

Supplementary Information

(Amount in millions of Renminbi, unless otherwise stated)

I DIFFERENCES BETWEEN IFRS AND CAS CONSOLIDATED FINANCIAL STATEMENTS

There are no differences in the Group's operating results for the years ended 31 December 2021 and 2020 or total equity as at 31 December 2021 and 2020 presented in the Group's consolidated financial statements prepared under IFRS and those prepared under CAS.

II UNAUDITED SUPPLEMENTARY INFORMATION

1 Liquidity ratios, liquidity coverage ratio and net stable funding ratio

	As at 31 December	
	2021	2020
RMB current assets to RMB current liabilities	49.63%	54.50%
Foreign currency current assets to foreign currency current liabilities	69.90%	58.57%

The liquidity ratios are calculated in accordance with the relevant provisions of the CBIRC.

Liquidity coverage ratio

According to the *Disclosure Rules on Liquidity Coverage Ratio of Commercial Banks*, the Group disclosed the information of liquidity coverage ratio ("LCR")⁽¹⁾ as follows.

Regulatory requirements of liquidity coverage ratio

As stipulated by the *Rules on Liquidity Risk Management of Commercial Banks* issued by the CBIRC, the minimum regulatory requirement of LCR is 100%.

The Group's liquidity coverage ratio

Since 2017, the Group measured the LCR on a day-to-day consolidated basis⁽²⁾. In the fourth quarter of 2021, the Group measured 92-day LCR on this basis, with average ratio⁽³⁾ standing at 127.61%, representing an increase of 2.99 percentage points over the previous quarter, which was primarily due to the decrease in the net cash outflow.

	2021			
	Quarter ended 31 December	Quarter ended 30 September	Quarter ended 30 June	Quarter ended 31 March
Average value of LCR	127.61%	124.62%	127.51%	133.30%

II UNAUDITED SUPPLEMENTARY INFORMATION (Continued)
1 Liquidity ratios, liquidity coverage ratio and net stable funding ratio (Continued)
The Group's liquidity coverage ratio (Continued)

The Group's average values⁽³⁾ of consolidated LCR individual line items in the fourth quarter of 2021 are as follows:

No.	Total unweighted value	Total weighted value
High-quality liquid assets		
1 Total high-quality liquid assets (HQLA)		4,594,486
Cash outflows		
2 Retail deposits and deposits from small business customers, of which:	8,584,274	620,119
3 Stable deposits	4,628,548	224,546
4 Less stable deposits	3,955,726	395,573
5 Unsecured wholesale funding, of which:	10,186,586	3,804,281
6 Operational deposits (excluding those generated from correspondent banking activities)	5,692,939	1,397,907
7 Non-operational deposits (all counterparties)	4,436,579	2,349,306
8 Unsecured debts	57,068	57,068
9 Secured funding		672
10 Additional requirements, of which:	3,276,987	2,027,702
11 Outflows related to derivative exposures and other collateral requirements	1,915,551	1,915,551
12 Outflows related to loss of funding on debt products	–	–
13 Credit and liquidity facilities	1,361,436	112,151
14 Other contractual funding obligations	79,935	79,935
15 Other contingent funding obligations	3,206,011	93,610
16 Total cash outflows		6,626,319
Cash inflows		
17 Secured lending (including reverse repos and securities borrowing)	485,026	117,279
18 Inflows from fully performing exposures	1,482,599	855,523
19 Other cash inflows	2,178,684	2,047,551
20 Total cash inflows	4,146,309	3,020,353
		Total adjusted value
21 Total HQLA		4,594,486
22 Total net cash outflows		3,605,966
23 Liquidity coverage ratio		127.61%

- (1) The LCR aims to ensure that commercial banks have sufficient HQLA that can be converted into cash to meet the liquidity requirements for at least thirty days under stress scenarios determined by the CBIRC.
- (2) When calculating the consolidated LCR, BOCG Investment, BOC Insurance, BOCG Insurance and BOCG Life were excluded from the scope of consolidation in accordance with the requirements of the CBIRC.
- (3) The average of LCR and the averages of all related individual items are the day-end simple arithmetic averages of figures over each quarter.

