

**Oversea-Chinese Banking Corporation Limited**

**Pillar 3 Disclosures  
(OCBC Group – As at 31 December 2022)**



Incorporated in Singapore  
Company Registration Number: 193200032W

## Table of Contents

<b>1. Attestation Statement .....</b>	<b>4</b>
<b>2. Introduction.....</b>	<b>5</b>
<b>3. Accounting and Regulatory Consolidation .....</b>	<b>5</b>
<b>4. Key Metrics.....</b>	<b>6</b>
<b>5. G-SIB Indicators and Countercyclical Capital Buffer .....</b>	<b>7</b>
5.1 G-SIB Assessment Indicators .....	7
5.2 Geographical Distribution of Credit Exposures Used in the Countercyclical Capital Buffer .....	8
<b>6. Composition of Capital .....</b>	<b>9</b>
6.1 Reconciliation of Regulatory Capital .....	9
6.2 Regulatory Capital Position.....	10
6.3 Main Features of Capital Instruments .....	12
<b>7. Linkages between Financial Statements and Regulatory Exposures .....</b>	<b>16</b>
7.1 Differences between Accounting and Regulatory Scopes of Consolidation .....	16
7.2 Main Sources of Differences between Financial Statements and Regulatory Exposures .....	18
7.3 Prudent Valuation Adjustments .....	19
<b>8. Leverage Ratio .....</b>	<b>20</b>
8.1 Leverage Ratio Summary Comparison Table .....	20
8.2 Leverage Ratio Common Disclosure Table .....	20
<b>9. Credit Quality .....</b>	<b>21</b>
9.1 Overview of Credit Quality of Assets .....	21
9.2 Changes in Stock of Defaulted Loans to Customers and Debt Securities .....	22
9.3 Additional Disclosures related to Credit Quality of Assets.....	22
9.4 Overview of Past Due Exposure and Impairment Allowances .....	26
9.5 Restructured Exposures .....	31
<b>10. Key Approaches used for Computation of RWA.....</b>	<b>32</b>
<b>11. Overview of Risk Weighted Assets.....</b>	<b>33</b>
<b>12. RWA Flow Statement for Credit Risk Exposures .....</b>	<b>34</b>
<b>13. Credit Exposures Under Standardised and IRB Approach .....</b>	<b>35</b>
13.1 Credit Exposures under Standardised Approach and CRM Effects .....	35
13.2 Credit Exposures under Standardised Approach by Risk Weight .....	36
13.3 Credit Exposures under F-IRBA .....	37
13.4 Credit Exposures under A-IRBA .....	41
13.5 Overview of Credit Risk Mitigation Techniques .....	45
13.6 Effect on RWA of Credit Derivatives used as CRM .....	45
<b>14. Backtesting of PD for Portfolios under IRB Approach .....</b>	<b>46</b>
14.1 Backtesting of PD for Portfolios under F-IRBA .....	46
14.2 Backtesting of PD for Portfolios under A-IRBA.....	50
<b>15. Specialised Lending under Supervisory Slotting Criteria.....</b>	<b>54</b>

**Table of Contents (continued)**

<b>16. Counterparty Credit Risk</b> .....	<b>55</b>
16.1 Counterparty Credit Risk Exposures by Approach .....	55
16.2 CVA Risk Capital Charge .....	56
16.3 Exposures to Central Counterparties .....	57
16.4 Counterparty Credit Risk Exposures under Standardised Approach by Risk Weight .....	59
16.5 Counterparty Credit Risk Exposures under F-IRBA .....	60
16.6 Counterparty Credit Risk Exposures under A-IRBA .....	64
16.7 Composition of Collateral for Counterparty Credit Risk Exposures .....	65
16.8 Credit Derivative Exposures .....	66
<b>17. Securitisation Exposures</b> .....	<b>66</b>
<b>18. Market Risk Type under Standardised Approach</b> .....	<b>67</b>
<b>19. Interest Rate Risk in the Banking Book</b> .....	<b>68</b>
<b>20. Liquidity Coverage Ratio</b> .....	<b>68</b>
<b>21. Net Stable Funding Ratio</b> .....	<b>71</b>

---

**Attestation Statement Pursuant to Monetary Authority of Singapore (MAS) Notice 637  
on Risk Based Capital Adequacy Requirements – Disclosure Requirements (Pillar 3)**

On behalf of the Board of Directors (Board), we are satisfied that the disclosures in this report have been prepared in accordance with the internal control processes approved by the Board for public disclosures.



**Goh Chin Yee**

Group Chief Financial Officer

**24 February 2023**

## 2. INTRODUCTION

This document presents the information in accordance with Pillar 3 (P3) disclosure requirements under Monetary Authority of Singapore (MAS) Notice 637 on Risk Based Capital Adequacy Requirements for Banks incorporated in Singapore. The P3 requirements specify reporting templates for most of the quantitative disclosures to enable market participants to better compare the capital adequacy and risk profile across banks via improved consistency in public disclosure.

For purpose of the year-end disclosure for OCBC Group (Group) as at 31 December 2022, explanations of the drivers behind significant differences between reporting periods for the respective sections are provided where appropriate. The disclosure on the RWA flow statements for the following are omitted as there is no exposure treated under these Approaches:

- Counterparty Credit Risk (CCR) under the Internal Models Method (IMM)
- Market Risk exposures under the Internal Models Approach (IMA)

As part of enhanced public disclosures on risk profile and capital adequacy driven by changes in Part XI of MAS Notice 637, a risk disclosure policy which includes establishing and maintaining internal control processes over the disclosure - among other requirements - has been approved by the Board. The Board has also appointed the Group Chief Financial Officer to attest that the Pillar 3 report has been prepared in accordance with the approved internal control processes.

## 3. ACCOUNTING AND REGULATORY CONSOLIDATION

The consolidation basis used for regulatory capital computation is similar to that used for financial reporting except for the following:

- Great Eastern Holdings Limited and its insurance subsidiaries are excluded from regulatory consolidation and are treated as investments in unconsolidated major stake companies that are financial institutions in accordance with MAS Notice 637's definition of insurance subsidiary. The regulatory adjustments applied to these investments are in accordance with MAS Notice 637 paragraphs 6.1.3(p), 6.2.3(e) and 6.3.3(e).
- As at 31 December 2022, the total equity of these insurance subsidiaries was S\$9 billion and total assets were S\$108 billion.

Disclosures on the Group's reconciliation of regulatory capital and regulatory capital position can be found in Section 6 of this document.

#### 4. KEY METRICS

The table below provides an overview of the Group's prudential regulatory metrics, as stipulated by MAS Notice 637.

	(a)	(b)	(c)	(d)	(e)	
	Dec-22	Sep-22	Jun-22	Mar-22	Dec-21	
<b>Available Capital (S\$ million)</b>						
1	CET1 Capital	35,179	34,239	34,573	35,145	34,845
2	Tier 1 Capital	36,909	35,971	36,304	36,377	36,076
3	Total Capital	40,937	40,256	40,539	39,823	39,573
<b>Risk Weighted Assets (S\$ million)</b>						
4	Total RWA	231,648	237,719	231,577	231,144	224,866
<b>Risk-based Capital Ratios as a percentage of RWA (%)</b>						
5	CET1 Ratio	15.2	14.4	14.9	15.2	15.5
6	Tier 1 Ratio	15.9	15.1	15.7	15.7	16.0
7	Total Capital Ratio	17.7	16.9	17.5	17.2	17.6
<b>Additional CET1 buffer requirements as a percentage of RWA (%)</b>						
8	Capital conservation buffer requirement	2.5	2.5	2.5	2.5	2.5
9	Countercyclical buffer requirement	0.2	0.1	0.1	0.1	0.1
10	Bank G-SIB and/or D-SIB additional requirements	-	-	-	-	-
11	Total of Bank CET1 specific requirements <sup>1/</sup>	2.7	2.6	2.6	2.6	2.6
12	CET1 available after meeting the Reporting Bank's minimum capital requirements	7.7	6.9	7.5	7.2	7.6
<b>Leverage Ratio (S\$ million)</b>						
13	Total Leverage Ratio exposure measure	512,119	529,619	510,314	506,113	469,537
14	Leverage Ratio (%) <sup>2/</sup>	7.2	6.8	7.1	7.2	7.7
<b>Liquidity Coverage Ratio (S\$ million) <sup>3/</sup></b>						
15	Total High Quality Liquid Assets	79,896	76,620	74,042	74,186	70,437
16	Total net cash outflow	50,310	50,093	50,907	49,086	44,368
17	Liquidity Coverage Ratio (%)	159	153	146	151	159
<b>Net Stable Funding Ratio (S\$ million)</b>						
18	Total available stable funding	285,347	287,125	284,915	280,653	274,655
19	Total required stable funding	243,897	249,496	243,876	237,212	227,629
20	Net Stable Funding Ratio (%)	117	115	117	118	121

<sup>1/</sup> Sum of rows 8, 9 and 10

<sup>2/</sup> Computed by row 2 / row 13

<sup>3/</sup> Reported as simple averages of daily observations for the respective quarter

## 5. G-SIB INDICATORS AND COUNTERCYCLICAL CAPITAL BUFFER

### 5.1 G-SIB Assessment Indicators

The Basel Committee on Banking Supervision (BCBS) has published indicators it uses to classify a Bank as a Global Systemically Important Bank (G-SIB). While OCBC is not a G-SIB, it is required under MAS Notice 637 to disclose the 14 G-SIB indicators. The G-SIB indicators disclosed in the table below are unaudited and have been prepared in accordance with the instructions issued by BCBS and may not be directly comparable with other disclosed information. The tables below list the G-SIB indicators of OCBC Group as at 31 December 2022 and 31 December 2021.

<b>31 Dec 2022</b>			<b>Amount</b>
<b>Category</b>	<b>Indicators used for assessing G-SIB <sup>2/</sup></b>		<b>S\$ million</b>
<b>1</b>	Cross-jurisdictional activity	Cross-jurisdictional claims	268,796
<b>2</b>		Cross-jurisdictional liabilities	277,208
<b>3</b>	Size	Total exposures as defined for use in the Basel III leverage ratio <sup>1/</sup>	625,114
<b>4</b>	Interconnectedness	Intra-financial system assets	112,251
<b>5</b>		Intra-financial system liabilities	46,157
<b>6</b>		Securities outstanding	103,601
<b>7</b>		Assets under custody	139,579
<b>8</b>	Substitutability / financial institution infrastructure	Payments activity	5,331,925
<b>9</b>		Underwritten transactions in debt and equity markets	5,720
<b>10</b>		Trading Volume - Fixed income securities	93,597
<b>11</b>		- Equities and other securities	141,673
<b>12</b>		Notional amount of OTC derivatives	1,106,941
<b>13</b>	Complexity	Level 3 assets	7,007
<b>14</b>		Trading and available-for-sale securities	30,637

  

<b>31 Dec 2021</b>			<b>Amount</b>
<b>Category</b>	<b>Indicators used for assessing G-SIB <sup>2/</sup></b>		<b>S\$ million</b>
<b>1</b>	Cross-jurisdictional activity	Cross-jurisdictional claims	262,781
<b>2</b>		Cross-jurisdictional liabilities	210,651
<b>3</b>	Size	Total exposures as defined for use in the Basel III leverage ratio <sup>1/</sup>	584,955
<b>4</b>	Interconnectedness	Intra-financial system assets	108,969
<b>5</b>		Intra-financial system liabilities	36,089
<b>6</b>		Securities outstanding	99,493
<b>7</b>		Assets under custody	150,734
<b>8</b>	Substitutability / financial institution infrastructure	Payments activity	5,923,379
<b>9</b>		Underwritten transactions in debt and equity markets	7,288
<b>10</b>		Trading Volume - Fixed income securities	109,793
<b>11</b>		- Equities and other securities	173,063
<b>12</b>		Notional amount of OTC derivatives	1,052,076
<b>13</b>	Complexity	Level 3 assets	4,583
<b>14</b>		Trading and available-for-sale securities	30,267

<sup>1/</sup> Total exposures differ from the total exposures disclosed under Leverage Ratio as the computation as required by the Basel Committee for the purposes of the G-SIB assessment disclosures excludes regulatory adjustments

<sup>2/</sup> The scope of consolidation has been extended to include insurance subsidiaries for Total exposures; Intra-financial system assets; Intra-financial system liabilities; Securities outstanding; Notional amount of OTC derivatives; and Level 3 assets indicators since 2021

## 5.2 Geographical Distribution of Credit Exposures Used in the Countercyclical Capital Buffer

The following table provides an overview of the Group's geographical distribution of private sector credit exposures for the calculation of countercyclical buffer.

The geographical distribution is based on the country where the physical collateral resides in, residence of the guarantor, or in the absence of such mitigant, the country of obligor (i.e. the country where the majority of the obligor's operating assets is situated) in accordance with MAS Notice 637 requirements.

	<b>31-Dec-22</b>			
	<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>(d)</b>
	Country-Specific countercyclical buffer requirement	RWA for private sector credit exposures	Bank-specific countercyclical buffer requirement <sup>1/</sup>	Countercyclical buffer amount
	(%)	(S\$ million)	(%)	(S\$ million)
<b>Geographical breakdown</b>				
United Kingdom	1.00%	10,894		
Sweden	1.00%	3		
Hong Kong	1.00%	19,163		
Luxembourg	0.50%	28		
All Others		150,463		
<b>Total</b>		<b>180,551</b>	<b>0.2%</b>	<b>386</b>

	<b>30-Jun-22</b>			
	<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>(d)</b>
	Country-Specific countercyclical buffer requirement	RWA for private sector credit exposures	Bank-specific countercyclical buffer requirement <sup>1/</sup>	Countercyclical buffer amount
	(%)	(S\$ million)	(%)	(S\$ million)
<b>Geographical breakdown</b>				
Hong Kong	1.00%	20,249		
Luxembourg	0.50%	31		
All Others		157,381		
<b>Total</b>		<b>177,661</b>	<b>0.1%</b>	<b>264</b>

<sup>1/</sup> The Bank-Specific countercyclical buffer is the additional capital which needs to be maintained above the Regulatory minimum and Capital Conservation buffer requirement



## 6. COMPOSITION OF CAPITAL

### 6.1 Reconciliation of Regulatory Capital

The reporting position of the table in this section is as at 31 December 2022.

	Balance sheet as per published financial statements	Under regulatory scope of consolidation	Cross Reference to Section 6.2
<b>EQUITY</b>			
Share capital	18,048	18,048	A
Other equity instruments	1,696	1,696	B
Reserves:			
Capital reserves	792		
Fair value reserves	(1,006)		
Revenue reserves	33,557		
<b>Total reserves</b>	<b>33,343</b>		
of which: Retained earnings		26,423	C1
of which: Accumulated other comprehensive income and other disclosed reserves		(387)	C2
of which: Unrealised fair value gains/losses on financial liabilities and derivative liabilities arising from changes in own credit risk		21	C3
Non-controlling interests	1,581		
of which: Minority interest that meets criteria for inclusion in CET1 Capital		218	D1
of which: Minority interest that meets criteria for inclusion in AT1 Capital		34	D2
of which: Minority interest that meets criteria for inclusion in Tier 2 Capital		20	D3
Valuation adjustment		21	E
<b>Total equity</b>	<b>54,668</b>		
<b>LIABILITIES</b>			
Deposits of non-bank customers	350,081		
Deposits and balances of banks	10,046		
Due to associates	236		
Trading portfolio liabilities	212		
Derivative payables	16,048		
Other liabilities	8,525		
Current tax payables	995		
Deferred tax liabilities	2,261		
of which: Associated with intangible assets		17	F
Debt issued	21,938		
of which: Tier 2 capital instruments		2,705	G
Life insurance fund liabilities	94,946		
<b>Total liabilities</b>	<b>505,288</b>		
<b>Total equity and liabilities</b>	<b>559,956</b>		
<b>ASSETS</b>			
Cash and placements with central banks	34,966		
Singapore government treasury bills and securities	17,096		
Other government treasury bills and securities	22,271		
Placements with and loans to banks	30,244		
Loans to customers	291,467		
of which: Eligible provision for inclusion in Tier 2 Capital subject to cap in respect of exposures under SA and IRBA		1,304	H
Debt and equity securities	28,010		
of which: Investments in unconsolidated major stake financial institutions		339	I1
of which: Investments in unconsolidated non major stake financial institutions		1,279	I2
of which: PE/VC investments held beyond the relevant holding periods set out in MAS Notice 630		0	I3
Investments in insurance subsidiaries		1,953	J
Derivative and forward securities:			
Unconsolidated non major stake financial institutions		(7)	K
Assets held for sale	1		
Derivative receivables	15,605		
Other assets	6,635		
Deferred tax assets	437		
of which: Deferred tax assets before netting		497	L
Associates	6,340		
of which: Investments in unconsolidated major stake financial institutions		6,176	M
Property, plant and equipment	3,483		
Investment property	763		
Goodwill and intangible assets	4,643		
of which: Goodwill		3,980	N1
of which: Intangible assets		121	N2
Life insurance fund investment securities and other assets	97,995		
<b>Total assets</b>	<b>559,956</b>		

## 6.2 Regulatory Capital Position

The reporting position of the tables in this section is as at 31 December 2022.

	Amount	Cross Reference to Section 6.1
<b>Common Equity Tier 1 capital: instruments and reserves</b>		-
1 Paid-up ordinary shares and share premium (if applicable)	18,048	A
2 Retained earnings	26,423	C1
3 Accumulated other comprehensive income and other disclosed reserves	(387)	C2
4 Directly issued capital subject to phase out from CET1 (only applicable to non-joint stock companies)	-	
5 Minority interest that meets criteria for inclusion	218	D1
<b>Common Equity Tier 1 capital before regulatory adjustments</b>	<b>44,302</b>	
<b>Common Equity Tier 1 capital: regulatory adjustments</b>		
7 Valuation adjustment pursuant to Part VIII of MAS Notice 637	21	E
8 Goodwill, net of associated deferred tax liability	3,980	N1
9 Intangible assets, net of associated deferred tax liability	103	N2 - F
10 Deferred tax assets that rely on future profitability	497	L
11 Cash flow hedge reserve	-	
12 Shortfall of TEP relative to EL under IRBA	-	
13 Increase in equity capital resulting from securitisation transactions	-	
14 Unrealised fair value gains/losses on financial liabilities and derivative liabilities arising from changes in own credit risk	21	C3
15 Defined benefit pension fund assets, net of associated deferred tax liability	-	
16 Investments in own shares	-	
17 Reciprocal cross-holdings in ordinary shares of financial institutions	-	
18 Investments in ordinary shares of unconsolidated financial institutions in which the Reporting Bank does not hold a major stake	-	
19 Investments in ordinary shares of unconsolidated financial institutions in which the Reporting Bank holds a major stake (including insurance subsidiaries) (amount above 10% threshold)	4,500	(I1 + J + M) - 3,968 <sup>1</sup>
20 Mortgage servicing rights (amount above 10% threshold)		
21 Deferred tax assets arising from temporary differences (amount above 10% threshold, net of associated deferred tax liability)		
22 Amount exceeding the 15% threshold	-	
23 of which: investments in ordinary shares of unconsolidated financial institutions in which the Reporting Bank holds a major stake (including insurance subsidiaries)	-	
24 of which: mortgage servicing rights		
25 of which: deferred tax assets arising from temporary differences		
26 National specific regulatory adjustments	0	
26A PE/VC investments held beyond the relevant holding periods set out in MAS Notice 630	0	I3
26B Capital deficits in subsidiaries and associates that are regulated financial institutions	-	
26C Any other items which the Authority may specify	-	
27 Regulatory adjustments applied in calculation of CET1 Capital due to insufficient AT1 Capital to satisfy required deductions	-	
<b>28 Total regulatory adjustments to CET1 Capital</b>	<b>9,123</b>	
<b>29 Common Equity Tier 1 capital (CET1)</b>	<b>35,179</b>	
<b>Additional Tier 1 capital: instruments</b>		
30 AT1 capital instruments and share premium (if applicable)	1,696	B
31 of which: classified as equity under the Accounting Standards	1,696	
32 of which: classified as liabilities under the Accounting Standards	-	
33 Transitional: Ineligible capital instruments (pursuant to paragraphs 6.5.3 and 6.5.4)	-	
34 AT1 capital instruments issued by fully-consolidated subsidiaries that meet criteria for inclusion	34	D2
35 of which: instruments issued by subsidiaries subject to phase out	-	
<b>36 Additional Tier 1 capital before regulatory adjustments</b>	<b>1,730</b>	
<b>Additional Tier 1 capital: regulatory adjustments</b>		
37 Investments in own AT1 capital instruments	-	
38 Reciprocal cross-holdings in AT1 capital instruments of financial institutions	-	
39 Investments in AT1 capital instruments of unconsolidated financial institutions in which the Reporting Bank does not hold a major stake	-	
40 Investments in AT1 capital instruments of unconsolidated financial institutions in which the Reporting Bank holds a major stake (including insurance subsidiaries)	-	
41 National specific regulatory adjustments which the Authority may specify	-	
42 Regulatory adjustments applied in calculation of AT1 Capital due to insufficient Tier 2 Capital to satisfy required deductions	-	
<b>43 Total regulatory adjustments to Additional Tier 1 capital</b>	<b>-</b>	
<b>44 Additional Tier 1 capital (AT1)</b>	<b>1,730</b>	
<b>45 Tier 1 capital (T1 = CET1 + AT1)</b>	<b>36,909</b>	

## 6.2 Regulatory Capital Position (continued)

		Amount	Cross Reference to Section 6.1
	<b>Tier 2 capital: instruments and provisions</b>		
46	Tier 2 capital instruments and share premium (if applicable)	2,705	G
47	Transitional: Ineligible capital instruments (pursuant to paragraphs 6.5.3 and 6.5.4)	-	
48	Tier 2 capital instruments issued by fully-consolidated subsidiaries that meet criteria for inclusion	20	D3
49	of which: instruments issued by subsidiaries subject to phase out	-	
50	Provisions	1,304	H
51	<b>Tier 2 capital before regulatory adjustments</b>	<b>4,028</b>	
	<b>Tier 2 capital: regulatory adjustments</b>		
52	Investments in own Tier 2 instruments	-	
53	Reciprocal cross-holdings in Tier 2 capital instruments of financial institutions	-	
54	Investments in Tier 2 capital instruments and other TLAC liabilities of unconsolidated financial institutions in which the Reporting Bank does not hold a major stake	-	
54a	Investments in other TLAC liabilities of unconsolidated financial institutions in which the Reporting Bank does not hold a major stake: amount previously designated for the 5% threshold but that no longer meets the conditions	-	
55	Investments in Tier 2 capital instruments and other TLAC liabilities of unconsolidated financial institutions in which the Reporting Bank holds a major stake (including insurance subsidiaries)	-	
56	National specific regulatory adjustments which the Authority may specify	-	
57	<b>Total regulatory adjustments to Tier 2 capital</b>	<b>-</b>	
58	<b>Tier 2 capital (T2)</b>	<b>4,028</b>	
59	<b>Total capital (TC = T1 + T2)</b>	<b>40,937</b>	
60	<b>Floor-adjusted total risk weighted assets</b>	<b>231,648</b>	
	<b>Capital ratios (as a percentage of floor-adjusted risk weighted assets)</b>		
61	<b>Common Equity Tier 1 CAR</b>	15.2%	
62	<b>Tier 1 CAR</b>	15.9%	
63	<b>Total CAR</b>	17.7%	
64	Bank-specific buffer requirement	9.2%	
65	of which: capital conservation buffer requirement	2.5%	
66	of which: bank specific countercyclical buffer requirement	0.2%	
67	of which: G-SIB and/or D-SIB buffer requirement (if applicable)	-	
68	Common Equity Tier 1 available after meeting the Reporting Bank's minimum capital requirements	7.7%	
	<b>National minima</b>		
69	Minimum CET1 CAR	6.5%	
70	Minimum Tier 1 CAR	8.0%	
71	Minimum Total CAR	10.0%	
	<b>Amounts below the thresholds for deduction (before risk weighting)</b>		
72	Investments in ordinary shares, AT1 capital and Tier 2 capital and other TLAC liabilities of unconsolidated financial institutions in which the Reporting Bank does not hold a major stake	1,271	I2 + K
73	Investments in ordinary shares of unconsolidated financial institutions in which the Reporting Bank holds a major stake (including insurance subsidiaries)	3,968	Refer to note <sup>1</sup>
74	Mortgage servicing rights (net of associated deferred tax liability)		
75	Deferred tax assets arising from temporary differences (net of associated deferred tax liability)		
	<b>Applicable caps on the inclusion of provisions in Tier 2</b>		
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to standardised approach (prior to application of cap)	494	
77	Cap on inclusion of provisions in Tier 2 under standardised approach	436	
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)	2,049	
79	Cap for inclusion of provisions in Tier 2 under internal ratings-based approach	868	

<sup>1/</sup> The investments in the ordinary shares of unconsolidated major stake companies that are financial institutions which are within the prescribed threshold amount in accordance with MAS Notice 637 paragraph 6.1.3 (p)(iii)

### 6.3 Main Features of Capital Instruments

The following disclosures are made pursuant to the requirements of MAS Notice 637 Annex 11D. They are not a summary of the terms, do not purport to be complete, and should be read in conjunction with, and are qualified in their entirety by, the relevant Terms and Conditions available on the Bank's Investor Relations website ([http://www.ocbc.com/group/investors/Cap\\_and\\_Reg\\_Disclosures.html](http://www.ocbc.com/group/investors/Cap_and_Reg_Disclosures.html)). The reporting position of all tables in this section is as at 31 December 2022.

