in defaulted loans and debt securities

Changes in defaulted loans and debt securities as required by section 16I of the Banking (Disclosure) Rules (expressed in US$'000 unless otherwise stated).

	Amount
Defaulted loans and debt securities at end of the previous reporting period	**-**
Loans and debt securities that have defaulted since the last reporting period	-
Returned to non-defaulted status	-
Amounts written off	-
Other changes	-
Defaulted loans and debt securities at end of the current reporting period	**-**

8 Additional disclosure related to credit quality of exposures

The Company classifies the debt securities as fair value through profit or loss ("FVTPL") in accordance to applicable accounting standards and the Company's accounting policies.

Financial assets measured at FVTPL is measured at fair market value. The fair values of quoted investments in active markets are based on current bid prices. If there is no active market for a financial asset, the Company establishes fair value by using valuation techniques. These include the use of recent arm's length transactions, discounted cash flow analysis and option pricing models, and other valuation techniques commonly used by market participants. Financial assets measured at FVTPL does not have past due or impaired exposure.

For determining impairments, the Company assesses at the end of each reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is impaired and impairment losses are incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a "loss event") and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.

8 Additional disclosure related to credit quality of exposures (continued)

The Company first assesses whether objective evidence of impairment exists individually for financial assets that are individually significant, and individually or collectively for financial assets that are not individually significant. If the Company determines that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment. Assets that are individually assessed for impairment and for which an impairment loss is or continues to be recognized are not included in a collective assessment of impairment.

Restructured exposure means the original terms of repayment of the exposure have been revised because of the inability of the obligor to meet the original repayment terms. It does not include an exposure where the exposure has subsequently been serviced by the obligor in accordance with the revised repayment terms continuously for (i) in the case of an exposure with monthly payments (including both interest and principal), a period of not less than 6 months; or (ii) in any other case, a period of not less than 12 months.

There were no exposures which are past due for more than 90 days but are not impaired.

There were no impaired exposures, accounting past due exposures and restructured exposures as at 31st December 2017.

a. Breakdown by geographical areas

	In US$'000 Amount
Hong Kong	8,311
Asia Pacific excluding Hong Kong	21,991
Europe	21
Total	**30,323**

b. Breakdown by industry

	In US$'000 Amount
Government	29,648
Financial institutions	675
Total	**30,323**

c. Breakdown by residual maturity

	In US$'000 Amount
Up to 3 months	17,250
Over 3 months - 1 year	3,211
Over 1 year - 5 years	3,967
Over 5 years	5,895
Total	**30,323**

9 Qualitative disclosures related to credit risk mitigation

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 Company has also entered into arrangements that do not meet the criteria for offsetting but still allow for the related amounts to be set off in certain circumstances, such as bankruptcy or the termination of a contract.

Management of the Firm's wholesale credit risk exposure is accomplished through a number of means, including collateral and other risk-reduction techniques. There was no credit risk mitigation used by the Company.

10 Overview of recognized credit risk mitigation

Overview of recognized credit risk mitigation as required by section 16L of the Banking (Disclosure) Rules (expressed in US$'000 unless otherwise stated).

		Exposures unsecured: carrying amount	Exposures to be secured	Exposures secured by recognized collateral	Exposures secured by recognized guarantees	Exposures secured by recognized credit derivative contracts
1	Loans	-	-	-	-	-
2	Debt securities	29,648	-	-	-	-
3	**Total**	29,648	-	-	-	-
4	Of which defaulted	-	-	-	-	-

11 Qualitative disclosures on use of ECAI ratings under STC approach

Standard & Poor's Ratings Services, Moody's Investors Service and Fitch Ratings are the external credit assessment institutions ("ECAIs") that the Company has used to determine the risk weights of the exposures from banks, securities firms and other corporates.

The process it used to map ECAI issuer ratings to exposures booked in its banking book is a process as prescribed in Part 4 of the Banking (Capital) Rules.

12 Credit risk exposures and effects of recognized credit risk mitigation – for STC approach

Credit risk exposures and effects of recognized credit risk mitigation – for STC approach as required by section 16N of the Banking (Disclosure) Rules (expressed in US$'000 unless otherwise stated).