(Amount in millions of Renminbi, unless otherwise stated)

II UNAUDITED SUPPLEMENTARY INFORMATION (Continued)

1 Liquidity ratios, liquidity coverage ratio and net stable funding ratio (Continued)

Net stable funding ratio

In accordance with the *Disclosure Rules on Net Stable Funding Ratio of Commercial Banks*, the Group disclosed the information of net stable funding ratio ("NSFR")⁽¹⁾ as follows:

Regulatory requirements of net stable funding ratio

As stipulated by the *Rules on Liquidity Risk Management of Commercial Banks* issued by the CBIRC, the minimum regulatory requirement of NSFR is 100%.

The Group's net stable funding ratio

As stipulated by the *Disclosure Rules on Net Stable Funding Ratio of Commercial Banks* issued by the CBIRC, banks approved to implement the advanced approaches of capital measurement by the CBIRC in accordance with *Capital Rules for Commercial Banks (Provisional)* shall disclose the information of net stable funding ratio for the preceding two consecutive quarters at least semi-annually.

As at 31 December 2021, the Group's NSFR was 122.21% on a consolidated basis⁽²⁾, representing an increase of 0.88 percentage point over the previous quarter. As at 30 September 2021, the Group's NSFR was 121.33%, representing an increase of 0.11 percentage point over the previous quarter. The Group's NSFR remained stable, and met the regulatory requirement.

	2021			
	As at 31 December	As at 30 September	As at 30 June	As at 31 March
Ending value of NSFR ⁽³⁾	122.21%	121.33%	121.22%	123.29%

- (1) NSFR is introduced to ensure commercial banks have sufficient stable funding to meet the requirements of assets and off-balance sheet exposures.
- (2) When calculating the consolidated NSFR, BOCG Investment, BOC Insurance, BOCG Insurance and BOCG Life were excluded from the scope of consolidation in accordance with the requirements of the CBIRC.
- (3) NSFR are the ending values of each quarter.

II UNAUDITED SUPPLEMENTARY INFORMATION (Continued)

1 Liquidity ratios, liquidity coverage ratio and net stable funding ratio (Continued)

The Group's net stable funding ratio (Continued)

The Group's consolidated NSFR individual line items at the end of the fourth quarter of 2021 are as follows:

No.	Items	Unweighted value				Weighted value
		No maturity	<6 months	6–12 months	≥1 year	
Available Stable Funding (ASF) Item						
1	Capital	–	–	–	2,604,093	2,604,093
2	Regulatory capital	–	–	–	2,586,093	2,586,093
3	Other capital instruments	–	–	–	18,000	18,000
4	Retail deposits and deposits from small business customers	4,334,300	4,842,101	53,469	6,456	8,555,486
5	Stable deposits	2,142,470	2,687,031	13,439	2,516	4,603,309
6	Less stable deposits	2,191,830	2,155,070	40,030	3,940	3,952,177
7	Wholesale funding	6,183,465	6,187,800	1,020,579	462,606	5,991,321
8	Operational deposits	5,696,346	172,982	–	–	2,934,664
9	Other wholesale funding	487,119	6,014,818	1,020,579	462,606	3,056,657
10	Liabilities with matching interdependent assets	–	–	–	–	–
11	Other liabilities	68,499	219,383	4,392	407,896	313,011
12	NSFR derivatives liabilities	–	–	–	97,081	–
13	All other liabilities and equity not included in the above categories	68,499	219,383	4,392	310,815	313,011
14	Total ASF					17,463,911
Required Stable Funding (RSF) Item						
15	Total NSFR high-quality liquid assets					759,186
16	Deposits held at other financial institutions for operational purposes	147,865	4,705	–	–	76,285
17	Loans and securities	75,073	5,084,932	2,228,720	10,582,731	11,894,558
18	Loans to financial institutions secured by Level 1 assets	–	293,010	–	–	29,301
19	Loans to financial institutions secured by non-Level 1 assets and unsecured loans to financial institutions	75,073	1,433,122	304,940	69,162	447,863
20	Loans to retail and small business customers, non-financial institutions, sovereigns, central banks and public sector entities (PSEs) of which:					
21	With a risk weight of less than or equal to 35%	–	2,911,282	1,702,685	5,363,951	6,763,085
		–	219,860	24,550	31,881	47,673