	OCBC Ordinary Shares	OCBC 4.00% Non-cumulative Non-convertible Perpetual Capital Securities
1. Issuer	Oversea-Chinese Banking Corporation Limited	Oversea-Chinese Banking Corporation Limited
2. Unique identifier (ISIN)	SG1S04926220	SGXF81199428
3. Governing law(s) of instrument	Singapore	Singapore
<i>Regulatory treatment</i>		
4. Transitional Basel III rules	Common Equity Tier 1	Additional Tier 1
5. Post-transitional Basel III rules	Common Equity Tier 1	Additional Tier 1
6. Eligible at Solo / Group / Solo and Group	Solo and Group	Solo and Group
7. Instrument type	Ordinary shares	Perpetual Capital Securities
8. Amount recognised in regulatory capital	S\$18,048 million	S\$998 million
9. Par value of instrument	NA	S\$1,000 million
10. Accounting classification	Shareholders' equity	Shareholders' equity
11. Original date of issuance	NA	24 Aug 2018
12. Perpetual or dated	Perpetual	Perpetual
13. Original maturity date	No maturity	No maturity
14. Issuer call subject to prior supervisory approval	No	Yes
15. Optional call date, contingent call dates and redemption amount	NA	On the First Reset Date of 24 Aug 2023 and each Distribution Payment Date thereafter (at par)  Tax call (at par) Regulatory call (at par)
16. Subsequent call dates, if applicable	NA	Optional call dates - any Distribution Payment Date after the First Reset Date
<i>Coupons / dividends</i>		
17. Fixed or floating dividend / coupon	NA	Fixed to fixed
18. Coupon rate and any related index	NA	4.00% p.a. up to (but excluding) 24 Aug 2023; if not redeemed, the distribution rate will be reset on the First Reset Date and every 5 years thereafter to a fixed rate equal to the then prevailing 5-year SGD SOR plus 1.811% p.a.
19. Existence of a dividend stopper	NA	Yes
20. Fully discretionary, partially discretionary or mandatory	NA	Fully discretionary
21. Existence of step up or other incentive to redeem	NA	No
22. Noncumulative or cumulative	NA	Noncumulative
23. Convertible or non-convertible	NA	Nonconvertible
24. If convertible, conversion trigger(s)	NA	NA
25. If convertible, fully or partially	NA	NA
26. If convertible, conversion rate	NA	NA
27. If convertible, mandatory or optional conversion	NA	NA
28. If convertible, specify instrument type convertible into	NA	NA
29. If convertible, specify issuer of instrument it converts into	NA	NA
30. Write-down feature	No	Yes
31. If write-down, write-down trigger(s)	NA	The earlier of: i) the MAS notifying the Issuer in writing that it is of the opinion that a Write-off is necessary, without which the Issuer would become non-viable; and ii) a decision by the MAS to make a public sector injection of capital, or equivalent support, without which the Issuer would have become non-viable, as determined by the MAS.
32. If write-down, full or partial	NA	Fully or partially
33. If write-down, permanent or temporary	NA	Permanent
34. If temporary write-down, description of write-up mechanism	NA	NA
35. Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument in the insolvency creditor hierarchy of the legal entity concerned)	Additional Tier 1 capital instruments of OCBC Bank	Upon the occurrence of any winding-up proceeding (other than pursuant to a Permitted Reorganisation), Capital Securities are expressly subordinated and subject in right of payment to the prior payment in full of all claims of (i) Senior Creditors which includes holders of Tier 2 Capital Securities, and will rank senior to all Junior Obligations.
36. Non-compliant transitioned features	No	No
37. If yes, specify non-compliant features	NA	NA

### 6.3 Main Features of Capital Instruments (continued)

	<b>OCBC 3.00% Non-cumulative Non-convertible Perpetual Capital Securities</b>	<b>OCBC 3.90% Non-cumulative Non-convertible Perpetual Capital Securities</b>
1. Issuer	Oversea-Chinese Banking Corporation Limited	Oversea-Chinese Banking Corporation Limited
2. Unique identifier (ISIN)	SGXF54217405	SGXF11790429
3. Governing law(s) of instrument	Singapore	Singapore
<i>Regulatory treatment</i>		
4. Transitional Basel III rules	Additional Tier 1	Additional Tier 1
5. Post-transitional Basel III rules	Additional Tier 1	Additional Tier 1
6. Eligible at Solo / Group / Solo and Group	Solo and Group	Solo and Group
7. Instrument type	Perpetual Capital Securities	Perpetual Capital Securities
8. Amount recognised in regulatory capital	S\$200 million	S\$499 million
9. Par value of instrument	S\$200 million	S\$500 million
10. Accounting classification	Shareholders' equity	Shareholders' equity
11. Original date of issuance	30 Sep 2020	08 Jun 2022
12. Perpetual or dated	Perpetual	Perpetual
13. Original maturity date	No maturity	No maturity
14. Issuer call subject to prior supervisory approval	Yes	Yes
15. Optional call date, contingent call dates and redemption amount	On the First Reset Date of 30 Sep 2030 and each Distribution Payment Date thereafter (at par)  Tax call (at par) Regulatory call (at par)	On the First Reset Date of 8 Jun 2027 and each Distribution Payment Date thereafter (at par)  Tax call (at par) Regulatory call (at par)
16. Subsequent call dates, if applicable	Optional call dates - any Distribution Payment Date after the First Reset Date	Optional call dates - any Distribution Payment Date after the First Reset Date
<i>Coupons / dividends</i>		
17. Fixed or floating dividend / coupon	Fixed to fixed	Fixed to fixed
18. Coupon rate and any related index	3.00% p.a. up to (but excluding) 30 September 2030; if not redeemed, the distribution rate will be reset on the First Reset Date and every 10 years thereafter to a fixed rate equal to the then prevailing 10-year SGD SOR plus 2.19% p.a.	3.90% p.a. up to (but excluding) 8 Jun 2027; if not redeemed, the distribution rate will be reset on the First Reset Date and every 5 years thereafter to a fixed rate equal to the then prevailing 5-year SORA-OIS plus 1.416% p.a.
19. Existence of a dividend stopper	Yes	Yes
20. Fully discretionary, partially discretionary or mandatory	Fully discretionary	Fully discretionary
21. Existence of step up or other incentive to redeem	No	No
22. Noncumulative or cumulative	Noncumulative	Noncumulative
23. Convertible or non-convertible	Nonconvertible	Nonconvertible
24. If convertible, conversion trigger(s)	NA	NA
25. If convertible, fully or partially	NA	NA
26. If convertible, conversion rate	NA	NA
27. If convertible, mandatory or optional conversion	NA	NA
28. If convertible, specify instrument type convertible into	NA	NA
29. If convertible, specify issuer of instrument it converts into	NA	NA
30. Write-down feature	Yes	Yes
31. If write-down, write-down trigger(s)	The earlier of: i) the MAS notifying the Issuer in writing that it is of the opinion that a Write-off is necessary, without which the Issuer would become non-viable; and ii) a decision by the MAS to make a public sector injection of capital, or equivalent support, without which the Issuer would have become non-viable, as determined by the MAS.	The earlier of: i) the MAS notifying the Issuer in writing that it is of the opinion that a Write-off is necessary, without which the Issuer would become non-viable; and ii) a decision by the MAS to make a public sector injection of capital, or equivalent support, without which the Issuer would have become non-viable, as determined by the MAS.
32. If write-down, full or partial	Fully or partially	Fully or partially
33. If write-down, permanent or temporary	Permanent	Permanent
34. If temporary write-down, description of write-up mechanism	NA	NA
35. Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument in the insolvency creditor hierarchy of the legal entity concerned)	Upon the occurrence of any winding-up proceeding (other than pursuant to a Permitted Reorganisation), Capital Securities are expressly subordinated and subject in right of payment to the prior payment in full of all claims of (i) Senior Creditors and (ii) holders of Tier 2 Capital Securities, and will rank senior to all Junior Obligations.	Upon the occurrence of any winding-up proceeding (other than pursuant to a Permitted Reorganisation), Capital Securities are expressly subordinated and subject in right of payment to the prior payment in full of all claims of (i) Senior Creditors and (ii) holders of Tier 2 Capital Securities, and will rank senior to all Junior Obligations.
36. Non-compliant transitioned features	No	No
37. If yes, specify non-compliant features	NA	NA

### 6.3 Main Features of Capital Instruments (continued)

	OCBC 4.25% Subordinated Notes due 2024	OCBC 1.832% Subordinated Notes due 2030
1. Issuer	Oversea-Chinese Banking Corporation Limited	Oversea-Chinese Banking Corporation Limited
2. Unique identifier (ISIN)	US69033DAC11 (Reg S) US69033CAC38 (144A)	US69033DAD93 (Reg S) US69033CAD11 (144A)
3. Governing law(s) of instrument	English (Save for the subordination provisions) Singapore (In respect of the subordination provisions)	English (Save for the subordination provisions) Singapore (In respect of the subordination provisions)
<i>Regulatory treatment</i>		
4. Transitional Basel III rules	Tier 2	Tier 2
5. Post-transitional Basel III rules	Tier 2	Tier 2
6. Eligible at Solo / Group / Solo and Group	Solo and Group	Solo and Group
7. Instrument type	Subordinated debt	Subordinated debt
8. Amount recognised in regulatory capital	S\$519 million	S\$1,220 million
9. Par value of instrument	US\$1,000 million	US\$1,000 million
10. Accounting classification	Liabilities - amortised cost	Liabilities - amortised cost
11. Original date of issuance	19 Jun 2014	10 Sep 2020
12. Perpetual or dated	Dated	Dated
13. Original maturity date	19 Jun 2024	10 Sep 2030
14. Issuer call subject to prior supervisory approval	Yes	Yes
15. Optional call date, contingent call dates and redemption amount	Tax call (at par)  Regulatory call (at par)	Tax call (at par)  Regulatory call (at par)
16. Subsequent call dates, if applicable	NA	NA
<i>Coupons / dividends</i>		
17. Fixed or floating dividend / coupon	Fixed	Fixed
18. Coupon rate and any related index	4.25% p.a.	1.832% p.a. up to (but excluding) 10 September 2025; if not redeemed, the interest rate will be reset to a fixed p.a. equal to the then-prevailing 5-year U.S. Treasury Rate plus 1.58% p.a.
19. Existence of a dividend stopper	NA	NA
20. Fully discretionary, partially discretionary or mandatory	Mandatory	Mandatory
21. Existence of step up or other incentive to redeem	No	No
22. Noncumulative or cumulative	NA	NA
23. Convertible or non-convertible	Nonconvertible	Nonconvertible
24. If convertible, conversion trigger(s)	NA	NA
25. If convertible, fully or partially	NA	NA
26. If convertible, conversion rate	NA	NA
27. If convertible, mandatory or optional conversion	NA	NA
28. If convertible, specify instrument type convertible into	NA	NA
29. If convertible, specify issuer of instrument it converts into	NA	NA
30. Write-down feature	Yes	Yes
31. If write-down, write-down trigger(s)	Contractual approach  The earlier of (i) MAS determining that a write-down is necessary; and (ii) a decision by MAS to make a public sector injection of capital, or equivalent support, without which the issuer would become non-viable in both (i) and (ii)	Contractual approach  The earlier of (i) MAS determining that a write-down is necessary; and (ii) a decision by MAS to make a public sector injection of capital, or equivalent support, without which the issuer would become non-viable in both (i) and (ii)
32. If write-down, full or partial	May be written down fully or partially	May be written down fully or partially
33. If write-down, permanent or temporary	Permanent	Permanent
34. If temporary write-down, description of write-up mechanism	NA	NA
35. Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument in the insolvency creditor hierarchy of the legal entity concerned)	Unsubordinated and unsecured obligations of OCBC Bank	Unsubordinated and unsecured obligations of OCBC Bank
36. Non-compliant transitioned features	No	No
37. If yes, specify non-compliant features	NA	NA

### 6.3 Main Features of Capital Instruments (continued)

<b>OCBC 4.602% Subordinated Notes due 2032</b>	
1. Issuer	Oversea-Chinese Banking Corporation Limited
2. Unique identifier (ISIN)	XS2490811168 (Reg S)
3. Governing law(s) of instrument	English (Save for the subordination provisions) Singapore (In respect of the subordination provisions)
<i>Regulatory treatment</i>	
4. Transitional Basel III rules	Tier 2
5. Post-transitional Basel III rules	Tier 2
6. Eligible at Solo / Group / Solo and Group	Solo and Group
7. Instrument type	Subordinated debt
8. Amount recognised in regulatory capital	S\$965 million
9. Par value of instrument	US\$750 million
10. Accounting classification	Liabilities - amortised cost
11. Original date of issuance	15 Jun 2022
12. Perpetual or dated	Dated
13. Original maturity date	15 Jun 2032
14. Issuer call subject to prior supervisory approval	Yes
15. Optional call date, contingent call dates and redemption amount	Tax call (at par)  Regulatory call (at par)
16. Subsequent call dates, if applicable	NA
<i>Coupons / dividends</i>	
17. Fixed or floating dividend / coupon	Fixed
18. Coupon rate and any related index	4.602% p.a. up to (but excluding) 15 June 2027; if not redeemed, the interest rate will be reset to a fixed p.a. equal to the then-prevailing 5-year U.S. Treasury Rate plus 1.575% p.a.
19. Existence of a dividend stopper	NA
20. Fully discretionary, partially discretionary or mandatory	Mandatory
21. Existence of step up or other incentive to redeem	No
22. Noncumulative or cumulative	NA
23. Convertible or non-convertible	Nonconvertible
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	Yes
31. If write-down, write-down trigger(s)	Contractual approach  The earlier of (i) MAS determining that a write-down is necessary; and (ii) a decision by MAS to make a public sector injection of capital, or equivalent support, without which the issuer would become non-viable in both (i) and (ii)
32. If write-down, full or partial	May be written down fully or partially
33. If write-down, permanent or temporary	Permanent
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 in the insolvency creditor hierarchy of the legal entity concerned)	Unsubordinated and unsecured obligations of OCBC Bank
36. Non-compliant transitioned features	No
37. If yes, specify non-compliant features	NA

## 7. LINKAGES BETWEEN FINANCIAL STATEMENTS AND REGULATORY EXPOSURES

### 7.1 Differences between Accounting and Regulatory Scopes of Consolidation

The purpose of this table is to identify the differences between the accounting and regulatory scopes of consolidation by the respective regulatory risk categories. The key reason for the differences between the accounting and regulatory scope of consolidation can be found in Section 3 of this document.

S\$ million	31 Dec 2022						
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Carrying amounts as reported in balance sheet of published financial statements	Carrying amounts under regulatory scope of consolidation	Subject to credit risk requirements <sup>1/</sup>	Subject to CCR requirements	Subject to securitisation framework	Subject to market risk requirements	Not subject to capital requirements or subject to deduction from regulatory capital
<b>Assets</b>							
Cash and placements with central banks	34,966	34,966	30,560	4,407	-	20,571	-
Singapore government treasury bills and securities	17,096	15,889	14,052	-	-	1,789	-
Other government treasury bills and securities	22,271	21,723	20,656	-	-	21,175	-
Placements with and loans to banks	30,244	27,747	25,760	1,137	-	26,895	-
Loans to customers	291,467	291,466	292,175	1,496	-	191,410	-
Debt and equity securities	28,010	24,380	19,437	-	-	23,499	180
Assets held for sale	1	1	1	-	-	#	-
Derivative receivables	15,605	15,576	-	14,879	-	14,488	-
Other assets	6,635	6,031	6,031	-	-	4,139	-
Deferred tax assets	437	394	-	-	-	389	497
Associates	6,340	6,340	3,058	-	-	2,302	3,282
Subsidiaries	-	1,953	915	-	-	8	1,038
Property, plant and equipment	3,483	2,801	2,801	-	-	814	-
Investment property	763	763	763	-	-	78	-
Goodwill and intangible assets	4,643	4,101	-	-	-	-	4,101
Life insurance fund investment securities and other assets	97,995	-	-	-	-	-	-
<b>Total Assets</b>	<b>559,956</b>	<b>454,131</b>	<b>416,209</b>	<b>21,919</b>	<b>-</b>	<b>307,557</b>	<b>9,098</b>
<b>Liabilities</b>							
Deposits of non-bank customers	350,081	350,202	-	1,076	-	232,785	117,417
Deposits and balances of banks	10,046	10,046	-	2,063	-	9,149	897
Due to associates	236	235	-	-	-	37	198
Trading portfolio liabilities	212	212	-	-	-	212	#
Derivative payables	16,048	16,041	-	15,525	-	14,834	516
Other liabilities	8,525	7,683	-	-	-	3,736	3,947
Current tax payables	995	767	-	-	-	182	585
Deferred tax liabilities	2,261	240	-	-	-	84	156
Debt issued	21,938	21,952	-	-	-	21,929	23
Life insurance fund liabilities	94,946	-	-	-	-	-	-
<b>Total Liabilities</b>	<b>505,288</b>	<b>407,378</b>	<b>-</b>	<b>18,664</b>	<b>-</b>	<b>282,948</b>	<b>123,739</b>



**7.1 Differences between Accounting and Regulatory Scopes of Consolidation (continued)**

S\$ million	31 Dec 2021						
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Carrying amounts as reported in balance sheet of published financial statements	Carrying amounts under regulatory scope of consolidation	Subject to credit risk requirements <sup>1/</sup>	Subject to CCR requirements	Subject to securitisation framework	Subject to market risk requirements	Not subject to capital requirements or subject to deduction from regulatory capital
<b>Assets</b>							
Cash and placements with central banks	27,919	27,919	26,095	1,827	-	13,225	-
Singapore government treasury bills and securities	11,112	10,106	8,976	-	-	1,130	-
Other government treasury bills and securities	26,159	25,897	23,251	-	-	25,636	-
Placements with and loans to banks	25,462	22,710	21,758	201	-	22,298	-
Loans to customers	286,281	286,280	287,171	1,009	-	185,329	-
Debt and equity securities	34,015	29,686	23,113	-	-	28,804	194
Assets held for sale	11	11	11	-	-	2	-
Derivative receivables	9,267	9,257	-	8,315	-	8,528	-
Other assets	6,334	5,753	5,753	-	-	4,464	-
Deferred tax assets	280	274	-	-	-	272	396
Associates	6,170	6,170	2,998	-	-	2,354	3,172
Subsidiaries	-	1,953	921	-	-	11	1,032
Property, plant and equipment	3,506	2,796	2,796	-	-	768	-
Investment property	801	801	801	-	-	84	-
Goodwill and intangible assets	4,774	4,184	-	-	-	-	4,184
Life insurance fund investment securities and other assets	100,096	-	-	-	-	-	-
<b>Total Assets</b>	<b>542,187</b>	<b>433,797</b>	<b>403,644</b>	<b>11,352</b>	<b>-</b>	<b>292,905</b>	<b>8,978</b>
<b>Liabilities</b>							
Deposits of non-bank customers	342,395	342,513	-	668	-	216,053	126,460
Deposits and balances of banks	8,239	8,239	-	1,387	-	7,505	734
Due to associates	431	431	-	-	-	199	232
Trading portfolio liabilities	393	393	-	-	-	393	#
Derivative payables	9,070	9,071	-	8,648	-	8,624	423
Other liabilities	7,163	6,405	-	-	-	3,366	3,039
Current tax payables	905	588	-	-	-	130	458
Deferred tax liabilities	2,832	246	-	-	-	75	171
Debt issued	20,115	20,122	-	-	-	20,106	16
Life insurance fund liabilities	96,306	-	-	-	-	-	-
<b>Total Liabilities</b>	<b>487,849</b>	<b>388,008</b>	<b>-</b>	<b>10,703</b>	<b>-</b>	<b>256,451</b>	<b>131,533</b>

<sup>1/</sup> Refers to non CCR exposures and exclude trading book assets such as bonds and equities

# Represents amounts of less than \$0.5 million

## 7.2 Main Sources of Differences between Financial Statements and Regulatory Exposures

This table provides information on the main sources of differences, other than due to the difference in scope of consolidation, between regulatory exposure amounts and carrying amounts under regulatory scope of consolidation. These differences are mainly due to off-balance sheet amounts, repos, derivatives, provisions. Amounts subject to Market Risk Requirements are omitted from this table since they are not meaningful for this disclosure.