		Exposures pre-CCF and pre-CRM		**Exposures post-CCF and post-CRM**		**RWA and RWA density**	
	Exposure classes	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density
1	Sovereign exposures	-	-	-	-	-	-
2	PSE exposures	-	-	-	-	-	-
2a	Of which: domestic PSEs	-	-	-	-	-	-
2b	Of which: foreign PSEs	-	-	-	-	-	-
3	Multilateral development bank exposures	-	-	-	-	-	-
4	Bank exposures	1,340,567	675	1,340,567	7	433,317	32.3%
5	Securities firm exposures	28,291	-	28,291	-	14,145	50.0%
6	Corporate exposures	53,498	-	53,498	-	53,498	100.0%
7	CIS exposures	-	-	-	-	-	-
8	Cash items	8	-	8	-	7	87.5%
9	Exposures in respect of failed delivery on transactions entered into on a basis other than a delivery-versus-payment basis	-	-	-	-	-	-
10	Regulatory retail exposures	-	-	-	-	-	-
11	Residential mortgage loans	-	-	-	-	-	-
12	Other exposures which are not past due exposures	35,375	-	35,375	-	35,375	100.0%
13	Past due exposures	-	-	-	-	-	-
14	Significant exposures to commercial entities	-	-	-	-	-	-
15	**Total**	**1,457,739**	**675**	**1,457,739**	**7**	**536,342**	**36.8%**

13 Credit risk exposures by asset classes and by risk weights – for STC approach

Credit risk exposures by asset classes and by risk weights – for STC approach as required by section 16O of the Banking (Disclosure) Rules (expressed in US$'000 unless otherwise stated).

Exposure class \ Risk Weight	0%	10%	20%	35%	50%	75%	100%	150%	250%	Others	Total credit risk exposures amount (post CCF and post CRM)
Sovereign exposures	-	-	-	-	-	-	-	-	-	-	-
PSE exposures	-	-	-	-	-	-	-	-	-	-	-
Of which: domestic PSEs	-	-	-	-	-	-	-	-	-	-	-
Of which: foreign PSEs	-	-	-	-	-	-	-	-	-	-	-
Multilateral development bank exposures	-	-	-	-	-	-	-	-	-	-	-
Bank exposures	-	-	789,901	-	550,673	-	-	-	-	-	1,340,574
Securities firm exposures	-	-	-	-	28,291	-	-	-	-	-	28,291
Corporate exposures	-	-	-	-	-	-	53,498	-	-	-	53,498
CIS exposures	-	-	-	-	-	-	-	-	-	-	-
Cash items	1	-	-	-	-	-	7	-	-	-	8
Exposures in respect of failed delivery on transactions entered into on a basis other than a delivery-versus-payment basis	-	-	-	-	-	-	-	-	-	-	-
Regulatory retail exposures	-	-	-	-	-	-	-	-	-	-	-
Residential mortgage loans	-	-	-	-	-	-	-	-	-	-	-
Other exposures which are not past due exposures	-	-	-	-	-	-	35,375	-	-	-	35,375
Past due exposures	-	-	-	-	-	-	-	-	-	-	-
Significant exposures to commercial entities	-	-	-	-	-	-	-	-	-	-	-
Total	**1**	**-**	**789,901**	**-**	**578,964**	**-**	**88,880**	**-**	**-**	**-**	**1,457,746**

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

The Company has adopted the Current Exposure Method for regulatory capital calculation of its counterparty credit risk ("CCR") arising from its exposure in the banking and trading book.

The Group 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 line of businesses.

As at 31st December 2017, no recognised credit derivative contract is applied as credit risk mitigation and no valid bilateral netting agreement is taken into account in the calculation of regulatory capital. The Company does not use guarantees and other forms of credit risk mitigation.

Wrong-way risk - the risk that exposure to a counterparty is positively correlated with the impact of a default by the same counterparty, which could cause exposure to increase at the same time as the counterparty's capacity to meet its obligations is decreasing – is actively monitored as this risk could result in greater exposure at default compared with a transaction with another counterparty that does not have this risk.

15 Analysis of counterparty default risk exposures (other than those to CCPs) by approaches

Analysis of counterparty default risk exposures (other than those to CCPs) by approaches as required by section 16W of the Banking (Disclosure) Rules (expressed in US$'000 unless otherwise stated).

		Replacement cost (RC)	PFE	Effective EPE	Alpha (α) used for computing default risk exposure	Default risk exposure after CRM	RWA
1	SA-CCR (for derivative contracts)	-	-		1.4	-	-
1a	CEM	-	7		1	7	1
2	IMM (CCR) approach			-	-	-	-
3	Simple Approach (for SFTs)					-	-
4	Comprehensive Approach (for SFTs)					-	-
5	VaR (for SFTs)					-	-
6	**Total**						1

16 CVA capital charge

CVA capital charge as required by section 16X of the Banking (Disclosure) Rules (expressed in US$'000 unless otherwise stated).