(Amount in millions of Renminbi, unless otherwise stated)

II UNAUDITED SUPPLEMENTARY INFORMATION (Continued)

1 Liquidity ratios, liquidity coverage ratio and net stable funding ratio (Continued)

The Group's net stable funding ratio (Continued)

The Group's consolidated NSFR individual line items at the end of the fourth quarter of 2021 are as follows (Continued):

No.	Items	Unweighted value				Weighted value
		No maturity	<6 months	6-12 months	≥1 year	
Required Stable Funding (RSF) Item (Continued)						
22	Residential mortgages of which:	-	98,499	98,971	4,597,223	3,948,278
23	With a risk weight of less than or equal to 35%	-	6,657	6,810	290,479	195,545
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	-	349,019	122,124	552,395	706,031
25	Assets with matching interdependent liabilities	-	-	-	-	-
26	Other assets	752,153	100,861	19,076	527,347	1,258,102
27	Physical traded commodities, including gold	285,887				243,004
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs				435	370
29	NSFR derivatives assets				103,898	6,817
30	NSFR derivatives liabilities with additional requirements				19,416*	19,416
31	All other assets not included in the above categories	466,266	100,861	19,076	423,014	988,495
32	Off-balance sheet items				7,419,366	302,271
33	Total RSF					14,290,402
34	NSFR					122.21%

* Reported derivative liabilities are before deducting variation margin posted. There is no need to differentiate by maturities. The unweighted value should be excluded from the total value of item No.26 "Other assets".

II UNAUDITED SUPPLEMENTARY INFORMATION (Continued)

1 Liquidity ratios, liquidity coverage ratio and net stable funding ratio (Continued)

The Group's net stable funding ratio (Continued)

The Group's consolidated NSFR individual line items at the end of the third quarter of 2021 are as follows:

No.	Items	Unweighted value				Weighted value
		No maturity	<6 months	6–12 months	≥1 year	
Available Stable Funding (ASF) Item						
1	Capital	–	–	–	2,490,030	2,490,030
2	Regulatory capital	–	–	–	2,472,030	2,472,030
3	Other capital instruments	–	–	–	18,000	18,000
4	Retail deposits and deposits from small business customers	4,250,419	4,815,806	53,104	17,445	8,456,230
5	Stable deposits	1,957,994	2,655,335	14,440	6,746	4,403,127
6	Less stable deposits	2,292,425	2,160,471	38,664	10,699	4,053,103
7	Wholesale funding	5,860,537	6,398,752	911,926	498,314	5,786,066
8	Operational deposits	5,414,042	108,334	–	–	2,761,188
9	Other wholesale funding	446,495	6,290,418	911,926	498,314	3,024,878
10	Liabilities with matching interdependent assets	–	–	–	–	–
11	Other liabilities	56,128	206,180	4,479	405,356	309,724
12	NSFR derivatives liabilities	–	–	–	97,871	–
13	All other liabilities and equity not included in the above categories	56,128	206,180	4,479	307,485	309,724
14	Total ASF					17,042,050
Required Stable Funding (RSF) Item						
15	Total NSFR high-quality liquid assets					675,604
16	Deposits held at other financial institutions for operational purposes	186,473	1,979	–	–	94,226
17	Loans and securities	46,539	5,112,083	2,254,618	10,429,932	11,765,087
18	Loans to financial institutions secured by Level 1 assets	–	417,569	–	–	41,757
19	Loans to financial institutions secured by non-Level 1 assets and unsecured loans to financial institutions	46,539	1,312,245	323,510	66,470	432,043
20	Loans to retail and small business customers, non-financial institutions, sovereigns, central banks and public sector entities (PSEs) of which:					
21	With a risk weight of less than or equal to 35%	–	3,010,264	1,679,453	5,273,588	6,708,858
		–	234,243	28,312	24,249	43,027