31 Dec 2022				
S\$ million	(a)	(b)	(c)	(d)
	Items subject to:			Total
	Credit risk requirements	CCR requirements	Securitisation framework	
<b>1</b>	<b>Assets carrying amount under regulatory scope of consolidation <sup>1/</sup></b>			
	416,209	21,919	-	445,033
<b>2</b>	Liabilities carrying amount under regulatory scope of consolidation <sup>1/</sup>			
	-	18,664	-	283,639
<b>3</b>	Total net amount under regulatory scope of consolidation			
	416,209	3,255	-	161,394
<b>4</b>	Differences due to off-balance sheet amounts			
	54,009	-	-	
<b>5</b>	Differences due to valuations			
	-	-	-	
<b>6</b>	Differences due to repos			
	-	6,845	-	
<b>7</b>	Differences due to netting rules and potential future exposures for derivatives <sup>2/</sup>			
	-	30,185	-	
<b>8</b>	Differences due to consideration of provisions			
	3,324	-	-	
<b>9</b>	Differences due to prudential filters			
	-	-	-	
<b>10</b>	Others <sup>3/</sup>			
	(431)	-	-	
<b>11</b>	<b>Exposure amounts considered for regulatory purposes <sup>4/</sup></b>			
	<b>473,111</b>	<b>40,285</b>	<b>-</b>	<b>513,396</b>

  

31 Dec 2021				
S\$ million	(a)	(b)	(c)	(d)
	Items subject to:			Total
	Credit risk requirements	CCR requirements	Securitisation framework	
<b>1</b>	<b>Assets carrying amount under regulatory scope of consolidation <sup>1/</sup></b>			
	403,644	11,352	-	424,819
<b>2</b>	Liabilities carrying amount under regulatory scope of consolidation <sup>1/</sup>			
	-	10,703	-	256,193
<b>3</b>	Total net amount under regulatory scope of consolidation			
	403,644	649	-	168,626
<b>4</b>	Differences due to off-balance sheet amounts			
	49,933	-	-	
<b>5</b>	Differences due to valuations			
	-	-	-	
<b>6</b>	Differences due to repos			
	-	4,457	-	
<b>7</b>	Differences due to netting rules and potential future exposures for derivatives <sup>2/</sup>			
	-	12,620	-	
<b>8</b>	Differences due to consideration of provisions			
	3,662	-	-	
<b>9</b>	Differences due to prudential filters			
	-	-	-	
<b>10</b>	Others <sup>3/</sup>			
	14	7	-	
<b>11</b>	<b>Exposure amounts considered for regulatory purposes <sup>4/</sup></b>			
	<b>457,253</b>	<b>17,733</b>	<b>-</b>	<b>474,986</b>

<sup>1/</sup> Refers to assets and liabilities carrying amounts as per the table in section 7.1

<sup>2/</sup> Refers to gross-up of the net exposure value as the derivatives netting in row 2 is broader than the netting considered for regulatory purpose and the application of the fixed beta factor of 1.4 used for computing regulatory EAD of derivatives under SA-CCR

<sup>3/</sup> Includes amounts not reported in the other categories

<sup>4/</sup> Refers to Regulatory Exposures at Default gross of impairment allowances before taking into account the effect of Credit Risk Mitigation

### 7.3 Prudent Valuation Adjustments

This table is to provide the breakdown of the constituent elements of the Group's prudent valuation adjustments. Valuation adjustments relating to Mid-market value, Closeout cost, Model risk and Unearned credit spreads, have been taken in financial reporting and not shown in this table.

		31 Dec 2022							
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
S\$ million		Equity	Interest rates	FX	Credit	Commodities	Total	of which: in the Trading book	of which: in the Banking book
1	Closeout uncertainty	-	-	-	2	-	2	2	-
2	of which: Mid-market value	-	-	-	-	-	-	-	-
3	of which: Closeout cost	-	-	-	-	-	-	-	-
4	of which: Concentration	-	-	-	2	-	2	2	-
5	Early termination <sup>1/</sup>	-	-	-	-	-	-	-	-
6	Model risk	-	-	-	-	-	-	-	-
7	Operational risk <sup>2/</sup>	-	-	-	-	-	-	-	-
8	Investing and funding costs						19	19	#
9	Unearned credit spreads						-	-	-
10	Future administrative costs <sup>3/</sup>	-	-	-	-	-	-	-	-
11	Other <sup>4/</sup>	-	-	-	-	-	-	-	-
<b>12</b>	<b>Total adjustment</b>	-	-	-	<b>2</b>	-	<b>21</b>	<b>21</b>	<b>#</b>

		31 Dec 2021							
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
S\$ million		Equity	Interest rates	FX	Credit	Commodities	Total	of which: in the Trading book	of which: in the Banking book
1	Closeout uncertainty	-	-	-	#	-	#	#	-
2	of which: Mid-market value	-	-	-	-	-	-	-	-
3	of which: Closeout cost	-	-	-	-	-	-	-	-
4	of which: Concentration	-	-	-	#	-	#	#	-
5	Early termination <sup>1/</sup>	-	-	-	-	-	-	-	-
6	Model risk	-	-	-	-	-	-	-	-
7	Operational risk <sup>2/</sup>	-	-	-	-	-	-	-	-
8	Investing and funding costs	-	14	6	-	-	20	20	#
9	Unearned credit spreads	-	-	-	-	-	-	-	-
10	Future administrative costs <sup>3/</sup>	-	-	-	-	-	-	-	-
11	Other <sup>4/</sup>	-	-	-	-	-	-	-	-
<b>12</b>	<b>Total adjustment</b>	-	<b>14</b>	<b>6</b>	<b>#</b>	-	<b>20</b>	<b>20</b>	<b>#</b>

<sup>1/</sup> Included in unwinding cost

<sup>2/</sup> Valuation processes are mostly automated with minimal manual intervention

<sup>3/</sup> No significant change in future administrative costs is expected

<sup>4/</sup> Not applicable

# Represents amounts less than \$0.5 million

## 8. LEVERAGE RATIO

### 8.1 Leverage Ratio Summary Comparison Table

	Item	Amount <sup>1</sup> (S\$m)
		31 Dec 2022
1	Total consolidated assets as per published financial statements	559,956
2	Adjustment for investments in entities that are consolidated for accounting purposes but are outside the regulatory scope of consolidation	(105,825)
3	Adjustment for fiduciary assets recognised on the balance sheet in accordance with the Accounting Standards but excluded from the calculation of exposure measure	0
4	Adjustment for derivative transactions	19,172
5	Adjustment for SFTs	86
6	Adjustment for off-balance sheet items	47,832
7	Other adjustments	(9,102)
<b>8</b>	<b>Exposure measure</b>	<b>512,119</b>

### 8.2 Leverage Ratio Common Disclosure Table

	Item	Amount <sup>1</sup> (S\$m)	
		31 Dec 2022	30 Sep 2022
	<b>Exposure measures of on-balance sheet items</b>		
1	On-balance sheet items (excluding derivative transactions and SFTs, but including on-balance sheet collateral for derivative transactions or SFTs)	430,625	439,555
2	Asset amounts deducted in determining Tier 1 capital	(9,102)	(9,529)
<b>3</b>	<b>Total exposures measures of on-balance sheet items</b> (excluding derivative transactions and SFTs)	<b>421,523</b>	<b>430,026</b>
	<b>Derivative exposure measures</b>		
4	Replacement cost associated with all derivative transactions (net of the eligible cash portion of variation margins)	15,964	22,321
5	Potential future exposure associated with all derivative transactions	19,468	20,333
6	Gross-up for derivative collaterals provided where deducted from the balance sheet assets in accordance with the Accounting Standards	-	-
7	Deductions of receivables for the cash portion of variation margins provided in derivative transactions	-	-
8	CCP leg of trade exposures excluded	-	-
9	Adjusted effective notional amount of written credit derivatives	186	167
10	Further adjustments in effective notional amounts and deductions from potential future exposures of written credit derivatives	-	-
<b>11</b>	<b>Total derivative exposure measures</b>	<b>35,618</b>	<b>42,821</b>
	<b>SFT exposure measures</b>		
12	Gross SFT assets (with no recognition of accounting netting), after adjusting for sales accounting	7,060	5,029
13	Eligible netting of cash payables and cash receivables	-	-
14	SFT counterparty exposures	86	307
15	SFT exposure measures where a Reporting Bank acts as an agent in the SFTs	-	-
<b>16</b>	<b>Total SFT exposure measures</b>	<b>7,146</b>	<b>5,336</b>
	<b>Exposure measures of off-balance sheet items</b>		
17	Off-balance sheet items at notional amount	209,769	218,690
18	Adjustments for calculation of exposure measures of off-balance sheet items	(161,937)	(167,254)
<b>19</b>	<b>Total exposure measures of off-balance sheet items</b>	<b>47,832</b>	<b>51,436</b>
	<b>Capital and Total exposures</b>		
<b>20</b>	<b>Tier 1 capital</b>	<b>36,909</b>	<b>35,971</b>
<b>21</b>	<b>Total exposures</b>	<b>512,119</b>	<b>529,619</b>
	<b>Leverage Ratio</b>		
<b>22</b>	<b>Leverage ratio</b>	<b>7.2%</b>	<b>6.8%</b>

<sup>1/</sup> Computed using quarter-end balances

SFT: Securities Financing Transactions  
CCP: Central Counterparty

## 9. CREDIT QUALITY

### 9.1 Overview of Credit Quality of Assets

The table below provides an overview of the credit quality of the on and off-balance sheet assets of the Group.

A borrower is recognised to be in default when the borrower is unlikely to repay in full its credit obligations to the Group, or the borrower is past due for more than 90 days on its credit obligations to the Group.

		31 Dec 2022						
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Gross carrying amount of <sup>1/</sup>		of which: Allowances for Standardised Approach exposures				
S\$ million		Defaulted exposures	Non-defaulted exposures	Allowances and Impairments	of which: Specific Allowances	of which: General Allowances	of which: Allowances for IRBA exposures	Net Values <sup>2/</sup> (a + b + c)
<b>1</b>	Loans to customers	3,383	291,597	(2,951)	(360)	(291)	(2,300)	292,029
<b>2</b>	Debt securities	-	22,973	(17)	(2)	#	(15)	22,956
<b>3</b>	Off-balance sheet exposures	103	16,646	(562)	-	(54)	(508)	16,187
<b>4</b>	<b>Total</b>	<b>3,486</b>	<b>331,216</b>	<b>(3,530)</b>	<b>(362)</b>	<b>(345)</b>	<b>(2,823)</b>	<b>331,172</b>

  

		30 Jun 2022						
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Gross carrying amount of <sup>1/</sup>		of which: Allowances for Standardised Approach exposures				
S\$ million		Defaulted exposures	Non-defaulted exposures	Allowances and Impairments	of which: Specific Allowances	of which: General Allowances	of which: Allowances for IRBA exposures	Net Values <sup>2/</sup> (a + b + c)
<b>1</b>	Loans to customers	3,849	294,071	(2,960)	(554)	(325)	(2,081)	294,960
<b>2</b>	Debt securities	3	25,240	(19)	(2)	(2)	(15)	25,224
<b>3</b>	Off-balance sheet exposures	117	16,161	(480)	-	(51)	(429)	15,798
<b>4</b>	<b>Total</b>	<b>3,969</b>	<b>335,472</b>	<b>(3,459)</b>	<b>(556)</b>	<b>(378)</b>	<b>(2,525)</b>	<b>335,982</b>

<sup>1/</sup> Refers to the accounting value of the assets before any impairment allowances but after write-offs

<sup>2/</sup> Refers to total gross carrying amount less impairment allowances

# Represents amounts of less than \$0.5 million

## 9.2 Changes in Stock of Defaulted Loans to Customers and Debt Securities

The table below identifies the changes in defaulted loans to customers and debt securities from the previous semi-annual reporting period, including the flows between non-defaulted and defaulted categories and reductions due to write-offs.

S\$ million	(a) Amount outstanding
<b>1</b>	
<b>Defaulted loans and debt securities as at 30 June 2022</b> <b>(1 + 2 + 3 + 4 + 5)</b>	<b>3,852</b>
<b>2</b> Loans and debt securities that have defaulted in the second half of 2022	898
<b>3</b> Return to non-defaulted status	(615)
<b>4</b> Amounts written-off	(281)
<b>5</b> Other changes <sup>1/</sup>	(471)
<b>6</b>	
<b>Defaulted loans and debt securities as at 31 December 2022</b> <b>(1 + 2 + 3 + 4 + 5)</b>	<b>3,383</b>

<sup>1/</sup> Other changes comprise foreign exchange, increase in existing defaulted loans and recoveries

## 9.3 Additional Disclosures related to the Credit Quality of Assets

The following tables show the breakdown of credit risk exposures by geographic areas, industry and residual maturity. The reporting position of all tables in this section is as at 31 December 2022.

### Gross Loans to Customers

#### Analysed by Geography

	S\$ million
Singapore	119,925
Malaysia	25,077
Indonesia	18,600
Greater China	72,756
Other Asia Pacific	21,734
Rest of the World	36,888
<b>Total</b>	<b>294,980</b>

Distribution by geography is determined based on where the credit risk resides.

### 9.3 Additional Disclosures related to the Credit Quality of Assets (continued)

#### Gross Loans to Customers (continued)

##### Analysed by Industry

	S\$ million
Agriculture, mining and quarrying	8,193
Manufacturing	15,052
Building and construction	89,299
Housing	62,015
General commerce	29,209
Transport, storage and communication	13,017
Financial institutions, investment and holding companies	24,387
Professionals and individuals	34,752
Others	19,056
<b>Total</b>	<b>294,980</b>

#### Gross Placements with and Loans to Banks

##### Analysed by Geography

	S\$ million
Singapore	753
Malaysia	5,841
Indonesia	565
Greater China	12,867
Other Asia Pacific	3,114
Rest of the World	4,973
<b>Balances with banks</b>	<b>28,113</b>
Bank balances of life insurance fund	2,136
<b>Total</b>	<b>30,249</b>

Distribution by geography is determined based on where the credit risk resides.

#### Government Treasury Bills and Securities

##### Analysed by Geography

	S\$ million
Singapore	17,096
Malaysia	4,550
Indonesia	3,994
Greater China	3,702
Other Asia Pacific	5,248
Rest of the World	4,777
<b>Total</b>	<b>39,367</b>

Distribution by geography is determined based on where the credit risk resides.

### 9.3 Additional Disclosures related to the Credit Quality of Assets (continued)

#### Gross Debt Securities

##### Analysed by Geography

	S\$ million
Singapore	2,263
Malaysia	1,676
Indonesia	1,113
Greater China	8,982
Other Asia Pacific	5,892
Rest of the World	3,030
<b>Total</b>	<b>22,956</b>

Distribution by geography is determined based on where the credit risk resides.

##### Analysed by Industry

	S\$ million
Agriculture, mining and quarrying	288
Manufacturing	1,204
Building and construction	1,947
General commerce	581
Transport, storage and communication	1,504
Financial institutions, investment and holding companies	14,768
Others	2,664
<b>Total</b>	<b>22,956</b>

#### Residual Contractual Maturity of On-Balance Sheet Assets

S\$ million	Within 1 week	1 week to 1 month	1 to 3 months	3 to 12 months	1 to 3 years	Over 3 years	Total
Net loans to customers	21,925	36,231	21,047	33,916	54,199	124,149	<b>291,467</b>
Net placements with and loans to banks	5,257	3,959	8,928	8,833	546	585	<b>28,108</b>
Government treasury bills and securities	435	3,913	6,174	9,896	11,204	7,745	<b>39,367</b>
Debt securities	70	622	1,103	5,454	9,527	6,180	<b>22,956</b>



### 9.3 Additional Disclosures related to the Credit Quality of Assets (continued)

#### Credit Commitments

##### Analysed by Geography

	S\$ million
Singapore	138,861
Malaysia	9,190
Indonesia	6,103
Greater China	20,432
Other Asia Pacific	3,424
Rest of the World	5,694
<b>Total</b>	<b>183,704</b>

Distribution by geography is determined based on where the transactions are recorded.

##### Analysed by Industry

	S\$ million
Agriculture, mining and quarrying	1,977
Manufacturing	11,297
Building and construction	26,766
General commerce	29,892
Transport, storage and communication	6,362
Financial institutions, investment and holding companies	41,278
Professionals and individuals	57,689
Others	8,443
<b>Total</b>	<b>183,704</b>

##### Analysed by Residual Maturity

	S\$ million
Undrawn credit facilities:	
Term to maturity of one year or less	150,236
Term to maturity of more than one year	33,468
<b>Total</b>	<b>183,704</b>

#### Contingent Liabilities

##### Analysed by Geography

	S\$ million
Singapore	10,905
Malaysia	1,226
Indonesia	1,094
Greater China	2,683
Other Asia Pacific	339
Rest of the World	502
<b>Total</b>	<b>16,749</b>

Distribution by geography is determined based on where the transactions are recorded.

### 9.3 Additional Disclosures related to the Credit Quality of Assets (continued)

#### Contingent Liabilities (continued)

##### Analysed by Industry

	S\$ million
Agriculture, mining and quarrying	153
Manufacturing	1,480
Building and construction	2,247
General commerce	9,238
Transport, storage and communication	561
Financial institutions, investment and holding companies	1,614
Professionals and individuals	158
Others	1,298
<b>Total</b>	<b>16,749</b>

##### Analysed by Residual Maturity

	S\$ million
Guarantees and standby letters of credit:	
Term to maturity of one year or less	6,352
Term to maturity of more than one year	2,984
	<b>9,336</b>
Acceptances and endorsements	950
Documentary credits and other short term trade-related transactions	6,463
<b>Total</b>	<b>16,749</b>

### 9.4 Overview of Past Due Exposure and Impairment Allowances

The following tables provide breakdown of defaulted loans to customers (Non-performing Loans) by geography, credit grade under MAS Notice 612 and industry. In addition, loans to customers are categorised into “neither past due nor impaired”, “past due but not impaired” and “impaired”.

With effect from 1 January 2018, the Group recognises allowance for Expected Credit Losses (ECL) on credit impaired and non-credit impaired exposures in accordance to SFRS(I) 9 and MAS Notice 612 with a forward looking ECL model.

For credit impaired portfolio, specific allowance is assessed individually and measured based on lifetime ECL. The amount of specific allowance for an individual credit exposure is determined by ascertaining the net present value of future cash flows that is recoverable from the borrower.

For non-credit impaired portfolio, the portfolio allowance is assessed and measured based on 12-month ECL if the credit risk of a credit exposure has not increased significantly since initial recognition. However, where there is significant increase in credit risk, the loss allowance is based on lifetime ECL.

The reporting position of all tables in this section is as at 31 December 2022.

#### 9.4 Overview of Past Due Exposure and Impairment Allowances (continued)

##### Total Loans to Customers – Credit Quality

	S\$ million
Neither past due nor impaired	291,059
Non-impaired	1,527
Impaired	1,505
Past due loans	3,032
Impaired but not past due	889
<b>Gross loans</b>	<b>294,980</b>
Allowances	
Impaired loans	(1,308)
Non-impaired loans	(2,205)
<b>Net loans</b>	<b>291,467</b>

##### Non-performing Loans

###### Analysed by Geography

S\$ million	Singapore	Malaysia	Indonesia	Greater China	Rest of the World	Total
Substandard	190	495	343	444	71	1,543
Doubtful	112	179	252	431	308	1,282
Loss	81	267	183	26	1	558
<b>Total</b>	<b>383</b>	<b>941</b>	<b>778</b>	<b>901</b>	<b>380</b>	<b>3,383</b>

Distribution by geography is determined based on where the credit risk resides.

###### Analysed by Industry

	S\$ million
Agriculture, mining and quarrying	56
Manufacturing	614
Building and construction	592
Housing	579
General commerce	392
Transport, storage and communication	392
Financial institutions, investment and holding companies	131
Professionals and individuals	128
Others	499
<b>Total</b>	<b>3,383</b>

#### 9.4 Overview of Past Due Exposure and Impairment Allowances (continued)

##### Non-performing Loans (continued)

##### Analysed by Period Overdue

	S\$ million
Over 180 days	915
Over 90 days to 180 days	395
30 days to 90 days	296
Less than 30 days	383
<b>Past due</b>	<b>1,989</b>
No overdue	1,394
<b>Total</b>	<b>3,383</b>

##### Past Due Loans

##### Analysed by Industry

	S\$ million
Agriculture, mining and quarrying	96
Manufacturing	548
Building and construction	391
General commerce	401
Transport, storage and communication	246
Financial institutions, investment and holding companies	136
Professionals and individuals (include housing)	1,094
Others	120
<b>Total</b>	<b>3,032</b>

##### Analysed by Geography

	S\$ million
Singapore	653
Malaysia	729
Indonesia	1,039
Greater China	472
Rest of the World	139
<b>Total</b>	<b>3,032</b>

Distribution by geography is determined based on where the credit risk resides.

#### 9.4 Overview of Past Due Exposure and Impairment Allowances (continued)

##### Impairment Allowances for Loans to Customers and Debt Securities

###### Analysed by Geography

S\$ million	Allowances for Impaired Assets			Allowances for Non-impaired Assets
	Debt Securities	Loans to Customers	Total	
Singapore	2	129	131	928
Malaysia	-	292	292	256
Indonesia	-	389	389	331
Greater China	-	246	246	780
Other Asia Pacific	-	29	29	123
Rest of the World	-	223	223	263
<b>Total</b>	<b>2</b>	<b>1,308</b>	<b>1,310</b>	<b>2,681</b>

Distribution by geography is determined based on where the credit risk resides.

###### Analysed by Industry

S\$ million	Allowances for Impaired Assets		
	Debt Securities	Loans to Customers	Total
Agriculture, mining and quarrying	-	33	33
Manufacturing	2	277	279
Building and construction	-	104	104
Housing	-	95	95
General commerce	-	156	156
Transport, storage and communication	-	228	228
Financial institutions, investment and holding companies	-	104	104
Professionals and individuals	-	48	48
Others	-	263	263
<b>Total</b>	<b>2</b>	<b>1,308</b>	<b>1,310</b>

#### 9.4 Overview of Past Due Exposure and Impairment Allowances (continued)

##### Impairment Allowances for Loans to Customers and Debt Securities (continued)

S\$ million	Net Allowances for Impaired Assets (Credited)/Charged to Income Statement		
	Debt Securities	Loans to Customers	Total
Agriculture, mining and quarrying	-	(17)	(17)
Manufacturing	(#)	59	59
Building and construction	-	56	56
Housing	-	(32)	(32)
General commerce	-	(9)	(9)
Transport, storage and communication	-	10	10
Financial institutions, investment and holding companies	-	73	73
Professionals and individuals	-	(13)	(13)
Others	-	9	9
<b>Total</b>	<b>(#)</b>	<b>136</b>	<b>136</b>

# Represents amounts less than S\$0.5 million

##### Past Due Loans but Not Impaired

These are loans to customers that are past due but not impaired as the collateral values of these loans are in excess of the principal and interest outstanding. Allowances for these loans may have been set aside.

The following table provides the ageing analysis of non-impaired past due exposures.

##### Analysed by Period Overdue

	S\$ million
<b>Past due</b>	
Less than 30 days	884
30 to 90 days	310
Over 90 days	333
<b>Past due but not impaired</b>	<b>1,527</b>

## 9.5 Restructured Exposures

Restructured exposures refer to exposures where the Bank has granted concessions or restructured repayment terms to borrowers who are facing difficulties in meeting original repayment schedules. They are classified in the appropriate non-performing grades and not restored to performing loan status until the borrowers have demonstrated sustained ability to meet all future obligations under the restructured terms.

The following table provides the breakdown of impaired and non-impaired restructured exposures.

<b>S\$ million</b>	<b>Impaired Exposures</b>	<b>Non-impaired Exposures</b>
<b>Credit Quality of Restructured Exposures</b>		
Substandard	343	46
Doubtful	334	16
Loss	135	5
<b>At 31 December 2022</b>	<b>812</b>	<b>67</b>

## 10. KEY APPROACHES USED FOR COMPUTATION OF RWA

Table below provides detail on Key Approaches used for computation of RWA.

