

Pillar 3 Disclosure Report

30 June 2020

United Overseas Bank Limited
Incorporated in the Republic of Singapore

Contents

1	Introduction	4
2	Key Metrics	5
3	Composition of Capital	6
	3.1 Reconciliation of Regulatory Capital to Balance Sheet	6
	3.2 Main Features of Regulatory Instruments	11
4	Leverage Ratio	16
	4.1 Leverage Ratio Summary Comparison Table	16
	4.2 Leverage Ratio Common Disclosure Template	17
5	Macroprudential Supervisory Measures	18
	5.1 Geographical Distribution of Credit Exposures Used in the Countercyclical Capital Buffer	18
6	Overview of RWA	19
7	Credit Risk	20
	7.1 Credit Quality of Assets	20
	7.2 Changes in Stock of Defaulted Loans and Debt Securities	20
	7.3 Overview of CRM Techniques	21
	7.4 SA(CR) and SA(EQ) – Credit Risk Exposure and CRM Effects	22
	7.5 SA(CR) and SA(EQ) – Exposures by Asset Classes and Risk Weights	23
	7.6 IRBA – Credit Risk Exposures by Portfolio and PD Range	24
	7.7 IRBA – Effect on RWA of Credit Derivatives used as CRM	28
	7.8 IRBA – RWA Flow Statement for Credit Risk Exposures	28
	7.9 IRBA – Specialised Lending	29
8	Counterparty Credit Risk (CCR)	30
	8.1 Analysis of CCR Exposure by Approach	30
	8.2 CVA Risk Capital Requirements	31
	8.3 Standardised Approach – CCR Exposures by Portfolio and Risk Weights	32
	8.4 IRBA – CCR Exposures by Portfolio and PD Range	32
	8.5 Composition of Collateral for CCR Exposures	36
	8.6 Credit Derivative Exposures	37
	8.7 RWA flow statements under CCR internal models method	37
9	Securitisation	38
	9.1 Securitisation Exposures in the Banking Book	38
	9.2 Securitisation Exposures in the Trading Book	38
	9.3 Securitisation Exposures in the Banking Book and associated Regulatory Capital Requirements – UOB acting as Originator or as Sponsor	38
	9.4 Securitisation Exposures in the Banking Book and associated Regulatory Capital Requirements – UOB acting as Investor	39

10	Market Risk	41
10.1	Market Risk under Standardised Approach	41
10.2	RWA Flow Statements of Market Risk Exposures under IMA and IMA Values for Trading Portfolios	41
10.3	Comparison of VaR Estimates with Gains or Losses	42
11	Interest Rate Risk in the Banking Book	44
12	Liquidity Coverage Ratio Disclosures	45
12.1	Liquidity Coverage Ratio	45
12.2	Average Group All Currency LCR.....	46
12.3	Average Group SGD Currency LCR.....	47
13	Net Stable Funding Ratio Disclosures	48
14	Abbreviations	51

Notes:

- 1 The pillar 3 disclosure report is presented in Singapore dollars.
- 2 Certain figures in this report may not add up to the respective totals due to rounding.
- 3 Amounts less than \$500,000 in absolute term are shown as "0".

1 Introduction

UOB Group's Pillar 3 Disclosure Report ("The Report") is prepared in accordance with the Monetary Authority of Singapore ("MAS") Notice to Banks No. 637 "Risk Based Capital Adequacy Requirements for Banks Incorporated in Singapore".

The Report is governed by the Group Pillar 3 Disclosure Policy which specifies the Group's Pillar 3 disclosure requirements, frequency of disclosure, medium of disclosure, and the roles and responsibilities of various parties involved in the disclosure reporting. The Policy is reviewed at least annually and approved by the Board.

The Report facilitates an assessment of the Group's capital adequacy and provides an overview of the Group's risk profile.

2 Key Metrics

The table below provides an overview of the Group's key prudential metrics related to regulatory capital, leverage ratio and liquidity standards.

\$m		30 Jun 2020	31 Mar 2020	31 Dec 2019	30 Sep 2019	30 Jun 2019
Available capital (amounts)¹						
1	CET1 capital	32,481	32,748	32,366	31,759	32,067
2	Tier 1 capital	34,860	35,127	34,745	34,637	34,196
3	Total capital	39,592	39,939	39,352	39,171	39,630
Risk weighted assets (amounts)¹						
4	Total RWA	232,037	231,900	226,318	231,610	230,032
Risk-based capital ratios as a percentage of RWA						
5	CET1 ratio (%)	14.0	14.1	14.3	13.7	13.9
6	Tier 1 ratio (%)	15.0	15.1	15.4	15.0	14.9
7	Total capital ratio (%)	17.1	17.2	17.4	16.9	17.2
Additional CET1 buffer requirements as a percentage of RWA						
8	Capital conservation buffer requirement (2.5% from 2019) (%)	2.5	2.5	2.5	2.5	2.5
9	Countercyclical buffer requirement (%)	0.1	0.1	0.2	0.3	0.3
10	Bank G-SIB and/or D-SIB additional requirement (%)	-	-	-	-	-
11	Total of bank CET1 specific buffer requirements (%) (row 8 + row 9 + row 10)	2.6	2.6	2.7	2.8	2.8
12	CET1 available after meeting the Reporting Bank's minimum capital requirements (%)	7.0	7.1	7.4	6.9	6.9
Leverage Ratio¹						
13	Total Leverage Ratio exposure measure	477,488	475,001	452,859	458,057	454,152
14	Leverage Ratio (%) (row 2/ row 13)	7.3	7.4	7.7	7.6	7.5
Liquidity Coverage Ratio						
15	Total High Quality Liquid Assets	73,323	60,817	57,419	61,140	58,528
16	Total net cash outflow	54,061	43,899	38,859	42,869	39,873
17	Liquidity Coverage Ratio (%)	136	139	149	144	147
Net Stable Funding Ratio						
18	Total available stable funding	258,317	253,901	249,651	244,071	242,619
19	Total required stable funding	217,477	233,779	223,998	227,613	224,621
20	Net Stable Funding Ratio (%)	119	109	111	107	108

¹ For Capital Adequacy and Leverage Ratios' commentaries, please refer to the Group Financial Report available on UOB's website at www.UOBgroup.com/investor-relations/financial/index.html

3 Composition of Capital

3.1 Reconciliation of Regulatory Capital to Balance Sheet

Table 1 and Table 2 are mandatory disclosures prescribed in MAS Notice 637 requirements.

Table 1 shows the reconciliation between the Group's published consolidated balance sheet and the regulatory capital components. Details of the regulatory capital components are set out in Table 2, as referenced.

The scope of consolidation for accounting and regulatory purposes is similar, except that subsidiaries which carry out insurance business are not consolidated for regulatory purpose. The list of the Group's major insurance subsidiaries can be found in the Group's Annual Report. As at 30 June 2020, both the total assets and the total equities of each of these subsidiaries were less than \$1 billion.

Compared with 31 December 2019, key movements in the items under the column "Under regulatory scope of consolidation" were mainly from redemption of capital instruments and higher eligible provisions.

Table 1 - Reconciliation of Balance Sheet to Regulatory Capital as at 30 June 2020

\$m	Balance Sheet per Published Financial Statements	Under regulatory scope of consolidation	Reference in Table 2
Equity			
Share capital and other capital	7,354		
<i>of which paid-up ordinary shares</i>		4,977	A
<i>of which AT1 capital instruments</i>		2,377	B
Retained earnings	23,429	23,283	C
<i>of which unrealised fair value gains/losses on financial liabilities and derivative liabilities arising from changes in own credit risk</i>		34	D1
Other reserves	9,299	8,874	E
<i>of which unrealised fair value gains/losses on financial liabilities and derivative liabilities arising from changes in own credit risk</i>		2	D2
Equity attributable to equity holders of the Bank	40,081		
Non-controlling interests	225		
<i>of which NCI that meets criteria for inclusion in</i>			
- CET1 capital		15	F1
- AT1 capital		2	F2
- T2 capital		3	F3
Total equity	40,306		
Liabilities			
Deposits and balances of banks	23,899		
Deposits and balances of customers	322,688		
Bills and drafts payable	737		
Derivative financial liabilities	11,905		
Other liabilities	5,001		
Tax payable	650		
Deferred tax liabilities	447		
Debts issued	23,981		
<i>of which T2 capital instruments</i>		3,678	G
Total liabilities	389,308		

3.1 Reconciliation of Regulatory Capital to Balance Sheet (cont'd)

Table 1 - Reconciliation of Balance Sheet to Regulatory Capital as at 30 June 2020

\$m	Balance Sheet per Published Financial Statements	Under regulatory scope of consolidation	Reference in Table 2
Assets			
Cash, balances and placements with central banks	31,016		
Singapore Government treasury bills and securities	8,491		
Other government treasury bills and securities	17,406		
Trading securities	3,134		
Placements and balances with banks	44,975		
Loans to customers	276,994		
<i>of which provisions eligible for inclusion in T2 capital</i>		1,051	H
Derivative financial assets	11,905		
Investment securities ²	20,573		
<i>of which investments in PE/VC held beyond the relevant holding period</i>		7	I1
Other assets	5,572		
Deferred tax assets	426		
<i>of which amount related to deferred tax assets (net of deferred tax liabilities, where permissible)</i>		417	J
Investment in associates and joint ventures ²	1,197		
<i>of which amount related to goodwill</i>		12	K1
<i>of which investments in PE/VC held beyond the relevant holding period</i>		37	I2
Investment properties	957		
Fixed assets	2,822		
Intangible assets	4,147		
<i>of which amount related to goodwill</i>		4,147	K2
Total Assets	429,614		

² Note: This includes the Bank's major stake investments in financial institutions.

3.1 Reconciliation of Regulatory Capital to Balance Sheet (cont'd)

Table 2 lists the regulatory capital components and the corresponding regulatory adjustments.

- (a) **'Amount'** refers to components of capital calculated in accordance with MAS Notice 637, and include both on- and off-balance sheet items.
- (b) **'Reference in Table 1'** links the respective line item to Table 1.
Regulatory adjustments that are deducted against capital are reflected as positive numbers.

Table 2 - Capital Components as at 30 June 2020

\$m		Amount	Reference in Table 1
Common Equity Tier 1 capital: instruments and reserves			
1	Paid-up ordinary shares and share premium (if applicable)	4,977	A
2	Retained earnings	23,283	C
3 [#]	Accumulated other comprehensive income and other disclosed reserves	8,874	E
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	15	F1
6	Common Equity Tier 1 capital before regulatory adjustments	37,149	
Common Equity Tier 1 capital: regulatory adjustments			
7	Valuation adjustment pursuant to Part VIII of MAS Notice 637	-	
8	Goodwill, net of associated deferred tax liability	4,159	K1+K2
9 [#]	Intangible assets, net of associated deferred tax liability	-	
10 [#]	Deferred tax assets that rely on future profitability	417	J
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	36	D1+ D2
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)	-	
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	56	
26A	PE/VC investments held beyond the relevant holding periods set out in MAS Notice 630	56	I1 + I2
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	-	
28	Total regulatory adjustments to CET1 Capital	4,668	
29	Common Equity Tier 1 capital (CET1)	32,481	
Additional Tier 1 capital: instruments			

3.1 Reconciliation of Regulatory Capital to Balance Sheet (cont'd)

Table 2 - Capital Components as at 30 June 2020

\$m		Amount	Reference in Table 1
30	AT1 capital instruments and share premium (if applicable)	2,377	B
31	of which: classified as equity under the Accounting Standards	2,377	
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	2	F2
35	of which: instruments issued by subsidiaries subject to phase out	-	
36	Additional Tier 1 capital before regulatory adjustments	2,379	
Additional Tier 1 capital: regulatory adjustments			
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 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	-	
43	Total regulatory adjustments to Additional Tier 1 capital	-	
44	Additional Tier 1 capital (AT1)	2,379	
45	Tier 1 capital (T1 = CET1 + AT1)	34,860	
Tier 2 capital: instruments and provisions			
46	Tier 2 capital instruments and share premium (if applicable)	3,678	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	3	F3
49	of which: instruments issued by subsidiaries subject to phase out	-	
50	Provisions	1,051	H
51	Tier 2 capital before regulatory adjustments	4,732	
Tier 2 capital: regulatory adjustments			
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	Total regulatory adjustments to Tier 2 capital	-	
58	Tier 2 capital (T2)	4,732	
59	Total capital (TC = T1 + T2)	39,592	
60	Floor-adjusted total risk weighted assets	232,037	
Capital ratios (as a percentage of floor-adjusted risk weighted assets)			
61	Common Equity Tier 1 CAR	14.0%	
62	Tier 1 CAR	15.0%	
63	Total CAR	17.1%	

3.1 Reconciliation of Regulatory Capital to Balance Sheet (cont'd)

Table 2 - Capital Components as at 30 June 2020

\$m		Amount	Reference in Table 1
64	Bank-specific buffer requirement	9.1%	
65	of which: capital conservation buffer requirement	2.5%	
66	of which: bank specific countercyclical buffer requirement	0.1%	
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	7.0%	
National minima			
69	Minimum CET1 CAR	6.5%	
70	Minimum Tier 1 CAR	8.0%	
71	Minimum Total CAR	10.0%	
Amounts below the thresholds for deduction (before risk weighting)			
72	Investments in ordinary shares, AT1 capital, Tier 2 capital and other TLAC liabilities of unconsolidated financial institutions in which the bank does not hold a major stake	925	
73	Investments in ordinary shares of unconsolidated financial institutions in which the Reporting Bank holds a major stake (including insurance subsidiaries)	1,591	
74	Mortgage servicing rights (net of associated deferred tax liability)	-	
75	Deferred tax assets arising from temporary differences (net of associated deferred tax liability)	-	
Applicable caps on the inclusion of provisions in Tier 2			
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to standardised approach (prior to application of cap)	407	row 50
77	Cap on inclusion of provisions in Tier 2 under standardised approach	426	
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)	644	row 50
79	Cap for inclusion of provisions in Tier 2 under internal ratings-based approach	1,282	
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2013 and 1 Jan 2022)			
80	Current cap on CET1 instruments subject to phase out arrangements	-	
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	-	
82	Current cap on AT1 instruments subject to phase out arrangements	-	
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-	
84	Current cap on T2 instruments subject to phase out arrangements	-	
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-	

These elements are subject to a more conservative definition relative to those set out under the Basel III capital standards.