		EAD post CRM	RWA
	Netting sets for which CVA capital charge is calculated by the advanced CVA method	-	-
1	(i) VaR (after application of multiplication factor if applicable)		-
2	(ii) Stressed VaR (after application of multiplication factor if applicable)		-
3	Netting sets for which CVA capital charge is calculated by the standardized CVA method	7	2
4	Total	7	2

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

Counterparty default risk exposures (other than those to CCPs) by asset classes and by risk weights – for STC approach as required by section 16Y of the Banking (Disclosure) Rules (expressed in US$'000 unless otherwise stated).

Exposure class / Risk Weight	0%	10%	20%	35%	50%	75%	100%	150%	250%	Others	Total default risk exposure after CRM
Sovereign exposures	-	-	-	-	-	-	-	-	-	-	-
PSE exposures	-	-	-	-	-	-	-	-	-	-	-
Of which: domestic PSEs	-	-	-	-	-	-	-	-	-	-	-
Of which: foreign PSEs	-	-	-	-	-	-	-	-	-	-	-
Multilateral development bank exposures	-	-	-	-	-	-	-	-	-	-	-
Bank exposures	-	-	7	-	-	-	-	-	-	-	7
Securities firm exposures	-	-	-	-	-	-	-	-	-	-	-
Corporate exposures	-	-	-	-	-	-	-	-	-	-	-
CIS exposures	-	-	-	-	-	-	-	-	-	-	-
Regulatory retail exposures	-	-	-	-	-	-	-	-	-	-	-
Residential mortgage loans	-	-	-	-	-	-	-	-	-	-	-
Other exposures which are not past due exposures	-	-	-	-	-	-	-	-	-	-	-
Significant exposures to commercial entities	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	7	-	-	-	-	-	-	-	7

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

Composition of collateral for counterparty default risk exposures (including those for contracts or transactions cleared through CCPs) as required by section 16ZA of the Banking (Disclosure) Rules (expressed in US$'000 unless otherwise stated).

	Derivative contracts				SFTs	
	Fair value of recognized collateral received		Fair value of posted collateral		Fair value of recognized collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Cash - domestic currency	-	-	-	-	-	-
Cash - other currencies	-	-	-	-	-	-
Domestic sovereign debt	-	-	-	-	-	-
Other sovereign debt	-	-	-	-	-	-
Government agency debt	-	-	-	-	-	-
Corporate bonds	-	-	-	-	-	-
Equity securities	-	-	-	-	-	-
Other collateral	-	-	-	-	-	-
Total	-	-	-	-	-	-

19 Credit-related derivatives contracts

Credit-related derivatives contracts as required by section 16ZB of the Banking (Disclosure) Rules (expressed in US$'000 unless otherwise stated).

	Protection bought	Protection sold
Notional amounts		
Single-name credit default swaps	-	-
Index credit default swaps	-	-
Total return swaps	-	-
Credit-related options	-	-
Other credit-related derivative contracts	-	-
Total notional amounts	-	-
Fair values		
Positive fair value (asset)	-	-
Negative fair value (liability)	-	-

20 Exposures to CCPs

Credit-related derivatives contracts as required by section 16ZD of the Banking (Disclosure) Rules (expressed in US$'000 unless otherwise stated).

		Exposure after CRM	RWA
1	**Exposures of the AI as clearing member or client to qualifying CCPs (total)**		-
2	Default risk exposures to qualifying CCPs (excluding items disclosed in rows 7 to 10), of which:	-	-
3	(i) OTC derivative transactions	-	-
4	(ii) Exchange-traded derivative contracts	-	-
5	(iii) Securities financing transactions	-	-
6	(iv) Netting sets subject to valid cross-product netting agreements	-	-
7	Segregated initial margin	-	
8	Unsegregated initial margin	-	-
9	Funded default fund contributions	-	-
10	Unfunded default fund contributions	-	-
11	**Exposures of the AI as clearing member or client to non-qualifying CCPs (total)**		-
12	Default risk exposures to non-qualifying CCPs (excluding items disclosed in rows 17 to 20), of which:	-	-
13	(i) OTC derivative transactions	-	-
14	(ii) Exchange-traded derivative contracts	-	-
15	(iii) Securities financing transactions	-	-
16	(iv) Netting sets subject to valid cross-product netting agreements	-	-
17	Segregated initial margin	-	
18	Unsegregated initial margin	-	-
19	Funded default fund contributions	-	-
20	Unfunded default fund contributions	-	-

21 Qualitative disclosures related to market risk

Market risk is identified, measured, monitored, and controlled by Market Risk team, a corporate risk governance function independent of the lines of business. Market Risk team seeks to facilitate efficient risk versus return decisions, reduce volatility in operating performance and make the Company's market risk profile transparent to senior management, the Board of Directors and regulators. Market Risk team is overseen by the Chief Risk Officer and performs the following functions:

- Establishment of a comprehensive market risk policy framework
- Independent measurement, monitoring and control of business segment market risk
- Definition, approval and monitoring of limits
- Performance of stress testing and qualitative risk assessments

The Group's business segments have valuation teams in Finance whose functions are to provide independent oversight of the accuracy of the valuations of positions that expose the Group to market risk.

