

**DBS BANK LTD.**

*(Incorporated in Singapore. Registration Number: 196800306E)*

**AND ITS SUBSIDIARIES**

**FINANCIAL STATEMENTS**

*For the financial year ended 31 December 2018*

# Financial Statements

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**DBS Bank Ltd. and its subsidiaries**  
**Income Statements**  
**For the Year Ended 31 December 2018**

In \$ millions	Note	The Group		Bank	
		2018	2017	2018	2017
Interest income		<b>13,792</b>	10,833	<b>11,099</b>	8,580
Interest expense		<b>4,777</b>	3,029	<b>4,540</b>	2,751
<b>Net interest income</b>	5	<b>9,015</b>	7,804	<b>6,559</b>	5,829
Net fee and commission income	6	<b>2,788</b>	2,623	<b>1,933</b>	1,900
Net trading income	7	<b>1,174</b>	1,037	<b>917</b>	1,296
Net income from investment securities	8	<b>131</b>	424	<b>127</b>	405
Other income	9	<b>139</b>	379	<b>774</b>	298
<b>Non-interest income</b>		<b>4,232</b>	4,463	<b>3,751</b>	3,899
<b>Total income</b>		<b>13,247</b>	12,267	<b>10,310</b>	9,728
Employee benefits	10	<b>3,188</b>	2,825	<b>2,085</b>	1,846
Other expenses	11	<b>2,611</b>	2,369	<b>1,727</b>	1,603
<b>Total expenses</b>		<b>5,799</b>	5,194	<b>3,812</b>	3,449
<b>Profit before allowances</b>		<b>7,448</b>	7,073	<b>6,498</b>	6,279
Allowances for credit and other losses	12	<b>710</b>	1,894	<b>410</b>	1,730
<b>Profit before tax</b>		<b>6,738</b>	5,179	<b>6,088</b>	4,549
Income tax expense	13	<b>1,014</b>	671	<b>781</b>	477
<b>Net profit</b>		<b>5,724</b>	4,508	<b>5,307</b>	4,072
Attributable to:					
<b>Shareholders</b>		<b>5,656</b>	4,388	<b>5,307</b>	4,072
Non-controlling interests		<b>68</b>	120	<b>-</b>	-
		<b>5,724</b>	4,508	<b>5,307</b>	4,072

*(see notes on pages 7 to 101 which form part of these financial statements)*

**DBS Bank Ltd. and its subsidiaries**  
**Statements of Comprehensive Income**  
**For the Year Ended 31 December 2018**

In \$ millions	The Group		Bank	
	2018	2017	2018	2017
<b>Net profit</b>	<b>5,724</b>	4,508	<b>5,307</b>	4,072
<b>Other comprehensive income:</b>				
<b>Items that may be reclassified subsequently to income statement:</b>				
Translation differences for foreign operations	<b>(94)</b>	(200)	<b>(107)</b>	(79)
Other comprehensive income of associates	<b>3</b>	(4)	<b>-</b>	-
Gains (losses) on debt instruments classified at fair value through other comprehensive income/ available-for-sale financial assets <sup>(a)</sup> and others				
Net valuation taken to equity	<b>(131)</b>	396	<b>(122)</b>	395
Transferred to income statement	<b>(146)</b>	(367)	<b>(149)</b>	(388)
Taxation relating to components of other comprehensive income	<b>20</b>	3	<b>16</b>	5
<b>Item that will not be reclassified to income statement:</b>				
Gains (losses) on equity instruments classified at fair value through other comprehensive income (net of tax) <sup>(a)</sup>	<b>(154)</b>	-	<b>(156)</b>	-
Fair value change from own credit risk on financial liabilities designated at fair value (net of tax)	<b>111</b>	(109)	<b>109</b>	(105)
<b>Other comprehensive income, net of tax</b>	<b>(391)</b>	(281)	<b>(409)</b>	(172)
<b>Total comprehensive income</b>	<b>5,333</b>	4,227	<b>4,898</b>	3,900
Attributable to:				
<b>Shareholders</b>	<b>5,263</b>	4,133	<b>4,898</b>	3,900
Non-controlling interests	<b>70</b>	94	<b>-</b>	-
	<b>5,333</b>	4,227	<b>4,898</b>	3,900

(a) Arising from the adoption of SFRS(I) 9 on 1 January 2018, realised gains or losses on equity instruments classified as "Fair Value through Other Comprehensive Income" are not reclassified to the income statement. Previously, FRS 39 required realised gains or losses on available-for-sale equity instruments to be reclassified to the income statement.

*(see notes on pages 7 to 101 which form part of these financial statements)*

**DBS Bank Ltd. and its subsidiaries**  
**Balance Sheets as at 31 December 2018**

In \$ millions	Note	The Group			Bank		
		31 Dec 2018	31 Dec 2017	1 Jan 2017	31 Dec 2018	1 Jan 2017	
<b>Assets</b>							
Cash and balances with central banks	15	<b>22,184</b>	26,463	26,840	<b>15,581</b>	20,302	20,001
Government securities and treasury bills	16	<b>47,278</b>	39,753	33,401	<b>37,580</b>	33,801	27,281
Due from banks		<b>40,154</b>	35,962	30,000	<b>34,616</b>	27,927	24,971
Derivatives	38	<b>17,042</b>	17,612	25,778	<b>14,912</b>	16,092	23,994
Bank and corporate securities	17	<b>58,197</b>	55,589	45,417	<b>54,007</b>	51,999	41,700
Loans and advances to customers	18	<b>345,003</b>	323,099	301,516	<b>286,658</b>	268,266	249,744
Other assets	20	<b>13,417</b>	12,056	11,027	<b>9,449</b>	7,802	7,632
Associates	23	<b>838</b>	783	890	<b>208</b>	148	192
Subsidiaries	22	-	-	-	<b>26,959</b>	33,150	26,381
Properties and other fixed assets	26	<b>1,450</b>	1,233	1,572	<b>803</b>	711	670
Goodwill and intangibles	27	<b>5,175</b>	5,165	5,117	<b>334</b>	334	281
<b>Total assets</b>		<b>550,738</b>	517,715	481,558	<b>481,107</b>	460,532	422,847
<b>Liabilities</b>							
Due to banks		<b>22,648</b>	17,803	15,915	<b>19,368</b>	14,353	12,694
Deposits and balances from customers	28	<b>393,785</b>	373,634	347,446	<b>293,603</b>	284,798	266,934
Derivatives	38	<b>16,741</b>	18,039	24,525	<b>14,706</b>	16,352	22,944
Other liabilities	29	<b>18,377</b>	16,564	15,853	<b>11,599</b>	11,536	10,339
Other debt securities	30	<b>41,571</b>	36,638	25,345	<b>38,982</b>	35,007	24,393
Due to holding company		<b>6,716</b>	3,927	2,102	<b>5,431</b>	2,936	1,029
Due to subsidiaries	31	-	-	-	<b>52,655</b>	51,697	41,205
Subordinated term debts	32	-	508	2,457	-	508	2,457
<b>Total liabilities</b>		<b>499,838</b>	467,113	433,643	<b>436,344</b>	417,187	381,995
<b>Net assets</b>		<b>50,900</b>	50,602	47,915	<b>44,763</b>	43,345	40,852
<b>Equity</b>							
Share capital	33	<b>24,452</b>	24,452	24,146	<b>24,452</b>	24,452	24,146
Other equity instruments	34	<b>2,813</b>	1,813	1,813	<b>2,813</b>	1,813	1,813
Other reserves	35	<b>(752)</b>	(187)	(119)	<b>(551)</b>	47	114
Revenue reserves	35	<b>23,417</b>	22,040	19,552	<b>18,049</b>	17,033	14,779
<b>Shareholders' funds</b>		<b>49,930</b>	48,118	45,392	<b>44,763</b>	43,345	40,852
Non-controlling interests	36	<b>970</b>	2,484	2,523	-	-	-
<b>Total equity</b>		<b>50,900</b>	50,602	47,915	<b>44,763</b>	43,345	40,852

(see notes on pages 7 to 101 which form part of these financial statements)

**DBS Bank Ltd. and its subsidiaries**  
**Consolidated Statement of Changes in Equity**  
**For the Year Ended 31 December 2018**

The Group	Attributable to shareholders of the Bank							
	In \$ millions	Share capital	Other equity instruments	Other reserves	Revenue reserves	Total Shareholders' funds	Non-controlling interests	Total equity
<b>2018</b>								
Balance at 1 January	24,452	1,813	(187)	22,040	48,118	2,484	50,602	
Impact of adopting SFRS(I) 9 on 1 January	-	-	(86)	95	9	-	9	
Balance at 1 January after adoption of SFRS(I) 9	24,452	1,813	(273)	22,135	48,127	2,484	50,611	
Issue of perpetual capital securities	-	1,000	-	-	1,000	-	1,000	
Dividends paid to holding company	-	-	-	(4,422)	(4,422)	-	(4,422)	
Dividends paid on preference shares	-	-	-	(38)	(38)	-	(38)	
Dividends paid to non-controlling interests	-	-	-	-	-	(77)	(77)	
Change in non-controlling interests	-	-	-	-	-	(7)	(7)	
Redemption of preference shares issued by a subsidiary	-	-	-	-	-	(1,500)	(1,500)	
Total comprehensive income	-	-	(479)	5,742	5,263	70	5,333	
Balance at 31 December	24,452	2,813	(752)	23,417	49,930	970	50,900	
<b>2017</b>								
Balance at 1 January	24,146	1,813	(119)	19,552	45,392	2,523	47,915	
Issue of ordinary shares	306	-	-	-	306	-	306	
Transfers	-	-	78	(78)	-	-	-	
Dividends paid to holding company	-	-	-	(1,675)	(1,675)	-	(1,675)	
Dividends paid on preference shares	-	-	-	(38)	(38)	-	(38)	
Dividends paid to non-controlling interests	-	-	-	-	-	(110)	(110)	
Change in non-controlling interests	-	-	-	-	-	(23)	(23)	
Total comprehensive income	-	-	(146)	4,279	4,133	94	4,227	
Balance at 31 December	24,452	1,813	(187)	22,040	48,118	2,484	50,602	

(see notes on pages 7 to 101 which form part of these financial statements)