3.2 Main Features of Regulatory Instruments

The following disclosure is based on the prescribed template as set out in MAS Notice 637. This disclosure shall be updated on a semi-annual basis and to be read in conjunction with the notes at <https://www.UOBgroup.com/investor-relations/capital-and-funding-information/group-securities.html>.

The salient features for non-public offerings have been included below, though further details are not published on the UOB website as they are not meaningful nor relevant.

Key Features of Regulatory Capital Instruments as at 30 June 2020

1 Issuer	United Overseas Bank Limited	United Overseas Bank Limited
2 Unique Identifier (ISIN code)	SG1M31001969	SGXF48097749
3 Governing law(s) of the instrument	Singapore	Singapore
Regulatory treatment		
4 Transitional Basel III rules	Core Equity	Additional Tier 1
5 Post-transitional Basel III rules	Core Equity	Additional Tier 1
6 Eligible at solo/group/group&solo	Group & Solo	Group & Solo
7 Instrument type	Ordinary Share	Perpetual Capital Security
8 Amount recognised in regulatory capital (<i>in millions</i>)	S\$4,977 million	S\$749 million
9 Principal amount (<i>in millions</i>)	n.a.	S\$750 million
10 Accounting classification	Equity	Equity
11 Original date of issuance	20 July 1970	17 July 2019
12 Perpetual or dated	Perpetual	Perpetual
13 Original maturity date	No maturity	No maturity
14 Issuer call subject to prior supervisory approval	n.a.	Yes
15 Optional call date	n.a.	17 July 2026
Tax/ regulatory event call	n.a.	Yes
Redemption price	n.a.	Par
16 Subsequent call dates, if applicable	n.a.	Each distribution payment date thereafter
Coupons / dividends		
17 Fixed or floating	Discretionary dividend amount	Fixed
18 Coupon rate and any related index	n.a.	3.58% paid semi-annually on 17 January and 17 July
19 Existence of a dividend stopper	n.a.	Yes
20 Fully discretionary, discretionally or mandatory	Fully discretionary	Fully discretionary
21 Existence of step up or incentive to redeem	n.a.	No
22 Non-cumulative or cumulative	Non-cumulative	Non-cumulative
23 Convertible or non-convertible	n.a.	Non-convertible
24 If convertible, conversion trigger	n.a.	n.a.
25 If convertible, fully or partially	n.a.	n.a.
26 If convertible, conversion rate	n.a.	n.a.
27 If convertible, mandatory or optional conversion	n.a.	n.a.
28 If convertible, specify instrument type convertible into	n.a.	n.a.
29 If convertible, specify issuer of instrument it converts into	n.a.	n.a.
30 Write-down feature	n.a.	Yes
31 If write-down, write-down triggers(s)	n.a.	Point of non-viability at the discretion of the Regulator
32 If write-down, full or partial	n.a.	Partial
33 If write-down, permanent or temporary	n.a.	Permanent
34 If temporary write-down, description of write-up mechanism	n.a.	n.a.
35 Position in subordination hierarchy in liquidation (<i>instrument type immediately senior to instrument</i>)	Additional Tier 1 instruments	Tier 2 instruments
36 Non compliant transitioned features	No	No
37 If yes, specify non compliant features	n.a.	n.a.

(1) Details on re-fixing of the dividend/interest rate on the first call date are available in the UOB website.

3.2 Main Features of Regulatory Instruments (cont'd)

Key Features of Regulatory Capital Instruments as at 30 June 2020

1 Issuer	United Overseas Bank Limited	United Overseas Bank Limited
2 Unique Identifier (ISIN code)	XS1699845068	SG72C9000002
3 Governing law(s) of the instrument	Singapore	Singapore
Regulatory treatment		
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/group&solo	Group & Solo	Group & Solo
7 Instrument type	Perpetual Capital Security	Perpetual Capital Security
8 Amount recognised in regulatory capital (<i>in millions</i>)	S\$879 million	S\$748 million
9 Principal amount (<i>in millions</i>)	US\$650 million	S\$750 million
10 Accounting classification	Equity	Equity
11 Original date of issuance	19 October 2017	18 May 2016
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	19 October 2023	18 May 2021
Tax/ regulatory event call	Yes	Yes
Redemption price	Par	Par
16 Subsequent call dates, if applicable	Each distribution payment date thereafter	Each distribution payment date thereafter
Coupons / dividends		
17 Fixed or floating	Fixed	Fixed
18 Coupon rate and any related index	3.875% paid semi-annually on 19 April and 19 October	4.00% paid semi-annually on 18 May and 18 November
19 Existence of a dividend stopper	Yes	Yes
20 Fully discretionary, discretionally or mandatory	Fully discretionary	Fully discretionary
21 Existence of step up or incentive to redeem	No	No
22 Non-cumulative or cumulative	Non-cumulative	Non-cumulative
23 Convertible or non-convertible	Non-convertible	Non-convertible
24 If convertible, conversion trigger	n.a.	n.a.
25 If convertible, fully or partially	n.a.	n.a.
26 If convertible, conversion rate	n.a.	n.a.
27 If convertible, mandatory or optional conversion	n.a.	n.a.
28 If convertible, specify instrument type convertible into	n.a.	n.a.
29 If convertible, specify issuer of instrument it converts into	n.a.	n.a.
30 Write-down feature	Yes	Yes
31 If write-down, write-down triggers(s)	Point of non-viability at the discretion of the Regulator	Point of non-viability at the discretion of the Regulator
32 If write-down, full or partial	Partial	Partial
33 If write-down, permanent or temporary	Permanent	Permanent
34 If temporary write-down, description of write-up mechanism	n.a.	n.a.
35 Position in subordination hierarchy in liquidation (<i>instrument type immediately senior to instrument</i>)	Tier 2 instruments	Tier 2 instruments
36 Non compliant transitioned features	No	No
37 If yes, specify non compliant features	n.a.	n.a.

3.2 Features of Regulatory Instruments (cont'd)

Key Features of Regulatory Capital Instruments as at 30 June 2020

1 Issuer	United Overseas Bank Limited	United Overseas Bank Limited
2 Unique Identifier (ISIN code)	US91127LAC46 / US91127KAC62	SG79A8000002
3 Governing law(s) of the instrument	Singapore	Singapore
Regulatory treatment		
4 Transitional Basel III rules	Tier 2	Tier 2
5 Post-transitional Basel III rules	Tier 2	Tier 2
6 Eligible at solo/group/group&solo	Group & Solo	Group & Solo
7 Instrument type	Subordinated Debt	Subordinated Debt
8 Amount recognised in regulatory capital (<i>in millions</i>)	S\$897 million	S\$800 million
9 Principal amount (<i>in millions</i>)	US\$600 million	S\$750 million
10 Accounting classification	Liability	Liability
11 Original date of issuance	15 April 2019	27 February 2017
12 Perpetual or dated	Dated	Dated
13 Original maturity date	15 April 2029	27 February 2029
14 Issuer call subject to prior supervisory approval	Yes	Yes
15 Optional call date	15 April 2024	27 February 2024
Tax/ regulatory event call	Yes	Yes
Redemption price	Par	Par
16 Subsequent call dates, if applicable	Not applicable. One time call only.	Not applicable. One time call only.
Coupons / dividends		
17 Fixed or floating	Fixed	Fixed
18 Coupon rate and any related index	3.75% paid semi-annually on 15 April and 15 October	3.50% paid semi-annually on 27 February and 27 August
19 Existence of a dividend stopper	No	No
20 Fully discretionary, discretionally or mandatory	Mandatory	Mandatory
21 Existence of step up or incentive to redeem	No	No
22 Non-cumulative or cumulative	Cumulative	Cumulative
23 Convertible or non-convertible	Non-convertible	Non-convertible
24 If convertible, conversion trigger	n.a.	n.a.
25 If convertible, fully or partially	n.a.	n.a.
26 If convertible, conversion rate	n.a.	n.a.
27 If convertible, mandatory or optional conversion	n.a.	n.a.
28 If convertible, specify instrument type convertible into	n.a.	n.a.
29 If convertible, specify issuer of instrument it converts into	n.a.	n.a.
30 Write-down feature	Yes	Yes
31 If write-down, write-down triggers(s)	Point of non-viability at the discretion of the Regulator	Point of non-viability at the discretion of the Regulator
32 If write-down, full or partial	Partial	Partial
33 If write-down, permanent or temporary	Permanent	Permanent
34 If temporary write-down, description of write-up mechanism	n.a.	n.a.
35 Position in subordination hierarchy in liquidation (<i>instrument type immediately senior to instrument</i>)	Unsubordinated and unsecured obligations	Unsubordinated and unsecured obligations
36 Non compliant transitioned features	No	No
37 If yes, specify non compliant features	n.a.	n.a.

3.2 Features of Regulatory Instruments (cont'd)

Key Features of Regulatory Capital Instruments as at 30 June 2020

1 Issuer	United Overseas Bank Limited	United Overseas Bank Limited
2 Unique Identifier (ISIN code)	XS1485603408	XS1480822516
3 Governing law(s) of the instrument	Singapore	Singapore
Regulatory treatment		
4 Transitional Basel III rules	Tier 2	Tier 2
5 Post-transitional Basel III rules	Tier 2	Tier 2
6 Eligible at solo/group/group&solo	Group & Solo	Group & Solo
7 Instrument type	Subordinated Debt	Subordinated Debt
8 Amount recognised in regulatory capital (<i>in millions</i>)	S\$860 million	S\$128 million
9 Principal amount (<i>in millions</i>)	US\$600 million	HK\$700 million
10 Accounting classification	Liability	Liability
11 Original date of issuance	8 September 2016	26 August 2016
12 Perpetual or dated	Dated	Dated
13 Original maturity date	8 March 2027	26 August 2028
14 Issuer call subject to prior supervisory approval	Yes	Yes
15 Optional call date	8 March 2022	26 August 2023
Tax/ regulatory event call	Yes	Yes
Redemption price	Par	Par
16 Subsequent call dates, if applicable	Not applicable. One time call only.	Not applicable. One time call only.
Coupons / dividends		
17 Fixed or floating	Fixed	Fixed
18 Coupon rate and any related index	2.88% paid semi-annually on 8 March and 8 September	3.19% paid quarterly on 26 August, 26 November, 26 February and 26 May
19 Existence of a dividend stopper	No	No
20 Fully discretionary, discretionally or mandatory	Mandatory	Mandatory
21 Existence of step up or incentive to redeem	No	No
22 Non-cumulative or cumulative	Cumulative	Cumulative
23 Convertible or non-convertible	Non-convertible	Non-convertible
24 If convertible, conversion trigger	n.a.	n.a.
25 If convertible, fully or partially	n.a.	n.a.
26 If convertible, conversion rate	n.a.	n.a.
27 If convertible, mandatory or optional conversion	n.a.	n.a.
28 If convertible, specify instrument type convertible into	n.a.	n.a.
29 If convertible, specify issuer of instrument it converts into	n.a.	n.a.
30 Write-down feature	Yes	Yes
31 If write-down, write-down triggers(s)	Point of non-viability at the discretion of the Regulator	Point of non-viability at the discretion of the Regulator
32 If write-down, full or partial	Partial	Partial
33 If write-down, permanent or temporary	Permanent	Permanent
34 If temporary write-down, description of write-up mechanism	n.a.	n.a.
35 Position in subordination hierarchy in liquidation (<i>instrument type immediately senior to instrument</i>)	Unsubordinated and unsecured obligations	Unsubordinated and unsecured obligations
36 Non compliant transitioned features	No	No
37 If yes, specify non compliant features	n.a.	n.a.