(Amount in millions of Renminbi, unless otherwise stated)

II UNAUDITED SUPPLEMENTARY INFORMATION (Continued)

1 Liquidity ratios, liquidity coverage ratio and net stable funding ratio (Continued)

The Group's net stable funding ratio (Continued)

The Group's consolidated NSFR individual line items at the end of the third quarter of 2021 are as follows (Continued):

No.	Items	Unweighted value				Weighted value
		No maturity	<6 months	6-12 months	≥1 year	
Required Stable Funding (RSF) Item (Continued)						
22	Residential mortgages of which:	-	97,853	98,102	4,508,548	3,873,376
23	With a risk weight of less than or equal to 35%	-	6,668	6,734	284,333	191,518
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	-	274,152	153,553	581,326	709,053
25	Assets with matching interdependent liabilities	-	-	-	-	-
26	Other assets	720,647	59,432	6,582	580,030	1,226,206
27	Physical traded commodities, including gold	249,356				211,952
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs				387	329
29	NSFR derivatives assets				103,514	5,643
30	NSFR derivatives liabilities with additional requirements				19,574*	19,574
31	All other assets not included in the above categories	471,291	59,432	6,582	476,129	988,708
32	Off-balance sheet items				7,024,290	285,014
33	Total RSF					14,046,137
34	NSFR					121.33%

* Reported derivative liabilities are before deducting variation margin posted. There is no need to differentiate by maturities. The unweighted value should be excluded from the total value of item No.26 "Other assets".

II UNAUDITED SUPPLEMENTARY INFORMATION (Continued)

2 Currency concentrations

The following information is computed in accordance with the provisions of the CBIRC.

	Equivalent in millions of RMB			Total
	USD	HKD	Other	
As at 31 December 2021				
Spot assets	4,217,661	1,693,178	1,954,742	7,865,581
Spot liabilities	(3,957,140)	(1,956,893)	(1,781,566)	(7,695,599)
Forward purchases	4,431,956	740,015	1,322,061	6,494,032
Forward sales	(4,650,892)	(485,197)	(1,516,624)	(6,652,713)
Net options position*	853	(32)	(2,194)	(1,373)
Net long/(short) position	42,438	(8,929)	(23,581)	9,928
Structural position	72,622	228,897	87,567	389,086
As at 31 December 2020				
Spot assets	3,695,294	1,607,291	1,945,381	7,247,966
Spot liabilities	(4,029,848)	(1,964,590)	(1,736,612)	(7,731,050)
Forward purchases	4,944,883	760,105	1,313,088	7,018,076
Forward sales	(4,546,040)	(420,572)	(1,536,300)	(6,502,912)
Net options position*	(19,306)	(364)	(6,615)	(26,285)
Net long/(short) position	44,983	(18,130)	(21,058)	5,795
Structural position	61,978	233,953	79,913	375,844

* The net option position is calculated in accordance with the relevant provisions of the CBIRC.

(Amount in millions of Renminbi, unless otherwise stated)

II UNAUDITED SUPPLEMENTARY INFORMATION (Continued)

3 International claims

The Group discloses international claims according to *Banking (Disclosure) Rules* (L.N. 160 of 2014). International claims are risk exposures generated from the countries or geographical areas where the counterparties take the ultimate risk while considering the transfer of the risk, exclude local claims on local residents in local currency. Risk transfer is only made if the claims are guaranteed by a party in a country which is different from that of the counterparty or if the claims are on an overseas branch of a counterparty whose head office is located in another country.

International claims include “Balances with central banks”, “Due from and placements with and loans to banks and other financial institutions”, “Government certificates of indebtedness for bank notes issued”, “Loans and advances to customers” and “Financial investments”, etc.

International claims have been disclosed by major countries or geographical areas. A country or geographical area is reported where it constitutes 10% or more of the aggregate amount of international claims, after taking into account any risk transfers.