**DBS Bank Ltd. and its subsidiaries**  
**Statement of Changes in Equity**  
**For the Year Ended 31 December 2018**

<b>Bank</b>					
<b>In \$ millions</b>	<b>Share capital</b>	<b>Other equity instruments</b>	<b>Other reserves</b>	<b>Revenue reserves</b>	<b>Total equity</b>
<b>2018</b>					
Balance at 1 January	24,452	1,813	47	17,033	43,345
Impact of adopting SFRS(I) 9 on 1 January 2018	-	-	(103)	83	(20)
Balance at 1 January 2018 after adoption of SFRS(I) 9	24,452	1,813	(56)	17,116	43,325
Issue of perpetual capital securities	-	1,000	-	-	1,000
Dividends paid to holding company	-	-	-	(4,422)	(4,422)
Dividends paid on preference shares	-	-	-	(38)	(38)
Total comprehensive income	-	-	(495)	5,393	4,898
Balance at 31 December	24,452	2,813	(551)	18,049	44,763
<b>2017</b>					
Balance at 1 January	24,146	1,813	114	14,779	40,852
Issue of ordinary shares	306	-	-	-	306
Dividends paid to holding company	-	-	-	(1,675)	(1,675)
Dividends paid on preference shares	-	-	-	(38)	(38)
Total comprehensive income	-	-	(67)	3,967	3,900
Balance at 31 December	24,452	1,813	47	17,033	43,345

*(see notes on pages 7 to 101 which form part of these financial statements)*

**DBS Bank Ltd. and its subsidiaries**  
**Consolidated Cash Flow Statement**  
**For the Year Ended 31 December 2018**

**The Group**

<b>In \$ millions</b>	<b>2018</b>	<b>2017</b>
<b>Cash flows from operating activities</b>		
Profit before tax	6,738	5,179
<b>Adjustments for non-cash and other items:</b>		
Allowances for credit and other losses	710	1,894
Depreciation of properties and other fixed assets	331	297
Share of profits or losses of associates	(29)	(11)
Net loss/(gain) on disposal, net of write-off of properties and other fixed assets	(86)	18
Net gain on divestment of subsidiary	-	(350)
Net loss on disposal of interest in associate	-	7
Net income from investment securities	(131)	(424)
Interest expense on subordinated term debts	4	62
Profit before changes in operating assets and liabilities	<u>7,537</u>	<u>6,672</u>
<b>Increase/(Decrease) in:</b>		
Due to banks	5,037	1,993
Deposits and balances from customers	19,598	18,121
Other liabilities	1,545	(2,096)
Other debt securities and borrowings	5,288	11,456
Due to holding company	2,785	1,819
<b>(Increase)/Decrease in:</b>		
Restricted balances with central banks	(276)	(1,118)
Government securities and treasury bills	(7,878)	(6,815)
Due from banks	(4,477)	(6,158)
Bank and corporate securities	(2,817)	(10,395)
Loans and advances to customers	(22,854)	(19,685)
Other assets	(1,200)	3,813
Tax paid	(887)	(708)
<b>Net cash generated from/ (used in) operating activities (1)</b>	<u>1,401</u>	<u>(3,101)</u>
<b>Cash flows from investing activities</b>		
Dividends from associates	25	38
Acquisition of interest in associate	(69)	-
Proceeds from disposal of interest in associates	11	74
Proceeds from disposal of properties and other fixed assets	105	1
Purchase of properties and other fixed assets	(533)	(360)
Proceeds from divestment of subsidiary	-	735
Net proceeds from acquisition of new business	262	4,783
Change in non-controlling interests	(7)	(23)
<b>Net cash (used in)/ from investing activities (2)</b>	<u>(206)</u>	<u>5,248</u>
<b>Cash flows from financing activities</b>		
Interest paid on subordinated term debts	(16)	(76)
Redemption/purchase of subordinated term debts	(508)	(1,897)
Redemption of preference shares issued by a subsidiary	(1,500)	-
Increase in share capital	-	306
Issue of perpetual capital securities	1,000	-
Dividends paid to shareholders of the Bank	(4,460)	(1,713)
Dividends paid to non-controlling interests	(72)	(110)
<b>Net cash used in financing activities (3)</b>	<u>(5,556)</u>	<u>(3,490)</u>
Exchange translation adjustments (4)	(109)	(96)
<b>Net change in cash and cash equivalents (1)+(2)+(3)+(4)</b>	<u>(4,470)</u>	<u>(1,439)</u>
<b>Cash and cash equivalents at 1 January</b>	<u>18,693</u>	<u>20,132</u>
<b>Impact of adopting SFRS(I) 9 on 1 January</b>	<u>(3)</u>	<u>-</u>
<b>Cash and cash equivalents at 31 December (Note 15)</b>	<u>14,220</u>	<u>18,693</u>

(see notes on pages 7 to 101 which form part of these financial statements)



These Notes are integral to the financial statements.

The consolidated financial statements for the year ended 31 December 2018 were authorised for issue by the Directors on 15 February 2019.

## **1 Domicile and Activities**

DBS Bank Ltd. (the Bank) is incorporated and domiciled in the Republic of Singapore and has its registered office at 12 Marina Boulevard, Marina Bay Financial Centre Tower Three, Singapore 018982. It is a wholly-owned subsidiary of DBS Group Holdings Ltd (DBSH).

The Bank is principally engaged in a range of commercial banking and financial services, principally in Asia.

The financial statements relate to the Bank and its subsidiaries (the Group) and the Group's interests in associates.

## **2 Summary of Significant Accounting Policies**

### **2.1 Basis of preparation**

#### **Compliance with Singapore Financial Reporting Standards (International) (SFRS(I))**

Singapore-incorporated companies listed on the Singapore Exchange reporting under Singapore Financial Reporting Standards (FRS) are required to apply Singapore Financial Reporting Standards (International) (SFRS(I)) from 1 January 2018. Accordingly, the financial statements of the Company and the consolidated financial statements of the Group are prepared in accordance with SFRS(I) from 1 January 2017. The convergence had no material impact on the financial statements and on the Group's accounting policies, except for those relating to SFRS(I) 9 Financial Instruments. These are the first financial statements that are prepared in accordance with SFRS(I). SFRS(I) 1 First time adoption of Singapore Financial Reporting Standards (International) was applied as part of the transition.

Comparatives relating to financial instruments were not restated as the Group applied the optional exemptions in SFRS(I) 1 and SFRS(I) 9. Refer to Note 4 for the impact of adopting SFRS(I) 9.

The Group also elected the exemption that allows companies not to retrospectively apply SFRS(I) 1 for business combinations. Consequently, the Group's accounting treatment for past business combinations remain unchanged from FRS.

As permitted by Section 201(10)(b) of the Companies Act (the Act), the Company's income statement has not been included in these financial statements.

The financial statements are presented in Singapore dollars and rounded to the nearest million, unless otherwise stated.

### **Financial statements in the previous financial years**

The financial statements of the Bank and the consolidated financial statements of the Group in the previous financial years are prepared in accordance with FRS and related Interpretations promulgated by the Accounting Standards Council (ASC). In accordance with Section 201(18) of the Act, the requirements of FRS 39 Financial Instruments: Recognition and Measurement in respect of loan loss provisioning are modified by the requirements of Notice to Banks No. 612 "Credit Files, Grading and Provisioning" (MAS Notice 612) issued by the Monetary Authority of Singapore (MAS). Other than the above modification to FRS related to MAS Notice 612, there are no significant differences between International Financial Reporting Standards (IFRS) and FRS in terms of their application to the Group.

### **2.2 Significant estimates and judgement**

The preparation of financial statements requires management to exercise judgement, use estimates and make assumptions in the application of policies and in reporting the amounts in the financial statements. Although these estimates are based on management's best knowledge of current events and actions, actual results may differ from these estimates. Critical accounting estimates and assumptions used that are significant to the financial statements, and areas involving a higher degree of judgement and complexity, are disclosed in Note 3.

### **2.3 New or amended SFRS(I) and Interpretations effective for 2018 year-end**

On 1 January 2018, the Group adopted the following revised SFRS(I) that are issued by the ASC and relevant for the Group.

- SFRS(I) 9: Financial Instruments
- SFRS(I) 15: Revenue from Contract with Customers

#### **2.3.1 SFRS(I) 9: Financial Instruments**

SFRS(I) 9, which replaces the FRS 39, includes revised guidance on the classification and measurement of financial instruments; more timely recognition of expected credit losses (ECL) of financial assets; and introduces revised requirements for general hedge accounting. Except for the provisions relating to the presentation of gains and losses on financial liabilities designated at fair value, which were early adopted by the Group from 1 January 2017, the requirements of SFRS(I) 9 were adopted from 1 January 2018.

The main changes to the accounting policies from the implementation of SFRS(I) 9 are summarised under Note 4, and mainly affect Note 2.9, Note 2.11 and Note 2.19.

Singapore banks are required to maintain the Minimum Regulatory Loss Allowances (MRLA) of at least 1% of

**DBS Bank Ltd. and its subsidiaries**  
**Notes to the financial statements**  
**Year ended 31 December 2018**

the gross carrying amount of selected credit exposures net of collaterals per MAS Notice 612. For periods when Stage 1 and 2 ECL fall below MRLA, the shortfall is appropriated from retained earnings in the shareholders' funds into a non-distributable Regulatory Loss Allowance Reserves (RLAR) account.

Differences in the carrying amounts of financial assets and financial liabilities resulting from the adoption of SFRS(I) 9 are recognised in retained earnings and reserves as at 1 January 2018. The aggregate impact from the transition to SFRS(I) 9 was a net increase of \$9 million in the Group's shareholders' funds and a net decrease of \$20 million in the Bank's shareholders' funds.

The tables in Note 4 summarise the transition impact on adoption of SFRS(I) 9, including information on classification and measurement, and ECL.

**2.3.2 SFRS(I) 15: Revenue from Contract with Customers**

From 1 January 2018, SFRS(I) 15 replaced the existing revenue recognition guidance and established a comprehensive framework for determining whether, how much and when revenue is recognised. Revenue is recognised when a performance obligation is satisfied, which could either be at a point in time or when the obligation is satisfied over time. SFRS(I) 15 applies mainly to "fee and commission income".

The adoption of SFRS(I) 15 does not have a material impact on the Group's consolidated financial statements.

**2.4 New or amended SFRS(I) and Interpretations effective for future periods**

The significant new SFRS(I) that is applicable to the Group for future reporting periods, and which has not been early adopted is SFRS(I) 16 Leases (effective 1 January 2019).

SFRS(I) 16 Leases replaces the existing lease accounting guidance and requires almost all leases to be recognised on the balance sheet. It also changes the way in which lease expenses are presented in the income statement.

The Group will apply SFRS(I) 16 on 1 January 2019, using the modified retrospective approach. The cumulative effect of adopting SFRS(I) 16 will be recognised as an adjustment to the opening balance of retained earnings as at 1 January 2019, with no restatement of comparative information.