3.2 Features of Regulatory Instruments (cont'd)

Key Features of Regulatory Capital Instruments as at 30 June 2020

1 Issuer	United Overseas Bank Limited
2 Unique Identifier (ISIN code)	XS1379133058
3 Governing law(s) of the instrument	Singapore
Regulatory treatment	
4 Transitional Basel III rules	Tier 2
5 Post-transitional Basel III rules	Tier 2
6 Eligible at solo/group/group&solo	Group & Solo
7 Instrument type	Subordinated Debt
8 Amount recognised in regulatory capital (<i>in millions</i>)	S\$992 million
9 Principal amount (<i>in millions</i>)	US\$700 million ⁽²⁾
10 Accounting classification	Liability
11 Original date of issuance	16 & 24 March 2016
12 Perpetual or dated	Dated
13 Original maturity date	16 September 2026
14 Issuer call subject to prior supervisory approval	Yes
15 Optional call date	16 September 2021
Tax/ regulatory event call	Yes
Redemption price	Par
16 Subsequent call dates, if applicable	Not applicable. One time call only.
Coupons / dividends	
17 Fixed or floating	Fixed
18 Coupon rate and any related index	3.5% paid semi-annually on 16 March and 16 September
19 Existence of a dividend stopper	No
20 Fully discretionary, discretional or mandatory	Mandatory
21 Existence of step up or incentive to redeem	No
22 Non-cumulative or cumulative	Cumulative
23 Convertible or non-convertible	Non-convertible
24 If convertible, conversion trigger	n.a.
25 If convertible, fully or partially	n.a.
26 If convertible, conversion rate	n.a.
27 If convertible, mandatory or optional conversion	n.a.
28 If convertible, specify instrument type convertible into	n.a.
29 If convertible, specify issuer of instrument it converts into	n.a.
30 Write-down feature	Yes
31 If write-down, write-down triggers(s)	Point of non-viability at the discretion of the Regulator
32 If write-down, full or partial	Partial
33 If write-down, permanent or temporary	Permanent
34 If temporary write-down, description of write-up mechanism	n.a.
35 Position in subordination hierarchy in liquidation (<i>instrument type immediately senior to instrument</i>)	Unsubordinated and unsecured obligations
36 Non compliant transitioned features	No
37 If yes, specify non compliant features	n.a.

(2) US\$500m 3.5% subordinated notes were first issued on 16 March 2016. This was followed by a re-tap for US\$200m on 24 March 2016, which was consolidated and formed a single series with the US\$500m tranche issued on 16 March 2016.

4 Leverage Ratio

The Basel III framework introduced Leverage Ratio as a non-risk-based backstop limit to supplement the risk-based capital requirements. It aims to constrain the build-up of excess leverage in the banking sector, with additional safeguards against model risk and measurement errors. Leverage ratio is expressed as Tier 1 Capital against Exposure Measure, which comprises on- and off-balance sheet items. Other than the difference in scope for consolidation and aggregation under SFRS and MAS Notice 637, there are no material differences between total balance sheet assets (net of on-balance sheet derivative and SFT assets) as reported in the financial statements and Exposure Measure of on-balance sheet items.

4.1 Leverage Ratio Summary Comparison Table

The following disclosure is presented in prescribed templates under MAS Notice 637 Annex 11F and 11G.

Reconciliation of Balance Sheet Assets to Exposure Measure³

\$m		30 June 2020
1	Total consolidated assets as per published financial statements	429,614
2	Adjustment for investments in entities that are consolidated for accounting purposes but are outside the regulatory scope of consolidation	(608)
3	Adjustment for fiduciary assets recognised on the balance sheet in accordance with the Accounting Standards but excluded from the calculation of the exposure measure	-
4	Adjustment for derivative transactions	4,912
5	Adjustment for SFTs	583
6	Adjustment for off-balance sheet items	47,619
7	Other adjustments	(4,632)
8	Exposure measure	477,488

³ Computed using quarter-end balances

4.2 Leverage Ratio Common Disclosure Template

Exposure Measure Components³

\$m		30 June 2020	31 March 2020
Exposure measures of on-balance sheet items			
1	On-balance sheet items (excluding derivative transactions and SFTs, but including on-balance sheet collateral for derivative transactions or SFTs)	403,434	398,902
2	Asset amounts deducted in determining Tier 1 capital	(4,632)	(4,575)
3	Total exposure measures of on-balance sheet items (excluding derivative transactions and SFTs)	398,802	394,327
Derivative exposure measures			
4	Replacement cost associated with all derivative transactions (net of the eligible cash portion of variation margins)	10,661	10,643
5	Potential future exposure associated with all derivative transactions	6,120	6,515
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	-	-
10	Further adjustments in effective notional amounts and deductions from potential future exposures of written credit derivatives	-	-
11	Total derivative exposure measures	16,781	17,158
SFT exposure measures			
12	Gross SFT assets (with no recognition of accounting netting), after adjusting for sales accounting	13,703	16,245
13	Eligible netting of cash payables and cash receivables	-	-
14	SFT counterparty exposures	583	1,333
15	SFT exposure measures where a Reporting Bank acts as an agent in the SFTs	-	-
16	Total SFT exposure measures	14,286	17,578
Exposure measures of off-balance sheet items			
17	Off-balance sheet items at notional amount	220,917	216,825
18	Adjustments for calculation of exposure measures of off-balance sheet items	(173,298)	(170,887)
19	Total exposure measures of off-balance sheet items	47,619	45,938
Capital and Total exposures			
20	Tier 1 capital	34,860	35,127
21	Total exposures	477,488	475,001
Leverage ratio			
22	Leverage ratio	7.3%	7.4%

³ Computed using quarter-end balances

As at 30 June 2020 the Group's leverage ratio was 7.3%, a 0.1% decrease quarter-on-quarter driven by both lower capital and higher asset base.

5 Macprudential Supervisory Measures

5.1 Geographical Distribution of Credit Exposures Used in the Countercyclical Capital Buffer

To achieve the broader macroprudential goal of protecting the banking sector from periods of excess aggregate credit growth, the Basel III standards introduced the Countercyclical Capital Buffer (CCyB) framework. The CCyB is applied on a discretionary basis by banking supervisors in the respective jurisdictions.

The Group's countercyclical buffer is computed as the weighted average of effective CCyB in jurisdictions where the Group has private sector credit exposures and the geographical distribution of the private sector credit exposures is based on where the ultimate risk of the exposure resides. Following mandatory disclosure under MAS Notice 637 provides an overview of the Group's private sector credit exposures by geographical breakdown.

Countercyclical Capital Buffer as at 30 June 2020

\$m	(a)	(b)	(c)	(d)
Geographical breakdown	Country-specific countercyclical buffer requirement	RWA for private sector credit exposures used in the computation of the countercyclical buffer	Bank-specific countercyclical buffer requirement	Countercyclical buffer amount
Hong Kong	1.00%	21,953		
Luxembourg	0.25%	547		
Sum		22,500		
Total		187,552	0.1%	273

Countercyclical Capital Buffer as at 31 December 2019

\$m	(a)	(b)	(c)	(d)
Geographical breakdown	Country-specific countercyclical buffer requirement	RWA for private sector credit exposures used in the computation of the countercyclical buffer	Bank-specific countercyclical buffer requirement	Countercyclical buffer amount
France	0.25%	6		
Hong Kong	2.00%	20,646		
Sweden	2.50%	1		
United Kingdom	1.00%	2,241		
Sum		22,894		
Total		183,401	0.2%	537

6 Overview of RWA

The table below lists the Group's RWA by risk type and approach, as prescribed under MAS Notice 637. The minimum capital requirement is stated at 10.0% of RWA.

Total RWA increased marginally between 30 June 2020 and 31 March 2020.

\$m		(a)	(b)	(c)
		RWA		Minimum capital requirements
		As at 30 Jun 2020	As at 31 Mar 2020	As at 30 Jun 2020
1	Credit risk (excluding CCR)	192,165	192,155	19,217
2	<i>of which: Standardised Approach</i>	25,754	25,035	2,575
3	<i>of which: F-IRBA</i>	142,928	144,816	14,293
4	<i>of which: supervisory slotting approach</i>	4,589	4,355	459
5	<i>of which: A-IRBA</i>	18,894	17,949	1,889
6	CCR	3,964	4,489	396
7	<i>of which: Current Exposure Method</i>	3,015	3,452	302
8	<i>of which: CCR internal models method</i>	-	-	-
9	<i>of which: other CCR</i>	468	615	47
9a	<i>of which: CCP</i>	481	422	48
10	CVA	2,624	2,572	262
11	Equity exposures under the simple risk weight method	-	-	-
11a	Equity exposures under the IMM	-	-	-
12	Equity investments in funds – look through approach	85	99	9
13	Equity investments in funds – mandate-based approach	3,090	2,996	309
14	Equity investments in funds – fall back approach	0	0	0
14a	Equity investment in funds – partial use of an approach	-	-	-
15	Unsettled transactions	-	-	-
16	Securitisation exposures in the banking book	346	284	35
17	<i>of which: SEC-IRBA</i>	-	-	-
18	<i>of which: SEC-ERBA, including IAA</i>	264	216	26
19	<i>of which: SEC-SA</i>	82	68	8
20	Market risk	9,526	9,132	953
21	<i>of which: SA(MR)</i>	9,526	9,132	953
22	<i>of which: IMA</i>	-	-	-
23	Operational risk	16,259	16,177	1,626
24	Amounts below the thresholds for deduction (subject to 250% risk weight)	3,978	3,996	398
25	Floor adjustment	-	-	-
26	Total	232,037	231,900	23,204

7 Credit Risk

7.1 Credit Quality of Assets

The table below provides an overview of the credit quality of the Group's on- and off-balance sheet assets. A default on the obligor is considered to have occurred when either or both of the followings have taken place:

- The obligor is unlikely to pay its credit obligations to the Group in full, without recourse by the bank to actions such as realising security (if held).
- The obligor is past due more than 90 days on any credit obligation to the Group. Overdrafts will be considered as being past due once the outstanding has breached an advised limit.

As at 30 June 2020

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
\$m	Gross carrying amount of		Allowances and impairments	of which: allowances for standardised approach exposures		of which: allowances for IRBA exposures	Net values (a+b-c)	
	Defaulted exposures	Non-defaulted exposures		of which: specific allowances	of which: general allowances			
1	Loans	4,529	276,164	3,699	125	365	3,209	276,994
2	Debt securities	44	41,286	76	-	21	55	41,254
3	Off-balance sheet exposures	24	62,780	220	0	42	178	62,584
4	Total	4,597	380,230	3,995	125	428	3,442	380,832

As at 31 December 2019

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
\$m	Gross carrying amount of		Allowances and impairments	of which: allowances for standardised approach exposures		of which: allowances for IRBA exposures	Net values (a+b-c)	
	Defaulted exposures	Non-defaulted exposures		of which: specific allowances	of which: general allowances			
1	Loans	4,136	264,539	3,217	119	300	2,798	265,458
2	Debt securities	93	32,403	118	-	18	100	32,378
3	Off-balance sheet exposures	43	54,681	215	0	29	186	54,509
4	Total	4,272	351,623	3,550	119	347	3,084	352,345

7.2 Changes in Stock of Defaulted Loans and Debt Securities

The table below provides the change in defaulted exposures, the flows between non-defaulted and defaulted exposure categories and reductions in the defaulted exposures due to write-offs.

As at 30 June 2020

	(a)	
1	Defaulted loans and debt securities at end of the previous semi-annual reporting period	4,229
2	Loans and debt securities that have defaulted since the previous semi-annual reporting period	964
3	Returned to non-defaulted status	(103)
4	Amounts written-off	(307)
5	Other changes	(210)
6	Defaulted loans and debt securities at end of the semi-annual reporting period (1+2+3+4+5)	4,573

The increase in defaulted loans and debt securities in the first half of 2020 was mainly due to higher inflow of new defaulted loans relative to the outflow of defaulted loans from recoveries, write-off and returned to non-defaulted status. Other changes mainly comprise of recoveries.

7.3 Overview of CRM Techniques

The following table provides information on the extent of usage of CRM techniques.

Compared with 31 December 2019, the increase in loans and debt securities was in line with asset growth.

As at 30 June 2020

		(a)	(b)	(c)	(d)	(e)
		Exposures Unsecured	Exposures Secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
\$m						
1	Loans	142,925	134,069	112,094	15,378	-
2	Debt Securities	40,196	1,058	-	1,058	-
3	Total	183,121	135,127	112,094	16,436	-
4	Of which: defaulted	1,163	1,785	1,658	-	-

As at 31 December 2019

		(a)	(b)	(c)	(d)	(e)
		Exposures Unsecured	Exposures Secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
\$m						
1	Loans	133,008	132,450	114,576	12,030	-
2	Debt Securities	31,960	418	-	418	-
3	Total	164,968	132,868	114,576	12,448	-
4	Of which: defaulted	1,259	1,521	1,412	-	-

7.4 SA(CR) and SA(EQ) – Credit Risk Exposure and CRM Effects

The following table illustrates the effects of CRM on the calculation of Group's capital requirements for credit exposures under SA(CR) and SA(EQ).

Compared with 31 December 2019, the increase in RWA was mainly driven by higher exposures to PSE and Corporate asset classes.