<b>Risk Type</b>	<b>Approach for Computation of RWA</b>
<b>Credit Risk</b>	<ul style="list-style-type: none"> <li>Advanced Internal Ratings Based (A-IRB) Approach for major consumer portfolios, including residential mortgages, credit cards and auto loans as well as small business and margin lending</li> <li>Foundation Internal Ratings Based (F-IRB) Approach for wholesale portfolios, namely sovereign, bank, non-bank financial institution, corporate real estate (including income-producing real estate specialised lending) and general corporate</li> <li>Supervisory Slotting Criteria for other specialised lending portfolios, namely project finance, object finance and commodities finance</li> <li>Any credit risk-weighted assets for securitisation exposures will be computed using the ratings-based method prescribed by MAS Notice 637</li> <li>Standardised Approach for portfolios in Bank OCBC NISP. Regulatory prescribed risk weights based on asset class and external ratings from approved credit rating agencies, where available, are used to determine regulatory capital. Approved external credit rating agencies are Standard and Poor's, Moody's and Fitch Ratings</li> </ul>
<b>Market Risk</b>	<ul style="list-style-type: none"> <li>Standardised Approach for market risk assets, where Risk Weights are specified according to the instrument category, maturity period, credit quality grade as well as other factors and applied to the corresponding notional amount as prescribed under MAS Notice 637</li> </ul>
<b>Operational Risk</b>	<ul style="list-style-type: none"> <li>Standardised Approach is used across the Group except for OCBC Wing Hang (Hong Kong and Macau) and Bank OCBC NISP, which have adopted the Basic Indicator Approach</li> <li>Operational risk-weighted assets are derived by applying specified factors or percentages to the annual gross income for the prescribed business lines in accordance with regulatory guidelines</li> </ul>



## 11. OVERVIEW OF RISK WEIGHTED ASSETS

The table below provides an overview of the Group's total RWA, broken down by the approaches with which the RWA are computed, as stipulated by MAS Notice 637. The decrease in total RWA in the fourth quarter of 2022 was mainly due to lower Credit RWA, largely attributed to the migration of corporate portfolio booked in OCBC Wing Hang to IRB from Standardised Approach and Foreign exchange movements.

S\$ million	(a) RWA		(b)	(c) Minimal Capital Requirements <sup>1/</sup>
	Dec-22	Sep-22	Dec-22	Dec-22
<b>1</b>	Credit Risk (excluding Counterparty Credit Risk)	184,445	188,752	18,444
<b>2</b>	Of which: Standardised Approach	33,194	41,160	3,319
<b>3</b>	Of which: Foundation Internal Ratings-Based Approach (F-IRBA)	133,624	128,805	13,362
<b>4</b>	Of which: Supervisory Slotting Approach	3,930	3,500	393
<b>5</b>	Of which: Advanced Internal Ratings-Based Approach (A-IRBA)	13,697	15,287	1,370
<b>6</b>	Credit Risk: Counterparty Credit Risk (CCR)	5,234	5,322	523
<b>7</b>	Of which: SA-CCR	2,767	3,018	277
<b>8</b>	Of which: Internal Models Method	-	-	-
<b>9</b>	Of which: Other CCR	465	365	46
<b>9a</b>	Of which: Central Counterparties (CCP)	2,002	1,939	200
<b>10</b>	Credit Valuation Adjustments (CVA)	2,598	2,987	260
<b>11</b>	Equity exposures under Simple Risk Weight Method	-	-	-
<b>11a</b>	Equity exposures under Internal Models Method	-	-	-
<b>12</b>	Equity investments in funds - Look Through Approach	148	150	15
<b>13</b>	Equity investments in funds - Mandate-Based Approach	227	257	23
<b>14</b>	Equity investments in funds - Fall Back Approach	9	9	1
<b>14a</b>	Equity investments in funds - Partial Use of an Approach	132	123	13
<b>15</b>	Unsettled Transactions	#	167	#
<b>16</b>	Securitisation exposures in banking book	-	-	-
<b>17</b>	Of which: SEC-IRBA	-	-	-
<b>18</b>	Of which: SEC-ERBA, including IAA	-	-	-
<b>19</b>	Of which: SEC-SA	-	-	-
<b>20</b>	Market Risk	8,587	10,215	859
<b>21</b>	Of which: Standardised Approach	8,587	10,215	859
<b>22</b>	Of which: Internal Models Approach	-	-	-
<b>23</b>	Operational Risk	20,348	19,989	2,035
<b>24</b>	Credit RWA pursuant to paragraph 6.1.3(p)(iii) <sup>2/</sup>	9,920	9,748	992
<b>25</b>	Floor Adjustment	-	-	-
<b>26</b>	<b>Total</b>	<b>231,648</b>	<b>237,719</b>	<b>23,165</b>

<sup>1/</sup> Minimum capital requirements are calculated at 10% of RWA

<sup>2/</sup> Refers to Credit RWA attributed to investments in the ordinary shares of unconsolidated major stake companies that are financial institutions, within the prescribed threshold amount in accordance with MAS Notice 637 paragraph 6.1.3 (p)(iii)

# Represents amounts of less than \$0.5 million

## 12. RWA FLOW STATEMENT FOR CREDIT RISK EXPOSURES

This table provides an overview of the quarter-on-quarter movement of Credit RWA (“CRWA”) attributed to the key drivers from rows 2 to 8.

The increase in CRWA during fourth quarter of 2022 was primarily due to the adoption of IRB Approach for corporate portfolio booked in OCBC Wing Hang and Corporate loan growth.

S\$ million	(a) RWA
<b>1 RWA as at 30 September 2022 <sup>1/</sup></b>	<b>147,592</b>
<b>2 Asset Size <sup>2/</sup></b>	4,900
<b>3 Asset Quality <sup>3/</sup></b>	(1,930)
<b>4 Model Updates <sup>4/</sup></b>	3,573
<b>5 Methodology and Policy <sup>5/</sup></b>	-
<b>6 Acquisitions and Disposals <sup>6/</sup></b>	-
<b>7 Foreign exchange movements <sup>7/</sup></b>	(2,884)
<b>8 Other <sup>8/</sup></b>	-
<b>9 RWA as at 31 December 2022 <sup>1/</sup> (1 + 2 + 3 + 4 + 5 + 6 + 7 + 8)</b>	<b>151,251</b>

<sup>1/</sup> Refers to RWA of Credit Risk (excluding Counterparty Credit Risk) exposures under IRB Approach and Supervisory Slotting Approach

<sup>2/</sup> Refers to organic changes in book size and composition (origination of new businesses and maturing loans), excluding acquisitions and disposal of entities

<sup>3/</sup> Refers to changes in the assessed quality of the bank’s assets due to changes in borrower risk, residual maturity or similar effects

<sup>4/</sup> Refers to changes due to model implementation, changes in model scope, or any model enhancements

<sup>5/</sup> Refers to changes driven by methodological changes such as regulatory policy changes

<sup>6/</sup> Refers to changes in book size due to acquisition and disposal of entities or portfolios

<sup>7/</sup> Refers to changes driven by market movements such as foreign exchange movements

<sup>8/</sup> Refers to changes that cannot be attributed to any other category

### 13. CREDIT EXPOSURES UNDER STANDARDISED AND IRB APPROACH

#### 13.1 Credit Exposures under Standardised Approach and CRM effects

The following table illustrates the effects of credit risk mitigation (CRM) on the calculation of capital requirements for credit and equity exposures under the Standardised Approach. The decrease in RWA in the second half of 2022 was due to the migration of corporate exposures booked in OCBC Wing Hang from Standardised to IRB Approach.

		31 Dec 2022					
		(a) Exposures before CCF and CRM		(c) Exposures post-CCF and post-CRM		(e)	(f)
S\$ million		On-Balance Sheet	Off-Balance Sheet	On-Balance Sheet	Off-Balance Sheet	RWA	RWA Density
<b>Asset Class</b>							
1	Cash Items	1,972	-	1,972	-	4	0%
2	Sovereign	4,963	-	4,963	-	384	8%
3	PSE	209	79	209	3	106	50%
4	MDB	36	-	36	1	-	0%
5	Bank	522	-	522	-	175	34%
6	Corporate	5,906	5,901	5,479	1,681	7,121	99%
7	Regulatory Retail	9,858	2,533	9,438	27	7,099	75%
8	Residential Mortgage	2,590	#	2,496	-	963	39%
9	Commercial Real Estate	7,091	3,458	7,084	594	7,679	100%
10	Equity exposures	710	-	710	-	1,146	162%
11	Past Due exposures	366	#	366	#	467	127%
12	Higher risk exposures	-	-	-	-	-	NA
13	Others <sup>1/</sup>	8,332	1,182	7,983	67	8,050	100%
14	<b>Total</b>	<b>42,555</b>	<b>13,153</b>	<b>41,258</b>	<b>2,373</b>	<b>33,194</b>	<b>76%</b>

  

		30 Jun 2022					
		(a) Exposures before CCF and CRM		(c) Exposures post-CCF and post-CRM		(e)	(f)
S\$ million		On-Balance Sheet	Off-Balance Sheet	On-Balance Sheet	Off-Balance Sheet	RWA	RWA Density
<b>Asset Class</b>							
1	Cash Items	1,729	-	1,729	-	4	0%
2	Sovereign	6,688	-	6,688	-	812	12%
3	PSE	171	-	171	-	86	50%
4	MDB	65	-	65	#	-	0%
5	Bank	474	-	474	-	151	32%
6	Corporate	12,517	8,021	11,554	2,185	13,173	96%
7	Regulatory Retail	10,138	2,549	9,635	40	7,256	75%
8	Residential Mortgage	2,522	-	2,416	-	881	36%
9	Commercial Real Estate	7,323	2,350	7,304	169	7,473	100%
10	Equity exposures	675	-	675	-	1,091	162%
11	Past Due exposures	465	4	464	2	576	123%
12	Higher risk exposures	-	-	-	-	-	NA
13	Others <sup>1/</sup>	8,649	1,071	8,269	22	8,292	100%
14	<b>Total</b>	<b>51,416</b>	<b>13,995</b>	<b>49,444</b>	<b>2,418</b>	<b>39,795</b>	<b>77%</b>

<sup>1/</sup> Includes other exposures not included in the above asset classes, such as fixed asset

# Represents amounts of less than \$0.5 million

### 13.2 Credit Exposures under Standardised Approach by Risk Weight

The following table provides a breakdown of credit risk exposures treated under the Standardised Approach by asset class and risk weight. The risk weight assigned corresponds to the level of risk attributed to each exposure.

		31 Dec 2022									
		(a)	(b)	(c)	Risk Weight		(f)	(g)	(h)	(i)	(j)
S\$ million		0%	10%	20%	35%	50%	75%	100%	150%	Others	Total EAD <sup>1/</sup>
<b>Asset Class</b>											
1	Cash Items	1,953	-	19	-	-	-	-	-	-	1,972
2	Sovereign	4,195	-	-	-	768	-	-	-	-	4,963
3	PSE	-	-	-	-	212	-	-	-	-	212
4	MDB	37	-	-	-	-	-	-	-	-	37
5	Bank	-	-	284	-	237	-	-	-	-	521
6	Corporate	-	-	45	-	4	-	7,111	#	-	7,160
7	Regulatory Retail	-	-	-	-	-	9,465	-	-	-	9,465
8	Residential Mortgage	-	-	-	2,292	-	171	33	-	-	2,496
9	Commercial Real Estate	-	-	-	-	-	-	7,679	-	-	7,679
10	Equity exposures	-	-	-	-	-	-	-	-	710	710
11	Past Due exposures	-	-	-	-	-	-	165	201	-	366
12	Higher risk exposures	-	-	-	-	-	-	-	-	-	-
13	Others <sup>2/</sup>	-	-	-	-	-	-	8,050	-	-	8,050
14	<b>Total</b>	<b>6,185</b>	<b>-</b>	<b>348</b>	<b>2,292</b>	<b>1,221</b>	<b>9,636</b>	<b>23,038</b>	<b>201</b>	<b>710</b>	<b>43,631</b>

		30 Jun 2022									
		(a)	(b)	(c)	Risk Weight		(f)	(g)	(h)	(i)	(j)
S\$ million		0%	10%	20%	35%	50%	75%	100%	150%	Others	Total EAD <sup>1/</sup>
<b>Asset Class</b>											
1	Cash Items	1,711	-	18	-	-	-	-	-	-	1,729
2	Sovereign	5,063	-	-	-	1,625	-	-	-	-	6,688
3	PSE	-	-	-	-	171	-	-	-	-	171
4	MDB	65	-	-	-	-	-	-	-	-	65
5	Bank	-	-	285	-	189	-	-	-	-	474
6	Corporate	-	-	123	-	931	-	12,684	#	-	13,738
7	Regulatory Retail	-	-	-	-	-	9,675	-	-	-	9,675
8	Residential Mortgage	-	-	-	2,342	-	50	24	-	-	2,416
9	Commercial Real Estate	-	-	-	-	-	-	7,473	-	-	7,473
10	Equity exposures	-	-	-	-	-	-	-	-	675	675
11	Past Due exposures	-	-	-	-	-	-	248	219	-	467
12	Higher risk exposures	-	-	-	-	-	-	-	-	-	-
13	Others <sup>2/</sup>	-	-	-	-	-	-	8,291	-	-	8,291
14	<b>Total</b>	<b>6,839</b>	<b>-</b>	<b>426</b>	<b>2,342</b>	<b>2,916</b>	<b>9,725</b>	<b>28,720</b>	<b>219</b>	<b>675</b>	<b>51,862</b>

<sup>1/</sup> Total EAD refers to both on and off-balance sheet amounts that are used for computing capital requirements, net of impairment allowances and write-offs and after application of CRM and CCF

<sup>2/</sup> Includes other exposures not included in the above asset classes, such as fixed asset

### 13.3 Credit Exposures under Foundation Internal Ratings-Based Approach (F-IRBA)

The following table provides the main parameters used in the treatment of exposures for the calculation of capital requirements under the F-IRBA.

31 Dec 2022												
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	On-Balance Sheet <sup>1/</sup>	Off-Balance Sheet <sup>2/</sup>	Average CCF (%)	EAD <sup>3/</sup> (S\$ million)	Average PD <sup>4/</sup> (%)	Number of Obligors <sup>5/</sup>	Average LGD <sup>4/</sup> (%)	Average Maturity <sup>6/</sup> (In years)	RWA (S\$ million)	RWA Density <sup>7/</sup> (%)	Expected Losses (S\$ million)	TEP <sup>8/</sup> (S\$ million)
<b>Sovereign</b>	(S\$ million)											
<b>Sovereign</b>												
PD Range												
0.00 to < 0.15	61,058	2,618	0%	61,755	0.00%	41	45%	1.4	738	1%	1	
0.15 to < 0.25	-	-	-	-	-	-	-	-	-	NA	-	
0.25 to < 0.50	-	-	-	-	-	-	-	-	-	NA	-	
0.50 to < 0.75	-	-	-	-	-	-	-	-	-	NA	-	
0.75 to < 2.50	4	-	-	4	1.11%	2	45%	1.0	4	81%	#	
2.50 to < 10.00	-	-	-	-	-	-	-	-	-	NA	-	
10.00 to < 100.00	53	#	-	53	11.10%	11	49%	1.0	111	210%	3	
100.00 (Default)	-	-	-	-	-	-	-	-	-	NA	-	
<b>Sub-total</b>	<b>61,115</b>	<b>2,618</b>	<b>0%</b>	<b>61,812</b>	<b>0.01%</b>	<b>54</b>	<b>45%</b>	<b>1.4</b>	<b>853</b>	<b>1%</b>	<b>4</b>	<b>12</b>
<b>Bank</b>												
PD Range												
0.00 to < 0.15	34,649	1,278	22%	36,110	0.05%	250	45%	0.9	5,190	14%	8	
0.15 to < 0.25	-	-	-	-	-	-	-	-	-	NA	-	
0.25 to < 0.50	1,820	173	71%	1,943	0.37%	15	45%	0.5	1,036	53%	3	
0.50 to < 0.75	831	111	7%	839	0.54%	17	45%	0.3	536	64%	2	
0.75 to < 2.50	749	176	30%	725	1.20%	19	45%	0.2	640	88%	4	
2.50 to < 10.00	-	1	100%	1	6.42%	1	0%	1.0	-	0%	-	
10.00 to < 100.00	2	5	52%	4	11.27%	48	25%	0.9	5	122%	#	
100.00 (Default)	#	1	50%	#	100.00%	4	2%	1.0	-	0%	#	
<b>Sub-total</b>	<b>38,051</b>	<b>1,745</b>	<b>27%</b>	<b>39,622</b>	<b>0.10%</b>	<b>354</b>	<b>45%</b>	<b>0.9</b>	<b>7,407</b>	<b>19%</b>	<b>17</b>	<b>105</b>
<b>Corporate</b>												
PD Range												
0.00 to < 0.15	55,966	37,090	35%	68,807	0.10%	1,035	44%	2.3	20,427	30%	30	
0.15 to < 0.25	-	#	0%	-	0.00%	1	0%	-	-	NA	-	
0.25 to < 0.50	25,011	23,527	27%	31,158	0.37%	672	44%	2.0	17,847	57%	50	
0.50 to < 0.75	15,437	12,452	20%	17,789	0.54%	726	43%	1.9	12,084	68%	41	
0.75 to < 2.50	13,580	14,597	18%	15,615	1.28%	950	42%	1.9	14,352	92%	84	
2.50 to < 10.00	4,569	1,587	12%	4,616	4.27%	394	40%	2.4	6,142	133%	80	
10.00 to < 100.00	721	480	2%	692	12.51%	442	38%	2.3	1,282	185%	34	
100.00 (Default)	2,378	61	29%	2,394	100.00%	142	44%	1.3	-	0%	1,023	
<b>Sub-total</b>	<b>117,662</b>	<b>89,794</b>	<b>27%</b>	<b>141,071</b>	<b>2.24%</b>	<b>4,362</b>	<b>44%</b>	<b>2.1</b>	<b>72,134</b>	<b>51%</b>	<b>1,343</b>	<b>2,921</b>

**13.3 Credit Exposures under Foundation Internal Ratings-Based Approach (F-IRBA) (continued)**

	31 Dec 2022											
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	On-Balance Sheet <sup>1/</sup>	Off-Balance Sheet <sup>2/</sup>	Average CCF (%)	EAD <sup>3/</sup> (\$ million)	Average PD <sup>4/</sup> (%)	Number of Obligors <sup>5/</sup>	Average LGD <sup>4/</sup> (%)	Average Maturity <sup>6/</sup> (In years)	RWA (\$ million)	RWA Density <sup>7/</sup> (%)	Expected Losses (\$ million)	TEP <sup>8/</sup> (\$ million)
	(\$ million)											
<b>Corporate (IPRE)</b>												
PD Range												
0.00 to < 0.15	1,846	119	66%	1,924	0.13%	14	45%	2.1	637	33%	1	
0.15 to < 0.25	-	-	-	-	-	-	-	-	-	NA	-	
0.25 to < 0.50	3,424	749	40%	3,721	0.37%	29	45%	2.1	2,202	59%	6	
0.50 to < 0.75	10,476	1,192	63%	11,222	0.54%	96	45%	2.3	8,446	75%	27	
0.75 to < 2.50	23,590	4,678	62%	26,465	1.37%	416	45%	2.2	27,560	104%	162	
2.50 to < 10.00	3,439	1,101	40%	3,862	3.93%	134	45%	2.2	5,508	143%	68	
10.00 to < 100.00	238	11	68%	246	11.10%	13	45%	1.1	479	195%	12	
100.00 (Default)	228	8	50%	232	100.00%	10	45%	1.3	-	0%	103	
<b>Sub-total</b>	<b>43,241</b>	<b>7,858</b>	<b>57%</b>	<b>47,672</b>	<b>1.78%</b>	<b>712</b>	<b>45%</b>	<b>2.2</b>	<b>44,832</b>	<b>94%</b>	<b>380</b>	<b>690</b>
<b>Corporate Small Business</b>												
PD Range												
0.00 to < 0.15	467	532	9%	505	0.12%	331	41%	2.7	152	30%	#	
0.15 to < 0.25	591	191	12%	552	0.16%	753	39%	4.1	211	38%	#	
0.25 to < 0.50	914	760	8%	914	0.37%	329	40%	2.1	427	47%	1	
0.50 to < 0.75	1,197	1,039	19%	1,354	0.54%	532	40%	2.3	796	59%	3	
0.75 to < 2.50	3,939	2,743	8%	3,931	1.52%	1,330	37%	2.4	3,146	80%	22	
2.50 to < 10.00	2,150	1,196	7%	2,157	4.20%	867	37%	2.3	2,279	106%	33	
10.00 to < 100.00	790	401	9%	802	12.92%	556	38%	2.5	1,387	173%	38	
100.00 (Default)	772	24	56%	775	100.00%	217	42%	1.2	-	0%	327	
<b>Sub-total</b>	<b>10,820</b>	<b>6,886</b>	<b>10%</b>	<b>10,990</b>	<b>9.47%</b>	<b>4,915</b>	<b>38%</b>	<b>2.4</b>	<b>8,398</b>	<b>76%</b>	<b>425</b>	<b>586</b>
<b>Total (all portfolios)</b>	<b>270,889</b>	<b>108,901</b>	<b>28%</b>	<b>301,167</b>	<b>1.69%</b>	<b>10,397</b>	<b>44%</b>	<b>1.8</b>	<b>133,624</b>	<b>44%</b>	<b>2,169</b>	<b>4,314</b>

**13.3 Credit Exposures under Foundation Internal Ratings-Based Approach (F-IRBA) (continued)**

30 Jun 2022												
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	On-Balance Sheet <sup>1/</sup>	Off-Balance Sheet <sup>2/</sup>	Average CCF (%)	EAD <sup>3/</sup> (S\$ million)	Average PD <sup>4/</sup> (%)	Number of Obligors <sup>5/</sup>	Average LGD <sup>4/</sup> (%)	Average Maturity <sup>6/</sup> (In years)	RWA (S\$ million)	RWA Density <sup>7/</sup> (%)	Expected Losses (S\$ million)	TEP <sup>8/</sup> (S\$ million)
<b>Sovereign</b>	(S\$ million)											
<b>PD Range</b>												
0.00 to < 0.15	57,290	1,410	7%	58,174	0.00%	43	45%	1.5	723	1%	1	
0.15 to < 0.25	-	-	-	-	-	-	-	-	-	NA	-	
0.25 to < 0.50	-	-	-	-	-	-	-	-	-	NA	-	
0.50 to < 0.75	-	-	-	-	-	-	-	-	-	NA	-	
0.75 to < 2.50	10	-	-	10	1.11%	2	45%	1.0	8	81%	#	
2.50 to < 10.00	-	-	-	-	-	-	-	-	-	NA	-	
10.00 to < 100.00	80	#	-	80	11.10%	5	48%	1.0	164	207%	4	
100.00 (Default)	-	-	-	-	-	-	-	-	-	NA	-	
<b>Sub-total</b>	<b>57,380</b>	<b>1,410</b>	<b>7%</b>	<b>58,264</b>	<b>0.02%</b>	<b>50</b>	<b>45%</b>	<b>1.5</b>	<b>895</b>	<b>2%</b>	<b>5</b>	<b>12</b>
<b>Bank</b>												
<b>PD Range</b>												
0.00 to < 0.15	31,624	1,470	27%	33,895	0.05%	262	45%	1.1	5,303	16%	8	
0.15 to < 0.25	-	-	-	-	-	-	-	-	-	NA	-	
0.25 to < 0.50	2,301	214	88%	2,489	0.37%	15	45%	0.5	1,325	53%	4	
0.50 to < 0.75	847	109	5%	1,143	0.54%	18	45%	0.6	787	69%	3	
0.75 to < 2.50	541	29	5%	506	1.16%	20	45%	0.3	462	91%	3	
2.50 to < 10.00	-	1	100%	1	6.42%	1	0%	1.0	-	0%	-	
10.00 to < 100.00	29	8	43%	31	11.21%	50	42%	0.4	64	202%	1	
100.00 (Default)	#	1	1	#	100.00%	4	2%	1.0	-	0%	#	
<b>Sub-total</b>	<b>35,342</b>	<b>1,832</b>	<b>32%</b>	<b>38,065</b>	<b>0.11%</b>	<b>370</b>	<b>45%</b>	<b>1.0</b>	<b>7,941</b>	<b>21%</b>	<b>19</b>	<b>103</b>
<b>Corporate</b>												
<b>PD Range</b>												
0.00 to < 0.15	52,225	33,748	35%	63,939	0.10%	988	44%	2.4	19,635	31%	28	
0.15 to < 0.25	1	6	74%	5	0.15%	4	40%	3.9	2	46%	#	
0.25 to < 0.50	26,205	21,129	25%	31,319	0.37%	639	43%	1.9	17,549	56%	50	
0.50 to < 0.75	13,408	12,238	18%	15,263	0.54%	647	43%	1.8	9,943	65%	35	
0.75 to < 2.50	12,116	14,000	16%	13,644	1.31%	845	42%	2.0	12,656	93%	75	
2.50 to < 10.00	4,979	1,702	24%	5,176	3.78%	394	41%	2.6	6,885	133%	80	
10.00 to < 100.00	557	758	2%	519	13.03%	401	42%	2.0	1,031	199%	28	
100.00 (Default)	2,309	66	30%	2,283	100.00%	129	44%	1.1	-	0%	1,009	
<b>Sub-total</b>	<b>111,800</b>	<b>83,647</b>	<b>26%</b>	<b>132,148</b>	<b>2.26%</b>	<b>4,047</b>	<b>44%</b>	<b>2.1</b>	<b>67,701</b>	<b>51%</b>	<b>1,305</b>	<b>2,795</b>