On transition, the estimated impact to retained earnings is a net decrease of approximately \$84 million for the Group and \$89 million for the Bank. On the balance sheet, the Group will recognise new right-of-use assets and lease liabilities of \$1.8 billion and \$1.9 billion respectively and the Bank will recognise new right-of-use assets and lease liabilities of \$1.0 billion and \$1.1 billion respectively.

**A) General Accounting Policies**

A summary of the significant group accounting policies is described further below starting with those relating to the entire financial statements followed by those relating to the income statement, the balance sheet and other specific topics. This does not reflect the relative importance of these policies to the Group.

**2.5 Group Accounting**

**Subsidiaries**

Subsidiaries are entities (including structured entities) over which the Group has control. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

Subsidiaries are consolidated from the date control is transferred to the Group to the date control ceases.

The acquisition method is used to account for business combinations. Please refer to Note 2.13 for the Group's accounting policy on goodwill.

All intra-group transactions and balances are eliminated on consolidation.

**Associates**

Associates are entities over which the Group has significant influence but no control, where the Group generally holds a shareholding of between and including 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method.

**2.6 Foreign currency treatment**

**Functional and presentation currency**

Items in the financial statements are measured using the functional currency of each entity in the Group, this being the currency of the primary economic environment in which the entity operates. The Group's financial statements are presented in Singapore dollars, which is the functional currency of the Bank.

**Foreign currency transactions and balances**

Transactions in foreign currencies are measured using the exchange rate at the date of the transaction.

Monetary assets and liabilities denominated in foreign currencies are translated into the functional currency of the entity undertaking the transaction at the exchange rates at the balance sheet date. Foreign exchange differences arising from this translation are recognised in the income statement within "Net trading income".

Non-monetary assets and liabilities measured at cost in a foreign currency are translated using the exchange rates at the date of the transaction.

Non-monetary assets and liabilities measured at fair values in foreign currencies are translated using the exchange rates at the date when the fair values are determined, which is generally the balance sheet date.

Unrealised foreign exchange differences arising from non-monetary financial assets and liabilities classified as fair value through profit or loss (FVPL) are recognised in the income statement within trading income.

Non-monetary financial assets that are classified at fair value through other comprehensive income (FVOCI) relates mainly to FVOCI equities. Refer to Note 2.9 for the accounting treatment of FVOCI equities.

### **Subsidiaries and branches**

The results and financial position of subsidiaries and branches whose functional currency is not Singapore dollars ("foreign operations") are translated into Singapore dollars in the following manner:

- Assets and liabilities are translated at the exchange rates at the balance sheet date;
- Income and expenses in the income statement are translated at exchange rates prevailing at each month-end, approximating the exchange rates at the dates of the transactions; and
- All resulting exchange differences are recognised in other comprehensive income and accumulated under capital reserves in equity. When a foreign operation is partially or fully disposed of, or when share capital is repaid, such exchange differences are recognised in the income statement as part of the gain or loss.

For acquisitions prior to 1 January 2005, the foreign exchange rates at the respective dates of acquisition were used. Please refer to Note 27 for an overview of goodwill recorded. Goodwill and fair value adjustments arising on the acquisition of a foreign operation on or after 1 January 2005 are treated as assets and liabilities of the foreign operation and translated at the closing rate.

### **2.7 Segment reporting**

Operating segments are reported in a manner consistent with the internal reporting provided to management.

In preparing the segment information, amounts for each business segment are shown after the allocation of certain centralised costs, funding income and the application of transfer pricing, where appropriate. Transactions between segments are recorded within the segment as if they are third party transactions and are eliminated on consolidation.

Please refer to Note 49 for further details on business and geographical segment reporting.

## **B) Income Statement**

### **2.8 Income recognition**

#### **Interest income and interest expense**

Interest income and interest expense as presented in Note 5 arise from all interest-bearing financial assets and financial liabilities regardless of their classification and measurement, with the exception of the Group's structured investment deposits which are carried at FVPL. Interest expense on such structured investment deposits is presented together with other fair value changes in trading income.

Interest income and interest expense are recognised on a time-proportionate basis using the effective interest method. The calculation includes significant fees and transaction costs that are integral to the effective interest rate, as well as premiums or discounts.

#### **Fee and commission income**

The Group earns fee and commission income from a diverse range of products and services provided to its customers. Fee and commission income are recognised when the Group has satisfied its performance obligation in providing the promised products and services to the customer, and are recognised based on contractual rates agreed with customers, net of expected waivers based on historical experience, and net of expenses directly related to it. The Group generally satisfies its performance obligation and recognises the fee and commission income on the following basis:

- Transaction-based fee and commission income is recognised on the completion of the transaction. Such fees include underwriting fees, brokerage fees, bancassurance sales commission and variable service fees, and fees related to the completion of corporate finance transactions.
- For a service that is provided over a period of time, fee and commission income is recognised on equal proportion basis over the period during which the related service is provided or credit risk is undertaken. This basis of recognition most appropriately reflects the nature and pattern of provision of these services to the customers over time. Fees for these services can be billed to customers in advance or periodically over time. Such fees include the income from issuance of financial guarantees and bancassurance fixed service fees.

The Group does not provide any significant credit terms to customers for the above products and services.

Directly related expenses typically include brokerage fees paid, card-related expenses and sales commissions, but do not include expenses for services delivered over a period (such as service contracts) and other expenses that are not specifically related to fee and commission income transactions.

### **Dividend income**

Dividend income is recognised when the right to receive payment is established. This is generally the ex-dividend date for listed equity securities, and the date when shareholders approve the dividend for unlisted equity securities. Dividend income arising from financial assets classified as FVPL is recognised in “Net trading income”, while those arising from FVOCI or AFS financial assets is recognised in “Net income from investment securities”.

### **Allowances for credit and other losses**

Please refer to Note 2.11 for the accounting policy on impairment of financial assets.

## **C) Balance Sheet**

### **2.9 Financial assets**

#### **Initial recognition**

Purchases and sales of all financial assets are recognised on the date that the Group enters into the contractual arrangements with counterparties. When the Group acts as a trustee or in a fiduciary capacity for assets it does not directly control or benefit from, the assets and the corresponding income belonging to a customer are excluded from the financial statements.

Financial assets are initially recognised at fair value, which is generally the transaction price.

#### **Classification and subsequent measurement**

The Group applied the classification and measurement requirements under SFRS(I) 9 for the year ended 2018. The 2017 comparative period was not restated and requirements under FRS 39 were applied. Please refer to Note 4 for further details on the key differences between FRS 39 and SFRS(I) 9 and the transition impact of classification and measurement.

#### *Policy applicable from 1 January 2018*

SFRS(I) 9 replaces the classification and measurement model in FRS 39 with a model that categorises debt-like financial assets based on the business model within which the assets are managed, and whether the assets constitute a “basic lending arrangement” where their contractual cash flows represent solely payments of principal and interest (SPPI). Interest is defined as consideration for the time value of money, credit risk, other basic lending risks and may include a profit margin.

The classification of the financial assets and the associated accounting treatment are as follows:

- *Debt instruments* are measured at **amortised cost** when they are in a “hold to collect” (HTC) business model and have contractual cash flows that are SPPI in nature. The objective of a HTC business model is to collect contractual principal and interest cash flows. Sales are incidental to the objective and expected to be either insignificant or infrequent. These assets consist primarily of loans in the “Consumer Banking/Wealth Management” and “Institutional Banking” segments as well as debt securities from the “Others” segment.

- *Debt instruments* are measured at **fair value through other comprehensive income** (FVOCI) when they are in a “hold to collect & sell” (HTC & S) business model and have cash flows that are SPPI in nature. Both the collection of contractual cash flows and sales are integral to achieving the objective of the HTC & S business model. Assets measured at FVOCI comprise mainly of debt securities from “Treasury Markets” and the “Others” segment.

Unrealised gains or losses on FVOCI debt instruments are recorded in other comprehensive income and accumulated in FVOCI reserves. When they are sold, the accumulated fair value adjustments in FVOCI are reclassified to the income statement as “Net income from investment securities”.

- *Debt instruments* are measured at **fair value through profit or loss** (FVPL) when:
  - i) the assets are not SPPI in nature;
  - ii) the assets are not part of a “HTC” or “HTC & S” business model; or
  - iii) the assets are designated at FVPL to eliminate or significantly reduce the measurement or recognition inconsistencies that would otherwise arise from measuring assets or liabilities on different bases

Assets measured at FVPL are mainly recorded in the “Treasury Markets” segment. Realised and unrealised gains or losses on FVPL financial assets, except interest income, are taken to “Net trading income” in the income statement in the period they arise.

- Subsequent changes in fair value of non-trading equity can be taken through profit or loss or comprehensive income, as elected. The Group generally elects its non-trading equity instruments to be classified as FVOCI. Other than dividend income, gains and losses on FVOCI equity instruments are recorded in other comprehensive income and accumulated in FVOCI reserves, and not reclassified to profit or loss upon derecognition.
- Derivatives (including derivatives embedded in financial liabilities but separated for accounting purposes) are also classified as held for trading unless they are designated as hedging instruments. Derivatives are classified as assets when the fair value is positive and as liabilities when the fair value is negative. Changes in the fair value of derivatives other than those designated as hedging instruments in cash flow or net investment hedges are included in “Net trading income”.

Please refer to Note 14 for further details on the types of financial assets classified and measured as above.

#### **Reclassification**

Reclassification of financial assets are prohibited unless the Group changes its business model for managing

financial assets. In practice, this is expected to be infrequent.

#### **Determination of fair value**

The fair value of financial assets is the price that would be received if the asset is sold in an orderly transaction between market participants at the measurement date. Fair value is generally estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Group for similar financial instruments. Where applicable, a valuation reserve or pricing adjustment is applied to arrive at the fair value. The determination of fair value is considered a significant accounting policy for the Group and further details are disclosed in Note 42.

#### **Offsetting**

Financial assets and liabilities are presented net when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle them on a net basis, or realise the asset and settle the liability simultaneously.

#### **Derecognition**

Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or when they have been transferred together with substantially all the risks and rewards of ownership.

The Group enters into certain transactions where it transfers financial assets recognised on its balance sheet but retains either all or a portion of the risks and rewards of the transferred financial assets. In such cases, the transferred financial assets are not derecognised from the balance sheet. Such transactions include repurchase transactions described in Note 2.12. They also include transactions where control over the financial asset is retained, for example, by a simultaneous transaction (such as options) with the same counterparty to which the asset is transferred. These are mainly transacted in the "Treasury Markets" segment. In such cases, the Group continues to recognise the asset to the extent of its continuing involvement which is the extent to which it is exposed to changes in the value of the transferred asset.