As at 30 June 2020

	Asset classes and others	(a)	(b)	(c)	(d)	(e)	(f)
		Exposures before CCF and CRM		Exposures post-CCF and post-CRM		RWA and RWA density	
		On-balance sheet amount \$m	Off-balance sheet amount \$m	On-balance sheet amount \$m	Off-balance sheet amount \$m	RWA \$m	RWA density %
1	Cash items	2,338	-	2,338	-	13	1
2	Central government and central bank	1,583	32	1,583	32	160	10
3	PSE	2,971	1,798	3,251	358	742	21
4	MDB	375	1	464	-	-	-
5	Bank	730	87	863	38	380	42
6	Corporate	10,120	13,881	8,422	1,788	10,070	99
7	Regulatory retail	2,058	1,758	1,715	25	1,306	75
8	Residential mortgage	2,096	12	2,096	7	890	42
9	CRE	1,889	889	1,808	47	1,855	100
10	Equity - SA(EQ)	1,363	178	1,363	178	2,658	173
11	Past due exposures	215	2	214	0	269	126
12	Higher-risk categories	-	-	-	-	-	-
13	Other exposures	8,888	2,217	6,952	460	7,411	100
14	Total	34,625	20,855	31,069	2,934	25,754	76

As at 31 December 2019

	Asset classes and others	(a)	(b)	(c)	(d)	(e)	(f)
		Exposures before CCF and CRM		Exposures post-CCF and post-CRM		RWA and RWA density	
		On-balance sheet amount \$m	Off-balance sheet amount \$m	On-balance sheet amount \$m	Off-balance sheet amount \$m	RWA \$m	RWA density %
1	Cash items	2,383	-	2,383	-	23	1
2	Central government and central bank	1,606	-	1,606	-	147	9
3	PSE	2,221	1,619	2,212	274	448	18
4	MDB	134	1	268	-	67	25
5	Bank	922	76	1,042	32	438	41
6	Corporate	9,733	12,290	7,841	1,519	9,192	98
7	Regulatory retail	2,102	1,705	1,746	23	1,327	75
8	Residential mortgage	2,128	5	2,127	0	901	42
9	CRE	1,940	883	1,857	45	1,902	100
10	Equity - SA(EQ)	1,446	137	1,446	137	2,717	172
11	Past due exposures	230	15	229	0	288	125
12	Higher-risk categories	-	-	-	-	-	-
13	Other exposures	9,257	1,854	7,037	492	7,528	100
14	Total	34,100	18,587	29,793	2,523	24,977	77

7.5 SA(CR) and SA(EQ) – Exposures by Asset Classes and Risk Weights

The following table provides a breakdown of Group's credit risk exposures under SA(CR) and SA(EQ) by asset class and risk weight.

Compared with 31 December 2019, the increase in exposures was mainly from PSE and Corporate asset classes.

As at 30 June 2020

\$m		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Asset classes and others	Risk weight	0%	10%	20%	35%	50%	75%	100%	150%	Others	Total credit exposure amount (post-CCF and post-CRM)
		1	Cash items	2,274	-	63	-	-	-	-	-
2	Central government and central bank	1,294	-	-	-	321	-	-	-	-	1,615
3	PSE	1,649	-	794	-	1,166	-	-	-	-	3,609
4	MDB	464	-	-	-	-	-	-	-	-	464
5	Bank	-	-	272	-	608	-	21	-	-	902
6	Corporate	-	-	132	-	70	-	10,009	-	-	10,210
7	Regulatory retail	-	-	-	-	-	1,741	-	-	-	1,741
8	Residential mortgage	-	-	-	1,837	-	75	191	-	-	2,103
9	CRE	-	-	-	-	-	-	1,855	-	-	1,855
10	Equity - SA(EQ)	-	-	-	-	-	-	-	-	1,541	1,541
11	Past due exposures	-	-	-	-	-	-	104	110	-	214
12	Higher-risk categories	-	-	-	-	-	-	-	-	-	-
13	Other exposures	-	-	-	-	-	-	7,411	-	-	7,411
14	Total	5,682	-	1,261	1,837	2,164	1,816	19,592	110	1,541	34,003

As at 31 December 2019

\$m		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Asset classes and others	Risk weight	0%	10%	20%	35%	50%	75%	100%	150%	Others	Total credit exposure amount (post-CCF and post-CRM)
		1	Cash items	2,270	-	113	-	-	-	-	-
2	Central government and central bank	1,312	-	-	-	294	-	-	-	-	1,606
3	PSE	1,193	-	751	-	490	-	52	-	-	2,487
4	MDB	134	-	-	-	134	-	-	-	-	268
5	Bank	-	-	366	-	686	-	22	-	-	1,074
6	Corporate	-	-	164	-	74	-	9,122	-	-	9,360
7	Regulatory retail	-	-	-	-	-	1,769	-	-	-	1,769
8	Residential mortgage	-	-	-	1,859	-	73	196	-	-	2,128
9	CRE	-	-	-	-	-	-	1,902	-	-	1,902
10	Equity - SA(EQ)	-	-	-	-	-	-	-	-	1,583	1,583
11	Past due exposures	-	-	-	-	-	-	113	117	-	229
12	Higher-risk categories	-	-	-	-	-	-	-	-	-	-
13	Other exposures	-	-	-	-	-	-	7,528	-	-	7,528
14	Total	4,909	-	1,393	1,859	1,678	1,842	18,935	117	1,583	32,317

7.6 IRBA – Credit Risk Exposures by Portfolio and PD Range

The following table provides the main parameters used for the calculation of capital requirements for credit exposures under IRBA.

(A) Main parameters used for calculations of capital requirements for credit exposures under FIRB

As at 30 June 2020

PD range %	(a) Original on-balance sheet gross exposures \$m	(b) Off-balance sheet exposures pre-CCF \$m	(c) Average CCF %	(d) EAD post-CRM and post-CCF \$m	(e) Average PD %	(f) Number of Obligors	(g) Average LGD %	(h) Average Maturity Years	(i) RWA \$m	(j) RWA density %	(k) EL \$m	(l) TEP \$m
Sovereign asset sub-class												
0.00 to < 0.15	47,739	1,018	100	50,848	0.0	23	45	1.4	2,424	5	4	
0.15 to <0.25	418	-	-	418	0.2	2	45	2.0	184	44	0	
0.25 to <0.50	-	-	-	-	-	-	-	-	-	-	-	
0.50 to <0.75	120	-	-	120	0.6	2	45	0.9	70	58	0	
0.75 to < 2.50	125	-	-	125	0.9	2	45	3.8	141	113	1	
2.50 to < 10.00	-	-	-	-	-	-	-	-	-	-	-	
10.00 to <100.00	13	0	-	13	18.5	1	45	0.0	28	221	1	
100.00 (Default)	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	48,415	1,018	100	51,524	0.0	30	45	1.4	2,847	6	6	38
Bank asset sub-class												
0.00 to < 0.15	33,883	3,281	19	34,620	0.0	167	45	0.8	4,203	12	7	
0.15 to <0.25	2,592	202	22	2,639	0.2	17	45	0.6	917	35	3	
0.25 to <0.50	1,643	52	28	1,658	0.3	16	45	0.4	794	48	3	
0.50 to <0.75	209	94	57	263	0.6	8	45	1.6	229	87	1	
0.75 to < 2.50	506	82	10	515	1.0	15	45	0.8	382	74	2	
2.50 to < 10.00	533	28	20	449	4.3	9	45	0.4	558	124	9	
10.00 to <100.00	14	2	83	16	18.7	16	41	0.1	32	200	1	
100.00 (Default)	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	39,380	3,741	20	40,160	0.1	248	45	0.7	7,115	18	25	96
Corporate asset sub-class												
0.00 to < 0.15	10,456	14,464	23	14,005	0.1	123	44	1.7	2,764	20	5	
0.15 to <0.25	4,143	7,445	16	6,837	0.2	114	45	1.8	2,891	42	6	
0.25 to <0.50	15,426	22,257	20	22,904	0.4	482	43	1.8	12,890	56	39	
0.50 to <0.75	6,276	13,535	20	9,323	0.5	388	37	1.7	4,985	53	18	
0.75 to < 2.50	26,554	41,994	12	33,138	1.2	1,807	42	1.5	27,318	82	166	
2.50 to < 10.00	10,159	13,337	15	7,205	5.0	734	41	1.3	9,147	127	145	
10.00 to <100.00	2,854	2,919	13	1,166	20.0	297	35	1.5	2,180	187	84	
100.00 (Default)	1,540	310	16	1,589	100.0	124	43	1.6	-	-	679	
Sub-total	77,409	116,261	16	96,168	2.9	4,069	42	1.6	62,176	65	1,142	1,621
Corporate small business asset sub-class												
0.00 to < 0.15	10	13	17	66	0.1	4	45	3.7	35	53	0	
0.15 to <0.25	91	932	8	216	0.2	189	32	2.0	64	30	0	
0.25 to <0.50	745	2,005	9	1,028	0.4	456	37	1.8	432	42	1	
0.50 to <0.75	787	1,844	9	1,112	0.5	489	39	1.8	558	50	2	
0.75 to < 2.50	7,581	8,980	11	8,783	1.4	3,039	39	2.0	6,745	77	48	
2.50 to < 10.00	7,319	4,886	10	6,576	5.4	2,463	37	1.8	7,019	107	130	
10.00 to <100.00	1,274	840	12	1,049	19.0	519	37	1.7	1,916	183	75	
100.00 (Default)	786	142	5	793	100.0	223	42	2.0	-	-	330	
Sub-total	18,593	19,643	10	19,624	7.6	7,382	38	1.9	16,770	85	587	479
Specialised lending asset sub-class - IPRE												
0.00 to < 0.15	-	-	-	-	-	-	-	-	-	-	-	
0.15 to <0.25	6,218	2,735	63	7,953	0.2	118	45	2.5	3,621	46	7	
0.25 to <0.50	23,469	4,161	57	25,837	0.4	322	45	2.0	15,338	59	45	
0.50 to <0.75	7,978	1,729	58	8,981	0.5	125	45	2.5	6,774	75	21	
0.75 to < 2.50	21,335	2,555	43	22,445	1.2	808	45	2.0	21,316	95	119	
2.50 to < 10.00	4,094	614	35	4,309	3.8	455	45	2.4	6,171	143	74	
10.00 to <100.00	295	44	61	322	22.5	19	45	2.1	801	249	33	
100.00 (Default)	410	6	11	411	100.0	46	45	1.5	-	-	185	
Sub-total	63,800	11,843	55	70,259	1.5	1,893	45	2.2	54,020	77	484	747
Total (sum of portfolios)	247,596	152,506	19	277,734	1.9	13,622	43	1.6	142,928	51	2,244	2,982

7.6 IRBA – Credit Risk Exposures by Portfolio and PD Range (cont'd)

As at 31 December 2019

PD range %	(a) Original on-balance sheet gross exposures \$m	(b) Off-balance sheet exposures pre-CCF \$m	(c) Average CCF %	(d) EAD post-CRM and post-CCF \$m	(e) Average PD %	(f) Number of Obligors	(g) Average LGD %	(h) Average Maturity Years	(i) RWA \$m	(j) RWA density %	(k) EL \$m	(l) TEP \$m
Sovereign asset sub-class												
0.00 to < 0.15	38,563	862	100	39,920	0.0	23	45	1.4	2,079	5	4	
0.15 to <0.25	151	-	-	151	0.2	2	45	1.2	54	35	0	
0.25 to <0.50	103	-	-	103	0.4	2	45	0.9	46	44	0	
0.50 to <0.75	-	-	-	-	-	-	-	-	-	-	-	
0.75 to < 2.50	109	-	-	109	0.9	2	45	2.8	109	100	0	
2.50 to < 10.00	-	-	-	-	-	-	-	-	-	-	-	
10.00 to <100.00	10	0	-	10	18.5	1	45	0.0	21	221	1	
100.00 (Default)	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	38,936	862	100	40,293	0.0	30	45	1.4	2,308	6	5	25
Bank asset sub-class												
0.00 to < 0.15	34,477	4,516	45	36,662	0.1	167	45	0.6	4,406	12	9	
0.15 to <0.25	3,210	332	57	3,403	0.2	22	45	0.8	1,229	36	3	
0.25 to <0.50	1,117	965	18	1,237	0.4	18	45	0.8	659	53	2	
0.50 to <0.75	11	20	0	12	0.6	7	45	0.3	6	53	0	
0.75 to < 2.50	683	81	12	692	1.3	15	45	0.3	531	77	4	
2.50 to < 10.00	582	-	-	448	4.3	11	45	0.5	562	125	9	
10.00 to <100.00	31	10	89	40	18.5	18	43	0.2	86	214	3	
100.00 (Default)	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	40,111	5,925	40	42,495	0.2	258	45	0.6	7,480	18	30	80
Corporate asset sub-class												
0.00 to < 0.15	4,414	7,365	9	5,004	0.1	54	45	1.5	859	17	1	
0.15 to <0.25	4,321	7,189	24	7,232	0.2	96	43	2.0	3,039	42	6	
0.25 to <0.50	14,254	24,516	25	22,399	0.4	472	40	2.0	11,869	53	34	
0.50 to <0.75	6,912	13,583	10	9,936	0.5	422	37	1.8	5,453	55	19	
0.75 to < 2.50	25,181	52,510	12	33,078	1.2	2,031	43	1.4	27,677	84	168	
2.50 to < 10.00	8,880	10,406	24	7,368	5.2	721	40	1.3	9,446	128	151	
10.00 to <100.00	2,593	2,714	28	1,272	18.1	294	31	1.5	1,996	157	68	
100.00 (Default)	1,359	240	16	1,397	100.0	121	43	1.8	-	-	605	
Sub-total	67,914	118,523	17	87,688	2.9	4,211	41	1.7	60,337	69	1,053	1,470
Corporate small business asset sub-class												
0.00 to < 0.15	3	15	29	8	0.1	4	44	0.7	1	11	0	
0.15 to <0.25	84	835	10	220	0.2	200	33	1.8	63	28	0	
0.25 to <0.50	594	2,065	10	1,005	0.4	477	38	1.8	436	43	1	
0.50 to <0.75	710	1,757	8	986	0.5	519	39	2.0	535	54	2	
0.75 to < 2.50	7,182	8,166	10	8,724	1.4	3,090	38	1.8	6,660	76	48	
2.50 to < 10.00	5,974	4,264	11	5,940	5.2	2,362	38	1.8	6,553	110	116	
10.00 to <100.00	978	529	12	778	18.3	435	37	1.5	1,363	175	53	
100.00 (Default)	778	121	7	786	100.0	217	41	1.7	-	-	326	
Sub-total	16,303	17,752	10	18,447	7.4	7,304	38	1.8	15,610	85	547	408
Specialised lending asset sub-class - IPRE												
0.00 to < 0.15	-	10	-	-	-	-	-	-	-	-	-	
0.15 to <0.25	7,177	3,320	64	9,289	0.2	128	45	2.3	4,048	44	8	
0.25 to <0.50	19,916	3,078	60	21,750	0.4	290	45	2.2	13,298	61	37	
0.50 to <0.75	6,964	1,761	56	7,947	0.5	118	45	2.5	6,004	76	19	
0.75 to < 2.50	24,367	3,511	46	25,993	1.2	902	45	2.2	25,752	99	141	
2.50 to < 10.00	3,355	520	38	3,552	3.6	474	45	2.7	5,171	146	58	
10.00 to <100.00	191	2	36	191	19.7	13	45	2.7	472	247	17	
100.00 (Default)	355	5	20	356	100.0	49	45	1.8	-	-	160	
Sub-total	62,324	12,207	55	69,080	1.4	1,974	45	2.3	54,746	79	440	622
Total (sum of portfolios)	225,588	155,270	20	258,003	1.9	13,777	43	1.6	140,482	54	2,075	2,604