	Banks	Official sector	Non-bank private sector	Total
As at 31 December 2021				
Asia Pacific				
Chinese mainland	926,064	256,068	729,546	1,911,678
Hong Kong, China	76,221	4,889	460,784	541,894
Other Asia Pacific locations	118,247	181,367	413,635	713,249
Subtotal	1,120,532	442,324	1,603,965	3,166,821
North and South America	116,742	240,651	278,585	635,978
Europe and other	238,323	86,339	303,990	628,652
Total	1,475,597	769,314	2,186,540	4,431,451
As at 31 December 2020				
Asia Pacific				
Chinese mainland	675,133	236,529	702,641	1,614,303
Hong Kong, China	40,671	214	442,402	483,287
Other Asia Pacific locations	97,249	166,292	417,733	681,274
Subtotal	813,053	403,035	1,562,776	2,778,864
North and South America	81,312	233,162	173,112	487,586
Europe and other	201,540	63,838	283,718	549,096
Total	1,095,905	700,035	2,019,606	3,815,546

II UNAUDITED SUPPLEMENTARY INFORMATION (Continued)

4 Overdue assets

For the purpose of the table below, the entire outstanding balance of “Loans and advances to customers” and “Placements with and loans to banks and other financial institutions” are considered overdue if either principal or interest payment is overdue.

4.1 Total amount of overdue loans and advances to customers

	As at 31 December	
	2021	2020
Total loans and advances to customers which have been overdue		
within 3 months	44,014	54,342
between 3 and 6 months	20,298	24,001
between 6 and 12 months	50,993	47,097
over 12 months	52,432	53,944
Total	167,737	179,384
Percentage		
within 3 months	0.28%	0.38%
between 3 and 6 months	0.13%	0.17%
between 6 and 12 months	0.33%	0.33%
over 12 months	0.33%	0.38%
Total	1.07%	1.26%

4.2 Total amount of overdue Placements with and loans to banks and other financial institutions

The total amount of overdue “Placements with and loans to banks and other financial institutions” as at 31 December 2021 and 2020 is not considered material.

5 Leverage ratio

The leverage ratios of the Group calculated in accordance with the *Administrative Measures for the Leverage Ratio of Commercial Banks (Revised)* and the *Capital Rules for Commercial Banks (Provisional)* are as follows⁽¹⁾:

	2021			
	As at 31 December	As at 30 September	As at 30 June	As at 31 March
Net tier 1 capital	2,173,731	2,111,813	2,058,220	2,014,251
Adjusted on- and off-balance sheet assets	28,425,377	27,820,891	27,861,068	27,344,497
Leverage ratio	7.65%	7.59%	7.39%	7.37%

(Amount in millions of Renminbi, unless otherwise stated)

II UNAUDITED SUPPLEMENTARY INFORMATION (Continued)

5 Leverage ratio (Continued)

No.	Items	As at 31 December 2021
1	Total consolidated assets	26,722,408
2	Adjustments that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(447,590)
3	Adjustments for fiduciary assets	–
4	Adjustments for derivative financial instruments	133,390
5	Adjustments for securities financing transactions	153,703
6	Adjustments for off-balance sheet exposures	1,889,881
7	Other adjustments	(26,415)
8	Adjusted on- and off-balance sheet assets	28,425,377
<hr/>		
No.	Items	As at 31 December 2021
1	On-balance sheet assets (excluding derivatives and securities financing transactions (SFTs))	25,674,481
2	Less: Tier 1 capital deductions	(26,415)
3	Total on-balance sheet exposures (excluding derivatives and SFTs)	25,648,066
4	Replacement cost associated with all derivative transactions (i.e. net of eligible cash variation margin)	95,847
5	Add-on amounts for potential future exposure associated with all derivative transactions	133,316
6	Gross-up for derivative collateral provided where deducted from the balance sheet assets	–
7	Less: Deductions of receivable assets for cash variation margin provided in derivative transactions	–
8	Less: Exempted CCP leg of client-cleared trade exposures	–
9	Adjusted effective notional amount of written credit derivatives	82
10	Less: Deductible amounts for written credit derivatives	(8)
11	Total derivative exposures	229,237
12	Accounting balance for securities financing transaction assets	504,490
13	Less: Deducted amounts for securities financing transaction assets	–
14	Counterparty credit risk exposure for securities financing transaction assets	153,703
15	Agent transaction exposures	–
16	Balance of assets in securities financing transactions	658,193
17	Off-balance sheet items	5,705,795
18	Less: Adjustments for conversion to credit equivalent amounts	(3,815,914)
19	Adjusted off-balance sheet exposures	1,889,881
20	Net tier 1 capital	2,173,731
21	Adjusted on- and off-balance sheet exposures	28,425,377
22	Leverage ratio	7.65%