Please refer to Note 19 for disclosures on transferred financial assets.

### **2.10 Cash and cash equivalents**

For the purposes of the cash flow statement, cash and cash equivalents comprise cash on hand and non-restricted balances with central banks which are readily convertible into cash.

### **2.11 Impairment**

The Group applied the impairment requirements under SFRS(I) 9 for the year ended 2018. The 2017 comparative period was not restated and requirements under FRS 39 were applied. Please refer to Note 4 for further details on the key differences between FRS 39 and SFRS(I) 9 and the transition impact of impairment.

#### Policy applicable from 1 January 2018

#### **Expected Credit Loss (ECL)**

All financial assets, except for financial assets classified or designated as FVPL and equity securities, are subject to impairment assessment and recognition of ECL. This requirement also extends to off-balance sheet financial instruments such as financial guarantees and undrawn loan commitments.

Under SFRS(I) 9, ECL will be assessed using an approach which classifies financial assets into three stages, each of which is associated with an ECL requirement that is reflective of the assessed credit risk profile. A financial asset is classified under:

- Stage 1, if it was not credit-impaired upon origination, and there has not been a significant increase in its credit risk. Stage 1 ECL will be the credit loss that is expected to result from a default occurring within the next 12 months;
- Stage 2, if it was not credit-impaired upon origination but has since experienced a significant increase in credit risk. Stage 2 ECL will be the life-time expected credit loss arising from a default during the remaining life of the asset;
- Stage 3, if it has been credit-impaired with an objective evidence of default. Stage 3 ECL are also measured as life-time expected credit loss.

The Group's application of the impairment requirements under SFRS(I) 9 is described in greater detail below.

#### **Measurement of ECL**

ECL are unbiased estimates of credit losses determined by evaluating a range of possible outcomes, taking into account past events, current conditions and assessments of future economic conditions. The ECL associated with a financial asset is typically a product of its probability of default (PD), loss given default (LGD) and exposure at default (EAD) discounted using the original effective interest rate to the reporting date.

The Group leverages the models / parameters implemented under the Basel II Internal Ratings-Based (IRB) framework where feasible and available, with appropriate adjustments to meet the SFRS(I) 9 requirements. For portfolios without appropriate Basel models / parameters, other relevant historical information, loss experience or proxies will be utilised, with a view to maximise the use of available information that is reliable and supportable.

#### **Assessment of significant increase in credit risk**

The analysis underpinning the assessment of whether a financial asset has experienced a significant increase in credit risk since origination, is dependent on a range of qualitative and quantitative factors.

For wholesale exposures, a financial asset is deemed to have experienced a significant increase in credit risk when:

- The observed change in its PD, as observed by downgrades in the Group's internal credit risk rating

for this asset between initial recognition and reporting date, is more than pre-specified thresholds; or

- It is placed within internal credit “watchlists” for closer scrutiny of developing credit issues.

For retail exposures, days past due is the main driver, supplemented with a PD-based criterion.

In any event, all retail and wholesale exposures that are more than 30 days past due are considered to have experienced a significant increase in credit risk and are classified as Stage 2.

A Stage 2 exposure can migrate back to Stage 1 if it is assessed that there is evidence of a sustainable improvement in its credit profile.

The Group has not adopted the low credit risk exemption.

#### **Definition of default for credit-impaired financial assets**

Exposures are classified as Stage 3 if these are deemed to be credit-impaired or have demonstrated objective evidence of default as at the reporting date. The definition of default that is applied under SFRS(I) 9 is consistent with that specified in the Basel regulatory capital rules.

The Group assesses whether there is evidence that a financial asset or a group of financial assets is impaired at each balance sheet date. The Group carries out regular and systematic reviews of all credit facilities extended to customers. The criteria that the Group uses to determine whether there is evidence of default include:

- Significant financial difficulty, including breach of covenants and/ or financial conditions;
- A breach of contract, such as a default or delinquency in interest or principal payments;
- Granting of a concession, that the Group would not otherwise consider, for economic or legal reasons relating to the borrower’s financial difficulty;
- High probability of bankruptcy.

A Stage 3 exposure that is restructured can be upgraded to Stage 2 if there are reasonable grounds to conclude that the obligor is able to service future principal and interest payments on the credit facility in accordance with the restructured terms.

Financial assets are written-off, in whole or in part, when the Group has exhausted all practical recovery efforts and has concluded that there is no reasonable expectation of future recoveries.

#### **ECL Modelling - Point-in-Time and Forward-Looking Adjustments**

Portfolio-specific adjustments are made to the Group’s existing credit rating models and processes to meet the requirements of SFRS(I) 9.

For the wholesale portfolios, credit risk cycle indices (CCIs) have been developed for significant industries and geographies using expected default frequencies. Expected default frequency is a market-based default

risk measure driven by equity prices, market volatility and leverage. CCIs are then used as inputs to convert the through-the-cycle PDs derived from Basel models / parameters into the point-in-time equivalents, and to incorporate forward-looking factors. LGD are determined using historical loss data, which are adjusted for both the latest and forecasted recovery experience. Basel EAD are reduced by contractual repayments to derive the forecasted EAD for Stage 2 exposures. No adjustments are made to Basel EAD for Stage 1 exposures.

For retail portfolios, historical loss experience is adjusted to determine the forecast loss rates, taking into account relevant macroeconomic variables, such as property-price indices and unemployment rates.

#### **Expected Life**

When measuring the Stage 2 ECL, cash flows over the expected remaining life of the financial asset are considered. In most instances, this is the same as the remaining contractual life which represents the maximum contractual period over which the Group is exposed to the credit risk of the borrower.

However, the expected remaining life of some retail revolving products (e.g. credit cards) may exceed the contractual maturity. For these products, a behavioural expected remaining life is estimated.

#### **Expert credit judgement and post model adjustments**

The measurement of ECL requires the application of expert credit judgement. These include:

- Assignment of credit risk ratings and determination of whether exposures should be placed on credit watchlists;
- Assessment of whether a significant increase in credit risk has occurred;
- Determination of the forecast loss rates;
- Adjustments to modelled output;
- Application of thematic overlays based on risk themes that are discussed at the Board Risk Management Committee. As at 31 December 2018, an overlay was made to address the geo-political tensions between US and China.

#### **Governance framework**

The measurement of ECL is subject to a robust governance framework as described below:

- The Group ECL Review Committee (Review Committee) is the overarching committee for ECL related matters and comprises representatives from senior management across the Group. Significant changes to ECL models and methodologies and the application of thematic overlays are subject to the oversight and approval of the Review Committee.
- The Review Committee is supported by the Group ECL Operating Committee (Operating Committee) which comprises cross functional representatives and subject matter experts. The Operating Committee is responsible for the implementation of ECL across the Group. The Operating Committee also recommends changes to ECL models, methodologies and thematic overlays to the Review Committee; provides oversight over system design,

infrastructure and development; and establishes principles and significant policies pertaining to ECL.

- Location ECL committees are established for key locations to support location-specific ECL implementation issues and governance.
- ECL models are subject to an independent assurance process, which is managed by the Risk Management Group (RMG), and are also reviewed regularly. This assurance process covers the review of the underlying ECL methodology, including its logic and conceptual soundness, together with the integrity of model inputs and outputs.

## 2.12 Repurchase agreements

**Repurchase agreements (Repos)** are treated as collateralised borrowings. The amount borrowed is reflected as a financial liability either as “Due to banks” or “Deposits and balances from customers”. The securities sold under repos are treated as pledged assets and remain on the balance sheet at amortised cost or fair value depending on their classification.

**Reverse repurchase agreements (Reverse repos)** are treated as collateralised lending. The amount lent is reflected as a financial asset as “Cash and balances with central banks”, “Due from banks” or “Loans and advances to customers”.

Amounts paid and received in excess of the amounts borrowed and lent on the repos and reverse repos are amortised as interest expense and interest income respectively using the effective interest method.

## 2.13 Goodwill

Goodwill arising from business combinations generally represents the excess of the acquisition cost over the fair value of identifiable assets acquired and liabilities and contingent liabilities assumed on the acquisition date. Goodwill is stated at cost less impairment losses and is tested at least annually for impairment.

At the acquisition date, any goodwill acquired is allocated to each of the cash-generating units (CGU) or group of CGUs expected to benefit from the combination’s synergies.

An impairment loss is recognised when the carrying amount of a CGU, or group of CGUs, including the goodwill, exceeds the applicable recoverable amount. The recoverable amount of a CGU or CGU group is the higher of the CGU’s or CGU group’s fair value less cost to sell and its value-in-use. An impairment loss on goodwill is recognised in the income statement and cannot be reversed in subsequent periods.

## 2.14 Properties and other fixed assets

Properties (including investment properties) and other fixed assets are stated at cost less accumulated depreciation and impairment losses. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets.

Generally, the useful lives are as follows:

Buildings	50 years or over the remaining lease period, whichever is shorter.
Leasehold land	100 years or over the remaining lease period, whichever is shorter. Leasehold land where the unexpired lease period is more than 100 years is not depreciated.
Computer software	3 - 5 years
Office equipment, furniture and fittings	5 - 10 years

Please refer to Note 26 for the details of properties and other fixed assets and their movements during the year.

## 2.15 Financial liabilities

### Initial recognition, classification and subsequent measurement

Financial liabilities are initially recognised at fair value. The Group generally classifies and measures its financial liabilities in accordance with the purpose for which the financial liabilities are incurred and managed. Accordingly:

- Financial liabilities are classified as **financial liabilities at fair value through profit or loss** if they are incurred for the purpose of repurchasing in the near term (“**held for trading**”), and this may include debt securities issued and short positions in securities for the purpose of ongoing market-making or trading. Financial liabilities at fair value through profit or loss can also be designated by management on initial recognition (“**designated at fair value through profit or loss**”) if doing so eliminates or significantly reduces measurement or recognition inconsistencies that would otherwise arise, or if the financial liability contains an embedded derivative that would otherwise need to be separately recorded. Financial liabilities in this classification are usually within the “Treasury Markets” segment.

Realised or unrealised gains or losses on financial liabilities held for trading and financial liabilities designated under the fair value option, except interest expense, are taken to “Net trading income” in the income statement in the period they arise. Interest expense on structured investment deposits at fair value through profit or loss is also presented together with other fair value changes in “Net trading income”.