7.6 IRBA – Credit Risk Exposures by Portfolio and PD Range (cont'd)

(B) Main parameters used for calculations of capital requirements for credit exposures under AIRB

As at 30 June 2020

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
PD range %	Original on-balance sheet gross exposures \$m	Off-balance sheet exposures pre-CCF \$m	Average CCF %	EAD post-CRM and post-CCF \$m	Average PD %	Number of Obligors	Average LGD %	Average Maturity Years	RWA \$m	RWA density %	EL \$m	TEP \$m
Residential mortgage asset sub-class												
0.00 to < 0.15	763	255	104	1,029	0.1	16,065	23		44	4	0	
0.15 to <0.25	18,299	619	100	18,918	0.2	46,490	14		1,031	5	5	
0.25 to <0.50	25,824	2,462	66	27,450	0.3	88,053	11		1,655	6	9	
0.50 to <0.75	15,857	660	99	16,510	0.7	37,320	12		2,024	12	13	
0.75 to < 2.50	8,304	399	36	8,448	1.3	48,910	13		1,799	21	15	
2.50 to < 10.00	1,790	72	42	1,820	4.2	17,831	24		1,384	76	19	
10.00 to <100.00	1,988	35	33	1,999	24.0	9,456	19		2,163	108	92	
100.00 (Default)	915	1	0	915	100.0	3,957	22		533	58	192	
Sub-total	73,740	4,504	74	77,090	2.3	247,763	13		10,634	14	345	333
QRRE asset sub-class												
0.00 to < 0.15	608	6,043	28	2,306	0.1	524,017	51		82	4	1	
0.15 to <0.25	265	1,921	32	874	0.2	161,112	45		46	5	1	
0.25 to <0.50	232	5,181	60	3,349	0.3	758,194	52		261	8	5	
0.50 to <0.75	711	1,747	55	1,666	0.6	317,622	55		266	16	6	
0.75 to < 2.50	841	1,934	67	2,141	1.5	321,833	44		542	25	15	
2.50 to < 10.00	583	508	61	895	5.5	202,414	59		713	80	29	
10.00 to <100.00	404	197	72	546	21.7	127,312	63		833	153	70	
100.00 (Default)	44	-	-	44	100.0	9,948	72		68	155	27	
Sub-total	3,686	17,530	46	11,820	2.3	2,116,371	51		2,811	24	154	65
Other retail exposures asset sub-class (excluding exposures to small business)												
0.00 to < 0.15	54	313	34	160	0.1	3,205	34		14	9	0	
0.15 to <0.25	1,155	124	40	1,204	0.2	28,992	13		59	5	0	
0.25 to <0.50	17	134	56	92	0.3	1,104	18		9	10	0	
0.50 to <0.75	4,949	575	50	5,236	0.6	25,582	10		448	9	3	
0.75 to < 2.50	2,884	622	77	3,362	1.7	17,859	6		262	8	3	
2.50 to < 10.00	604	152	75	718	5.2	70,441	48		551	77	20	
10.00 to <100.00	407	37	84	438	26.9	61,929	50		483	110	55	
100.00 (Default)	112	0	0	112	100.0	9,085	37		245	219	24	
Sub-total	10,182	1,957	58	11,323	3.2	214,833	14		2,070	18	106	55
Other retail small business exposures asset sub-class												
0.00 to < 0.15	10	55	69	48	0.1	264	6		1	1	0	
0.15 to <0.25	528	607	66	926	0.2	3,485	21		80	9	0	
0.25 to <0.50	2,534	1,022	60	3,144	0.4	10,886	24		474	15	3	
0.50 to <0.75	1,109	385	58	1,333	0.5	5,112	24		252	19	2	
0.75 to < 2.50	3,436	1,136	51	4,021	1.3	14,796	28		1,322	33	15	
2.50 to < 10.00	1,372	291	43	1,496	4.8	5,891	30		684	46	21	
10.00 to <100.00	300	22	46	310	21.2	1,247	27		195	63	18	
100.00 (Default)	203	12	5	203	100.0	770	35		371	182	51	
Sub-total	9,491	3,530	56	11,481	3.6	42,450	26		3,379	29	109	96
Total (sum of portfolios)	97,100	27,522	53	111,713	2.6	2,385,076	19		18,894	17	715	550

As at 30 June 2020, the Group did not use credit derivatives as credit risk mitigant for exposures in its Banking book.

7.6 IRBA – Credit Risk Exposures by Portfolio and PD Range (cont'd)

As at 31 December 2019

PD range %	(a) Original on-balance sheet gross exposures \$m	(b) Off-balance sheet exposures pre-CCF \$m	(c) Average CCF %	(d) EAD post-CRM and post-CCF \$m	(e) Average PD %	(f) Number of Obligors	(g) Average LGD %	(h) Average Maturity Years	(i) RWA \$m	(j) RWA density %	(k) EL \$m	(l) TEP \$m
Residential mortgage asset sub-class												
0.00 to < 0.15	811	257	104	1,078	0.1	16,780	23		46	4	0	
0.15 to <0.25	18,408	469	100	18,877	0.2	48,508	15		1,079	6	5	
0.25 to <0.50	26,994	2,449	66	28,616	0.3	87,614	11		1,719	6	9	
0.50 to <0.75	16,161	713	99	16,863	0.7	39,621	13		2,144	13	14	
0.75 to < 2.50	7,883	480	35	8,052	1.3	45,406	12		1,565	19	13	
2.50 to < 10.00	1,495	81	42	1,529	3.9	15,751	22		1,037	68	14	
10.00 to <100.00	1,462	23	27	1,469	27.8	7,816	18		1,372	93	71	
100.00 (Default)	807	3	0	807	100.0	3,621	22		710	88	141	
Sub-total	74,020	4,475	73	77,291	2.1	245,825	13		9,670	13	267	245
QRRE asset sub-class												
0.00 to < 0.15	856	5,207	30	2,432	0.1	499,538	52		87	4	1	
0.15 to <0.25	334	1,772	33	926	0.2	165,425	46		51	6	1	
0.25 to <0.50	307	4,775	61	3,230	0.3	726,367	52		254	8	5	
0.50 to <0.75	843	1,745	56	1,814	0.6	331,034	55		290	16	7	
0.75 to < 2.50	971	2,050	66	2,332	1.5	344,624	45		607	26	17	
2.50 to < 10.00	620	569	64	983	5.7	219,899	58		777	79	32	
10.00 to <100.00	469	128	66	554	24.6	127,990	67		913	165	89	
100.00 (Default)	56	-	-	56	100.0	13,240	70		95	169	33	
Sub-total	4,456	16,245	48	12,326	2.5	2,115,057	52		3,074	25	184	66
Other retail exposures asset sub-class (excluding exposures to small business)												
0.00 to < 0.15	69	267	39	174	0.1	3,001	34		15	9	0	
0.15 to <0.25	1,139	102	44	1,184	0.2	27,598	13		61	5	0	
0.25 to <0.50	16	127	57	88	0.3	1,013	18		8	10	0	
0.50 to <0.75	5,088	581	49	5,374	0.6	25,498	10		456	8	3	
0.75 to < 2.50	3,374	652	73	3,848	1.7	20,871	6		314	8	4	
2.50 to < 10.00	654	155	75	770	5.2	76,008	51		617	80	22	
10.00 to <100.00	378	27	73	398	26.0	62,766	50		427	107	47	
100.00 (Default)	109	0	0	109	100.0	6,157	45		368	337	24	
Sub-total	10,828	1,911	58	11,945	3.0	219,463	14		2,266	19	101	48
Other retail small business exposures asset sub-class												
0.00 to < 0.15	12	63	68	54	0.1	278	8		1	1	0	
0.15 to <0.25	473	620	66	883	0.2	3,366	21		76	9	0	
0.25 to <0.50	2,215	1,008	60	2,823	0.4	10,470	25		448	16	3	
0.50 to <0.75	993	345	58	1,192	0.5	4,961	26		238	20	2	
0.75 to < 2.50	3,423	1,112	51	3,992	1.3	14,934	28		1,304	33	15	
2.50 to < 10.00	1,288	268	44	1,406	4.7	5,745	29		629	45	19	
10.00 to <100.00	260	19	40	268	21.0	1,330	26		165	62	15	
100.00 (Default)	194	13	5	194	100.0	768	35		350	180	51	
Sub-total	8,856	3,449	57	10,812	3.6	41,851	26		3,211	30	104	85
Total (sum of portfolios)	98,161	26,080	54	112,374	2.4	2,381,158	19		18,221	16	655	444

As at 31 December 2019, the Group did not use credit derivatives as credit risk mitigant for exposures in its Banking book.

7.7 IRBA – Effect on RWA of Credit Derivatives used as CRM

As at 30 June 2020, the Group did not use credit derivatives as credit risk mitigant for exposures under IRBA.

7.8 IRBA – RWA Flow Statement for Credit Risk Exposures

The following table presents changes in RWA corresponding to credit risk only (excluding CCR) over the quarterly reporting period for each of the key drivers.

Compared to March 2020, the decrease in Group's RWA was mainly due to model enhancements.

As at 30 June 2020

		(a)
		RWA amounts
\$m		
1	RWA as at end of previous quarter	167,120
2	Asset size	522
3	Asset quality	938
4	Model updates	(1,722)
5	Methodology and policy	-
6	Acquisitions and disposals	-
7	Foreign exchange movements	(447)
8	Other	-
9	RWA as at end of quarter	166,411

7.9 IRBA – Specialised Lending

The following table provides the exposure amount and RWA of the Group's specialised lending portfolio under Supervisory Slotting Criteria.

Compared with 31 December 2019, total exposures and RWA for specialised lending under Supervisory Slotting Criteria remained relatively stable. The decrease in exposure to Commodities Finance was offset by an increase in exposures to Project Finance and Income-Producing Real Estate asset classes.

As at 30 June 2020

\$m

Specialised lending											
Other than HVCRE											
Regulatory categories	Remaining maturity	On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount					RWA	Expected Losses
					PF	OF	CF	IPRE	Total		
Strong	< 2.5 years	879	13,134	50%	622	-	512	87	1,221	647	-
	≥ 2.5 years	1,779	439	70%	1,854	-	57	198	2,109	1,565	8
Good	< 2.5 years	628	1,440	70%	249	42	86	427	804	596	3
	≥ 2.5 years	944	427	90%	361	156	-	740	1,258	1,200	10
Satisfactory		361	67	115%	134	2	-	261	398	485	11
Weak		36	1	250%	-	-	-	36	36	96	3
Default		236	139	-	-	185	35	15	236	-	118
Total		4,864	15,647		3,221	386	690	1,764	6,061	4,589	154

As at 31 December 2019

\$m

Specialised lending											
Other than HVCRE											
Regulatory categories	Remaining maturity	On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount					RWA	Expected Losses
					PF	OF	CF	IPRE	Total		
Strong	< 2.5 years	945	13,151	50%	393	-	977	151	1,521	806	-
	≥ 2.5 years	1,953	436	70%	1,912	-	58	309	2,280	1,691	9
Good	< 2.5 years	523	2,505	70%	228	45	91	336	700	519	3
	≥ 2.5 years	811	221	90%	307	183	-	483	973	929	8
Satisfactory		335	76	115%	139	3	-	240	382	465	11
Weak		42	1	250%	-	-	0	42	42	112	3
Default		225	31	-	-	213	3	10	225	-	113
Total		4,835	16,420		2,978	444	1,130	1,572	6,123	4,523	146

8 Counterparty Credit Risk (CCR)

8.1 Analysis of CCR Exposure by Approach

The following table provides the EAD, RWA and parameters used to calculate the Group's CCR regulatory requirements.

Compared with 31 December 2019, the increase in EAD and RWA mainly arose from interest rate derivatives.

