

# Regulatory Disclosures

31 March 2019



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## 1. Key prudential ratios and overview of RWA

### KM1: Key prudential ratios

	(a)	(b)	(c)	(d)	(e)	
	At 31 March 2019	At 31 December 2018	At 30 September 2018	At 30 June 2018	At 31 March 2018	
	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	
<b>Regulatory capital</b>						
1	Common Equity Tier 1 (CET1)	185,025	180,202	178,953	176,702	174,287
2	Tier 1	208,502	203,678	202,430	176,702	174,287
3	Total capital	240,595	238,071	236,646	213,839	210,552
<b>RWA</b>						
4	Total RWA	1,070,971	1,030,815	1,032,355	1,063,065	1,087,903
<b>Risk-based regulatory capital ratios (as a percentage of RWA)</b>						
5	CET1 ratio (%)	17.28%	17.48%	17.33%	16.62%	16.02%
6	Tier 1 ratio (%)	19.47%	19.76%	19.61%	16.62%	16.02%
7	Total capital ratio (%)	22.47%	23.10%	22.92%	20.12%	19.35%
<b>Additional CET1 buffer requirements (as a percentage of RWA)</b>						
8	Capital conservation buffer requirement (%)	2.500%	1.875%	1.875%	1.875%	1.875%
9	Countercyclical capital buffer requirement (%)	1.912%	1.418%	1.394%	1.403%	1.361%
10	Higher loss absorbency requirements (%) (applicable only to G-SIBs or D-SIBs)	1.500%	1.125%	1.125%	1.125%	1.125%
11	Total AI-specific CET1 buffer requirements (%)	5.912%	4.418%	4.394%	4.403%	4.361%
12	CET1 available after meeting the AI's minimum capital requirements (%)	12.78%	12.98%	12.83%	10.62%	10.02%
<b>Basel III leverage ratio</b>						
13	Total leverage ratio (LR) exposure measure	2,691,882	2,733,653	2,631,057	2,558,199	2,637,364
14	LR (%)	7.75%	7.45%	7.69%	6.91%	6.61%
<b>Liquidity Coverage Ratio (LCR)/Liquidity Maintenance Ratio (LMR)</b>						
Applicable to category 1 institution only:						
15	Total high quality liquid assets (HQLA)	588,804	492,674	555,702	551,312	514,025
16	Total net cash outflows	343,513	314,666	405,974	394,615	383,880
17	LCR (%)	178.67%	159.05%	137.27%	142.58%	134.33%
Applicable to category 2 institution only:						
17a	LMR (%)	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>Net Stable Funding Ratio (NSFR)/Core Funding Ratio (CFR)</b>						
Applicable to category 1 institution only:						
18	Total available stable funding	1,591,465	1,541,356	1,522,120	1,484,704	1,483,608
19	Total required stable funding	1,325,423	1,239,852	1,251,246	1,263,811	1,246,981
20	NSFR (%)	120.07%	124.32%	121.65%	117.48%	118.98%
Applicable to category 2A institution only:						
20a	CFR (%)	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