Market risk identification and classification

Market Risk team works in partnership with the business segments to identify market risks throughout the Group and to define and monitor market risk policies and procedures. All business segments are responsible for comprehensive identification and verification of market risks within their units. Risk-taking businesses have functions that act independently from trading personnel and are responsible for verifying risk exposures that the business takes. In addition to providing independent oversight for market risk arising from the business segments, Market Risk team is also responsible for identifying exposures which may not be large within individual business segments, but which may be large for the Group in aggregate. Regular meetings are held between Market Risk team and the heads of risk-taking businesses to discuss and decide on risk exposures in the context of the market environment and client flows.

Positions that expose the Group to market risk can be classified into two categories: trading and non-trading portfolios. At Group level, trading portfolio includes positions that are held by the Group as part of a business segment or unit, the main business strategy of which is for trading or market making. At Company level, the market risk positions booked in the Company's trading book mainly consist of government bills and bonds and corporate debts. Unrealized gains and losses in these positions are reported in trading revenue. At Group level, non-trading portfolio includes securities and other assets held for long-term investment, and securities and derivatives used to manage the Group's asset or liability exposures. At Company level, the non-trading portfolio primarily arises from the banking assets and liabilities. Unrealized gains and losses in these positions are not reported in trading revenue.

Market risk measurement

Because no single measure can reflect all aspects of market risk, the Group uses various metrics, both statistical and non-statistical, including:

(i) Non-statistical risk measures

Non-statistical measures other than stress testing include net open positions, basis point values, option sensitivities, market values, position concentrations and position turnover. These measures provide granular information on the Group's market risk exposure. They are aggregated by line of business and by risk type, and are used for monitoring limits, one-off approvals and tactical control.

21 Qualitative disclosures related to market risk (continued)

(ii) Statistical risk measures - Value-At-Risk ("VAR")

The Group's primary statistical risk measure, VAR, estimates the potential loss from adverse market moves in an ordinary market environment and provides a consistent cross-business measure of risk profiles and levels of diversification. VAR is used for comparing risks across businesses, monitoring limits, and as an input to economic capital calculations. VAR provides risk transparency in a normal trading environment.

To calculate VAR, the Group uses historical simulation, which measures risk across instruments and portfolios in a consistent and comparable way. This approach assumes that historical changes in market values are representative of future changes. The simulation is based upon data for the previous twelve months.

Market risk monitoring and control

Market risk is controlled primarily through a series of limits. In setting limits, the Group takes into consideration factors such as market volatility, product liquidity, business trends and management experience.

Market risk management regularly reviews and updates risk limits. Senior management, including the Hong Kong RALCO, Hong Kong LERM and Chief Risk Officer, are responsible for reviewing and approving risk limits on an ongoing basis.

The Group maintains different levels of limits. The overall Group level limits include VAR and stress limits. Similarly, line-of-business level limits include VAR and stress limits and may be supplemented by loss advisories, non-statistical measurements and instrument authorities. Businesses are responsible for adhering to established limits, against which exposures are monitored and reported. Limit breaches are reported in a timely manner to senior management, and the affected business segment is required either to reduce trading positions or consult with senior management on the appropriate action. VAR limit is also set for the Company.

Market risk reporting

Non-statistical exposures, VAR and limit excesses are reported daily for each trading and non-trading business and stress-test results are reported monthly to business and senior management.

There is a regular process to review risk reports to capture relevant risk exposures.

22 Market risk under STM approach

Market risk under STM approach as required by section 16ZL of the Banking (Disclosure) Rules (expressed in US$'000 unless otherwise stated).

		RWA
	Outright product exposures	
1	Interest rate exposures (general and specific risk)	20,577
2	Equity exposures (general and specific risk)	1,597
3	Foreign exchange (including gold) exposures	5,998
4	Commodity exposures	-
	Option exposures	
5	Simplified approach	-
6	Delta-plus approach	-
7	Other approach	-
8	Securitization exposures	-
9	**Total**	28,172

23 Securitization Exposures

The Company has no securitization exposures as at 31st December 2017.