As at 30 June 2020

		(a)	(b)	(c)	(d)	(e)	(f)
		Replacement cost	Potential future exposure	Effective EPE	α used for computing regulatory EAD	EAD (post-CRM)	RWA
\$m							
1	Current Exposure Method (for derivatives)	3,350	3,376			6,719	3,015
2	CCR internal models method (for derivatives and SFTs)			-	-	-	-
3	FC(SA) (for SFTs)					-	-
4	FC(CA) (for SFTs)					19,029	468
5	VaR for SFTs					-	-
6	Total						3,483

As at 31 December 2019

		(a)	(b)	(c)	(d)	(e)	(f)
		Replacement cost	Potential future exposure	Effective EPE	α used for computing regulatory EAD	EAD (post-CRM)	RWA
\$m							
1	Current Exposure Method (for derivatives)	2,241	3,451			5,688	2,334
2	CCR internal models method (for derivatives and SFTs)			-	-	-	-
3	FC(SA) (for SFTs)					-	-
4	FC(CA) (for SFTs)					20,471	503
5	VaR for SFTs					-	-
6	Total						2,837

8.2 CVA Risk Capital Requirements

The following table provides the Group's CVA risk capital requirements calculated under the Standardised Approach.

Compared with 31 December 2019, the increase in EAD and RWA mainly arose from interest rate derivatives.

As at 30 June 2020

		(a)	(b)
		EAD (post-CRM)	RWA
\$m			
	Total portfolios subject to the Advanced CVA capital requirement	-	-
1	(i) VaR component (including the three-times multiplier)	-	-
2	(ii) Stressed VaR component (including the three-times multiplier)	-	-
3	All portfolios subject to the Standardised CVA capital requirement	5,932	2,624
4	Total portfolios subject to the CVA risk capital requirement	5,932	2,624

As at 31 December 2019

		(a)	(b)
		EAD (post-CRM)	RWA
\$m			
	Total portfolios subject to the Advanced CVA capital requirement	-	-
1	(i) VaR component (including the three-times multiplier)	-	-
2	(ii) Stressed VaR component (including the three-times multiplier)	-	-
3	All portfolios subject to the Standardised CVA capital requirement	5,218	1,769
4	Total portfolios subject to the CVA risk capital requirement	5,218	1,769

8.3 Standardised Approach – CCR Exposures by Portfolio and Risk Weights

The following table provides a breakdown of the Group's CCR exposures under SA(CR) by asset class and risk weight.

As at 30 June 2020

\$m	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Risk weight									
Asset classes	0%	10%	20%	50%	75%	100%	150%	Others	Total Credit Exposure
Central government and central bank	104	-	-	3	-	-	-	-	108
PSE	-	-	15	29	-	-	-	-	43
MDB	77	-	-	6	-	-	-	-	83
Bank	-	-	6	76	-	-	-	-	82
Corporate	-	-	1	0	0	209	-	-	210
Regulatory retail	-	-	-	-	1	-	-	-	1
Other exposures	-	-	-	-	-	23	-	-	23
Total	181	-	21	115	1	232	-	-	550

As at 31 December 2019

\$m	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Risk weight									
Asset classes	0%	10%	20%	50%	75%	100%	150%	Others	Total Credit Exposure
Central government and central bank	-	-	-	1	-	-	-	-	1
PSE	-	-	1	13	-	-	-	-	14
MDB	68	-	-	-	-	-	-	-	68
Bank	-	-	5	65	-	-	-	-	70
Corporate	-	-	1	1	-	220	-	-	221
Regulatory retail	-	-	-	-	1	-	-	-	1
Other exposures	-	-	-	-	-	12	-	-	12
Total	68	-	6	80	1	232	-	-	386

8.4 IRBA – CCR Exposures by Portfolio and PD Range

The following table sets out the relevant parameters used for the calculations of CCR capital requirements for IRBA models.

Compared with 31 December 2019, the decrease in EAD was mainly due to reduction in repurchase transactions under Bank asset class, partially offset by the increase in repurchase transactions under Sovereign asset class.

8.4 IRBA – CCR Exposures by Portfolio and PD Range (cont'd)

(A) Main parameters used for calculations of CCR capital requirements for FIRB models

As at 30 June 2020

PD range %	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	EAD post- CRM \$m	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA \$m	RWA density %
Sovereign asset sub-class							
0.00 to < 0.15	5,279	0.0	7	7	0.2	8	0
0.15 to <0.25	7	0.2	1	45	0.0	2	24
0.25 to <0.50	-	-	-	-	-	-	-
0.50 to <0.75	176	0.6	1	45	0.0	82	47
0.75 to < 2.50	-	-	-	-	-	-	-
2.50 to < 10.00	-	-	-	-	-	-	-
10.00 to <100.00	-	-	-	-	-	-	-
100.00 (Default)	-	-	-	-	-	-	-
Sub-total	5,462	0.0	9	8	0.2	91	2
Bank asset sub-class							
0.00 to < 0.15	11,012	0.1	142	14	0.5	560	5
0.15 to <0.25	897	0.2	17	21	0.2	132	15
0.25 to <0.50	286	0.4	11	23	0.2	67	24
0.50 to <0.75	19	0.6	4	7	0.1	2	10
0.75 to < 2.50	34	1.4	8	4	0.4	3	8
2.50 to < 10.00	2	4.3	4	45	0.6	3	127
10.00 to <100.00	0	18.5	1	45	0.0	0	221
100.00 (Default)	-	-	-	-	-	-	-
Sub-total	12,251	0.1	187	15	0.4	768	6
Corporate asset sub-class							
0.00 to < 0.15	712	0.1	27	20	1.8	95	13
0.15 to <0.25	1,200	0.2	34	11	0.8	167	14
0.25 to <0.50	1,884	0.4	134	20	0.9	535	28
0.50 to <0.75	654	0.5	85	16	0.7	142	22
0.75 to < 2.50	1,990	1.5	322	11	0.7	511	26
2.50 to < 10.00	174	4.8	106	45	1.6	250	143
10.00 to <100.00	6	26.3	21	43	1.7	15	240
100.00 (Default)	19	100.0	2	45	1.2	-	-
Sub-total	6,641	1.1	731	16	0.9	1,715	26
Corporate small business asset sub-class							
0.00 to < 0.15	71	0.1	3	45	0.3	14	19
0.15 to <0.25	1	0.2	31	45	0.7	0	24
0.25 to <0.50	2	0.4	46	41	0.7	1	36
0.50 to <0.75	3	0.5	49	44	0.3	1	45
0.75 to < 2.50	14	1.3	244	42	1.6	12	84
2.50 to < 10.00	10	6.4	183	43	2.6	14	137
10.00 to <100.00	1	19.6	25	39	1.2	2	188
100.00 (Default)	0	100.0	2	45	0.3	-	-
Sub-total	102	1.1	583	44	0.7	44	43
Specialised lending asset sub-class - IPRE							
0.00 to < 0.15	-	-	-	-	-	-	-
0.15 to <0.25	36	0.2	18	45	3.2	19	52
0.25 to <0.50	277	0.4	67	45	2.4	178	64
0.50 to <0.75	65	0.5	15	45	3.0	53	81
0.75 to < 2.50	171	1.2	56	45	2.2	167	98
2.50 to < 10.00	23	3.2	7	45	1.7	29	128
10.00 to <100.00	0	20.5	1	45	1.0	0	238
100.00 (Default)	-	-	-	-	-	-	-
Sub-total	572	0.7	164	45	2.5	446	78
Total (sum of portfolios)	25,028	0.4	1,674	15	0.6	3,063	12

8.4 IRBA – CCR Exposures by Portfolio and PD Range (cont'd)

(A) Main parameters used for calculations of CCR capital requirements for FIRB models

As at 31 December 2019

PD range %	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	EAD post- CRM \$m	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA \$m	RWA density %
Sovereign asset sub-class							
0.00 to < 0.15	2,957	0.0	6	10	0.2	6	0
0.15 to <0.25	6	0.2	1	45	0.0	2	24
0.25 to <0.50	64	0.4	1	45	0.0	22	34
0.50 to <0.75	-	-	-	-	-	-	-
0.75 to < 2.50	-	-	-	-	-	-	-
2.50 to < 10.00	-	-	-	-	-	-	-
10.00 to <100.00	-	-	-	-	-	-	-
100.00 (Default)	-	-	-	-	-	-	-
Sub-total	3,028	0.0	8	11	0.2	29	1
Bank asset sub-class							
0.00 to < 0.15	13,308	0.1	129	12	0.3	497	4
0.15 to <0.25	1,348	0.2	17	9	0.4	105	8
0.25 to <0.50	639	0.3	12	17	0.1	92	14
0.50 to <0.75	330	0.6	5	1	0.1	3	1
0.75 to < 2.50	139	1.5	6	8	0.1	18	13
2.50 to < 10.00	-	-	-	-	-	-	-
10.00 to <100.00	0	27.9	1	45	0.0	0	268
100.00 (Default)	-	-	-	-	-	-	-
Sub-total	15,764	0.1	170	12	0.3	717	5
Corporate asset sub-class							
0.00 to < 0.15	589	0.1	28	21	1.2	67	11
0.15 to <0.25	1,536	0.2	33	7	0.5	131	9
0.25 to <0.50	1,807	0.4	105	14	0.7	363	20
0.50 to <0.75	589	0.5	84	14	0.8	133	23
0.75 to < 2.50	1,776	1.3	358	13	0.7	511	29
2.50 to < 10.00	180	3.6	76	48	0.8	230	128
10.00 to <100.00	6	27.8	13	45	0.1	16	268
100.00 (Default)	1	100.0	2	40	1.0	-	-
Sub-total	6,484	0.7	699	14	0.7	1,451	22
Corporate small business asset sub-class							
0.00 to < 0.15	-	-	-	-	-	-	-
0.15 to <0.25	3	0.2	38	45	0.5	1	23
0.25 to <0.50	2	0.4	60	42	0.5	1	34
0.50 to <0.75	91	0.5	58	45	0.1	41	45
0.75 to < 2.50	22	1.2	243	43	0.7	14	64
2.50 to < 10.00	9	7.3	186	44	0.9	12	136
10.00 to <100.00	0	21.4	17	37	0.7	0	174
100.00 (Default)	0	100.0	3	40	0.3	-	-
Sub-total	128	1.1	605	45	0.3	69	54
Specialised lending asset sub-class - IPRE							
0.00 to < 0.15	-	-	-	-	-	-	-
0.15 to <0.25	16	0.2	17	45	3.1	8	51
0.25 to <0.50	100	0.4	52	45	2.6	67	67
0.50 to <0.75	16	0.5	13	45	2.0	11	69
0.75 to < 2.50	90	1.0	60	45	2.7	88	98
2.50 to < 10.00	25	3.3	5	45	2.1	34	134
10.00 to <100.00	-	-	-	-	-	-	-
100.00 (Default)	-	-	-	-	-	-	-
Sub-total	247	0.9	147	45	2.6	208	84
Total (sum of portfolios)	25,650	0.3	1,629	13	0.4	2,474	10

8.4 IRBA – CCR Exposures by Portfolio and PD Range (cont'd)

(B) Main parameters used for calculations of CCR capital requirements for AIRB models

As at 30 June 2020

PD range %	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	EAD post- CRM \$m	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA \$m	RWA density %
Other retail small business exposures asset sub-class							
0.00 to < 0.15	0	0.1	2	82		0	15
0.15 to <0.25	0	0.2	26	60		0	25
0.25 to <0.50	0	0.4	59	67		0	45
0.50 to <0.75	0	0.5	18	57		0	44
0.75 to < 2.50	0	1.5	127	71		0	88
2.50 to < 10.00	2	3.4	121	81		3	122
10.00 to <100.00	0	22.6	2	81		0	200
100.00 (Default)	-	-	-	-		-	-
Sub-total	3	2.6	355	77		3	103
Total (sum of portfolios)	3	2.6	355	77		3	103

As at 31 December 2019

PD range %	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	EAD post- CRM \$m	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWA \$m	RWA density %
Other retail small business exposures asset sub-class							
0.00 to < 0.15	0	0.1	5	61		0	11
0.15 to <0.25	0	0.2	30	61		0	25
0.25 to <0.50	0	0.4	67	67		0	44
0.50 to <0.75	0	0.5	32	57		0	45
0.75 to < 2.50	1	1.5	145	69		0	85
2.50 to < 10.00	0	3.3	122	81		0	120
10.00 to <100.00	0	22.3	2	81		0	195
100.00 (Default)	-	-	-	-		-	-
Sub-total	1	1.6	403	70		1	77
Total (sum of portfolios)	1	1.6	403	70		1	77

8.5 Composition of Collateral for CCR Exposures

The following table provides the breakdown of all types of collateral posted or received by the Group to support or reduce the CCR exposures related to derivative transactions or to SFTs.

Compared with 31 December 2019, the decrease in collateral posted and received for SFTs was in line with the reduction in repurchase transactions. The increase in collateral posted and received for derivative transactions mainly arose from cash collateral.

As at 30 June 2020

	(a)	(b)	(c)	(d)	(e)	(f)
	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
\$m	Segregated	Unsegregated	Segregated	Unsegregated		
Cash domestic currencies	-	2	-	321	1,303	1,345
Cash other currencies	-	300	-	2,260	2,944	13,677
Domestic sovereign debt	-	54	-	-	1,327	1,294
Other sovereign debt	-	76	-	1	6,792	271
Government agency debt	-	-	-	-	-	-
Corporate bonds	-	71	-	101	6,408	3,185
Equity securities	-	22	-	-	-	-
Other collateral	-	-	-	-	-	-
Total	-	524	-	2,683	18,774	19,772

As at 31 December 2019

	(a)	(b)	(c)	(d)	(e)	(f)
	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
\$m	Segregated	Unsegregated	Segregated	Unsegregated		
Cash domestic currencies	-	1	-	142	595	764
Cash other currencies	-	325	-	1,251	2,062	17,297
Domestic sovereign debt	-	15	-	-	757	972
Other sovereign debt	-	-	-	41	7,506	450
Government agency debt	-	-	-	-	-	-
Corporate bonds	-	-	-	99	8,982	1,264
Equity securities	-	-	-	-	-	-
Other collateral	-	-	-	-	-	-
Total	-	340	-	1,533	19,903	20,746

8.6 Credit Derivative Exposures

The following table shows the breakdown of Group's exposures to credit derivative transactions by protection bought or sold.