## 1. Key prudential ratios and overview of RWA (continued)

### OV1: Overview of RWA

		(a)	(b)	(c)
		RWA		Minimum capital requirements
		At 31 March 2019	At 31 December 2018	At 31 March 2019
		HK\$m	HK\$m	HK\$m
1	Credit risk for non-securitization exposures	919,254	889,177	77,541
2	Of which STC approach	85,772	85,361	6,862
2a	Of which BSC approach	-	-	-
3	Of which foundation IRB approach	833,481	803,815	70,679
4	Of which supervisory slotting criteria approach	1	1	-
5	Of which advanced IRB approach	-	-	-
6	Counterparty default risk and default fund contributions	11,226	11,526	946
7	Of which SA-CCR	Not applicable	Not applicable	Not applicable
7a	Of which CEM	10,961	11,011	925
8	Of which IMM(CCR) approach	-	-	-
9	Of which others	265	515	21
10	CVA risk	6,682	6,556	535
11	Equity positions in banking book under the simple risk-weight method and internal models method	-	-	-
12	Collective investment scheme ("CIS") exposures – LTA	Not applicable	Not applicable	Not applicable
13	CIS exposures – MBA	Not applicable	Not applicable	Not applicable
14	CIS exposures – FBA	Not applicable	Not applicable	Not applicable
14a	CIS exposures – combination of approaches	Not applicable	Not applicable	Not applicable
15	Settlement risk	-	1	-
16	Securitization exposures in banking book	-	-	-
17	Of which SEC-IRBA	-	-	-
18	Of which SEC-ERBA (including IAA)	-	-	-
19	Of which SEC-SA	-	-	-
19a	Of which SEC-FBA	-	-	-
20	Market risk	17,500	13,261	1,400
21	Of which STM approach	5,034	2,858	403
22	Of which IMM approach	12,466	10,403	997
23	Capital charge for switch between exposures in trading book and banking book (not applicable before the revised market risk framework takes effect)	Not applicable	Not applicable	Not applicable
24	Operational risk	89,437	85,421	7,155
24a	Sovereign concentration risk	Not applicable	Not applicable	Not applicable
25	Amounts below the thresholds for deduction (subject to 250% RW)	4,770	4,549	382
26	Capital floor adjustment	-	-	-
26a	Deduction to RWA	28,508	28,521	2,281
26b	Of which portion of regulatory reserve for general banking risks and collective provisions which is not included in Tier 2 Capital	299	326	24
26c	Of which portion of cumulative fair value gains arising from the revaluation of land and buildings which is not included in Tier 2 Capital	28,209	28,195	2,257
27	Total	1,020,361	981,970	85,678

In this table, RWAs for credit risk calculated under the IRB approach are before the application of the 1.06 scaling factor. Minimum capital requirement represents the amount of capital required to be held for that risk based on its RWAs after any applicable scaling factor multiplied by 8%.

The change in "Of which others" under "Counterparty default risk and default fund contributions" was mainly due to change in outstanding volume of repo-style transactions.

## 2. Leverage ratio

### LR2: Leverage ratio

		At 31 March 2019	At 31 December 2018
		(a)	(b)
		HK\$m	HK\$m
<b>On-balance sheet exposures</b>			
1	On-balance sheet exposures (excluding those arising from derivative contracts and SFTs, but including collateral)	2,545,665	2,563,681
2	Less: Asset amounts deducted in determining Tier 1 capital	(61,847)	(61,872)
3	<b>Total on-balance sheet exposures (excluding derivative contracts and SFTs)</b>	<b>2,483,818</b>	<b>2,501,809</b>
<b>Exposures arising from derivative contracts</b>			
4	Replacement cost associated with all derivative contracts (where applicable net of eligible cash variation margin and/or with bilateral netting)	12,963	12,356
5	Add-on amounts for PFE associated with all derivative contracts	19,500	19,884
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	-	-
7	Less: Deductions of receivables assets for cash variation margin provided under derivative contracts	(2,022)	(290)
8	Less: Exempted CCP leg of client-cleared trade exposures	-	-
9	Adjusted effective notional amount of written credit derivative contracts	-	-
10	Less: Adjusted effective notional offsets and add-on deductions for written credit derivative contracts	-	-
11	<b>Total exposures arising from derivative contracts</b>	<b>30,441</b>	<b>31,950</b>
<b>Exposures arising from SFTs</b>			
12	Gross SFT assets (with no recognition of netting), after adjusting for sale accounting transactions	47,100	70,581
13	Less: Netted amounts of cash payables and cash receivables of gross SFT assets	-	-
14	CCR exposure for SFT assets	155	579
15	Agent transaction exposures	-	-
16	<b>Total exposures arising from SFTs</b>	<b>47,255</b>	<b>71,160</b>
<b>Other off-balance sheet exposures</b>			
17	Off-balance sheet exposure at gross notional amount	624,329	610,096
18	Less: Adjustments for conversion to credit equivalent amounts	(487,685)	(475,336)
19	<b>Off-balance sheet items</b>	<b>136,644</b>	<b>134,760</b>
<b>Capital and total exposures</b>			
20	<b>Tier 1 capital</b>	<b>208,502</b>	<b>203,678</b>
20a	<b>Total exposures before adjustments for specific and collective provisions</b>	<b>2,698,158</b>	<b>2,739,679</b>
20b	<b>Adjustments for specific and collective provisions</b>	<b>(6,276)</b>	<b>(6,026)</b>
21	<b>Total exposures after adjustments for specific and collective provisions</b>	<b>2,691,882</b>	<b>2,733,653</b>
<b>Leverage ratio</b>			
22	<b>Leverage ratio</b>	<b>7.75%</b>	<b>7.45%</b>