**13.3 Credit Exposures under Foundation Internal Ratings-Based Approach (F-IRBA) (continued)**

	30 Jun 2022											
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	On-Balance Sheet <sup>1/</sup>	Off-Balance Sheet <sup>2/</sup>	Average CCF (%)	EAD <sup>3/</sup> (\$ million)	Average PD <sup>4/</sup> (%)	Number of Obligors <sup>5/</sup>	Average LGD <sup>4/</sup> (%)	Average Maturity <sup>6/</sup> (In years)	RWA (\$ million)	RWA Density <sup>7/</sup> (%)	Expected Losses (\$ million)	TEP <sup>8/</sup> (\$ million)
	(\$ million)											
<b>Corporate (IPRE)</b>												
PD Range												
0.00 to < 0.15	1,365	141	67%	1,460	0.14%	11	45%	3.1	622	43%	1	
0.15 to < 0.25	-	-	-	-	-	-	-	-	-	NA	-	
0.25 to < 0.50	4,780	886	45%	5,179	0.37%	35	45%	1.9	2,965	57%	9	
0.50 to < 0.75	11,006	956	61%	11,584	0.54%	83	45%	2.4	8,622	74%	28	
0.75 to < 2.50	20,843	3,365	62%	22,887	1.38%	381	45%	2.2	23,784	104%	142	
2.50 to < 10.00	3,080	716	29%	3,270	3.82%	130	45%	2.2	4,614	141%	56	
10.00 to < 100.00	179	1	11%	177	13.86%	11	44%	1.2	364	206%	11	
100.00 (Default)	131	9	50%	135	100.00%	7	45%	1.5	-	0%	61	
<b>Sub-total</b>	<b>41,384</b>	<b>6,074</b>	<b>56%</b>	<b>44,692</b>	<b>1.53%</b>	<b>658</b>	<b>45%</b>	<b>2.2</b>	<b>40,971</b>	<b>92%</b>	<b>308</b>	<b>587</b>
<b>Corporate Small Business</b>												
PD Range												
0.00 to < 0.15	469	490	11%	512	0.11%	324	39%	2.6	140	27%	#	
0.15 to < 0.25	571	226	12%	525	0.16%	843	39%	4.0	199	38%	#	
0.25 to < 0.50	696	531	9%	697	0.37%	308	41%	2.6	354	51%	1	
0.50 to < 0.75	1,094	752	9%	1,102	0.54%	529	39%	2.1	577	52%	2	
0.75 to < 2.50	3,506	2,329	10%	3,459	1.45%	1,152	38%	2.5	2,706	78%	19	
2.50 to < 10.00	1,820	1,020	10%	1,843	3.94%	697	37%	2.2	1,798	98%	27	
10.00 to < 100.00	521	248	7%	507	13.78%	473	38%	2.5	769	152%	25	
100.00 (Default)	899	24	56%	906	100.00%	212	43%	1.3	-	0%	390	
<b>Sub-total</b>	<b>9,576</b>	<b>5,620</b>	<b>10%</b>	<b>9,551</b>	<b>11.61%</b>	<b>4,538</b>	<b>39%</b>	<b>2.4</b>	<b>6,543</b>	<b>68%</b>	<b>464</b>	<b>686</b>
<b>Total (all portfolios)</b>	<b>255,482</b>	<b>98,583</b>	<b>27%</b>	<b>282,720</b>	<b>1.71%</b>	<b>9,663</b>	<b>44%</b>	<b>1.9</b>	<b>124,051</b>	<b>44%</b>	<b>2,101</b>	<b>4,183</b>

- <sup>1/</sup> On-balance sheet refers to the amount of the on-balance sheet exposure gross of impairment allowances (before taking into account the effect of CRM)
- <sup>2/</sup> Off-balance sheet refers to the exposure value without taking into account valuation adjustments and impairment allowances, CCFs and the effect of CRM
- <sup>3/</sup> EAD refers to the amount relevant for the capital requirements calculation, after taking into account the effect of CCFs and CRM
- <sup>4/</sup> Refers to the PD and LGD associated with each obligor grade, weighted by EAD
- <sup>5/</sup> Number of obligors refers to the number of counterparties
- <sup>6/</sup> Refers to the effective maturity of the exposures to the obligor in years, weighted by EAD
- <sup>7/</sup> Total RWA divided by the exposures post-CCF and post-CRM
- <sup>8/</sup> Refers to the total eligible provisions attributed to the respective portfolios
- # Represents amounts of less than \$0.5 million



### 13.4 Credit Exposures under Advanced Internal Ratings-Based Approach (A-IRBA)

The following table provides the main parameters used in the treatment of exposures for the calculation of capital requirements under the A-IRBA.

	31 Dec 2022											
	(a) On- Balance Sheet <sup>1/</sup> (S\$ million)	(b) Off- Balance Sheet <sup>2/</sup>	(c) Average CCF (%)	(d) EAD <sup>3/</sup> (S\$ million)	(e) Average PD <sup>4/</sup> (%)	(f) Number of Obligors <sup>5/</sup>	(g) Average LGD <sup>4/</sup> (%)	(h) Average Maturity <sup>6/</sup> (In years)	(i) RWA (S\$ million)	(j) RWA Density <sup>7/</sup> (%)	(k) Expected Losses (S\$ million)	(l) TEP <sup>8/</sup> (S\$ million)
<b>Residential Mortgage</b>												
PD Range												
0.00 to < 0.15	5,169	503	66%	5,503	0.10%	13,513	10%		139	3%	1	
0.15 to < 0.25	16,216	1,984	79%	17,792	0.16%	36,402	10%		647	4%	3	
0.25 to < 0.50	13,214	1,453	77%	14,329	0.25%	37,213	10%		734	5%	4	
0.50 to < 0.75	15,516	1,820	81%	16,989	0.50%	49,445	10%		1,448	9%	9	
0.75 to < 2.50	9,519	803	83%	10,183	1.16%	43,482	11%		1,593	16%	13	
2.50 to < 10.00	1,959	254	89%	2,185	3.72%	7,532	11%		703	32%	9	
10.00 to < 100.00	813	20	82%	830	25.03%	7,438	13%		608	73%	28	
100.00 (Default)	577	3	0%	577	100.00%	7,469	16%		356	62%	100	
<b>Sub-total</b>	<b>62,983</b>	<b>6,840</b>	<b>79%</b>	<b>68,388</b>	<b>1.67%</b>	<b>202,494</b>	<b>10%</b>		<b>6,228</b>	<b>9%</b>	<b>167</b>	<b>188</b>
<b>Qualifying Revolving Retail</b>												
PD Range												
0.00 to < 0.15	445	6,383	42%	3,155	0.06%	535,548	80%		111	4%	2	
0.15 to < 0.25	379	1,864	46%	1,245	0.15%	170,774	81%		90	7%	2	
0.25 to < 0.50	3	254	49%	128	0.31%	23,154	86%		18	14%	#	
0.50 to < 0.75	320	849	48%	730	0.51%	95,058	78%		136	19%	3	
0.75 to < 2.50	328	284	60%	499	1.45%	55,421	82%		218	44%	6	
2.50 to < 10.00	211	151	65%	310	4.53%	48,999	76%		285	92%	11	
10.00 to < 100.00	87	38	77%	116	21.55%	14,172	82%		243	209%	20	
100.00 (Default)	13	-	0%	13	100.00%	2,407	81%		#	0%	13	
<b>Sub-total</b>	<b>1,786</b>	<b>9,823</b>	<b>45%</b>	<b>6,196</b>	<b>1.09%</b>	<b>945,533</b>	<b>80%</b>		<b>1,101</b>	<b>18%</b>	<b>57</b>	<b>28</b>
<b>Retail Small Business</b>												
PD Range												
0.00 to < 0.15	195	201	58%	311	0.10%	3,683	23%		19	6%	#	
0.15 to < 0.25	1,472	447	54%	1,712	0.17%	8,835	27%		173	10%	1	
0.25 to < 0.50	465	35	56%	485	0.35%	1,989	27%		81	17%	#	
0.50 to < 0.75	529	68	60%	569	0.50%	4,024	31%		132	23%	1	
0.75 to < 2.50	1,361	98	61%	1,421	1.22%	7,638	30%		492	35%	5	
2.50 to < 10.00	675	28	60%	692	4.28%	5,380	32%		333	48%	9	
10.00 to < 100.00	320	51	70%	356	24.62%	3,124	34%		259	73%	32	
100.00 (Default)	159	3	0%	159	100.00%	1,473	41%		241	151%	56	
<b>Sub-total</b>	<b>5,176</b>	<b>931</b>	<b>57%</b>	<b>5,705</b>	<b>5.28%</b>	<b>36,146</b>	<b>29%</b>		<b>1,730</b>	<b>30%</b>	<b>104</b>	<b>78</b>

**13.4 Credit Exposures under Advanced Internal Ratings-Based Approach (A-IRBA) (continued)**

	31 Dec 2022											
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	On- Balance Sheet <sup>1/</sup>	Off- Balance Sheet <sup>2/</sup>	Average CCF (%)	EAD <sup>3/</sup> (S\$ million)	Average PD <sup>4/</sup> (%)	Number of Obligors <sup>5/</sup>	Average LGD <sup>4/</sup> (%)	Average Maturity <sup>6/</sup> (In years)	RWA (S\$ million)	RWA Density <sup>7/</sup> (%)	Expected Losses (S\$ million)	TEP <sup>8/</sup> (S\$ million)
<b>Other Retail</b>	(S\$ million)											
<b>PD Range</b>												
0.00 to < 0.15	566	2,810	99%	3,358	0.05%	13,292	4%		24	1%	#	
0.15 to < 0.25	3,402	1,389	95%	4,725	0.19%	34,164	10%		189	4%	1	
0.25 to < 0.50	230	19	48%	239	0.30%	3,701	15%		20	8%	#	
0.50 to < 0.75	3,035	849	98%	3,866	0.50%	7,037	8%		241	6%	2	
0.75 to < 2.50	6,111	1,695	97%	7,749	1.51%	4,855	9%		826	11%	10	
2.50 to < 10.00	3,422	789	100%	4,210	5.00%	1,734	9%		590	14%	19	
10.00 to < 100.00	6,013	1,342	100%	7,353	12.57%	1,407	9%		1,307	18%	86	
100.00 (Default)	124	1	1%	124	100.00%	358	39%		41	33%	84	
<b>Sub-total</b>	<b>22,903</b>	<b>8,894</b>	<b>98%</b>	<b>31,624</b>	<b>4.45%</b>	<b>66,548</b>	<b>9%</b>		<b>3,238</b>	<b>10%</b>	<b>202</b>	<b>130</b>
<b>Corporate</b>												
<b>PD Range</b>												
0.00 to < 0.15	117	554	100%	672	0.05%	439	1%	1.0	2	0%	#	
0.15 to < 0.25	363	252	100%	615	0.20%	372	7%	1.0	29	5%	#	
0.25 to < 0.50	-	-	-	-	-	-	-	-	-	NA	-	
0.50 to < 0.75	504	142	100%	646	0.50%	122	5%	1.0	39	6%	#	
0.75 to < 2.50	1,106	240	100%	1,346	1.55%	166	6%	1.0	169	13%	1	
2.50 to < 10.00	1,137	187	100%	1,323	5.00%	74	8%	1.0	329	25%	5	
10.00 to < 100.00	1,235	347	100%	1,582	11.46%	197	12%	1.0	832	53%	21	
100.00 (Default)	-	-	-	-	-	-	-	-	-	NA	-	
<b>Sub-total</b>	<b>4,462</b>	<b>1,722</b>	<b>100%</b>	<b>6,184</b>	<b>4.42%</b>	<b>1,370</b>	<b>7%</b>	<b>1.0</b>	<b>1,400</b>	<b>23%</b>	<b>27</b>	<b>20</b>
<b>Total (all portfolios)</b>	<b>97,310</b>	<b>28,210</b>	<b>74%</b>	<b>118,097</b>	<b>2.70%</b>	<b>1,252,091</b>	<b>14%</b>		<b>13,697</b>	<b>12%</b>	<b>556</b>	<b>444</b>

**13.4 Credit Exposures under Advanced Internal Ratings-Based Approach (A-IRBA) (continued)**

	30 Jun 2022											
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	On-Balance Sheet <sup>1/</sup>	Off-Balance Sheet <sup>2/</sup>	Average CCF (%)	EAD <sup>3/</sup> (S\$ million)	Average PD <sup>4/</sup> (%)	Number of Obligors <sup>5/</sup>	Average LGD <sup>4/</sup> (%)	Average Maturity <sup>6/</sup> (In years)	RWA (S\$ million)	RWA Density <sup>7/</sup> (%)	Expected Losses (S\$ million)	TEP <sup>8/</sup> (S\$ million)
<b>Residential Mortgage</b>	(S\$ million)											
<b>PD Range</b>												
0.00 to < 0.15	4,729	502	66%	5,059	0.10%	13,346	10%		128	3%	1	
0.15 to < 0.25	16,182	1,978	72%	17,612	0.16%	36,991	10%		643	4%	3	
0.25 to < 0.50	12,538	1,522	70%	13,597	0.26%	37,466	10%		699	5%	4	
0.50 to < 0.75	15,639	1,787	72%	16,929	0.50%	50,626	10%		1,446	9%	9	
0.75 to < 2.50	10,005	910	74%	10,681	1.15%	45,289	11%		1,656	16%	13	
2.50 to < 10.00	2,273	331	84%	2,550	3.64%	7,903	11%		822	32%	11	
10.00 to < 100.00	793	27	96%	818	24.85%	7,890	13%		579	71%	25	
100.00 (Default)	876	8	40%	879	100.00%	9,264	16%		622	71%	145	
<b>Sub-total</b>	<b>63,035</b>	<b>7,065</b>	<b>72%</b>	<b>68,125</b>	<b>2.13%</b>	<b>208,775</b>	<b>10%</b>		<b>6,595</b>	<b>10%</b>	<b>211</b>	<b>230</b>
<b>Qualifying Revolving Retail</b>												
<b>PD Range</b>												
0.00 to < 0.15	407	6,353	43%	3,120	0.06%	544,540	80%		110	4%	2	
0.15 to < 0.25	342	1,703	44%	1,094	0.15%	164,936	80%		78	7%	1	
0.25 to < 0.50	2	264	49%	132	0.31%	23,889	85%		19	14%	#	
0.50 to < 0.75	271	804	47%	649	0.51%	88,959	78%		120	18%	3	
0.75 to < 2.50	272	282	57%	433	1.44%	50,688	81%		188	43%	5	
2.50 to < 10.00	229	166	63%	333	4.55%	52,398	77%		309	93%	12	
10.00 to < 100.00	122	54	75%	162	21.07%	19,337	82%		341	211%	28	
100.00 (Default)	11	-	0%	11	100.00%	2,294	82%		-	0%	11	
<b>Sub-total</b>	<b>1,656</b>	<b>9,626</b>	<b>44%</b>	<b>5,934</b>	<b>1.24%</b>	<b>947,041</b>	<b>80%</b>		<b>1,165</b>	<b>20%</b>	<b>62</b>	<b>26</b>
<b>Retail Small Business</b>												
<b>PD Range</b>												
0.00 to < 0.15	208	221	57%	333	0.10%	3,856	23%		20	6%	#	
0.15 to < 0.25	1,698	447	53%	1,935	0.17%	9,907	26%		187	10%	1	
0.25 to < 0.50	417	27	58%	433	0.35%	1,641	26%		70	16%	#	
0.50 to < 0.75	542	71	57%	583	0.50%	4,024	31%		136	23%	1	
0.75 to < 2.50	1,331	88	68%	1,390	1.21%	7,092	31%		483	35%	5	
2.50 to < 10.00	625	31	61%	644	4.35%	4,903	34%		334	52%	9	
10.00 to < 100.00	286	41	80%	319	24.75%	3,020	36%		244	77%	30	
100.00 (Default)	236	2	3%	236	100.00%	1,838	41%		415	176%	79	
<b>Sub-total</b>	<b>5,343</b>	<b>928</b>	<b>57%</b>	<b>5,873</b>	<b>6.26%</b>	<b>36,281</b>	<b>29%</b>		<b>1,889</b>	<b>32%</b>	<b>125</b>	<b>102</b>

**13.4 Credit Exposures under Advanced Internal Ratings-Based Approach (A-IRBA) (continued)**

	30 Jun 2022											
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	On-Balance Sheet <sup>1/</sup>	Off-Balance Sheet <sup>2/</sup>	Average CCF (%)	EAD <sup>3/</sup> (\$ million)	Average PD <sup>4/</sup> (%)	Number of Obligors <sup>5/</sup>	Average LGD <sup>4/</sup> (%)	Average Maturity <sup>6/</sup> (In years)	RWA (\$ million)	RWA Density <sup>7/</sup> (%)	Expected Losses (\$ million)	TEP <sup>8/</sup> (\$ million)
	(S\$ million)											
<b>Other Retail</b>												
PD Range												
0.00 to < 0.15	610	2,493	99%	3,084	0.05%	13,627	4%		27	1%	#	
0.15 to < 0.25	3,517	1,341	95%	4,789	0.19%	33,409	10%		188	4%	1	
0.25 to < 0.50	194	23	44%	204	0.30%	3,429	12%		14	7%	#	
0.50 to < 0.75	3,035	799	98%	3,822	0.50%	7,171	9%		251	7%	2	
0.75 to < 2.50	6,585	1,629	100%	8,210	1.45%	5,234	9%		865	11%	10	
2.50 to < 10.00	3,795	1,135	99%	4,915	5.00%	1,857	10%		800	16%	26	
10.00 to < 100.00	7,917	1,763	100%	9,679	13.81%	1,633	11%		2,145	22%	148	
100.00 (Default)	59	1	26%	59	100.00%	410	27%		62	105%	15	
<b>Sub-total</b>	<b>25,712</b>	<b>9,184</b>	<b>99%</b>	<b>34,762</b>	<b>5.15%</b>	<b>66,770</b>	<b>9%</b>		<b>4,352</b>	<b>13%</b>	<b>202</b>	<b>71</b>
<b>Corporate</b>												
PD Range												
0.00 to < 0.15	102	401	100%	502	0.05%	413	2%	1.0	2	0%	#	
0.15 to < 0.25	373	177	100%	549	0.20%	376	6%	1.0	23	4%	#	
0.25 to < 0.50	-	-	-	-	-	-	-	-	-	NA	-	
0.50 to < 0.75	563	303	100%	867	0.50%	137	8%	1.0	82	9%	#	
0.75 to < 2.50	1,262	250	100%	1,512	1.55%	179	7%	1.0	197	13%	1	
2.50 to < 10.00	1,000	163	100%	1,163	5.00%	85	6%	1.1	235	20%	4	
10.00 to < 100.00	1,321	345	100%	1,666	11.46%	228	13%	1.0	981	59%	25	
100.00 (Default)	-	#	100%	#	100.00%	1	51%	1.0	-	0%	#	
<b>Sub-total</b>	<b>4,621</b>	<b>1,639</b>	<b>100%</b>	<b>6,259</b>	<b>4.45%</b>	<b>1,419</b>	<b>8%</b>	<b>1.0</b>	<b>1,520</b>	<b>24%</b>	<b>30</b>	<b>20</b>
<b>Total (all portfolios)</b>	<b>100,367</b>	<b>28,442</b>	<b>72%</b>	<b>120,953</b>	<b>3.27%</b>	<b>1,260,286</b>	<b>14%</b>		<b>15,521</b>	<b>13%</b>	<b>629</b>	<b>449</b>

- <sup>1/</sup> On-balance sheet refers to the amount of the on-balance sheet exposure gross of impairment allowances (before taking into account the effect of CRM)
- <sup>2/</sup> Off-balance sheet refers to the exposure value without taking into account valuation adjustments and impairment allowances, CCFs and the effect of CRM
- <sup>3/</sup> EAD refers to the amount relevant for the capital requirements calculation, after taking into account the effects of CCFs and CRM
- <sup>4/</sup> Refers to the PD and LGD associated with each obligor grade, weighted by EAD
- <sup>5/</sup> Number of obligors refers to the number of accounts, except for Retail Small Business which refers to the number of counterparties
- <sup>6/</sup> Refers to the effective maturity of the exposures to the obligor in years and is not applicable for portfolios under the IRB treatment of Retail asset classes
- <sup>7/</sup> Total RWA divided by the exposures post-CCF and post-CRM
- <sup>8/</sup> Refers to the total eligible provisions attributed to the respective portfolios
- # Represents amounts of less than \$0.5 million

### 13.5 Overview of Credit Risk Mitigation Techniques

The table below provides an overview of the Group's usage of Credit Risk Mitigation (CRM) techniques for on-balance sheet exposures to Loans to Customers and Debt Securities, categorised by status followed by form of instrument.

		31 Dec 2022				
		(a)	(b)	(c)	(d)	(e)
S\$ million		Exposures unsecured	Exposures secured <sup>1/</sup>	Exposures secured by Collateral	Exposures secured by Financial Guarantees	Exposures secured by Credit Derivatives <sup>2/</sup>
1	Loans to customers	164,036	127,993	118,266	1,883	-
2	Debt Securities	22,801	155	-	152	-
3	<b>Total</b>	<b>186,837</b>	<b>128,148</b>	<b>118,266</b>	<b>2,035</b>	-
4	Of which: Defaulted	1,081	1,050	897	12	-

		30 Jun 2022				
		(a)	(b)	(c)	(d)	(e)
S\$ million		Exposures unsecured	Exposures secured <sup>1/</sup>	Exposures secured by Collateral	Exposures secured by Financial Guarantees	Exposures secured by Credit Derivatives <sup>2/</sup>
1	Loans to customers	164,205	130,755	119,652	3,024	-
2	Debt Securities	25,090	134	-	132	-
3	<b>Total</b>	<b>189,295</b>	<b>130,889</b>	<b>119,652</b>	<b>3,156</b>	-
4	Of which: Defaulted	1,305	1,130	989	47	-

<sup>1/</sup> Refers to carrying amount of exposures (net of impairment allowances) which have at least one credit risk mitigation mechanism, collateral or financial guarantees associated with them

<sup>2/</sup> Not applicable since the Group does not recognise credit derivatives as a form of CRM instrument for exposures

### 13.6 Effect on RWA of Credit Derivatives used as CRM

The Group does not recognise credit derivatives as a credit risk mitigant for exposures under F-IRBA or A-IRBA.