With effect from 1 January 2017, the Group has early adopted the requirements under SFRS(I) 9 that allows for changes to the fair value of financial liabilities designated under the fair value option that are attributable to a reporting entity's own credit risk to be taken to revenue reserves through other comprehensive income. These amounts are not transferred to the income statement even when realised.

- Derivative liabilities are treated consistently with derivative assets. Please refer to Note 2.9 for the accounting policy on derivatives.
- Other financial liabilities are carried at **amortised cost** using the effective interest method. These comprise predominantly the Group's "Deposits and balances from customers", "Due to banks" and "Other debt securities".

Where the classification and measurement of financial liabilities do not reflect the management of the financial liabilities, the Group may apply hedge accounting where permissible and relevant to better reflect the management of the financial liabilities. Please refer to Note 2.19 for details on hedging and hedge accounting.

Please refer to Note 14 for further details on the types of financial liabilities classified and measured as above.

#### **Determination of fair value**

The fair value of financial liabilities is the price that would be paid to transfer the liability in an orderly transaction between market participants at the measurement date.

Please refer to Note 42 for further fair value disclosures.

#### **Derecognition**

A financial liability is derecognised from the balance sheet when the obligation specified in the contract is discharged, cancelled or expired.

### **2.16 Loan commitments, letters of credit and financial guarantees**

#### **Loan commitments**

Loan commitments are not recognised on the balance sheet and are disclosed in Note 37. Upon a loan draw-down, the amount of the loan is accounted for under "loans and receivables" on the Group's balance sheet.

#### **Letters of credit**

Letters of credit are recorded off-balance sheet as contingent liabilities upon issuance, and the corresponding payables to the beneficiaries and receivables from the applicants are recognised on the balance sheet upon acceptance of the underlying documents.

#### **Financial guarantees**

Financial guarantees are initially recognised in the financial statements at fair value on the date the guarantees are given.

Financial guarantees are subsequently measured at the higher of:

- the amount of the ECL (note 2.11); and
- the unamortised portion of the fees that were received on initial recognition.

Please refer to Note 2.8 for the principles for recognising the fees.

Off-balance sheet credit exposures are managed for credit risk in the same manner as financial assets.

Please refer to Note 2.11 on the Group's accounting policies on allowances for credit allowances.

### **2.17 Provisions and other liabilities**

Provisions for other liabilities of uncertain timing and amounts are recognised when:

- the Group has a present legal or constructive obligation as a result of past events;
- it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and
- a reliable estimate of the amount of the obligation can be made.

The amount recognised as a provision is the best estimate of the expenditure required to settle the present obligation at the balance sheet date.

### **2.18 Share capital and other instruments classified as equity**

Ordinary shares, preference shares and other instruments which do not result in the Group having a contractual obligation to deliver cash or another financial asset, or to exchange financial assets or financial liabilities with the holder under conditions that are potentially unfavourable to the Group, are classified as equity. Distributions arising from such instruments are recognised in equity as there is no contractual obligation to pay distributions on these instruments. Incremental external costs directly attributable to the issuance of such instruments are accounted for as a deduction from equity.

Dividends are recorded during the financial year in which they are approved by the Board of Directors and declared payable.

## **D) Other Specific Topics**

### **2.19 Hedging and hedge accounting**

As part of the overall risk management of the Group, derivatives and other instruments are used to manage exposures to interest rate and foreign currency risks, including exposures arising from forecast transactions.



Where hedge accounting is not applied, the derivatives are treated in the same way as derivatives held for trading purposes, i.e. realised and unrealised gains and losses are recognised in "Net trading income".

The Group applies hedge accounting for economic hedge relationships that meet the hedge accounting criteria. To qualify for hedge accounting, at the inception of each hedging relationship, the Group designates and documents the relationship between the hedging instrument and the hedged item; the risk management objective for undertaking the hedge transaction; and the methods used to assess the effectiveness of the hedge. At inception and on an on-going basis, the Group also assesses and measures the effectiveness of the hedging relationship between the hedging instrument and the hedged item.

Where all relevant criteria are met, hedge accounting is applied to remove the accounting mismatch between hedging instrument and the hedged item. The Group designates certain derivatives as hedging instruments in respect of foreign currency risk and interest rate risk in fair value hedges, cash flow hedges, or hedges of net investments in foreign operations as described below.

#### • Fair value hedges

For a qualifying fair value hedge, the changes in the fair value of the hedging instruments are recorded in the income statement, together with any changes in the fair value of the hedged item attributable to the hedged risk. If the hedge no longer meets the criteria for hedge accounting, the adjustment to the carrying amount of a hedged item is amortised, using the effective interest method, to the income statement over its remaining maturity.

However, where the hedged item is an equity instrument classified as FVOCI, changes in the fair value of the hedging instrument and the hedged item are both recorded in other comprehensive income and accumulated in FVOCI reserves. The amounts recorded in FVOCI reserves are not subsequently reclassified to the income statement.

#### • Cash flow hedges

The effective portion of changes in the fair value of a derivative designated and qualifying as a cash flow hedge is recognised in other comprehensive income and accumulated under the cash flow hedge reserve in equity. This amount is reclassified to the income statement in the periods when the hedged forecast cash flows affect the income statement. The ineffective portion of the gain or loss is recognised immediately in the income statement under "Net trading income".

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in the cash flow hedge reserve remains until the forecast transaction is recognised in the income statement.

When a forecast transaction is no longer expected to occur, the cumulative gain or loss in the cash flow hedge reserve is reclassified from equity to the income statement.

#### • Net investment hedges

Hedges of net investments in the Group's foreign operations are accounted for in a manner similar to cash flow hedges. On disposal of the foreign operations, the cumulative gain or loss in the capital reserves is reclassified to the income statement as part of the gain or loss on disposal.

Prior to 1 January 2018, valuation components of currency basis spreads were not excluded from the designated hedging instrument.

From 1 January 2018, when designating the hedging instrument, the Group may elect to exclude the valuation components of currency basis spreads and forward points from the hedge relationship on a hedge-by-hedge basis.

The forward points and currency basis spreads which are excluded and recorded in other comprehensive income are:

- reclassified to the income statement when the forecast transaction occurs; or
- amortised to the income statement over the hedging tenor for time-period hedges. The amounts recorded in other comprehensive income are not subsequently reclassified to the income statement for hedges of FVOCI equities.

The Group has elected to apply the SFRS(I) 9 hedge accounting rules in full.

Please refer to Note 39 for further details relating to hedge accounting, including fair value, cash flow and net investment hedges.

## 2.20 Employee benefits

Employee benefits, which include base pay, cash bonuses, share-based compensation, contribution to defined contribution plans such as the Central Provident Fund and other staff-related allowances, are recognised in the income statement when incurred. For defined contribution plans, contributions are made to publicly or privately administered funds on a mandatory, contractual or voluntary basis. Once the contributions have been paid, the Group has no further payment obligations.

Employee entitlement to annual leave is recognised when they accrue to employees. A provision is made for the estimated liability for annual unutilised leave as a result of services rendered by employees up to the balance sheet date.

## **2.21 Share-based compensation**

Employee benefits also include share-based compensation, namely the DBSH Share Ownership Scheme (the Scheme), the DBSH Share Plan and the DBSH Employee Share Plan (the Plans). The details of the Scheme and Plans are described in Note 40.

Equity instruments granted and ultimately vested under the Plans are recognised in the income statement based on the fair value of the equity instrument at the date of grant. The expense is amortised over the vesting period of each award. Monthly contributions to the Scheme are expensed off when incurred.

## **2.22 Current and deferred taxes**

Current income tax for current and prior periods is recognised as the amount expected to be paid or recovered from the tax authorities, using the tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date. The Group considers uncertain tax positions generally at the level of the total tax liability to each tax authority for each period. The liability is determined based on the total amount of current tax expected to be paid, taking into account all tax uncertainties, using either an expected value approach or a single best estimate of the most likely outcome.

Tax assets and liabilities of the same type (current or deferred) are offset when a legal right of offset exists and settlement in this manner is intended. This applies generally when they arise from the same tax reporting group and relate to the same tax authority.

Deferred income tax is provided on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted by the balance sheet date.

The amount of deferred tax assets recognised takes into account the likelihood the amount that can be used to offset payable taxes on future profits.

Deferred tax related to fair value re-measurement of FVOCI investments, which are recognised outside profit or loss, is also recognised outside profit or loss, i.e. in other comprehensive income and accumulated in the FVOCI reserves.

### **3 Critical Accounting Estimates**

The Group's accounting policies and use of estimates are integral to the reported amounts in the financial statements. Certain accounting estimates require management's judgement in determining the appropriate methodology for valuation of assets and liabilities. Procedures are in place to ensure that methodologies are reviewed and revised as appropriate. The Group believes its estimates for determining the valuation of its assets and liabilities are appropriate.

The following is a brief description of the Group's critical accounting estimates that involve management's valuation judgement.

#### **3.1 Impairment of financial assets**

It is the Group's policy to recognise, through charges against profit, allowances in respect of estimated and inherent credit losses in its portfolio as described in Note 2.11.

The Group applied the impairment requirements under SFRS(I) 9 for financial year ended 2018, resulting in changes in assumptions used in the computation of impairment allowances using the ECL model. The numbers in the comparative period have not been restated.

ECLs are probability-weighted amounts determined by evaluating a range of possible outcomes and taking into account past events, current conditions and assessments of future economic conditions, which will necessarily involve the use of judgement.

In estimating specific allowances under FRS 39, the Group assesses the gap between borrowers' obligations to the Group and their repayment ability. The assessment takes into account various factors, including the economic or business outlook, the future profitability of the borrowers and the liquidation value of collateral. Such assessment requires considerable judgement.

The general allowances under FRS 39 are determined after taking into account historical data and management's assessment of the current economic and credit environment, country and portfolio risks, as well as industry practices.

Please refer to Note 44 for a further description of the Group's credit risk management framework, policies and procedures.

#### **3.2 Fair value of financial instruments**

The majority of the Group's financial instruments reported at fair value are based on quoted and observable market prices or on internally developed models that are based on independently sourced market parameters.

The fair value of financial instruments without an observable market price in an active market may be determined using valuation models. The choice of model requires significant judgement for complex products especially those in the "Treasury Markets" segment.

Policies and procedures have been established to facilitate the exercise of judgement in determining the risk characteristics of various financial instruments, discount rates, estimates of future cash flows and other factors used in the valuation process.

Please refer to Note 42 for further details on fair valuation and fair value hierarchy of the Group's financial instruments measured at fair value.