As at 30 June 2020

		(a)	(b)
		Protection bought	Protection sold
\$m			
	Notionals		
1	Single-name credit default swaps	42	-
2	Index credit default swaps	112	-
3	Total return swaps	876	-
4	Total notionals	1,029	-
	Fair values		
5	Positive fair value (asset)	0	-
6	Negative fair value (liability)	32	-

As at 31 December 2019

		(a)	(b)
		Protection bought	Protection sold
\$m			
	Notionals		
1	Single-name credit default swaps	27	13
2	Index credit default swaps	81	-
3	Total return swaps	887	-
4	Total notionals	994	13
	Fair values		
5	Positive fair value (asset)	0	0
6	Negative fair value (liability)	27	-

8.7 RWA flow statements under CCR internal models method

UOB does not use CCR Internal Models Method.

9.1 Securitisation Exposures in the Banking Book

The following table shows the Group's securitisation exposures in the Banking Book.

Compared with 31 December 2019, the increase in securitisation exposures mainly arose from residential mortgage-backed securities.

		As at	As at
		30 Jun 2020	31 Dec 2019
		(a)	
		UOB acts as investor	
		Traditional	
\$m			
1	Total retail	2,760	1,930
2	of which: residential mortgage	2,676	1,838
3	of which: credit card	84	92
4	Total wholesale	26	31
5	of which: commercial mortgage	26	31

Note: The group does not have any securitisation exposures where it acts as sponsor or originator.

9.2 Securitisation Exposures in the Trading Book

The Group currently has no securitisation exposures in the Trading book.

9.3 Securitisation Exposures in the Banking Book and associated Regulatory Capital Requirements – UOB acting as Originator or as Sponsor

Currently, UOB has no securitisation exposures in the Banking Book where the Group acts as sponsor.

9.4 Securitisation Exposures in the Banking Book and associated Regulatory Capital Requirements – UOB acting as Investor

The following table shows the exposure amounts, RWA and capital requirements of the Group's securitisation exposures in the Banking Book where the Group acts as an investor.

Compared with 31 December 2019, the increase in securitisation exposures mainly arose from residential mortgage-backed securities with lower risk weights.

As at 30 June 2020

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
	Exposure values (by risk weight bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	SEC-IRBA	SEC-ERBA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA	SEC-SA	1250%
\$m																	
1 Total exposures	2,676	-	110	-	-	-	2,079	707	-	-	264	82	-	-	26	8	-
2 Traditional securitisation	2,676	-	110	-	-	-	2,079	707	-	-	264	82	-	-	26	8	-
3 of which: securitisation	2,676	-	110	-	-	-	2,079	707	-	-	264	82	-	-	26	8	-
4 of which: retail underlying	2,676	-	84	-	-	-	2,053	707	-	-	247	82	-	-	25	8	-
5 of which: wholesale	-	-	26	-	-	-	26	-	-	-	17	-	-	-	2	-	-
6 of which: resecuritisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 of which: senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 of which: non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 Synthetic securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 of which: securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 of which: retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 of which: wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 of which resecuritisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 of which: senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 of which: non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

9.4 Securitisation Exposures in the Banking book and associated Regulatory Capital Requirements – UOB acting as Investor (cont'd)

As at 31 December 2019

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
	Exposure values (by risk weight bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	SEC-IRBA	SEC-ERBA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA	SEC-SA	1250%
\$m																	
1 Total exposures	1,838	-	123	-	-	-	1,744	217	-	-	239	31	-	-	24	3	-
2 Traditional securitisation	1,838	-	123	-	-	-	1,744	217	-	-	239	31	-	-	24	3	-
3 of which: securitisation	1,838	-	123	-	-	-	1,744	217	-	-	239	31	-	-	24	3	-
4 of which: retail underlying	1,838	-	92	-	-	-	1,713	217	-	-	219	31	-	-	22	3	-
5 of which: wholesale	-	-	31	-	-	-	31	-	-	-	20	-	-	-	2	-	-
6 of which: resecuritisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 of which: senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 of which: non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 Synthetic securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 of which: securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 of which: retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 of which: wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 of which resecuritisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 of which: senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 of which: non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

10.1 Market Risk under Standardised Approach

The table below shows the components of the capital requirement under the standardised approach for market risk.

Compared with 31 December 2019, the decrease in RWA was mainly due to lower commodity and foreign exchange risk, offset by increase in interest rate and options risk.

As at 30 June 2020

\$m		(a)
		RWA
	Products excluding Options	
1	Interest Rate Risk (General and Specific)	2,939
2	Equity Risk (General and Specific)	93
3	Foreign Exchange Risk	4,605
4	Commodity Risk	320
	Options	
5	Simplified Approach	
6	Delta-Plus Method	
7	Scenario Approach	1,569
8	Securitisaion	
9	Total	9,526

As at 31 December 2019

\$m		(a)
		RWA
	Products excluding Options	
1	Interest Rate Risk (General and Specific)	2,387
2	Equity Risk (General and Specific)	50
3	Foreign Exchange Risk	5,127
4	Commodity Risk	1,116
	Options	
5	Simplified Approach	
6	Delta-Plus Method	
7	Scenario Approach	1,278
8	Securitisaion	
9	Total	9,959

10.2 RWA Flow Statements of Market Risk Exposures under IMA and IMA Values for Trading Portfolios

These disclosures are not applicable as the Group has not adopted IMA for market risk regulatory capital requirements.

10.3 Comparison of VaR Estimates with Gains or Losses

Standardised Approach

The Group currently adopts the SA for the calculation of regulatory market risk capital but uses the Internal Models Approach to measure and to control trading market risks. The financial products which are warehoused, measured and controlled with internal models include:

- FX and FX options;
- plain vanilla interest rate contracts and interest rate options;
- government and corporate bonds;
- equities and equity options; and
- commodities contracts and commodity options.

Internal Model Approach

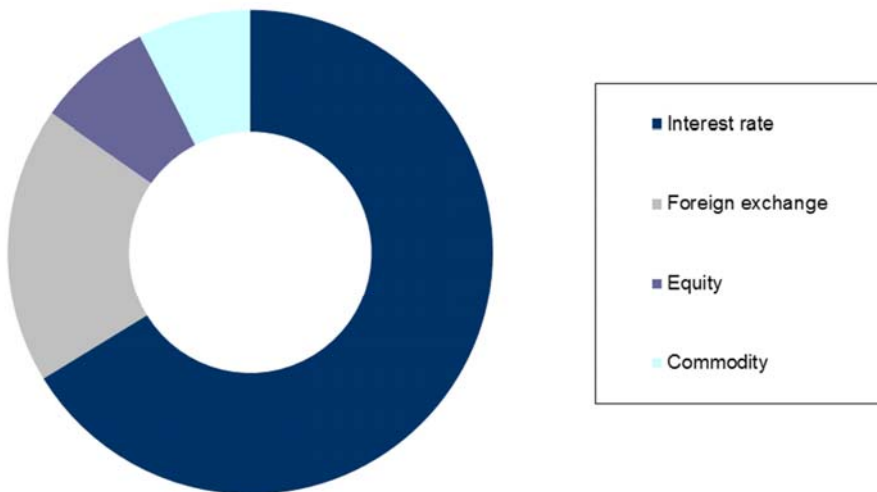
VaR is a statistical measurement which estimates the potential loss over a given period, at a certain confidence level.

The Group estimates a daily Expected Shortfall (ES) within a 97.5 per cent confidence interval over a one-day holding period, using the historical VaR simulation method, as a control for market risk. The method assumes that possible future changes in market rates may be implied by observed historical market movements. ES is the average portfolio loss, assuming that the loss is greater than the specified percentile of the loss distribution.

To complement the ES measure, we perform stress and scenario tests to identify the Group's vulnerability to event risk. These tests serve to provide early warnings of plausible extreme losses for which we have proactive risk management measures.

The Group's daily ES on 30 June 2020 was \$17.84 million.

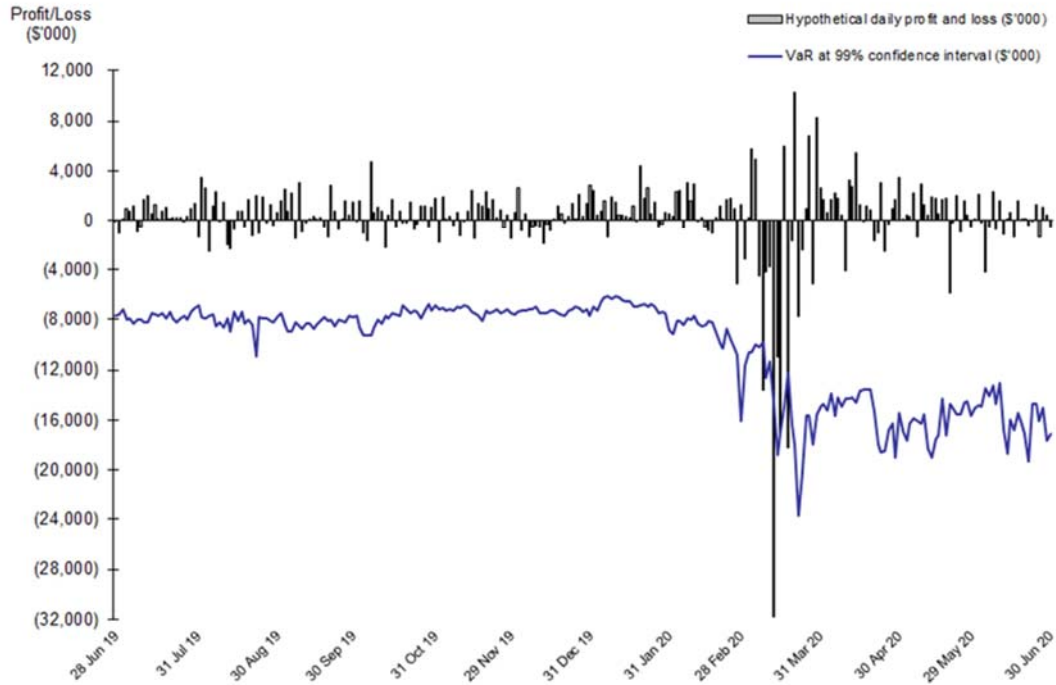
Group Trading ES for Market Risk by Risk Class



10.3 Comparison of VaR Estimates with Gains or Losses (cont'd)

Group Trading Backtesting Chart

(Hypothetical daily profit and loss versus VaR at 99% confidence interval)



For backtesting purpose, the Group uses daily VaR within a 99 per cent confidence interval over a one-day holding period, based on the historical simulation method. As VaR is the statistical measure for potential losses, the VaR measures are backtested against profit and loss of the trading book to validate the robustness of the methodology. The backtesting process analyses whether the exceptions are due to model deficiencies or market volatility. All backtesting exceptions are tabled to the ALCO with recommended actions and resolutions. Four backtesting exceptions were noted for Group Trading in the year under review.

11 Interest Rate Risk in the Banking Book

Interest rate risk is the impact to earnings and economic value of the Group due to fluctuations in interest rates. Interest rate exposure arises from differences in the maturity and repricing dates of assets, liabilities and off-balance sheet items. These mismatches are actively monitored and managed as part of the overall interest rate risk management process which is conducted in accordance with the Group's policies as approved by the ALCO.

The Group's interest rate risk sensitivity is measured as changes in economic value of equity ("EVE") or net interest income ("NII") based on new Basel IRRBB requirements. At 100 and 200 basis points parallel interest rate shocks, worst case results were negative \$774 million and \$1,552 million (FY2019: negative \$803 million and \$1,676 million) respectively, driven mainly by the Group's SGD and USD positions.

EVE is the present value of assets less present value of liabilities of the Group. NII is the simulated change in the Group's net interest income. The repricing profile of loans is generally based on the earliest possible repricing dates, taking into account the notice period to be served to the customers. Interest rate flooring effects are taken into consideration. Loan prepayment and time deposit early withdrawal rates are estimated based on past statistics and trends where possible and material. Behavioural assumptions based on historical trends are applied where appropriate. The average repricing maturity of core non-maturity deposits is determined through empirical models taking into account asset duration. Risk-free zero coupon curves are used for EVE discounting. Currencies are aggregated by scenarios. There may be some differences in the assumptions across geographical locations due to variation in local conditions.

Please refer to UOB Annual Report 2019, Risk Management section – Interest Rate Risk in the Banking Book for more information.

12 Liquidity Coverage Ratio Disclosures

12.1 Liquidity Coverage Ratio

The Liquidity Coverage Ratio (“LCR”) ensures that a Bank has sufficient unencumbered high quality liquid assets (“HQLA”) to survive a significant stress scenario for the next 30 days. The Group’s LCR disclosure is as per MAS Notice 651 “Liquidity Coverage Ratio Disclosure”.