## 14. BACKTESTING OF PD FOR PORTFOLIOS UNDER IRB APPROACH

### 14.1 Backtesting of PD for Portfolios under Foundation Internal Ratings-Based Approach (F-IRBA)

The following table provides the information used to validate the reliability of PD used in the calculation of capital requirements. It compares the PD under F-IRBA with the average of the annual observed default rate of the Group's obligors.

(a)	(b)	(c)			31 Dec 2022		(f)	(g)	(h)	(i)	
		External Ratings			(d)	(e)					Number of Obligor
		S&P	Fitch	Moody's	PD <sup>1/</sup> (%)	Arithmetic PD of Obligor <sup>2/</sup> (%)	Dec-21	Dec-22	Defaulted Obligor	Of which: New Defaulted Obligor <sup>3/</sup>	Historical Annual Default Rate <sup>4/</sup> (%)
<b>Sovereign</b>											
PD Range											
	0.00 to < 0.15	AAA to BBB	AAA to BBB	Aaa to Baa2	0.00%	0.01%	44	42	-	-	-
	0.15 to < 0.25	BBB to BBB-	BBB to BBB-	Baa2 to Baa3	NA	NA	-	-	-	-	-
	0.25 to < 0.50	BBB- to BB+	BBB- to BB+	Baa3 to Ba1	NA	NA	-	-	-	-	-
	0.50 to < 0.75	BB+	BB+	Ba1	NA	NA	-	-	-	-	-
	0.75 to < 2.50	BB+ to B+	BB+ to B+	Ba1 to B1	1.11%	1.11%	2	2	-	-	-
	2.50 to < 10.00	B+ to B-	B+ to B-	B1 to B3	NA	NA	-	-	-	-	-
	10.00 to < 100.00	B- to C-	B- to C-	B3 to C3	11.10%	11.10%	3	10	-	-	-
<b>Total</b>					<b>0.01%</b>	<b>0.73%</b>	<b>49</b>	<b>54</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Bank</b>											
PD Range											
	0.00 to < 0.15	AAA to BBB	AAA to BBB	Aaa to Baa2	0.05%	0.06%	262	260	-	-	-
	0.15 to < 0.25	BBB to BBB-	BBB to BBB-	Baa2 to Baa3	NA	NA	-	-	-	-	-
	0.25 to < 0.50	BBB- to BB+	BBB- to BB+	Baa3 to Ba1	0.37%	0.37%	25	18	-	-	-
	0.50 to < 0.75	BB+	BB+	Ba1	0.54%	0.54%	21	17	-	-	-
	0.75 to < 2.50	BB+ to B+	BB+ to B+	Ba1 to B1	1.14%	1.56%	21	20	-	-	-
	2.50 to < 10.00	B+ to B-	B+ to B-	B1 to B3	5.67%	4.27%	3	1	-	-	-
	10.00 to < 100.00	B- to C-	B- to C-	B3 to C3	11.41%	12.59%	50	48	4	-	0.80%
<b>Total</b>					<b>0.12%</b>	<b>1.86%</b>	<b>382</b>	<b>364</b>	<b>4</b>	<b>-</b>	<b>0.10%</b>
<b>Corporate</b>											
PD Range											
	0.00 to < 0.15	AAA to BBB	AAA to BBB	Aaa to Baa2	0.10%	0.11%	973	1,087	-	-	0.07%
	0.15 to < 0.25	BBB to BBB-	BBB to BBB-	Baa2 to Baa3	0.16%	0.18%	4	1	-	-	-
	0.25 to < 0.50	BBB- to BB+	BBB- to BB+	Baa3 to Ba1	0.37%	0.37%	636	680	1	-	0.07%
	0.50 to < 0.75	BB+	BB+	Ba1	0.54%	0.54%	600	741	3	-	0.22%
	0.75 to < 2.50	BB+ to B+	BB+ to B+	Ba1 to B1	1.33%	1.40%	897	961	6	-	0.48%
	2.50 to < 10.00	B+ to B-	B+ to B-	B1 to B3	4.32%	4.15%	400	395	7	-	2.42%
	10.00 to < 100.00	B- to C-	B- to C-	B3 to C3	12.86%	11.26%	451	473	4	-	1.56%
<b>Total</b>					<b>0.61%</b>	<b>2.19%</b>	<b>3,961</b>	<b>4,338</b>	<b>21</b>	<b>-</b>	<b>0.60%</b>

**14.1 Backtesting of PD for Portfolios under Foundation Internal Ratings-Based Approach (F-IRBA)**  
 (continued)

(a)	(b)	(c)			31 Dec 2022		(f)	(g)	(h)	(i)	
		External Ratings			(d)	(e)					
		S&P	Fitch	Moody's	PD <sup>1/</sup> (%)	Arithmetic PD of Obligors <sup>2/</sup> (%)	Dec-21	Dec-22	Defaulted Obligors	Of which: New Defaulted Obligors <sup>3/</sup>	Historical Annual Default Rate <sup>4/</sup> (%)
<b>Corporate IPRE</b>											
PD Range											
	0.00 to < 0.15	AAA to BBB	AAA to BBB	Aaa to Baa2	0.14%	0.13%	17	14	-	-	-
	0.15 to < 0.25	BBB to BBB-	BBB to BBB-	Baa2 to Baa3	NA	NA	-	-	-	-	-
	0.25 to < 0.50	BBB- to BB+	BBB- to BB+	Baa3 to Ba1	0.37%	0.37%	37	30	-	-	-
	0.50 to < 0.75	BB+	BB+	Ba1	0.54%	0.54%	85	96	-	-	-
	0.75 to < 2.50	BB+ to B+	BB+ to B+	Ba1 to B1	1.41%	1.47%	346	425	2	-	0.24%
	2.50 to < 10.00	B+ to B-	B+ to B-	B1 to B3	3.65%	4.18%	141	134	-	-	0.31%
	10.00 to < 100.00	B- to C-	B- to C-	B3 to C3	13.83%	12.13%	9	13	-	-	4.09%
<b>Total</b>					<b>1.21%</b>	<b>2.00%</b>	<b>635</b>	<b>712</b>	<b>2</b>	<b>-</b>	<b>0.30%</b>
<b>Corporate Small Business</b>											
PD Range											
	0.00 to < 0.15	AAA to BBB	AAA to BBB	Aaa to Baa2	0.11%	0.11%	328	333	-	-	0.07%
	0.15 to < 0.25	BBB to BBB-	BBB to BBB-	Baa2 to Baa3	0.16%	0.16%	854	753	1	-	0.25%
	0.25 to < 0.50	BBB- to BB+	BBB- to BB+	Baa3 to Ba1	0.37%	0.36%	293	331	-	-	0.11%
	0.50 to < 0.75	BB+	BB+	Ba1	0.54%	0.52%	509	533	-	-	0.37%
	0.75 to < 2.50	BB+ to B+	BB+ to B+	Ba1 to B1	1.45%	1.44%	1,203	1,335	6	-	0.46%
	2.50 to < 10.00	B+ to B-	B+ to B-	B1 to B3	4.11%	4.18%	747	867	12	-	1.52%
	10.00 to < 100.00	B- to C-	B- to C-	B3 to C3	12.96%	21.37%	463	566	10	-	3.44%
<b>Total</b>					<b>2.43%</b>	<b>3.53%</b>	<b>4,397</b>	<b>4,718</b>	<b>29</b>	<b>-</b>	<b>0.82%</b>

### 14.1 Backtesting of PD for Portfolios under Foundation Internal Ratings-Based Approach (F-IRBA) (continued)

(a)	(b)	(c)			31 Dec 2021		(f)		(g)	(h)	(i)
		External Ratings			(d)	(e)	Number of Obligor		Defaulted Obligor	Of which: New Defaulted Obligor <sup>3/</sup>	Historical Annual Default Rate <sup>4/</sup> (%)
		S&P	Fitch	Moody's	PD <sup>1/</sup> (%)	Arithmetic PD of Obligor <sup>2/</sup> (%)	Dec-20	Dec-21			
<b>Sovereign</b>											
PD Range											
	0.00 to < 0.15	AAA to BBB	AAA to BBB	Aaa to Baa2	0.00%	0.01%	44	44	-	-	-
	0.15 to < 0.25	BBB to BBB-	BBB to BBB-	Baa2 to Baa3	NA	NA	-	-	-	-	-
	0.25 to < 0.50	BBB- to BB+	BBB- to BB+	Baa3 to Ba1	NA	NA	-	-	-	-	-
	0.50 to < 0.75	BB+	BB+	Ba1	NA	NA	-	-	-	-	-
	0.75 to < 2.50	BB+ to B+	BB+ to B+	Ba1 to B1	1.11%	1.11%	2	2	-	-	-
	2.50 to < 10.00	B+ to B-	B+ to B-	B1 to B3	6.42%	6.42%	2	-	-	-	-
	10.00 to < 100.00	B- to C-	B- to C-	B3 to C3	NA	11.10%	1	3	-	-	-
<b>Total</b>					<b>0.01%</b>	<b>0.55%</b>	<b>49</b>	<b>49</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Bank</b>											
PD Range											
	0.00 to < 0.15	AAA to BBB	AAA to BBB	Aaa to Baa2	0.05%	0.06%	268	262	-	-	-
	0.15 to < 0.25	BBB to BBB-	BBB to BBB-	Baa2 to Baa3	NA	NA	-	-	-	-	-
	0.25 to < 0.50	BBB- to BB+	BBB- to BB+	Baa3 to Ba1	0.37%	0.37%	23	25	-	-	-
	0.50 to < 0.75	BB+	BB+	Ba1	0.54%	0.54%	26	21	-	-	-
	0.75 to < 2.50	BB+ to B+	BB+ to B+	Ba1 to B1	1.80%	1.46%	18	21	-	-	-
	2.50 to < 10.00	B+ to B-	B+ to B-	B1 to B3	6.40%	5.45%	20	3	-	-	-
	10.00 to < 100.00	B- to C-	B- to C-	B3 to C3	12.05%	12.13%	45	50	-	-	-
<b>Total</b>					<b>0.14%</b>	<b>1.80%</b>	<b>400</b>	<b>382</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Corporate</b>											
PD Range											
	0.00 to < 0.15	AAA to BBB	AAA to BBB	Aaa to Baa2	0.10%	0.11%	811	973	-	-	0.08%
	0.15 to < 0.25	BBB to BBB-	BBB to BBB-	Baa2 to Baa3	0.18%	0.17%	5	4	-	-	-
	0.25 to < 0.50	BBB- to BB+	BBB- to BB+	Baa3 to Ba1	0.37%	0.37%	552	636	1	1	0.07%
	0.50 to < 0.75	BB+	BB+	Ba1	0.54%	0.54%	555	600	-	-	0.19%
	0.75 to < 2.50	BB+ to B+	BB+ to B+	Ba1 to B1	1.44%	1.44%	1,069	897	1	-	0.46%
	2.50 to < 10.00	B+ to B-	B+ to B-	B1 to B3	4.40%	4.09%	490	400	8	-	2.49%
	10.00 to < 100.00	B- to C-	B- to C-	B3 to C3	13.84%	11.33%	369	451	1	-	1.64%
<b>Total</b>					<b>0.72%</b>	<b>2.16%</b>	<b>3,851</b>	<b>3,961</b>	<b>11</b>	<b>1</b>	<b>0.60%</b>



### 14.1 Backtesting of PD for Portfolios under Foundation Internal Ratings-Based Approach (F-IRBA) (continued)

(a)	(b)	(c)			31 Dec 2021		(f)	(g)	(h)	(i)	
		External Ratings			(d)	(e)					
		S&P	Fitch	Moody's	PD <sup>1/</sup> (%)	Arithmetic PD of Obligors <sup>2/</sup> (%)	Dec-20	Dec-21	Defaulted Obligors	Of which: New Defaulted Obligors <sup>3/</sup>	Historical Annual Default Rate <sup>4/</sup> (%)
<b>Corporate IPRE</b>											
PD Range											
	0.00 to < 0.15	AAA to BBB	AAA to BBB	Aaa to Baa2	0.14%	0.13%	12	17	-	-	-
	0.15 to < 0.25	BBB to BBB-	BBB to BBB-	Baa2 to Baa3	NA	NA	-	-	-	-	-
	0.25 to < 0.50	BBB- to BB+	BBB- to BB+	Baa3 to Ba1	0.37%	0.37%	34	37	-	-	-
	0.50 to < 0.75	BB+	BB+	Ba1	0.54%	0.54%	82	85	-	-	-
	0.75 to < 2.50	BB+ to B+	BB+ to B+	Ba1 to B1	1.34%	1.43%	291	346	1	-	0.19%
	2.50 to < 10.00	B+ to B-	B+ to B-	B1 to B3	3.96%	4.53%	136	141	1	-	0.36%
	10.00 to < 100.00	B- to C-	B- to C-	B3 to C3	11.10%	11.10%	13	9	1	-	4.77%
<b>Total</b>					<b>1.18%</b>	<b>2.17%</b>	<b>568</b>	<b>635</b>	<b>3</b>	<b>-</b>	<b>0.30%</b>
<b>Corporate Small Business</b>											
PD Range											
	0.00 to < 0.15	AAA to BBB	AAA to BBB	Aaa to Baa2	0.12%	0.11%	318	328	1	-	0.08%
	0.15 to < 0.25	BBB to BBB-	BBB to BBB-	Baa2 to Baa3	0.16%	0.17%	819	854	12	-	0.28%
	0.25 to < 0.50	BBB- to BB+	BBB- to BB+	Baa3 to Ba1	0.36%	0.36%	272	293	-	-	0.08%
	0.50 to < 0.75	BB+	BB+	Ba1	0.54%	0.52%	492	509	12	-	0.42%
	0.75 to < 2.50	BB+ to B+	BB+ to B+	Ba1 to B1	1.44%	1.46%	1,236	1,203	13	-	0.46%
	2.50 to < 10.00	B+ to B-	B+ to B-	B1 to B3	4.40%	4.42%	820	747	28	-	1.51%
	10.00 to < 100.00	B- to C-	B- to C-	B3 to C3	13.29%	24.41%	495	463	40	-	3.62%
<b>Total</b>					<b>2.69%</b>	<b>4.05%</b>	<b>4,452</b>	<b>4,397</b>	<b>106</b>	<b>-</b>	<b>0.84%</b>

<sup>1/</sup> Refers to PD associated with each obligor grade, weighted by EAD

<sup>2/</sup> Arithmetic mean of PDs by the number of obligors within the PD range

<sup>3/</sup> New defaulted obligors refer to the number of obligors that defaulted during the last 12-month period that were not funded at the end of the previous annual reporting period

<sup>4/</sup> Refers to the average of the annual observed default rate (ODR) over a minimum of the last five years

## 14.2 Backtesting of PD for Portfolios under Advanced Internal Ratings-Based Approach (A-IRBA)

The following table provides the information used to validate the reliability of PD used in the calculation of capital requirements. It compares the PD under A-IRBA with the average of the annual observed default rate of the Group's obligors.

(a)	(b)	31 Dec 2022									
		(c) External Ratings <sup>1/</sup>			(d)	(e)	(f) Number of Obligators		(g)	(h)	(i)
		S&P	Fitch	Moody's	PD <sup>2/</sup> (%)	Arithmetic PD of Obligators <sup>3/</sup> (%)	Dec-21	Dec-22	Defaulted Obligators	Of which: New Defaulted Obligators <sup>4/</sup>	Historical Annual Default Rate <sup>5/</sup> (%)
<b>Residential Mortgage</b>											
PD Range											
	0.00 to < 0.15				0.10%	0.09%	13,300	13,513	19	-	0.09%
	0.15 to < 0.25				0.16%	0.16%	45,111	36,402	58	-	0.12%
	0.25 to < 0.50				0.25%	0.25%	44,071	37,213	129	-	0.29%
	0.50 to < 0.75				0.50%	0.50%	50,601	49,445	240	-	0.47%
	0.75 to < 2.50				1.11%	1.19%	33,625	43,482	256	-	0.88%
	2.50 to < 10.00				3.60%	4.17%	7,549	7,532	175	4	2.48%
	10.00 to < 100.00				21.83%	23.61%	5,434	7,438	691	3	19.91%
<b>Total</b>					<b>0.75%</b>	<b>1.22%</b>	<b>199,691</b>	<b>195,025</b>	<b>1,568</b>	<b>7</b>	<b>1.20%</b>
<b>Qualifying Revolving Retail</b>											
PD Range											
	0.00 to < 0.15				0.06%	0.07%	543,914	535,548	280	8	0.07%
	0.15 to < 0.25				0.15%	0.15%	171,325	170,774	224	1	0.13%
	0.25 to < 0.50				0.31%	0.30%	24,000	23,154	47	-	0.28%
	0.50 to < 0.75				0.51%	0.51%	93,018	95,058	384	17	0.53%
	0.75 to < 2.50				1.42%	1.36%	58,723	55,421	666	33	1.22%
	2.50 to < 10.00				4.67%	4.80%	47,219	48,999	1,248	57	3.94%
	10.00 to < 100.00				21.30%	21.73%	20,373	14,172	1,909	11	17.30%
<b>Total</b>					<b>1.09%</b>	<b>0.90%</b>	<b>958,572</b>	<b>943,126</b>	<b>4,758</b>	<b>127</b>	<b>0.88%</b>
<b>Retail Small Business</b>											
PD Range											
	0.00 to < 0.15				0.10%	0.10%	4,642	4,111	6	-	0.11%
	0.15 to < 0.25				0.17%	0.18%	10,596	9,463	25	-	0.30%
	0.25 to < 0.50				0.35%	0.35%	1,494	1,989	21	-	0.55%
	0.50 to < 0.75				0.50%	0.50%	4,397	4,407	32	-	0.60%
	0.75 to < 2.50				1.20%	1.28%	7,797	7,794	81	3	1.06%
	2.50 to < 10.00				4.54%	4.75%	4,855	5,389	134	3	3.04%
	10.00 to < 100.00				26.21%	26.73%	2,289	3,223	250	-	18.00%
<b>Total</b>					<b>2.21%</b>	<b>2.83%</b>	<b>36,070</b>	<b>36,376</b>	<b>549</b>	<b>6</b>	<b>2.47%</b>

## 14.2 Backtesting of PD for Portfolios under Advanced Internal Ratings-Based Approach (A-IRBA) (continued)

(a)	(b)	(c)			(d)		31 Dec 2022		(g)	(h)	(i)
		External Ratings <sup>1/</sup>			PD <sup>2/</sup> (%)	Arithmetic PD of Obligors <sup>3/</sup> (%)	Number of Obligors				
		S&P	Fitch	Moody's					Dec-21	Dec-22	Defaulted Obligors
<b>Other Retail</b>											
	PD Range										
	0.00 to < 0.15				0.05%	0.09%	14,365	13,292	8	1	0.12%
	0.15 to < 0.25				0.19%	0.17%	33,236	34,164	50	1	0.12%
	0.25 to < 0.50				0.30%	0.28%	3,223	3,701	5	1	0.17%
	0.50 to < 0.75				0.50%	0.50%	7,495	7,037	24	1	0.39%
	0.75 to < 2.50				1.50%	1.33%	5,306	4,855	22	1	0.53%
	2.50 to < 10.00				5.00%	5.10%	1,602	1,734	34	-	1.78%
	10.00 to < 100.00				12.99%	13.55%	1,455	1,408	51	-	9.05%
	<b>Total</b>				<b>4.61%</b>	<b>0.70%</b>	<b>66,682</b>	<b>66,191</b>	<b>194</b>	<b>5</b>	<b>0.46%</b>
<b>Corporate</b>											
	PD Range										
	0.00 to < 0.15				0.05%	0.05%	402	451	-	-	-
	0.15 to < 0.25				0.20%	0.20%	418	383	-	-	-
	0.25 to < 0.50				NA	NA	-	-	-	-	-
	0.50 to < 0.75				0.50%	0.50%	160	130	-	-	-
	0.75 to < 2.50				1.48%	1.42%	227	185	-	-	-
	2.50 to < 10.00				5.00%	5.00%	68	83	-	-	-
	10.00 to < 100.00				11.98%	11.10%	209	216	-	-	0.10%
	<b>Total</b>				<b>4.14%</b>	<b>2.13%</b>	<b>1,484</b>	<b>1,448</b>	<b>-</b>	<b>-</b>	<b>0.01%</b>

## 14.2 Backtesting of PD for Portfolios under Advanced Internal Ratings-Based Approach (A-IRBA) (continued)

(a)	(b)	31 Dec 2021									
		(c) External Ratings <sup>1/</sup>			(d)	(e)	(f) Number of Obligators		(g)	(h)	(i)
		S&P	Fitch	Moody's	PD <sup>2/</sup> (%)	Arithmetic PD of Obligators <sup>3/</sup> (%)	Dec-20	Dec-21	Defaulted Obligators	Of which: New Defaulted Obligators <sup>4/</sup>	Historical Annual Default Rate <sup>5/</sup> (%)
<b>Residential Mortgage</b>											
PD Range											
	0.00 to < 0.15				0.09%	0.08%	14,176	13,300	29	-	0.08%
	0.15 to < 0.25				0.16%	0.16%	44,278	45,111	154	-	0.12%
	0.25 to < 0.50				0.25%	0.25%	44,350	44,071	430	1	0.29%
	0.50 to < 0.75				0.50%	0.50%	51,702	50,601	800	5	0.47%
	0.75 to < 2.50				1.13%	1.16%	36,209	33,625	763	1	0.89%
	2.50 to < 10.00				3.80%	4.22%	8,640	7,549	483	7	2.51%
	10.00 to < 100.00				24.62%	24.92%	7,268	5,434	2,352	-	20.71%
<b>Total</b>					<b>0.96%</b>	<b>1.48%</b>	<b>206,623</b>	<b>199,691</b>	<b>5,011</b>	<b>14</b>	<b>1.25%</b>
<b>Qualifying Revolving Retail</b>											
PD Range											
	0.00 to < 0.15				0.06%	0.06%	544,394	543,914	419	3	0.08%
	0.15 to < 0.25				0.16%	0.15%	144,518	171,325	105	2	0.13%
	0.25 to < 0.50				0.29%	0.29%	74,197	24,000	178	-	0.29%
	0.50 to < 0.75				0.57%	0.57%	99,359	93,018	357	7	0.55%
	0.75 to < 2.50				1.44%	1.40%	79,243	58,723	771	23	1.24%
	2.50 to < 10.00				5.00%	5.00%	58,266	47,219	1,599	33	4.10%
	10.00 to < 100.00				23.32%	25.37%	21,127	20,373	2,131	8	18.19%
<b>Total</b>					<b>1.14%</b>	<b>1.05%</b>	<b>1,021,104</b>	<b>958,572</b>	<b>5,560</b>	<b>76</b>	<b>0.92%</b>
<b>Retail Small Business</b>											
PD Range											
	0.00 to < 0.15				0.10%	0.10%	5,663	4,642	26	-	0.11%
	0.15 to < 0.25				0.17%	0.18%	10,133	10,596	64	-	0.31%
	0.25 to < 0.50				0.35%	0.35%	1,102	1,494	11	-	0.46%
	0.50 to < 0.75				0.50%	0.50%	4,826	4,397	145	3	0.59%
	0.75 to < 2.50				1.19%	1.28%	7,926	7,797	216	2	1.06%
	2.50 to < 10.00				4.61%	4.88%	5,626	4,855	317	1	3.08%
	10.00 to < 100.00				33.16%	29.10%	2,750	2,289	631	-	18.79%
<b>Total</b>					<b>3.06%</b>	<b>3.23%</b>	<b>38,026</b>	<b>36,070</b>	<b>1,410</b>	<b>6</b>	<b>2.58%</b>