### 3. Liquidity

#### LIQ1: Liquidity Coverage Ratio – for category 1 institution

Number of data points used in calculating the average value of the LCR and related components set out in this template: (73)		For the quarter ended 31 March 2019	
		(a)	(b)
Basis of disclosure: consolidated		Unweighted value (average)	Weighted value (average)
		HK\$m	HK\$m
<b>A. HQLA</b>			
1	Total HQLA		588,804
<b>B. Cash Outflows</b>			
2	Retail deposits and small business funding, of which:	1,014,579	63,761
3	<i>Stable retail deposits and stable small business funding</i>	351,716	10,551
4	<i>Less stable retail deposits and less stable small business funding</i>	395,661	39,566
4a	<i>Retail term deposits and small business term funding</i>	267,202	13,644
5	Unsecured wholesale funding (other than small business funding), and debt securities and prescribed instruments issued by the AI, of which:	958,203	443,596
6	<i>Operational deposits</i>	323,531	79,492
7	<i>Unsecured wholesale funding (other than small business funding) not covered in row 6</i>	631,788	361,220
8	<i>Debt securities and prescribed instruments issued by the AI and redeemable within the LCR period</i>	2,884	2,884
9	Secured funding transactions (including securities swap transactions)		851
10	Additional requirements, of which:	371,834	61,956
11	<i>Cash outflows arising from derivative contracts and other transactions, and additional liquidity needs arising from related collateral requirements</i>	28,342	28,342
12	<i>Cash outflows arising from obligations under structured financing transactions and repayment of funding obtained from such transactions</i>	-	-
13	<i>Potential drawdown of undrawn committed facilities (including committed credit facilities and committed liquidity facilities)</i>	343,492	33,614
14	Contractual lending obligations (not otherwise covered in Section B) and other contractual cash outflows	44,951	44,951
15	Other contingent funding obligations (whether contractual or non-contractual)	301,441	5,783
16	<b>Total Cash Outflows</b>		<b>620,898</b>
<b>C. Cash Inflows</b>			
17	Secured lending transactions (including securities swap transactions)	5,503	4,786
18	Secured and unsecured loans (other than secured lending transactions covered in row 17) and operational deposits placed at other financial institutions	289,017	214,819
19	Other cash inflows	64,470	57,780
20	<b>Total Cash Inflows</b>	<b>358,990</b>	<b>277,385</b>
<b>D. Liquidity Coverage Ratio</b>			<b>Adjusted value</b>
21	<b>Total HQLA</b>		<b>588,804</b>
22	<b>Total Net Cash Outflows</b>		<b>343,513</b>
23	<b>LCR (%)</b>		<b>178.67%</b>

### 3. Liquidity (continued)

#### LIQ1: Liquidity Coverage Ratio – for category 1 institution (continued)

Notes:

- The weighted amount of HQLA is to be calculated as the amount after applying the haircuts as required under the Banking (Liquidity) Rules.
- The unweighted amounts of cash inflows and cash outflows are to be calculated as the principal amounts in the calculation of the LCR as required under the Banking (Liquidity) Rules.
- The weighted amounts of cash inflows and cash outflows are to be calculated as the amounts after applying the inflow and outflow rates as required under the Banking (Liquidity) Rules.
- The adjusted value of total HQLA and the total net cash outflows have taken into account any applicable ceiling as required under the Banking (Liquidity) Rules.