#### **3.3 Goodwill impairment**

The Group performs an impairment review to ensure that the carrying amount of a CGU to which goodwill is allocated does not exceed the recoverable amount of the CGU. Note 27 provides details of goodwill at the reporting date.

The recoverable amount represents the present value of the estimated future cash flows expected to arise from continuing operations. Therefore, in arriving at the recoverable amount, management exercises judgement in estimating the future cash flows, growth rate and discount rate.

#### **3.4 Income taxes**

The Group has exposure to income taxes in numerous jurisdictions. Significant judgement is involved in determining the Group's provision for income taxes. The Group recognises liabilities for expected tax issues based on reasonable estimates of whether additional taxes will be due. Where uncertainty exists around the Group's tax position including resolution of any related appeals or litigation processes, appropriate provisions are provided based on technical merits of the positions with the same tax authority. Note 21 provides details of the Group's deferred tax assets/liabilities. In general, determination of the value of assets/liabilities relating to carry forward tax losses requires judgement.

4 Transition to SFRS(I) 9

4.1 Key differences between FRS 39 and SFRS(I) 9

The key differences between FRS 39 and SFRS(I) 9 are described below. Refer to the Group's 2017 financial statements for details on the accounting policies for FRS 39.

**Classification and Measurement of financial assets**

	FRS 39 (Prior to 1 Jan 2018)	SFRS(I) 9 (From 1 Jan 2018 onwards)
<b>Classification and measurement</b>	<p>Classification is based on the investment intention of individual instruments and the nature of the instruments. Embedded derivatives are separated from their host instrument or measured in entirety at FVPL.</p> <p>The Group applied the following measurement categories in FRS 39:</p> <p>Amortised cost using the effective interest method</p> <ol style="list-style-type: none"> <li>1) Loans and receivables which have fixed or determinable payments and are not quoted in an active market.</li> <li>2) Non-derivative financial assets that the Group intends to hold to maturity are classified as held to maturity.</li> </ol> <p>FVPL:</p> <ol style="list-style-type: none"> <li>1) Non-derivative financial assets that are: <ul style="list-style-type: none"> <li>▪ held for the purpose of short-term selling and market-making;</li> <li>▪ designated under the fair value option if doing so eliminates or significantly reduces measurement or recognition inconsistencies that would otherwise arise or;</li> <li>▪ if the financial asset contains an embedded derivative that would otherwise need to be separately recorded.</li> </ul> </li> </ol> <p>Realised or unrealised gains or losses on such financial assets, except interest income, are taken to "Net trading income" in the income statement in the period they arise.</p> <ol style="list-style-type: none"> <li>2) Derivatives (including derivatives embedded in other contracts but separate for accounting purposes) are classified as assets or liabilities when the fair value is positive or negative respectively. Changes in the fair value of derivatives other than those designated as hedging instruments in cash flow or net investment hedges are included in "Net trading income".</li> </ol> <p>Available-for-sale (AFS):</p> <ol style="list-style-type: none"> <li>1) Non-derivative financial assets held for the purpose of investment or satisfying regulatory liquidity requirements are classified as AFS and initially and subsequently measured at fair value. Unrealised gains or losses arising from changes in fair value are recognised in other comprehensive income and accumulated in the AFS revaluation reserves. When sold or impaired, the accumulated fair value adjustments in the AFS revaluation reserves are reclassified to the income statement.</li> </ol> <p>Unquoted equity investments classified as AFS for which fair values cannot be reliably determined are carried at cost, less impairment (if any)</p>	<p>Debt instruments are measured at amortised cost, FVOCI or FVPL.</p> <p>Classification of debt instruments is based on the business model in which the debt instruments are held and the contractual terms of the assets ('solely payments of principal and interest' (SPPI) test). Embedded derivatives are not separated i.e. the asset is accounted for in its entirety.</p> <p>Upon derecognition of FVOCI debt instruments cumulative gains or losses in other comprehensive income is recognised in the income statement.</p> <p>Equity instruments are measured at FVOCI or FVPL as elected by the Group.</p> <p>Upon derecognition of FVOCI equity instruments, cumulative gains or losses in other comprehensive income is not recognised in the income statement</p>

**Impairment**

Prior to SFRS(I) 9, the Group adopted FRS 39 which was modified by the requirements of MAS Notice 612. The key similarities and differences between the two standards are summarised below:

	<b>FRS 39</b> (Prior to 1 Jan 2018)	<b>SFRS(I) 9</b> (From 1 Jan 2018 onwards)
<b>Instruments in scope</b>	<p>Debt instruments that are measured at amortised cost and FVOCI (AFS) are subject to impairment. Off balance sheet credit exposures are also in scope for impairment.</p> <p>AFS equity instruments are subject to impairment.</p>	<p>The scope of financial instruments that are subject to impairment is generally similar between FRS 39 and SFRS(I) 9.</p> <p>However, FVOCI equity instruments are not subject to impairment.</p>
<b>Impaired/ Stage 3</b>	<p>The criteria used to determine objective evidence of impairment is largely similar to SFRS(I) 9.</p> <p>Specific allowances for credit losses are recognised based on the circumstances existing at balance sheet date and is not adjusted for forward looking factors.</p> <p>When there is evidence of an impairment of an AFS financial asset, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognised in the income statement – is reclassified from the available-for-sale revaluation reserve within equity to the income statement as “Allowances for credit and other losses”.</p> <p>For equity investments, impairment losses are not reversed until they are disposed of. For impaired debt instruments that subsequently recover in value, the impairment losses are reversed through the income statement if there has been an identifiable event that led to the recovery.</p>	<p>Stage 3 refers to financial assets and other credit exposures that have been impaired.</p> <p>Lifetime ECL is recognised on such exposures. Lifetime ECL incorporates forward looking factors.</p>
<b>Stage 2</b>	<p>There is no concept of Stage 1 or Stage 2 prior to SFRS(I) 9. As required by MAS Notice 612, the Group maintains general allowances of at least 1% of credit exposures arising from both financial assets and other off-balance sheet credit exposures. (against which specific allowances have not been made), adjusted for collateral held.</p>	<p>Stage 2 refers to financial assets and other off-balance sheet credit exposures that have experienced a significant increase in credit risk since its inception.</p> <p>Lifetime ECL is recognised on such exposures.</p>
<b>Stage 1</b>	<p>General allowances are recorded in the income statement.</p>	<p>Stage 1 refers to financial assets and other off-balance sheet credit exposures which have not experienced a significant increase in credit risk since inception.</p> <p>Stage 1 exposures are measured at an amount equal to 12 months of ECL.</p>

**Hedge accounting**

The main concepts of hedge accounting remain unchanged between FRS 39 and SFRS(I) 9. The main change which is relevant to the Group relates to currency basis spreads which is described in Note 2.19.

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**4.2 Transition impact of adopting SFRS(I) 9 on 1 January 2018**

The table below reflects the impact of adopting SFRS(I) 9 on the Group's opening balance sheet as at 1 January 2018.

**The Group**  
**In \$ millions**

	31 Dec 2017 FRS 39	Transitional impact of classification and measurement	Transitional impact of ECL	1 Jan 2018 SFRS(I) 9
<b>Assets</b>				
Cash and balances with central banks	26,463	-	(3)	26,460
Government securities and treasury bills	39,753	(43)	#	39,710
Due from banks	35,962	-	(20)	35,942
Derivatives	17,612	-	-	17,612
Bank and corporate securities	55,589	(6)	31	55,614
Loans and advances to customers	323,099	-	331	323,430
Other assets	12,056	-	(113) <sup>(a)</sup>	11,943
Associates	783	-	(5) <sup>(b)</sup>	778
Properties and other fixed assets	1,233	-	-	1,233
Goodwill and intangibles	5,165	-	-	5,165
<b>Total assets</b>	<b>517,715</b>	<b>(49)</b>	<b>221</b>	<b>517,887</b>
<b>Liabilities</b>				
Due to banks	17,803	-	-	17,803
Deposits and balances from customers	373,634	-	-	373,634
Derivatives	18,039	-	-	18,039
Other liabilities	16,564	-	163 <sup>(a)</sup>	16,727
Other debt securities	36,638	-	-	36,638
Due to holding company	3,927	-	-	3,927
Subordinated term debts	508	-	-	508
<b>Total liabilities</b>	<b>467,113</b>	<b>-</b>	<b>163</b>	<b>467,276</b>
<b>Total equity</b>	<b>50,602</b>	<b>(49)</b>	<b>58</b>	<b>50,611</b>

# Amount under \$500,000

(a) Includes current and deferred tax impact

(b) Impact of adoption of SFRS(I) 9 by the Group's associates

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The table below reflects the impact of adopting SFRS(I) 9 on the Bank's opening balance sheet as at 1 January 2018.

<b>Bank</b>				
<b>In \$ millions</b>	<b>31 Dec 2017</b>	<b>Transitional impact</b>	<b>Transitional</b>	<b>1 Jan 2018</b>
	<b>FRS 39</b>	<b>of classification</b>	<b>impact of ECL</b>	<b>SFRS(I) 9</b>
		<b>and measurement</b>		
<b>Assets</b>				
Cash and balances with central banks	20,302	-	(2)	20,300
Government securities and treasury bills	33,801	(43)	#	33,758
Due from banks	27,927	-	(15)	27,912
Derivatives	16,092	-	-	16,092
Bank and corporate securities	51,999	(26)	31	52,004
Loans and advances to customers	268,266	-	272	268,538
Other assets	7,802	-	(96) <sup>(a)</sup>	7,706
Associates	148	-	-	148
Subsidiaries	33,150	-	-	33,150
Properties and other fixed assets	711	-	-	711
Goodwill and intangibles	334	-	-	334
<b>Total assets</b>	<b>460,532</b>	<b>(69)</b>	<b>190</b>	<b>460,653</b>
<b>Liabilities</b>				
Due to banks	14,353	-	-	14,353
Deposits and balances from customers	284,798	-	-	284,798
Derivatives	16,352	-	-	16,352
Other liabilities	11,536	-	141 <sup>(a)</sup>	11,677
Other debt securities	35,007	-	-	35,007
Due to holding company	2,936	-	-	2,936
Due to subsidiaries	51,697	-	-	51,697
Subordinated term debts	508	-	-	508
<b>Total liabilities</b>	<b>417,187</b>	<b>-</b>	<b>141</b>	<b>417,328</b>
<b>Total equity</b>	<b>43,345</b>	<b>(69)</b>	<b>49</b>	<b>43,325</b>

# Amount under \$500,000

(a) Includes current and deferred tax impact

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**4.3 Additional information on impact from classification and measurement**

The table below does not reflect reclassifications when the measurement basis between FRS 39 and SFRS(I) 9 remains similar. This will include reclassifications from available-for-sale (AFS) to fair value through other comprehensive income (FVOCI) as they are measured at fair value with changes in fair value being recorded in other comprehensive income.