## 14.2 Backtesting of PD for Portfolios under Advanced Internal Ratings-Based Approach (A-IRBA) (continued)

(a)	(b)	(c)			31 Dec 2021		(g)	(h)	(i)		
		External Ratings <sup>1/</sup>			(d)	(e)				Number of Obligors	
		S&P	Fitch	Moody's	PD <sup>2/</sup> (%)	Arithmetic PD of Obligors <sup>3/</sup> (%)	Dec-20	Dec-21	Defaulted Obligors	Of which: New Defaulted Obligors <sup>4/</sup>	Historical Annual Default Rate <sup>5/</sup> (%)
<b>Other Retail</b>											
PD Range											
	0.00 to < 0.15				0.05%	0.09%	16,411	14,365	11	1	0.12%
	0.15 to < 0.25				0.19%	0.17%	33,085	33,236	26	3	0.12%
	0.25 to < 0.50				0.30%	0.28%	3,776	3,223	7	-	0.18%
	0.50 to < 0.75				0.50%	0.51%	7,777	7,495	33	2	0.40%
	0.75 to < 2.50				1.48%	1.32%	5,130	5,306	33	3	0.55%
	2.50 to < 10.00				4.99%	5.10%	1,724	1,602	51	-	1.74%
	10.00 to < 100.00				14.04%	15.55%	1,553	1,455	136	-	9.66%
<b>Total</b>					<b>4.26%</b>	<b>0.75%</b>	<b>69,456</b>	<b>66,682</b>	<b>297</b>	<b>9</b>	<b>0.48%</b>
<b>Corporate</b>											
PD Range											
	0.00 to < 0.15				0.05%	0.05%	396	402	-	-	-
	0.15 to < 0.25				0.20%	0.20%	399	418	-	-	-
	0.25 to < 0.50				NA	NA	-	-	-	-	-
	0.50 to < 0.75				0.50%	0.50%	172	160	-	-	-
	0.75 to < 2.50				1.54%	1.49%	204	227	-	-	-
	2.50 to < 10.00				5.00%	5.00%	85	68	-	-	-
	10.00 to < 100.00				11.84%	11.05%	229	209	-	-	0.13%
<b>Total</b>					<b>4.94%</b>	<b>2.32%</b>	<b>1,485</b>	<b>1,484</b>	<b>-</b>	<b>-</b>	<b>0.02%</b>

<sup>1/</sup> Not applicable for A-IRBA Retail and Corporate asset classes

<sup>2/</sup> Refers to PD associated with each obligor grade, weighted by EAD

<sup>3/</sup> Arithmetic mean of PDs by the number of obligors within the PD range

<sup>4/</sup> New defaulted obligors refer to the number of obligors that defaulted during the last 12-month period that were not funded at the end of the previous annual reporting period

<sup>5/</sup> Refers to the average of the annual observed default rate (ODR) over a minimum of the last five years

## 15. SPECIALISED LENDING UNDER SUPERVISORY SLOTTING CRITERIA

Exposures treated under the Supervisory Slotting Criteria include loans to customers for Project Financing (PF), Object Financing (OF) and Commodity Financing (CF). Income Producing Real Estate (IPRE) exposures are reported under F-IRBA.

		31 Dec 2022				EAD <sup>3/</sup>				
Specialised Lending Portfolio (S\$ million)		On- Balance Sheet <sup>1/</sup>	Off- Balance Sheet <sup>2/</sup>	Risk Weight (%)	PF	OF	CF	Total	RWA	Expected Losses
Regulatory Categories	Remaining Maturities									
Strong	Less than 2.5 years	-	-	50%	-	-	-	-	-	-
	Equal to or more than 2.5 years	-	-	70%	-	-	-	-	-	-
Good	Less than 2.5 years	-	-	70%	-	-	-	-	-	-
	Equal to or more than 2.5 years	-	-	90%	-	-	-	-	-	-
Satisfactory		2,145	1,708	115%	2,758	5	43	2,807	3,422	79
Weak		174	23	250%	192	-	-	192	508	15
Default		209	8	-	428	74	3	505	-	252
<b>Total</b>		<b>2,528</b>	<b>1,739</b>		<b>3,378</b>	<b>79</b>	<b>46</b>	<b>3,504</b>	<b>3,930</b>	<b>346</b>

		30 Jun 2022				EAD <sup>3/</sup>				
Specialised Lending Portfolio (S\$ million)		On- Balance Sheet <sup>1/</sup>	Off- Balance Sheet <sup>2/</sup>	Risk Weight (%)	PF	OF	CF	Total	RWA	Expected Losses
Regulatory Categories	Remaining Maturities									
Strong	Less than 2.5 years	-	-	50%	-	-	-	-	-	-
	Equal to or more than 2.5 years	-	-	70%	-	-	-	-	-	-
Good	Less than 2.5 years	-	-	70%	-	-	-	-	-	-
	Equal to or more than 2.5 years	-	-	90%	-	-	-	-	-	-
Satisfactory		1,847	1,780	115%	2,309	7	134	2,450	2,988	69
Weak		175	20	250%	190	-	-	190	503	15
Default		225	9	-	406	77	3	486	-	243
<b>Total</b>		<b>2,247</b>	<b>1,809</b>		<b>2,905</b>	<b>84</b>	<b>137</b>	<b>3,126</b>	<b>3,491</b>	<b>327</b>

<sup>1/</sup> On-balance sheet refers to the amount of the on-balance sheet exposure net of impairment allowances and write-offs (after taking into account the effect of CRM)

<sup>2/</sup> Off-balance sheet refers to the exposure value without taking into account the effects of CCFs and CRM

<sup>3/</sup> EAD refers to the amount relevant for capital requirements calculated by taking into account the effects of CCFs and CRM

## 16. COUNTERPARTY CREDIT RISK

### 16.1 Counterparty Credit Risk Exposures by Approach

Counterparty credit risk (CCR) is the risk of a counterparty defaulting before the final settlement of the transaction, which generally represents uncertain exposures that can vary over time with the movement of underlying market factors such as those in over-the-counter (OTC) derivatives.

The Group currently treats CCR under Standardised Approach. The table below provides an overview of the CCR for OTC derivatives and Securities Financing Transactions (SFTs).

		31 Dec 2022						
Counterparty Credit Risk Exposure by Approach (S\$ million)		(a) Replacement Cost	(b) Potential Future Exposure	(c) Effective EPE	(d) Fixed Beta factor, $\beta$ used for computing regulatory EAD	(d.1) $\alpha$ used for computing regulatory EAD	(e) EAD <sup>1/</sup>	(f) RWA
1	SA-CCR (For derivatives)	1,673	4,431		1.4		8,546	2,767
2	CCR Internal models method (For derivatives and SFTs)			-			-	-
3	FC(SA) for SFTs						-	-
4	FC(CA) for SFTs						10,586	465
5	VaR for SFTs						-	-
6	<b>Total</b>							<b>3,232</b>

		30 Jun 2022						
Counterparty Credit Risk Exposure by Approach (S\$ million)		(a) Replacement Cost	(b) Potential Future Exposure	(c) Effective EPE	(d) Fixed Beta factor, $\beta$ used for computing regulatory EAD	(d.1) $\alpha$ used for computing regulatory EAD	(e) EAD <sup>1/</sup>	(f) RWA
1	SA-CCR (For derivatives)	2,033	5,327		1.4		10,304	2,985
2	CCR Internal models method (For derivatives and SFTs)			-			-	-
3	FC(SA) for SFTs						-	-
4	FC(CA) for SFTs						8,199	207
5	VaR for SFTs						-	-
6	<b>Total</b>							<b>3,192</b>

<sup>1/</sup> EAD refers to the amount relevant for capital requirements calculation, after taking into account the effects of CRM

## 16.2 CVA Risk Capital Charge

The Credit Valuation Adjustment (CVA) is made to the mark-to-market valuation of OTC derivatives as calculated under the Standardised approach for the Group.

<b>31 Dec 2022</b>		
S\$ million	<b>(a)</b> EAD <sup>1/</sup>	<b>(b)</b> RWA
<b>Credit Valuation Adjustments (CVA) Risk Capital Requirements</b>		
Total portfolios subject to Advanced CVA capital requirement	-	-
<b>1</b> (i) VaR component (including the three-times multiplier)	-	-
<b>2</b> (ii) Stressed VaR component (including the three-times multiplier)	-	-
<b>3</b> All portfolios subject to Standardised CVA capital requirement	9,408	2,598
<b>4 Total portfolios subject to the CVA risk capital requirement</b>	<b>9,408</b>	<b>2,598</b>

<b>30 Jun 2022</b>		
S\$ million	<b>(a)</b> EAD <sup>1/</sup>	<b>(b)</b> RWA
<b>Credit Valuation Adjustments (CVA) Risk Capital Requirements</b>		
Total portfolios subject to Advanced CVA capital requirement	-	-
<b>1</b> (i) VaR component (including the three-times multiplier)	-	-
<b>2</b> (ii) Stressed VaR component (including the three-times multiplier)	-	-
<b>3</b> All portfolios subject to Standardised CVA capital requirement	10,919	3,509
<b>4 Total portfolios subject to the CVA risk capital requirement</b>	<b>10,919</b>	<b>3,509</b>

<sup>1/</sup> EAD refers to the amount relevant for capital requirements calculation, after taking into account the effects of CRM



### 16.3 Exposures to Central Counterparties

The table below provides an overview of the Group's exposures to Central Clearing Counterparties (CCPs), including all types of exposures due to operations, margins, contributions to default funds and related capital requirements.

		<b>31 Dec 2022</b>	
S\$ million		<b>(a)</b> EAD	<b>(b)</b> RWA
<b>1</b>	<b>Total exposures to qualifying CCPs</b>		<b>1,980</b>
<b>2</b>	Exposures to qualifying CCPs	20,187	1,715
<b>3</b>	arising from: OTC derivative transactions;	20,180	1,713
<b>4</b>	arising from: Exchange-traded derivative transactions;	7	2
<b>5</b>	arising from: SFTs; and	-	-
<b>6</b>	arising from: Netting sets <sup>1/</sup>	-	-
<b>7</b>	Segregated collateral <sup>2/</sup>	-	
<b>8</b>	Non-segregated collateral	901	261
<b>9</b>	Pre-funded default fund contributions	19	4
<b>10</b>	Unfunded default fund contributions	-	-
<b>11</b>	<b>Total exposures to non-qualifying CCPs</b>		<b>22</b>
<b>12</b>	Exposures to non-qualifying CCPs	-	-
<b>13</b>	arising from: OTC derivative transactions;	-	-
<b>14</b>	arising from: Exchange-traded derivative transactions;	-	-
<b>15</b>	arising from: SFTs; and	-	-
<b>16</b>	arising from: Netting sets <sup>1/</sup>	-	-
<b>17</b>	Segregated collateral <sup>2/</sup>	-	
<b>18</b>	Non-segregated collateral	22	22
<b>19</b>	Pre-funded default fund contributions	-	-
<b>20</b>	Unfunded default fund contributions	-	-

**16.3 Exposures to Central Counterparties (continued)**

		<b>30 Jun 2022</b>	
S\$ million		<b>(a)</b>	<b>(b)</b>
		EAD	RWA
<b>1</b>	<b>Total exposures to qualifying CCPs</b>		<b>1,394</b>
<b>2</b>	Exposures to qualifying CCPs	16,424	1,170
<b>3</b>	arising from: OTC derivative transactions;	16,401	1,165
<b>4</b>	arising from: Exchange-traded derivative transactions;	23	5
<b>5</b>	arising from: SFTs; and	-	-
<b>6</b>	arising from: Netting sets <sup>1/</sup>	-	-
<b>7</b>	Segregated collateral <sup>2/</sup>	-	
<b>8</b>	Non-segregated collateral	1,002	222
<b>9</b>	Pre-funded default fund contributions	13	2
<b>10</b>	Unfunded default fund contributions	-	-
<b>11</b>	<b>Total exposures to non-qualifying CCPs</b>		<b>22</b>
<b>12</b>	Exposures to non-qualifying CCPs	21	21
<b>13</b>	arising from: OTC derivative transactions;	-	-
<b>14</b>	arising from: Exchange-traded derivative transactions;	21	21
<b>15</b>	arising from: SFTs; and	-	-
<b>16</b>	arising from: Netting sets <sup>1/</sup>	-	-
<b>17</b>	Segregated collateral <sup>2/</sup>	-	
<b>18</b>	Non-segregated collateral	1	1
<b>19</b>	Pre-funded default fund contributions	-	-
<b>20</b>	Unfunded default fund contributions	-	-

<sup>1/</sup> Refers to netting assets where cross-product netting has been approved

<sup>2/</sup> Refers to collateral which is held in a bankruptcy remote manner

#### 16.4 Counterparty Credit Risk Exposures under Standardised Approach by Risk Weight

The table below represents the risk weights used in the calculation of capital for the Group's portfolio, which are subjected to the CCR requirements under the Standardised Approach by asset classes.

31 Dec 2022									
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
	Risk Weight								Total EAD <sup>1/</sup>
S\$ million	0%	10%	20%	50%	75%	100%	150%	Others	
<b>Asset Class</b>									
Sovereign	3,185	-	-	-	-	-	-	-	3,185
PSE	-	-	-	-	-	-	-	-	-
MDB	-	-	-	-	-	-	-	-	-
Bank	-	-	441	-	-	-	-	-	441
Corporate	-	-	2	9	-	908	-	-	919
Regulatory	-	-	-	-	-	-	-	-	-
Retail	-	-	-	-	-	-	-	-	-
Others <sup>2/</sup>	-	-	-	-	-	190	-	-	190
<b>Total</b>	<b>3,185</b>	<b>-</b>	<b>443</b>	<b>9</b>	<b>-</b>	<b>1,098</b>	<b>-</b>	<b>-</b>	<b>4,735</b>

30 Jun 2022									
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
	Risk Weight								Total EAD <sup>1/</sup>
S\$ million	0%	10%	20%	50%	75%	100%	150%	Others	
<b>Asset Class</b>									
Sovereign	1,313	-	-	-	-	-	-	-	1,313
PSE	-	-	-	-	-	-	-	-	-
MDB	-	-	-	-	-	-	-	-	-
Bank	-	-	38	-	-	-	-	-	38
Corporate	-	-	1	11	-	485	-	-	497
Regulatory Retail	-	-	-	-	-	-	-	-	-
Others <sup>2/</sup>	-	-	-	-	-	255	-	-	255
<b>Total</b>	<b>1,313</b>	<b>-</b>	<b>39</b>	<b>11</b>	<b>-</b>	<b>740</b>	<b>-</b>	<b>-</b>	<b>2,103</b>

<sup>1/</sup> EAD refers to the amount relevant for capital requirement calculation, after taking into account the effects of CRM

<sup>2/</sup> Includes other exposures not included in the above asset classes

### 16.5 Counterparty Credit Risk Exposures under Foundation Internal Ratings-Based Approach (F-IRBA)

The table below represents the parameters used in the calculation of capital for the Group's portfolio, which are subjected to the CCR requirements under the F-IRBA by asset classes.

	31 Dec 2022						
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	EAD <sup>1/</sup> (S\$ million)	Average PD <sup>2/</sup> (%)	Number of Obligors <sup>3/</sup>	Average LGD <sup>2/</sup> (%)	Average Maturity <sup>4/</sup> (In years)	RWA (S\$ million)	RWA Density <sup>5/</sup> (%)
<b>Sovereign</b>							
PD Range							
0.00 to < 0.15	3,612	0.00%	5	37%	0.3	#	0%
0.15 to < 0.25	-	-	-	-	-	-	NA
0.25 to < 0.50	-	-	-	-	-	-	NA
0.50 to < 0.75	-	-	-	-	-	-	NA
0.75 to < 2.50	-	-	-	-	-	-	NA
2.50 to < 10.00	-	-	-	-	-	-	NA
10.00 to < 100.00	-	-	-	-	-	-	NA
100.00 (Default)	-	-	-	-	-	-	NA
<b>Sub-total</b>	<b>3,612</b>	<b>0.00%</b>	<b>5</b>	<b>37%</b>	<b>0.3</b>	<b>-</b>	<b>0%</b>
<b>Bank</b>							
PD Range							
0.00 to < 0.15	5,875	0.05%	137	29%	0.7	595	10%
0.15 to < 0.25	-	-	-	-	-	-	NA
0.25 to < 0.50	492	0.37%	8	5%	0.2	26	5%
0.50 to < 0.75	23	0.54%	10	45%	0.5	15	64%
0.75 to < 2.50	1	1.11%	1	45%	0.1	#	69%
2.50 to < 10.00	-	-	-	-	-	-	NA
10.00 to < 100.00	-	-	-	-	-	-	NA
100.00 (Default)	-	-	-	-	-	-	NA
<b>Sub-total</b>	<b>6,391</b>	<b>0.08%</b>	<b>156</b>	<b>27%</b>	<b>0.7</b>	<b>636</b>	<b>10%</b>
<b>Corporate</b>							
PD Range							
0.00 to < 0.15	2,058	0.09%	182	34%	1.3	374	18%
0.15 to < 0.25	-	-	-	-	-	-	NA
0.25 to < 0.50	745	0.37%	92	30%	0.8	288	39%
0.50 to < 0.75	57	0.54%	77	45%	1.0	33	59%
0.75 to < 2.50	150	1.21%	102	45%	1.3	131	88%
2.50 to < 10.00	75	3.26%	31	45%	1.9	99	131%
10.00 to < 100.00	4	11.10%	36	15%	0.4	2	66%
100.00 (Default)	-	-	-	-	-	-	NA
<b>Sub-total</b>	<b>3,089</b>	<b>0.31%</b>	<b>520</b>	<b>34%</b>	<b>1.2</b>	<b>927</b>	<b>30%</b>

**16.5 Counterparty Credit Risk Exposures under Foundation Internal Ratings-Based Approach (F-IRBA)**  
 (continued)

	31 Dec 2022						
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	EAD <sup>1/</sup> (S\$ million)	Average PD <sup>2/</sup> (%)	Number of Obligors <sup>3/</sup>	Average LGD <sup>2/</sup> (%)	Average Maturity <sup>4/</sup> (In years)	RWA (S\$ million)	RWA Density <sup>5/</sup> (%)
<b>Corporate (IPRE)</b>							
PD Range							
0.00 to < 0.15	5	0.14%	3	45%	3.6	2	48%
0.15 to < 0.25	-	-	-	-	-	-	NA
0.25 to < 0.50	4	0.37%	8	45%	2.4	2	63%
0.50 to < 0.75	18	0.54%	21	45%	3.1	17	91%
0.75 to < 2.50	58	1.19%	51	45%	2.3	60	103%
2.50 to < 10.00	3	3.20%	3	45%	3.0	5	145%
10.00 to < 100.00	-	-	-	-	-	-	NA
100.00 (Default)	#	100.00%	1	45%	5.0	-	0%
<b>Sub-total</b>	<b>88</b>	<b>1.28%</b>	<b>87</b>	<b>45%</b>	<b>2.6</b>	<b>86</b>	<b>97%</b>
<b>Corporate Small Business</b>							
PD Range							
0.00 to < 0.15	9	0.10%	24	45%	0.9	2	25%
0.15 to < 0.25	#	0.15%	10	45%	0.3	#	16%
0.25 to < 0.50	1	0.37%	20	45%	0.3	#	35%
0.50 to < 0.75	354	0.54%	26	45%	0.0	212	60%
0.75 to < 2.50	4	1.75%	68	45%	2.6	5	114%
2.50 to < 10.00	5	3.29%	26	45%	2.8	6	120%
10.00 to < 100.00	#	26.24%	19	45%	1.1	#	223%
100.00 (Default)	#	100.00%	1	45%	5.0	-	0%
<b>Sub-total</b>	<b>373</b>	<b>0.66%</b>	<b>193</b>	<b>45%</b>	<b>0.1</b>	<b>225</b>	<b>60%</b>
<b>Total (all portfolios)</b>	<b>13,552</b>	<b>0.13%</b>	<b>961</b>	<b>32%</b>	<b>0.7</b>	<b>1,874</b>	<b>14%</b>

**16.5 Counterparty Credit Risk Exposures under Foundation Internal Ratings-Based Approach (F-IRBA)**  
 (continued)

	30 Jun 2022						
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	EAD <sup>1/</sup> (S\$ million)	Average PD <sup>2/</sup> (%)	Number of Obligors <sup>3/</sup>	Average LGD <sup>2/</sup> (%)	Average Maturity <sup>4/</sup> (In years)	RWA (S\$ million)	RWA Density <sup>5/</sup> (%)
<b>Sovereign</b>							
PD Range							
0.00 to < 0.15	2,557	0.00%	7	34%	0.6	1	0%
0.15 to < 0.25	-	-	-	-	-	-	NA
0.25 to < 0.50	-	-	-	-	-	-	NA
0.50 to < 0.75	-	-	-	-	-	-	NA
0.75 to < 2.50	-	-	-	-	-	-	NA
2.50 to < 10.00	-	-	-	-	-	-	NA
10.00 to < 100.00	-	-	-	-	-	-	NA
100.00 (Default)	-	-	-	-	-	-	NA
<b>Sub-total</b>	<b>2,557</b>	<b>0.00%</b>	<b>7</b>	<b>34%</b>	<b>0.6</b>	<b>1</b>	<b>0%</b>
<b>Bank</b>							
PD Range							
0.00 to < 0.15	7,526	0.05%	137	29%	0.6	680	9%
0.15 to < 0.25	-	-	-	-	-	-	NA
0.25 to < 0.50	753	0.37%	11	7%	0.2	70	9%
0.50 to < 0.75	32	0.54%	10	45%	0.6	21	65%
0.75 to < 2.50	#	1.11%	1	45%	0.0	#	68%
2.50 to < 10.00	-	-	-	-	-	-	NA
10.00 to < 100.00	-	-	-	-	-	-	NA
100.00 (Default)	-	-	-	-	-	-	NA
<b>Sub-total</b>	<b>8,311</b>	<b>0.08%</b>	<b>159</b>	<b>27%</b>	<b>0.6</b>	<b>771</b>	<b>9%</b>
<b>Corporate</b>							
PD Range							
0.00 to < 0.15	3,213	0.09%	185	37%	1.2	576	18%
0.15 to < 0.25	-	-	-	-	-	-	NA
0.25 to < 0.50	679	0.37%	105	42%	1.0	369	54%
0.50 to < 0.75	68	0.54%	65	45%	1.3	43	63%
0.75 to < 2.50	110	1.48%	97	45%	2.3	118	107%
2.50 to < 10.00	101	3.24%	26	45%	1.4	127	125%
10.00 to < 100.00	#	14.65%	45	45%	2.4	1	252%
100.00 (Default)	-	-	-	-	-	-	NA
<b>Sub-total</b>	<b>4,171</b>	<b>0.25%</b>	<b>523</b>	<b>38%</b>	<b>1.2</b>	<b>1,234</b>	<b>30%</b>

**16.5 Counterparty Credit Risk Exposures under Foundation Internal Ratings-Based Approach (F-IRBA)**  
 (continued)

<b>30 Jun 2022</b>							
	<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>(d)</b>	<b>(e)</b>	<b>(f)</b>	<b>(g)</b>
	EAD <sup>1/</sup> (S\$ million)	Average PD <sup>2/</sup> (%)	Number of Obligors <sup>3/</sup>	Average LGD <sup>2/</sup> (%)	Average Maturity <sup>4/</sup> (In years)	RWA (S\$ million)	RWA Density <sup>5/</sup> (%)
<b>Corporate (IPRE)</b>							
PD Range							
0.00 to < 0.15	9	0.14%	3	45%	4.2	5	53%
0.15 to < 0.25	-	-	-	-	-	-	NA
0.25 to < 0.50	9	0.37%	9	45%	2.4	5	63%
0.50 to < 0.75	12	0.54%	17	45%	2.1	8	71%
0.75 to < 2.50	47	1.17%	37	45%	2.2	46	98%
2.50 to < 10.00	8	3.20%	2	45%	3.3	11	149%
10.00 to < 100.00	-	-	-	-	-	-	NA
100.00 (Default)	-	-	-	-	-	-	NA
<b>Sub-total</b>	<b>85</b>	<b>1.07%</b>	<b>68</b>	<b>45%</b>	<b>2.5</b>	<b>75</b>	<b>91%</b>
<b>Corporate Small Business</b>							
PD Range							
0.00 to < 0.15	17	0.10%	17	45%	0.7	4	23%
0.15 to < 0.25	#	0.18%	12	45%	0.1	#	17%
0.25 to < 0.50	1	0.37%	22	45%	0.3	#	33%
0.50 to < 0.75	140	0.54%	26	45%	0.0	83	59%
0.75 to < 2.50	6	1.46%	67	45%	2.2	6	89%
2.50 to < 10.00	2	3.39%	27	45%	1.0	1	99%
10.00 to < 100.00	#	25.17%	11	45%	0.2	#	129%
100.00 (Default)	1	100.00%	2	45%	5.0	-	0%
<b>Sub-total</b>	<b>167</b>	<b>0.87%</b>	<b>184</b>	<b>45%</b>	<b>0.2</b>	<b>94</b>	<b>57%</b>
<b>Total (all portfolios)</b>	<b>15,291</b>	<b>0.13%</b>	<b>941</b>	<b>32%</b>	<b>0.7</b>	<b>2,175</b>	<b>14%</b>

<sup>1/</sup> EAD refers to the amount relevant for capital requirements calculation, after taking into account the effects of CRM

<sup>2/</sup> Refers to the PD and LGD associated with each obligor grade, weighted by EAD

<sup>3/</sup> Number of obligors refers to the number of counterparties

<sup>4/</sup> Refers to the effective maturity of the exposures to the obligor in years, weighted by EAD

<sup>5/</sup> Total RWA divided by the exposures post-CRM

# Represents amounts of less than \$0.5 million

## 16.6 Counterparty Credit Risk Exposures under Advanced Internal Ratings-Based Approach (A-IRBA)

The table below represents the parameters used in the calculation of capital for the Group's portfolio, which are subjected to the CCR requirements under the A-IRBA by asset classes.