The Group's average LCR of the first quarter in 2019 was 178.67%, continuously maintained at stable and healthy level.

The HQLA consists of cash, balances at central banks and high quality marketable securities issued or guaranteed by sovereigns, central banks, public sector entities or multilateral development banks and non-financial corporate debt securities. The majority of the HQLA was composed of Level 1 HQLA.

The net cash outflow was mainly from retail and corporate customer deposit which are the Group's primary source of funds, together with deposit and balance from bank and other financial institution. To ensure stable, sufficient and diversified source of funds, the Group actively attracts new deposits, keeps the core deposit and obtains supplementary funding from the interbank market or by issuing debts in the capital market. Other cash outflow, such as commitment, cash outflow under derivative contract and potential collateral requirement, were minimal to the LCR.

Majority of the Group's customer deposits are denominated in HKD, USD and RMB. As the supply of HKD denominated HQLA in the market is relatively limited, the Group swaps surplus HKD funding into USD and other foreign currencies, part of funding are deployed to investment in HQLA.

#### 4. Credit risk for non-securitization exposures

##### CR8: RWA flow statements of credit risk exposures under IRB approach

		(a)
		HK\$m
1	<b>RWA as at 31 December 2018</b>	<b>803,816</b>
2	Asset size	26,202
3	Asset quality	(6,271)
4	Model updates	8,193
5	Methodology and policy	-
6	Acquisitions and disposals	-
7	Foreign exchange movements	1,542
8	Other	-
9	<b>RWA as at 31 March 2019</b>	<b>833,482</b>

RWAs increased by HK\$8,193 million in model updates was due to adoption of bank PD model for the bank credit exposures of BOCHK's Southeast Asia Entities for calculating credit risk capital charge under FIRB approach.

#### 5. Counterparty credit risk

##### CCR7: RWA flow statements of default risk exposures under IMM(CCR) approach

The Group did not use IMM(CCR) approach to measure default risk exposures as at 31 March 2019.

#### 6. Market risk

##### MR2: RWA flow statements of market risk exposures under IMM approach

		(a)	(b)	(c)	(d)	(e)	(f)
		VaR	Stressed VaR	IRC	CRC	Other	Total RWA
		HK\$m	HK\$m	HK\$m	HK\$m	HK\$m	HK\$m
1	<b>RWA as at 31 December 2018</b>	<b>3,160</b>	<b>7,243</b>	-	-	-	<b>10,403</b>
1a	<i>Regulatory adjustment</i>	(2,486)	(5,674)	-	-	-	(8,160)
1b	<b>RWA as at day-end of 31 December 2018</b>	<b>674</b>	<b>1,569</b>	-	-	-	<b>2,243</b>
2	Movement in risk levels*	384	1,127	-	-	-	1,511
3	Model updates/changes	-	67	-	-	-	67
4	Methodology and policy	-	-	-	-	-	-
5	Acquisitions and disposals	5	3	-	-	-	8
6	Foreign exchange movements	-	-	-	-	-	-
7	Other	-	-	-	-	-	-
7a	<b>RWA as at day-end of 31 March 2019</b>	<b>1,063</b>	<b>2,766</b>	-	-	-	<b>3,829</b>
7b	<i>Regulatory adjustment</i>	1,870	6,767	-	-	-	8,637
8	<b>RWA as at 31 March 2019</b>	<b>2,933</b>	<b>9,533</b>	-	-	-	<b>12,466</b>

\* Movements as a result of changes in positions and risk levels.