The Group In \$ millions	Reclassification		31 Dec 2017	Remeasurement	1 Jan 2018
	From FRS 39	To SFRS(I) 9			
<b>Government securities and treasury bills</b>					
Debt instruments that are part of a hold to collect business model <sup>(a)</sup>	AFS	Amortised Cost	9,175	(43)	9,132
<b>Bank and corporate securities</b>			<b>7,761</b>	<b>(6)</b>	<b>7,755</b>
Debt instruments that are part of a hold to collect business model <sup>(a)</sup>	AFS	Amortised Cost	7,333	(36)	7,297
Unquoted equities previously measured at cost remeasured to fair value	AFS (Cost)	FVOCI	178	30	208
Debt instruments that are not SPPI in nature	AFS	FVPL	163	-	163
Non-trading equities which the Group has elected to adopt FVOCI measurement	FVPL	FVOCI	87	-	87

(a) As at 31 December 2018, the fair value of the assets which were reclassified from AFS to amortised cost that continue to be recognised on the Group's balance sheet is \$11,780 million

Bank In \$ millions	Reclassification		31 Dec 2017	Remeasurement	1 Jan 2018
	From FRS 39	To SFRS(I) 9			
<b>Government securities and treasury bills</b>					
Debt instruments that are part of a hold to collect business model <sup>(a)</sup>	AFS	Amortised Cost	9,175	(43)	9,132
<b>Bank and corporate securities</b>			<b>6,668</b>	<b>(26)</b>	<b>6,642</b>
Debt instruments that are part of a hold to collect business model <sup>(a)</sup>	AFS	Amortised Cost	6,255	(41)	6,214
Unquoted equities previously measured at cost remeasured to fair value	AFS (Cost)	FVOCI	163	15	178
Debt instruments that are not SPPI in nature	AFS	FVPL	163	-	163
Non-trading equities which the Group has elected to adopt FVOCI measurement	FVPL	FVOCI	87	-	87

(a) As at 31 December 2018, the fair value of the assets which were reclassified from AFS to amortised cost that continue to be recognised on the Bank's balance sheet is \$10,941 million

**4.4 Additional information on impact of ECL**

Prior to 2018, the Group complies with the provisions of MAS Notice 612 where banks maintain, in addition to specific allowances, a prudent level of general allowances of at least 1% of uncollateralised exposures. In response to SFRS(I) 9, MAS issued a revised MAS 612 which requires the Group to maintain a MRLA of 1% of the gross carrying amount of selected credit exposures net of collaterals. Where ECL falls below MRLA, additional loss allowance shall be maintained in a non-distributable RLAR through an appropriation of the Group's retained earnings.



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The opening general allowance balance as at 1 January 2018 was \$2,620 million, which is also the amount required under MAS' MRLA as defined in the previous paragraph. This exceeds the Group's estimated stage 1 and 2 ECL of approximately \$2,525 million. Consequently, approximately \$95 million will be transferred from the general allowance balance to RLAR as required by MAS Notice 612, thus increasing shareholders' funds. Taking into account the deferred tax impact and the share of impact for associates, the net increase in shareholders' funds for the Group was \$58 million (Bank: \$49 million).

The following table is a comparison of impairment allowances determined in accordance with FRS 39, modified by requirements under MAS Notice 612, to the corresponding ECL determined in accordance with SFRS(I) 9 as at 1 January 2018.

**The Group**  
**In \$ millions**

	31 Dec 2017 FRS 39		1 Jan 2018 SFRS(I) 9			Impact of ECL
	GP	SP	Stage 1	Stage 2	Stage 3	
<b>Assets</b>						
Cash and balances with central banks	-	-	3	-	-	(3)
Government securities and treasury bills	-	-	#	-	-	#
Due from banks	-	-	20	-	-	(20)
Bank and corporate securities	83	14	12	40	14	31
Loans and advances to customers	2,394	2,276	624	1,439	2,276	331
Other assets	1	90	14	-	90	(13)
<b>Liabilities</b>						
Other liabilities <sup>(a)</sup>	142	139	214	128	139	(200)
<b>Total<sup>(b)</sup></b>	<b>2,620</b>	<b>2,519</b>	<b>887</b>	<b>1,607</b>	<b>2,519</b>	<b>126</b>
Share of impact from associates						(5)
Tax impact						(63)
						<b>58</b>

# Amount under \$500,000

(a) ECL on guarantees and other off-balance sheet exposures are recorded in "Other liabilities"

(b) ECL amounts for Stage 1 and 2 exclude ECL relating to debt securities at FVOCI, which are reflected under FVOCI reserves (\$31 million)

**Bank**  
**In \$ millions**

	31 Dec 2017 FRS 39		1 Jan 2018 SFRS(I) 9			Impact of ECL
	GP	SP	Stage 1	Stage 2	Stage 3	
<b>Assets</b>						
Cash and balances with central banks	-	-	2	-	-	(2)
Government securities and treasury bills	-	-	#	-	-	#
Due from banks	-	-	15	-	-	(15)
Bank and corporate securities	81	14	12	38	14	31
Loans and advances to customers	1,988	1,819	462	1,254	1,819	272
Other assets	-	29	11	-	29	(11)
<b>Liabilities</b>						
Other liabilities <sup>(a)</sup>	136	139	190	124	139	(178)
<b>Total<sup>(b)</sup></b>	<b>2,205</b>	<b>2,001</b>	<b>692</b>	<b>1,416</b>	<b>2,001</b>	<b>97</b>
Tax impact						(48)
						<b>49</b>

# Amount under \$500,000

(a) ECL on guarantees and other off-balance sheet exposures are recorded in "Other liabilities"

(b) ECL amounts for Stage 1 and 2 exclude ECL relating to debt securities at FVOCI, which are reflected under FVOCI reserves (\$30 million)

**5 Net Interest Income**

In \$ millions	The Group		Bank	
	2018	2017	2018	2017
Cash and balances with central banks and Due from banks	819	621	700	509
Customer non-trade loans	8,959	7,096	7,176	5,587
Trade assets	1,556	1,138	1,066	739
Securities and others	2,458	1,978	2,157	1,745
<b>Total interest income</b>	<b>13,792</b>	<b>10,833</b>	<b>11,099</b>	<b>8,580</b>
Deposits and balances from customers	3,488	2,180	2,583	1,580
Other borrowings	1,289	849	1,957	1,171
<b>Total interest expense</b>	<b>4,777</b>	<b>3,029</b>	<b>4,540</b>	<b>2,751</b>
<b>Net interest income</b>	<b>9,015</b>	<b>7,804</b>	<b>6,559</b>	<b>5,829</b>
Comprising:				
Interest income from financial assets at FVPL	852	625	642	478
Interest income from financial assets at FVOCI (2017: AFS)	745	865	604	728
Interest income from financial assets at amortised cost	12,195	9,343	9,853	7,374
Interest expense from financial liabilities at FVPL	(320)	(174)	(263)	(161)
Interest expense from financial liabilities not at FVPL	(4,457)	(2,855)	(4,277)	(2,590)
<b>Total</b>	<b>9,015</b>	<b>7,804</b>	<b>6,559</b>	<b>5,829</b>

**6 Net Fee and Commission Income**

In \$ millions	The Group		Bank	
	2018	2017	2018	2017
Brokerage	154	154	71	71
Investment banking	136	217	121	201
Transaction services <sup>(b)</sup>	647	618	445	437
Loan-related	390	409	304	324
Cards <sup>(c)</sup>	714	543	490	416
Wealth management <sup>(d)</sup>	1,141	966	743	647
Others	73	88	73	70
<b>Fee and commission income</b>	<b>3,255</b>	<b>2,995</b>	<b>2,247</b>	<b>2,166</b>
Less: fee and commission expense	467	372	314	266
<b>Net fee and commission income<sup>(a)</sup></b>	<b>2,788</b>	<b>2,623</b>	<b>1,933</b>	<b>1,900</b>

(a) Includes net fee and commission income of \$78 million (2017: \$68 million) and \$64 million (2017: \$54 million) for the Group and Bank respectively, which was derived from the provision of trust and other fiduciary services during the year. Net fee and commission income earned from financial assets or liabilities not at fair value through profit or loss was \$873 million (2017: \$790 million) and \$645 million (2017: \$626 million) during the year for the Group and Bank respectively

(b) Includes trade & remittances, guarantees and deposit-related fees

(c) Card fees are net of interchange fees paid

(d) Includes \$111 million (2017: \$72 million) and \$84 million (2017: \$51 million) for the Group and Bank respectively that would have been previously classified as other non-interest income. The amount represents fees earned from wealth management treasury products sold on open investment architecture platforms. The change in classification was applied prospectively from 1 April 2017

## 7 Net Trading Income

In \$ millions	The Group		Bank	
	2018	2017	2018	2017
Net trading income <sup>(a)</sup>				
- Foreign exchange	836	556	623	927
- Interest rates, credit, equities and others <sup>(b)</sup>	(15)	801	(63)	672
Net (loss)/ gain from financial assets designated at fair value	(12)	21	(12)	21
Net gain/ (loss) from financial liabilities designated at fair value	365	(341)	369	(324)
<b>Total</b>	<b>1,174</b>	<b>1,037</b>	<b>917</b>	<b>1,296</b>

(a) 2018 includes income from assets that are mandatorily classified as FVPL as they are not SPPI in nature

(b) Includes dividend income of \$117 million (2017: \$32 million) for both the Group and Bank

## 8 Net Income from Investment Securities

In \$ millions	The Group		Bank	
	2018	2017	2018	2017
Debt securities				
- FVOCI (2017: AFS)	25	109	26	95
- Amortised cost (2017: Loans and receivables)	6	2	6	2
Equity securities at FVOCI (2017: AFS) <sup>(a)</sup>	100	313	95	308
<b>Total<sup>(b)</sup></b>	<b>131</b>	<b>424</b>	<b>127</b>	<b>405</b>
Of which: net gains transferred from FVOCI reserves (2017: AFS revaluation reserves)	5	316	6	319

(a) Includes dividend income of \$100 million (2017: \$63 million) for the Group; and \$95 million (2017: \$58 million) for the Bank