Quarterly average All Currency LCR and Singapore Dollar LCR of 136% and 305% respectively were comfortably above the regulatory requirements of 100%. 91 calendar days’ data points were used in calculating the average figures. Compared to 1Q2020, decrease in All Currency LCR and SGD Dollar LCR was mainly due to increase in average outflows from deposits within 30days; partially offset by increase in HQLA. The main drivers of LCR are the net cumulative outflow driven mainly by deposit profile and the portfolio of high quality liquid asset which would cause some volatility on a day to day basis. The Group’s HQLA composition comprised 94%⁴ Level 1 HQLA and the remaining in Level 2A and 2B HQLA. Deposit strategies are regularly discussed in Group ALCO with monitoring on deposit concentration and currency mismatch etc. The Group’s exposures to derivatives and potential collateral calls were incorporated into the LCR outflows.

Daily liquidity management is centrally managed under Global Markets-Portfolio & Liquidity Management with regular discussion with Central Treasury and relevant Business Units. Liquidity limits and triggers were established to limit the Group’s liquidity exposure. Balance Sheet Risk Management oversees the liquidity risk management in the Group. Contingency funding plans are in place to identify potential liquidity crisis using a series of early warning indicators as well as crisis escalation process and related funding strategies.

Please refer to:

- UOB Annual Report 2019, Risk Management section – Liquidity Risk for governance of liquidity risk management, funding strategy and liquidity risk mitigation techniques.
- UOB Annual Report 2019, Note 44 Financial Risk Management section for Balance sheet and off-balance sheet items broken down into maturity buckets and resultant liquidity gaps.

⁴ after LCR weighting

12.2 Average Group All Currency LCR

For the quarter ended 30 June 2020

\$m		Total Unweighted Value Average	Total Weighted Value Average
HIGH-QUALITY LIQUID ASSETS			
1	Total high-quality liquid assets (HQLA)		73,323
CASH OUTFLOWS			
2	Retail deposits and deposits from small business customers, of which:	129,248	11,050
3	Stable deposits	32,255	1,613
4	Less stable deposits	96,993	9,437
5	Unsecured wholesale funding, of which:	126,731	65,306
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	22,961	5,487
7	Non-operational deposits (all counterparties)	99,242	55,291
8	Unsecured debt	4,528	4,528
9	Secured wholesale funding		103
10	Additional requirements, of which:	38,699	9,053
11	Outflows related to derivative exposures and other collateral requirements	6,713	3,877
12	Outflows related to loss of funding on debt products	0	0
13	Credit and liquidity facilities	31,985	5,175
14	Other contractual funding obligations	4,216	4,216
15	Other contingent funding obligations	8,985	643
16	TOTAL CASH OUTFLOWS		90,370
CASH INFLOWS			
17	Secured lending (eg reverse repos)	8,699	3,593
18	Inflows from fully performing exposures	43,439	28,744
19	Other cash inflows	4,992	3,973
20	TOTAL CASH INFLOWS	57,130	36,310
		Total Adjusted Value	
21	TOTAL HQLA		73,323
22	TOTAL NET CASH OUTFLOWS		54,061
23	LIQUIDITY COVERAGE RATIO (%)		136

12.3 Average Group SGD Currency LCR

For the quarter ended 30 June 2020

\$m		Total Unweighted Value Average	Total Weighted Value Average
HIGH-QUALITY LIQUID ASSETS			
1	Total high-quality liquid assets (HQLA)		34,966
CASH OUTFLOWS			
2	Retail deposits and deposits from small business customers, of which:	87,907	7,316
3	Stable deposits	29,484	1,474
4	Less stable deposits	58,423	5,842
5	Unsecured wholesale funding, of which:	37,264	15,753
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	10,789	2,522
7	Non-operational deposits (all counterparties)	26,149	12,906
8	Unsecured debt	325	325
9	Secured wholesale funding		-
10	Additional requirements, of which:	19,192	8,029
11	Outflows related to derivative exposures and other collateral requirements	6,899	6,606
12	Outflows related to loss of funding on debt products	-	-
13	Credit and liquidity facilities	12,293	1,423
14	Other contractual funding obligations	1,034	1,034
15	Other contingent funding obligations	110	80
16	TOTAL CASH OUTFLOWS		32,213
CASH INFLOWS			
17	Secured lending (eg reverse repos)	988	-
18	Inflows from fully performing exposures	9,662	5,371
19	Other cash inflows	15,477	15,281
20	TOTAL CASH INFLOWS	26,128	20,652
		Total Adjusted Value	
21	TOTAL HQLA		34,966
22	TOTAL NET CASH OUTFLOWS		11,813
23	LIQUIDITY COVERAGE RATIO (%)		305

13 Net Stable Funding Ratio Disclosures

The Net Stable Funding Ratio ("NSFR") measures the amount of available stable funding relative to the amount of required stable funding in a bank and promotes resilience over a longer time horizon. The bank is required to maintain a stable funding profile in relation to the composition of their assets and off-balance sheet activities.

The Group is subjected to NSFR standards effective January 2018. NSFR disclosure is as per MAS Notice 653 "Net Stable Funding Ratio Disclosure". NSFR for 30 June 2020 and 31 March 2020 were 119% and 109% respectively, above the regulatory requirement of 100%. Increase in NSFR in the 2nd quarter was largely due to MAS relief on short term loans; otherwise NSFR remained relatively unchanged. In the 1st quarter, decrease in NSFR was largely due to growth in long term loans. The main drivers of NSFR are the composition and profile of deposits and capital in relation to loans. Interdependent asset and liabilities reported include government funded loans and gold savings accounts backed by gold in accordance with criteria stated in MAS Notice 652.

13 Net Stable Funding Ratio Disclosures (cont'd)
As at 30 June 2020

\$m	ASF Item	Unweighted value by residual maturity				Weighted value
		No maturity	< 6 months	6 months to < 1 yr	≥ 1 yr	
1	Capital:	38,325	-	750	5,979	45,054
2	Regulatory capital	38,325	-	750	5,185	44,260
3	Other capital instruments	-	-	-	794	794
4	Retail deposits and deposits from small business customers:	95,286	49,034	5,932	1,248	138,409
5	Stable deposits	25,262	13,183	214	282	37,008
6	Less stable deposits	70,025	35,851	5,718	966	101,401
7	Wholesale funding:	69,011	127,235	9,518	7,306	74,065
8	Operational deposits	19,405	-	-	-	9,703
9	Other wholesale funding	49,606	127,235	9,518	7,306	64,362
10	Liabilities with matching interdependent assets	-	265	56	676	-
11	Other liabilities:	6,799		9,085		788
12	NSFR derivative liabilities			8,897		
13	All other liabilities and equity not included in the above categories	6,799	-	-	188	788
14	Total ASF					258,317
RSF Item						
15	Total NSFR high-quality liquid assets (HQLA)					3,459
16	Deposits held at other financial institutions for operational purposes	-	-	-	-	-
17	Performing loans and securities:	13,330	132,655	25,322	176,875	192,481
18	Performing loans to financial institutions secured by Level 1 HQLA	-	5,222	354	15	714
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	4,346	28,390	3,427	6,383	14,700
20	Performing loans to non-financial corporates, loans to retail and small business customers, and loans to sovereigns, central banks and public sector entities (PSEs), of which:	7,445	86,635	14,915	96,128	112,202
21	With a risk weight of less than or equal to 35% under paragraphs 7.3.13 to 7.3.20 and 7.3.24 to 7.3.26 of MAS Notice 637	-	241	175	5,098	3,426
22	Performing residential mortgages, of which:	-	1,307	1,515	65,295	47,727
23	With a risk weight of less than or equal to 35% under paragraph 7.3.29 of MAS Notice 637	-	1,160	1,320	53,412	37,483
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	1,539	11,102	5,112	9,054	17,138
25	Assets with matching interdependent liabilities	-	265	56	676	-
26	Other assets:	17,291		22,591		19,900
27	Physical traded commodities, including gold	1,533				1,303
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs			591		502
29	NSFR derivative assets			11,234		2,337
30	NSFR derivative liabilities before deduction of variation margin posted			10,767		-
31	All other assets not included in the above categories	15,758	-	-	-	15,758
32	Off-balance sheet items			182,676		1,638
33	Total RSF					217,477
34	Net Stable Funding Ratio (%)					119

As at 31 March 2020

\$m	ASF Item	Unweighted value by residual maturity				Weighted value
		No maturity	< 6 months	6 months to < 1 yr	≥ 1 yr	
1	Capital:	38,035	500	-	6,825	44,860
2	Regulatory capital	38,035	500	-	6,010	44,045
3	Other capital instruments	-	-	-	815	815
4	Retail deposits and deposits from small business customers:	91,184	46,444	6,960	1,458	133,474
5	Stable deposits	24,169	13,376	193	327	36,178
6	Less stable deposits	67,015	33,068	6,766	1,131	97,296
7	Wholesale funding:	64,921	131,145	10,302	8,556	74,903
8	Operational deposits	21,103	-	-	-	10,551
9	Other wholesale funding	43,818	131,145	10,302	8,556	64,352
10	Liabilities with matching interdependent assets	-	289	102	482	-
11	Other liabilities:	7,784		9,240		664
12	NSFR derivative liabilities			8,985		
13	All other liabilities and equity not included in the above categories	7,784	66	-	189	664
14	Total ASF					253,901
RSF Item						
15	Total NSFR high-quality liquid assets (HQLA)					3,030
16	Deposits held at other financial institutions for operational purposes	-	-	-	-	-
17	Performing loans and securities:	15,686	134,159	24,888	173,556	208,383
18	Performing loans to financial institutions secured by Level 1 HQLA	-	6,583	212	-	764
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	5,938	32,550	3,619	6,803	16,358
20	Performing loans to non-financial corporates, loans to retail and small business customers, and loans to sovereigns, central banks and public sector entities (PSEs), of which:	8,206	83,996	13,423	94,211	127,872
21	With a risk weight of less than or equal to 35% under paragraphs 7.3.13 to 7.3.20 and 7.3.24 to 7.3.26 of MAS Notice 637	-	286	174	5,035	3,511
22	Performing residential mortgages, of which:	-	1,470	1,482	65,382	48,135
23	With a risk weight of less than or equal to 35% under paragraph 7.3.29 of MAS Notice 637	-	1,294	1,297	53,551	37,893
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	1,542	9,560	6,152	7,162	15,254
25	Assets with matching interdependent liabilities	-	289	102	482	-
26	Other assets:	18,041		23,254		20,816
27	Physical traded commodities, including gold	1,704				1,448
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs			653		555
29	NSFR derivative assets			11,461		2,476
30	NSFR derivative liabilities before deduction of variation margin posted			11,140		-
31	All other assets not included in the above categories	16,337	-	-	-	16,337
32	Off-balance sheet items			180,701		1,549
33	Total RSF					233,779
34	Net Stable Funding Ratio (%)					109

14 Abbreviations

The following abbreviated terms are used throughout this document.

A		E	
A-IRBA	Advanced Internal Ratings-Based Approach	EAD	Exposure at Default
ALCO	Asset and Liability Committee	EL	Expected Loss
AMA	Advanced Measurement Approach	EPE	Expected Positive Exposure
AT1	Additional Tier 1	EQ	Equity Exposures
ASF	Available Stable Funding	ES	Expected Shortfall
B		F	
BIA	Basic Indicator Approach	FC(SA)	Financial Collateral Simple Approach
C		FC(CA)	Financial Collateral Comprehensive Approach
CAR	Capital Adequacy Ratio	F-IRBA	Foundation Internal Ratings-Based Approach
CCF	Credit Conversion Factor	G	
CCP	Central Counterparty	G-SIB	Global Systemically Important Bank
CCR	Counterparty Credit Risk	H	
CCyB	Countercyclical Capital Buffer	HVCRE	High-Volatility Commercial Real Estate
CET1	Common Equity Tier 1	I	
CF	Commodities Finance	IAA	Internal Assessment Approach
CR	Credit Risk	IAM	Internal Assessment Method
CRE	Commercial Real Estate	IMA	Internal Models Approach
CRM	Credit Risk Mitigation	IMM	Internal Models Method
CVA	Credit Valuation Adjustment	IPRE	Income-Producing Real Estate
D		IRBA	Internal Ratings-Based Approach
D-SIB	Domestic Systemically Important Bank		

14 ABBREVIATIONS (cont'd)

L		S	
LGD	Loss Given Default	S&P	Standard & Poor's
M		SA	Standardised Approach
MDB	Multilateral Development Bank	SA(CR)	Standardised Approach to Credit Risk
MR	Market Risk	SA(EQ)	Standardised Approach for Equity Exposures
N		SA(MR)	Standardised Approach to Market Risk
NBFI	Non Bank Financial Institutions	SA(OR)	Standardised Approach to Operational Risk
NCI	Non-Controlling Interests	SEC-IRBA	Securitisation Internal Ratings-Based Approach
O		SEC-ERBA	Securitisation External Ratings-Based Approach
OF	Object Finance	SEC-SA	Securitisation Standardised Approach
P		SF	Supervisory Formula
PD	Probability of Default	SFRS	Singapore Financial Reporting Standards
PE/VC	Private Equity/Venture Capital	SFTs	Securities Financing Transactions
PF	Project Finance	SME	Small-and Medium-sized Enterprises
PSE	Public Sector Entity	T	
Q		T1	Tier 1
QRRE	Qualifying Revolving Retail Exposures	T2	Tier 2
R		TEP	Total Eligible Provisions
RBM	Ratings-Based Method	TLAC	Total Loss-Absorbing Capacity
RSF	Required Stable Funding	V	
RW	Risk Weight	VaR	Value-at-Risk
RWA	Risk-Weighted Assets		