There was no CCR exposure within the other prescribed asset classes (Sovereign, Banks and Corporate Small Business) under A-IRBA as at 31 December 2022.

31 Dec 2022							
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	EAD <sup>1/</sup> (S\$ million)	Average PD <sup>2/</sup> (%)	Number of Obligors <sup>3/</sup>	Average LGD <sup>2/</sup> (%)	Average Maturity <sup>4/</sup> (In years)	RWA (S\$ million)	RWA Density <sup>5/</sup> (%)
<b>Corporate</b>							
PD Range							
0.00 to < 0.15	21	0.05%	51	1%	0.5	#	0%
0.15 to < 0.25	14	0.20%	85	3%	0.3	#	2%
0.25 to < 0.50	-	-	-	-	-	-	NA
0.50 to < 0.75	4	0.50%	34	2%	0.8	#	3%
0.75 to < 2.50	9	1.85%	42	5%	0.4	1	10%
2.50 to < 10.00	6	5.00%	22	9%	1.3	2	29%
10.00 to < 100.00	7	11.65%	90	18%	0.2	5	74%
100.00 (Default)	-	-	-	-	-	-	NA
<b>Sub-total</b>	<b>61</b>	<b>2.19%</b>	<b>324</b>	<b>5%</b>	<b>0.5</b>	<b>8</b>	<b>13%</b>
<b>Total (all portfolios)</b>	<b>61</b>	<b>2.19%</b>	<b>324</b>	<b>5%</b>	<b>0.5</b>	<b>8</b>	<b>13%</b>
30 Jun 2022							
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	EAD <sup>1/</sup> (S\$ million)	Average PD <sup>2/</sup> (%)	Number of Obligors <sup>3/</sup>	Average LGD <sup>2/</sup> (%)	Average Maturity <sup>4/</sup> (In years)	RWA (S\$ million)	RWA Density <sup>5/</sup> (%)
<b>Corporate</b>							
PD Range							
0.00 to < 0.15	6	0.05%	44	1%	0.6	#	0%
0.15 to < 0.25	36	0.20%	75	3%	0.4	1	2%
0.25 to < 0.50	-	-	-	-	-	-	NA
0.50 to < 0.75	7	0.50%	34	2%	0.3	#	2%
0.75 to < 2.50	11	1.87%	52	1%	0.2	#	2%
2.50 to < 10.00	4	5.00%	34	8%	0.3	1	24%
10.00 to < 100.00	23	10.07%	93	16%	1.0	15	67%
100.00 (Default)	-	-	-	-	-	-	NA
<b>Sub-total</b>	<b>87</b>	<b>3.27%</b>	<b>332</b>	<b>6%</b>	<b>0.5</b>	<b>17</b>	<b>20%</b>
<b>Total (all portfolios)</b>	<b>87</b>	<b>3.27%</b>	<b>332</b>	<b>6%</b>	<b>0.5</b>	<b>17</b>	<b>20%</b>

<sup>1/</sup> EAD refers to the amount relevant for capital requirements calculation, after taking into account the effects of CRM

<sup>2/</sup> Refers to the PD and LGD associated with each obligor grade, weighted by EAD

<sup>3/</sup> Number of obligors refers to the number of accounts

<sup>4/</sup> Refers to the maturity of the exposures to the obligor in years, weighted by EAD

<sup>5/</sup> Total RWA divided by the exposures post-CRM

# Represents amounts of less than \$0.5 million



## 16.7 Composition of Collateral for Counterparty Credit Risk Exposures

The table below represents all the types of collateral posted or received by the Group to support or reduce its CCR exposures related to derivatives or securities financing transactions (SFTs), including transactions cleared through Central Counterparties (CCP).

31 Dec 2022													
		(a)		(b)		(c)		(d)		(e)		(f)	
		Collateral used in derivative transactions				Collateral used in SFTs <sup>1/</sup>							
		Fair value of collateral received		Fair value of collateral posted				Fair value of collateral received		Fair value of collateral posted			
S\$ million		Segregated <sup>2/</sup>	Unsegregated	Segregated <sup>2/</sup>	Unsegregated			Fair value of collateral received	Fair value of collateral posted				
1	Cash	-	3,151	97	2,302			3,277	7,217				
2	Debt	102	1,196	478	581			6,254	3,497				
3	Equity	-	784	-	-			-	-				
4	Others <sup>3/</sup>	-	777	-	-			-	-				
5	<b>Total</b>	<b>102</b>	<b>5,908</b>	<b>575</b>	<b>2,883</b>			<b>9,531</b>	<b>10,714</b>				

30 Jun 2022													
		(a)		(b)		(c)		(d)		(e)		(f)	
		Collateral used in derivative transactions				Collateral used in SFTs <sup>1/</sup>							
		Fair value of collateral received		Fair value of collateral posted				Fair value of collateral received		Fair value of collateral posted			
S\$ million		Segregated <sup>2/</sup>	Unsegregated	Segregated <sup>2/</sup>	Unsegregated			Fair value of collateral received	Fair value of collateral posted				
1	Cash	-	2,902	139	2,348			3,675	4,133				
2	Debt	-	720	-	127			3,585	4,113				
3	Equity	-	640	-	-			-	-				
4	Others <sup>3/</sup>	-	576	-	-			-	-				
5	<b>Total</b>	<b>-</b>	<b>4,838</b>	<b>139</b>	<b>2,475</b>			<b>7,260</b>	<b>8,246</b>				

<sup>1/</sup> Refers to Securities Financing Transaction (i.e. Repos and Reverse Repos)

<sup>2/</sup> Refers to collateral held in a bankruptcy remote manner

<sup>3/</sup> Includes collateral not reported in the other categories

## 16.8 Credit Derivative Exposures

The table below presents the Group's exposure to credit derivatives by what had been bought or sold.

The increase in notional for credit derivatives during the second half of 2022 was mainly driven by higher index credit default swaps and higher single-name credit default swaps.

S\$ million	31 Dec 2022		30 Jun 2022		
	(a)	(b)	(a)	(b)	
	Protection Bought	Protection Sold	Protection Bought	Protection Sold	
<b>Notional</b>					
1	Single-name credit default swaps	1,502	942	1,273	563
2	Index credit default swaps	2,171	2,164	1,725	1,718
3	Total return swaps	8	-	147	-
4	Other credit derivatives	312	204	258	158
5	<b>Total notional</b>	<b>3,993</b>	<b>3,310</b>	<b>3,403</b>	<b>2,439</b>
<b>Fair values</b>					
6	Positive fair value (asset)	7	30	48	8
7	Negative fair value (liability)	37	6	14	27

## 17. SECURITISATION EXPOSURES

The Group has limited exposure to asset-backed securities and collateralised debt obligations and are not active in securitisation activities. As at 31 December 2022, there was no securitisation and re-securitisation exposure in the banking and trading books.

## 18. MARKET RISK TYPE UNDER STANDARDISED APPROACH

The decrease in Market Risk RWA during the second half of 2022 was mainly attributed to lower Foreign exchange risk and Equity risk.

<b>31 Dec 2022</b>	
<b>Market Risk by Standardised Approach</b>	<b>(a)</b>
S\$ million	RWA
<b>Notional</b>	
1 Interest rate risk (general and specific)	2,024
2 Equity risk (general and specific)	293
3 Foreign exchange risk	5,682
4 Commodity risk	1
<b>Options</b>	
5 Simplified Approach	-
6 Delta-plus method	331
7 Scenario Approach	256
8 Securitisation	-
<b>9 Total</b>	<b>8,587</b>

<b>30 Jun 2022</b>	
<b>Market Risk by Standardised Approach</b>	<b>(a)</b>
S\$ million	RWA
<b>Notional</b>	
1 Interest rate risk (general and specific)	2,432
2 Equity risk (general and specific)	753
3 Foreign exchange risk	6,435
4 Commodity risk	2
<b>Options</b>	
5 Simplified Approach	-
6 Delta-plus method	212
7 Scenario Approach	615
8 Securitisation	-
<b>9 Total</b>	<b>10,449</b>

There is no Market Risk exposure under Internal Model Approach as at 31 December 2022.

## 19. INTEREST RATE RISK IN THE BANKING BOOK

Qualitative disclosures related to Interest Rate Risk in the Banking Book, including a description of its nature and key assumptions made by the Group, can be found in the Risk Management chapter and Notes to the Financial Statements of the Annual Report.

Based on a 100 bp parallel rise in yield curves on the Group's exposure to major currencies i.e. Singapore Dollar, US Dollar, Hong Kong Dollar and Malaysian Ringgit, net interest income is estimated to increase by S\$742 million, or approximately +9.6% of reported net interest income. The corresponding impact from a 100 bp decrease is an estimated reduction of S\$742 million in net interest income, or approximately -9.6% of reported net interest income.

## 20. LIQUIDITY COVERAGE RATIO

The Group is subjected to the Liquidity Coverage Ratio ("LCR") requirements under the MAS Notice 649. As at 1 January 2019, the Group is required to maintain daily all-currency and Singapore dollar ("SGD") LCR of at least 100% on an ongoing basis.

LCR aims to ensure that a Bank maintains an adequate level of unencumbered High Quality Liquid Assets ("HQLA") that can be quickly and easily converted into cash to meet any liquidity needs for a 30-calendar day liquidity stress scenario.

The following quarterly disclosures are made pursuant to the MAS Notice 651 "Liquidity Coverage Ratio Disclosure".

For 4Q22, the average SGD and all-currency LCRs for the Group were 308% and 159% respectively. Compared to 3Q22, the average SGD LCR decreased by 52 percentage points largely driven by lower inflows from derivatives. The average all-currency LCR increased by 6 percentage points due to an increase in HQLA.

The Group continues to focus on acquiring stable deposits and on maintaining a mix of HQLA comprising mainly of Level 1 central bank reserves and liquid sovereign bonds. The Asset & Liability Management Desk in Global Treasury manages the day-to-day liquidity needs of the Group and is subject to liquidity limits and triggers that serve as risk control on the Group's liquidity exposure.

## 20. Liquidity Coverage Ratio (continued)

### Average Group All Currency LCR for 4Q22

The data presented in the quantitative disclosure are simple averages of daily observations over the quarter. The number of data points in calculating the average figures is 92.

Group - ALL Currency (S\$m)		Total Unweighted Value (average)	Total Weighted Value (average)
<b>HIGH-QUALITY LIQUID ASSETS</b>			
1	Total high-quality liquid assets (HQLA)		79,896
<b>CASH OUTFLOWS</b>			
2	Retail deposits and deposits from small business customers, of which:	166,358	14,107
3	Stable deposits	50,342	2,517
4	Less stable deposits	116,016	11,590
5	Unsecured wholesale funding, of which:	128,419	58,995
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	41,269	9,966
7	Non-operational deposits (all counterparties)	80,781	42,660
8	Unsecured debt	6,369	6,369
9	Secured wholesale funding		522
10	Additional requirements, of which:	75,579	39,935
11	Outflows related to derivative exposures and other collateral requirements	35,249	35,087
12	Outflows related to loss of funding on debt products	32	32
13	Credit and liquidity facilities	40,298	4,816
14	Other contractual funding obligations	1,702	1,702
15	Other contingent funding obligations	17,910	537
16	<b>TOTAL CASH OUTFLOWS</b>		115,799
<b>CASH INFLOWS</b>			
17	Secured lending (eg reverse repos)	3,719	480
18	Inflows from fully performing exposures	50,389	31,351
19	Other cash inflows	33,771	33,658
20	<b>TOTAL CASH INFLOWS</b>	87,879	65,489
			TOTAL ADJUSTED VALUE
21	<b>TOTAL HQLA</b>		79,896
22	<b>TOTAL NET CASH OUTFLOWS</b>		50,310
23	<b>LIQUIDITY COVERAGE RATIO (%)</b>		159

## 20. Liquidity Coverage Ratio (continued)

### Average Group SGD LCR for 4Q22

The data presented in the quantitative disclosure are simple averages of daily observations over the quarter. The number of data points in calculating the average figures is 92.

Group - SGD (\$m)		Total Unweighted Value (average)	Total Weighted Value (average)
<b>HIGH-QUALITY LIQUID ASSETS</b>			
1	Total high-quality liquid assets (HQLA)		39,094
<b>CASH OUTFLOWS</b>			
2	Retail deposits and deposits from small business customers, of which:	95,653	7,443
3	Stable deposits	42,447	2,122
4	Less stable deposits	53,206	5,321
5	Unsecured wholesale funding, of which:	26,803	10,379
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	10,868	2,624
7	Non-operational deposits (all counterparties)	15,933	7,752
8	Unsecured debt	3	3
9	Secured wholesale funding		-
10	Additional requirements, of which:	34,916	18,956
11	Outflows related to derivative exposures and other collateral requirements	17,395	17,395
12	Outflows related to loss of funding on debt products	-	-
13	Credit and liquidity facilities	17,521	1,561
14	Other contractual funding obligations	1,213	1,213
15	Other contingent funding obligations	1,952	59
16	<b>TOTAL CASH OUTFLOWS</b>		38,049
<b>CASH INFLOWS</b>			
17	Secured lending (eg reverse repos)	1,233	0
18	Inflows from fully performing exposures	4,712	2,525
19	Other cash inflows	22,710	22,699
20	<b>TOTAL CASH INFLOWS</b>	28,654	25,224
			TOTAL ADJUSTED VALUE
21	<b>TOTAL HQLA</b>		39,094
22	<b>TOTAL NET CASH OUTFLOWS</b>		12,860
23	<b>LIQUIDITY COVERAGE RATIO (%)</b>		308

## 21. NET STABLE FUNDING RATIO

The Group is subjected to the Net Stable Funding Ratio (“NSFR”) requirements under MAS Notice 652. The Group is required to maintain an all-currency NSFR of at least 100% on an ongoing basis.

NSFR ensures that the Group maintains a stable funding profile in relation to the composition of its assets and off-balance sheet activities. It aims to promote resilience over a longer time horizon by funding its activities with stable sources of funding on an ongoing basis.

The following semi-annual disclosures are made pursuant to the MAS Notice 653 “Net Stable Funding Ratio Disclosure”.

As at 31 December 2022, the all-currency NSFR for the Group was 117%. Compared to 30 September 2022, the all-currency NSFR increased by 2 percentage points, mainly driven by lower required stable funding (“RSF”) from customer loans.

The Group continues to maintain a stable funding structure to support its asset growth. Funding strategies have been put in place to provide effective diversification and stability in funding sources across tenors, products and geographies. Liquidity limits and triggers serve as risk control on the Group’s funding and liquidity exposure.

## 21. Net Stable Funding Ratio (continued)

Group All-Currency NSFR as at 31 Dec 2022

Group - ALL Currency (S\$m)	Unweighted value by residual maturity				Weighted value
	No Maturity	< 6 months	6 months to <1 yr	≥ 1yr	
<b>ASF Item</b>					
1 Capital:	45,659	-	998	3,403	50,060
2 <i>Regulatory capital</i>	45,659	-	998	3,403	50,060
3 <i>Other capital instruments</i>	-	-	-	-	-
4 Retail deposits and deposits from small business customers:	109,023	62,682	2,385	720	159,947
5 <i>Stable deposits</i>	43,886	6,982	37	2	48,362
6 <i>Less stable deposits</i>	65,137	55,700	2,348	718	111,585
7 Wholesale funding:	76,832	109,759	13,066	6,734	75,138
8 <i>Operational deposits</i>	41,357	-	-	-	20,678
9 <i>Other wholesale funding</i>	35,475	109,759	13,066	6,734	54,459
10 Liabilities with matching interdependent assets	-	-	-	-	-
11 Other liabilities:	4,907	17,994			201
12 <i>NSFR derivative liabilities</i>		16,633			
13 <i>All other liabilities and equity not included in the above categories</i>	4,907	1,159	-	201	201
<b>14 Total ASF</b>					<b>285,347</b>
<b>RSF Item</b>					
15 Total NSFR high-quality liquid assets (HQLA)					5,131
16 Deposits held at other financial institutions for operational purposes	59	-	-	-	29
17 Performing loans and securities:	11,567	122,994	25,592	183,755	214,717
18 <i>Performing loans to financial institutions secured by Level 1 HQLA</i>	-	1,422	96	-	190
19 <i>Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions</i>	6,215	19,423	1,240	2,791	8,073
20 <i>Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and PSEs, of which:</i>	5,163	88,342	17,848	116,671	151,632
21 <i>With a risk weight of less than or equal to 35% under MAS Notice 637's standardised approach to credit risk</i>	-	-	-	-	-
22 <i>Performing residential mortgages, of which:</i>	-	1,635	1,453	57,813	40,437
23 <i>With a risk weight of less than or equal to 35% under MAS Notice 637's standardised approach to credit risk</i>	-	1,427	1,299	55,954	38,657
24 <i>Securities that are not in default and do not qualify as HQLA, including exchange-traded equities</i>	189	12,172	4,955	6,479	14,386
25 Assets with matching interdependent liabilities	-	-	-	-	-
26 Other assets:	16,614	40,118			22,007
27 <i>Physical trade commodities, including gold</i>	1,287				1,094
28 <i>Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs</i>		529			450
29 <i>NSFR derivative assets</i>		18,129			1,496
30 <i>NSFR derivative liabilities before deduction of variation margin posted</i>		18,617			931
31 <i>All other assets not included in the above categories</i>	15,327	826	140	1,877	18,037
32 Off-balance sheet items		228,123			2,012
<b>33 Total RSF</b>					<b>243,897</b>
<b>34 Net Stable Funding Ratio (%)</b>					<b>117</b>



## 21. Net Stable Funding Ratio (continued)

### Group All-Currency NSFR at 30 Sep 2022

Group - ALL Currency (S\$m)	Unweighted value by residual maturity				Weighted value
	No Maturity	< 6 months	6 months to <1 yr	≥ 1yr	
<b>ASF Item</b>					
1 Capital:	45,236	-	998	3,576	49,810
2 <i>Regulatory capital</i>	45,236	-	998	3,576	49,810
3 <i>Other capital instruments</i>	-	-	-	-	-
4 Retail deposits and deposits from small business customers:	119,824	49,889	3,057	609	158,665
5 <i>Stable deposits</i>	45,842	5,364	40	1	48,685
6 <i>Less stable deposits</i>	73,983	44,525	3,017	608	109,980
7 Wholesale funding:	85,580	107,194	12,326	8,435	78,453
8 <i>Operational deposits</i>	42,071	-	-	-	21,035
9 <i>Other wholesale funding</i>	43,510	107,194	12,326	8,435	57,418
10 Liabilities with matching interdependent assets	-	-	-	-	-
11 Other liabilities:	5,969		25,881		196
12 <i>NSFR derivative liabilities</i>			23,315		
13 <i>All other liabilities and equity not included in the above categories</i>	5,969	2,370	-	196	196
<b>14 Total ASF</b>					287,125
<b>RSF Item</b>					
15 Total NSFR high-quality liquid assets (HQLA)					5,695
16 Deposits held at other financial institutions for operational purposes	109	-	-	-	54
17 Performing loans and securities:	12,691	124,161	23,445	185,400	217,862
18 <i>Performing loans to financial institutions secured by Level 1 HQLA</i>	-	1,368	80	-	177
19 <i>Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions</i>	6,662	19,147	1,432	2,063	7,523
20 <i>Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and PSEs, of which:</i>	5,685	91,367	15,784	117,569	154,453
21 <i>With a risk weight of less than or equal to 35% under MAS Notice 637's standardised approach to credit risk</i>	-	-	-	-	-
22 <i>Performing residential mortgages, of which:</i>	-	1,765	1,640	58,954	41,945
23 <i>With a risk weight of less than or equal to 35% under MAS Notice 637's standardised approach to credit risk</i>	-	1,526	1,358	56,212	39,259
24 <i>Securities that are not in default and do not qualify as HQLA, including exchange-traded equities</i>	344	10,514	4,508	6,815	13,765
25 Assets with matching interdependent liabilities	-	-	-	-	-
26 Other assets:	16,714		56,396		23,886
27 <i>Physical trade commodities, including gold</i>	1,226				1,042
28 <i>Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs</i>			447		380
29 <i>NSFR derivative assets</i>			26,460		3,145
30 <i>NSFR derivative liabilities before deduction of variation margin posted</i>			25,576		1,279
31 <i>All other assets not included in the above categories</i>	15,488	1,956	157	1,800	18,040
32 Off-balance sheet items			232,668		1,999
<b>33 Total RSF</b>					249,496
<b>34 Net Stable Funding Ratio (%)</b>					115