(1) When calculating the consolidated leverage ratio, BOCG Investment, BOC Insurance, BOCG Insurance and BOCG Life were excluded from the scope of consolidation in accordance with the *Capital Rules for Commercial Banks (Provisional)*.

II UNAUDITED SUPPLEMENTARY INFORMATION (Continued)

6 Global systemic importance assessment indicators of commercial banks

The Group calculated the global systemically important banks assessment indicators by using the *Notice on Issuing the Guidelines for the Disclosure of the Indicators for Assessing Global Systemic Importance of Commercial Banks* (Yin Jian Fa, [2014] No.1) as a reference basis, and based on the *Instructions for G-SIB assessment exercise* by the Basel Committee on Banking Supervision. The indicators are disclosed as follows:

No.	Indicators ⁽¹⁾	2021
1	Adjusted on-balance and off-balance sheet assets	28,521,651
2	Intra-financial system assets	2,372,647
3	Intra-financial system liabilities	2,983,029
4	Securities and other financing instruments	4,449,968
5	Payments settled via payment systems or correspondent banks	665,682,257
6	Assets under custody	11,777,333
7	Underwritten transactions in debt and equity markets	2,174,703
8	Trading volume of fixed income	3,141,591
9	Trading volume of equities and other securities	1,140,731
10	Notional amount of over-the-counter derivatives	10,888,369
11	Trading and available for sale securities	1,086,588
12	Level 3 assets	93,107
13	Cross-jurisdictional claims	4,415,941
14	Cross-jurisdictional liabilities	3,801,847

- (1) The indicators above are calculated and disclosed in accordance with the *Guidelines for the Disclosure of Global Systemic Importance Assessment Indicators of Commercial Banks*, which are unaudited and prepared on a different basis compared with the financial and regulatory scope of consolidation.

(Amount in millions of Renminbi, unless otherwise stated)

II UNAUDITED SUPPLEMENTARY INFORMATION (Continued)

7 Domestic systemic importance assessment indicators of commercial banks for 2020

The Group calculated the domestic systemic importance assessment indicators pursuant to the *Notice on Filling in Data for Evaluating Systemically Important Banks and by referring to the Evaluation Measures for Systemically Important Banks* (Yin Fa [2020] No. 289). The indicators are disclosed as follows:

No.	Indicators ⁽¹⁾	2020
1	Adjusted on-balance and off-balance sheet assets	25,370,714
2	Intra-financial system assets	2,853,180
3	Intra-financial system liabilities	2,885,960
4	Securities and other financing instruments	1,711,262
5	Payments settled via payment systems or correspondent banks	618,018,673
6	Assets under custody	9,847,839
7	Agency and commission business	3,784,824
8	Number of corporate customers (Unit: ten thousand)	451
9	Number of personal customers (Unit: ten thousand)	32,742
10	Number of domestic operating institutions (Unit : one)	10,489
11	Derivatives	12,453,130
12	Securities measured at fair value	957,698
13	Assets of non-banking affiliates	550,421
14	Balance of non-principal-guaranteed wealth management products issued by the Bank	670,782
15	Balance of wealth management products issued by wealth management subsidiary	718,122
16	Cross-jurisdictional claims and liabilities	7,931,434

(1) The indicators above are unaudited data and prepared on a different basis compared with the financial scope of consolidation and adopted a different assessment methodology from global systemically important banks.