(b) Includes fair value impact of hedges for investment securities

## 9 Other Income

In \$ millions	The Group		Bank	
	2018	2017	2018	2017
Rental income	4	10	8	8
Net gain on disposal of properties and other fixed assets	91	1	4	#
Others <sup>(a)/(b)/(c)</sup>	44	368	762	290
<b>Total</b>	<b>139</b>	<b>379</b>	<b>774</b>	<b>298</b>

# Amount under \$500,000

(a) Includes share of profits or losses of associates for the Group and net gains and losses from sale of loans carried at amortised cost for both the Group and Bank

(b) Includes dividend income from subsidiaries and associates of \$740 million (2017: \$27 million) for the Bank

(c) 2017 includes net gain from sale of DBS China Square Limited of \$350 million for the Group and \$241 million for the Bank (refer to Note 22)

## 10 Employee Benefits

In \$ millions	The Group		Bank	
	2018	2017	2018	2017
Salaries and bonuses	2,588	2,276	1,684	1,483
Contributions to defined contribution plans	167	153	116	106
Share-based expenses <sup>(a)</sup>	112	110	90	88
Others	321	286	195	169
<b>Total</b>	<b>3,188</b>	<b>2,825</b>	<b>2,085</b>	<b>1,846</b>

(a) Equity settled share-based expenses

## 11 Other Expenses

In \$ millions	The Group		Bank	
	2018	2017	2018	2017
Computerisation expenses <sup>(a)</sup>	939	903	723	696
Occupancy expenses <sup>(b)</sup>	443	411	240	233
Revenue-related expenses	352	288	205	175
Others <sup>(c)</sup>	877	767	559	499
<b>Total</b>	<b>2,611</b>	<b>2,369</b>	<b>1,727</b>	<b>1,603</b>

(a) Includes hire and maintenance costs of computer hardware and software

(b) Includes rental expenses of office and branch premises of \$283 million (2017: \$253 million) for the Group, and \$141 million (2017: \$141 million) for the Bank and amounts incurred in the maintenance and service of buildings

(c) Includes office administration expenses (e.g. printing, stationery, telecommunications, etc.), legal and professional fees

In \$ millions	The Group		Bank	
	2018	2017	2018	2017
Depreciation expenses	331	297	222	205
Hire and maintenance costs of fixed assets, including building-related expenses	560	495	341	315
Expenses on investment properties	#	1	#	#
Audit fees <sup>(a)</sup> payable to external auditors <sup>(b)</sup> :				
- Auditors of the Bank	5	5	4	4
- Associated firms of auditors of the Bank	4	5	1	1
Non-audit related fees payable to external auditors <sup>(b)</sup> :				
- Auditors of the Bank	1	1	1	1
- Associated firms of auditors of the Bank	1	1	#	#

# Amount under \$500,000

(a) Includes audit related assurance fees

(b) PricewaterhouseCoopers network firms

## 12 Allowances for Credit and Other Losses

In \$ millions	The Group		Bank	
	2018	2017	2018	2017
<b>Specific allowances<sup>(a)(b)</sup></b>				
Loans and advances to customers (Note 18)	657	2,238	379	2,034
Investment securities				
- FVOCI (2017: AFS)	(1)	4	(1)	4
- Amortised cost (2017: Loans and receivables)	#	15	#	15
Properties and other fixed assets	#	(3)	#	-
Off-balance sheet credit exposures	44	123	45	120
Others	11	22	(5)	45
<b>General allowances<sup>(c)</sup></b>	<b>(1)</b>	<b>(505)</b>	<b>(8)</b>	<b>(488)</b>
<b>Total</b>	<b>710</b>	<b>1,894</b>	<b>410</b>	<b>1,730</b>

# Amount under \$500,000

(a) 2018 includes Stage 3 ECL

(b) Includes allowances for non-credit exposures of a charge of \$2 million (2017: charge of \$15 million) for the Group and a write-back of \$7 million (2017: charge of \$37 million) for the Bank

(c) Refers to Stage 1 and Stage 2 ECL for 2018

The following table explains the changes in ECL under SFRS(I) 9 in 2018 which are attributable to the following factors:

- Transfers between stages.
- Net portfolio changes, which are determined on an obligor basis i.e. originations with new obligors net of derecognitions from former obligors.
- Remeasurements, which include the impact of changes in model inputs or assumptions, partial repayments, additional drawdowns on existing facilities and changes in ECL following a transfer between stages.
- Model refinements, which reflect the impact of significant changes that have been made to credit models used to estimate ECL. In particular, the retail ECL models were updated to incorporate the 12 months average loss rate that had been adjusted for forecasted macroeconomic variables.

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In \$ millions	The Group			Total
	General allowances (Non-impaired)		Specific allowances (Impaired)	
	Stage 1	Stage 2	Stage 3	
<b>2018</b>				
<b>Balance at 1 January</b>	<b>902</b>	<b>1,623</b>	<b>2,519</b>	<b>5,044</b>
Changes in allowances recognised in opening balance that were transferred to (from)	<b>121</b>	<b>(207)</b>	<b>86</b>	<b>-</b>
-Stage 1	<b>(20)</b>	<b>20</b>	<b>-</b>	<b>-</b>
-Stage 2	<b>144</b>	<b>(144)</b>	<b>-</b>	<b>-</b>
-Stage 3	<b>(3)</b>	<b>(83)</b>	<b>86</b>	<b>-</b>
Net portfolio changes	<b>105</b>	<b>(78)</b>	<b>-</b>	<b>27</b>
Remeasurements	<b>68</b>	<b>219</b>	<b>623</b>	<b>910</b>
Model refinements	<b>(119)</b>	<b>(110)</b>	<b>-</b>	<b>(229)</b>
Net write-offs <sup>(a)</sup>	<b>-</b>	<b>-</b>	<b>(659)</b>	<b>(659)</b>
Acquisition of new business	<b>51</b>	<b>-</b>	<b>14</b>	<b>65</b>
Exchange and other movements	<b>(4)</b>	<b>(2)</b>	<b>29</b>	<b>23</b>
<b>Balance at 31 December</b>	<b>1,124</b>	<b>1,445</b>	<b>2,612</b>	<b>5,181</b>
<b>Charge/(Write-back) in the income statement</b>	<b>175</b>	<b>(176)</b>	<b>709</b>	<b>708</b>

(a) Write-offs net of recoveries

In \$ millions	Bank			Total
	General allowances (Non-impaired)		Specific allowances (Impaired)	
	Stage 1	Stage 2	Stage 3	
<b>2018</b>				
<b>Balance at 1 January</b>	<b>703</b>	<b>1,435</b>	<b>2,001</b>	<b>4,139</b>
Changes in allowances recognised in opening balance that were transferred to (from)	<b>101</b>	<b>(168)</b>	<b>67</b>	<b>-</b>
-Stage 1	<b>(15)</b>	<b>15</b>	<b>-</b>	<b>-</b>
-Stage 2	<b>118</b>	<b>(118)</b>	<b>-</b>	<b>-</b>
-Stage 3	<b>(2)</b>	<b>(65)</b>	<b>67</b>	<b>-</b>
Net portfolio changes	<b>94</b>	<b>(68)</b>	<b>-</b>	<b>26</b>
Remeasurements	<b>93</b>	<b>141</b>	<b>358</b>	<b>592</b>
Model refinements	<b>(89)</b>	<b>(112)</b>	<b>-</b>	<b>(201)</b>
Net write-offs <sup>(a)</sup>	<b>-</b>	<b>-</b>	<b>(323)</b>	<b>(323)</b>
Exchange and other movements	<b>(2)</b>	<b>2</b>	<b>27</b>	<b>27</b>
<b>Balance at 31 December</b>	<b>900</b>	<b>1,230</b>	<b>2,130</b>	<b>4,260</b>
<b>Charge/(Write-back) in the income statement</b>	<b>199</b>	<b>(207)</b>	<b>425</b>	<b>417</b>

(a) Write-offs net of recoveries

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The following table provides additional information on the financial instruments that are subject to ECL as at 31 December 2018. FVPL assets and FVOCI equity instruments are not subject to ECL and therefore not reflected in the table.

In \$ millions	The Group							
	Gross carrying value <sup>(c)</sup>				ECL balances			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
<b>2018</b>								
<b>Assets</b>								
Loans and advances to customer	323,982	18,839	5,251	348,072	903	1,299	2,440	4,642
Investment securities								
- Government securities and treasury bills <sup>(a)</sup>	36,661	35	-	36,696	3	-	-	3
- Bank and corporate debt securities <sup>(a)</sup>	41,739	313	46	42,098	26	6	18	50
Others <sup>(b)</sup>	61,634	76	60	61,770	27	1	51	79
<b>Liabilities</b>								
ECL on guarantees and other off-balance sheet exposures	-	-	-	-	165	139	103	407
<b>Total ECL</b>					<b>1,124</b>	<b>1,445</b>	<b>2,612</b>	<b>5,181</b>

(a) Includes loss allowances of \$15 million for debt securities that are classified at FVOCI

(b) Comprise of amounts in "Cash and balances with central banks", "Due from Banks" and "Other assets" that are subject to ECL

(c) Balances exclude off-balance sheet exposures

In \$ millions	Bank							
	Gross carrying value				ECL balances			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
<b>2018</b>								
<b>Assets</b>								
Loans and advances to customer	270,204	14,542	4,130	288,876	702	1,095	1,994	3,791
Investment securities								
- Government securities and treasury bills <sup>(a)</sup>	29,918	35	-	29,953	2	-	-	2
- Bank and corporate debt securities <sup>(a)</sup>	39,485	313	46	39,844	25	6	18	49
Others <sup>(b)</sup>	63,008	54	20	63,082	22	-	15	37
<b>Liabilities</b>								
ECL on guarantees and other off-balance sheet exposures	-	-	-	-	149	129	103	381
<b>Total ECL</b>					<b>900</b>	<b>1,230</b>	<b>2,130</b>	<b>4,260</b>

(a) Includes loss allowances of \$13 million for debt securities that are classified at FVOCI

(b) Comprise of amounts in "Cash and balances with central banks", "Due from Banks", "Due from subsidiaries" and "Other assets" that are subject to ECL

(c) Balances exclude off-balance sheet exposures

**13 Income Tax Expense**

In \$ millions	The Group		Bank	
	2018	2017	2018	2017
Current tax expense				
- Current year	1,062	819	784	602
- Prior years' provision	(57)	(79)	(56)	(79)
Deferred tax expense				
- Prior years' provision	2	4	-	-
- Origination of temporary differences	7	(73)	53	(46)
<b>Total</b>	<b>1,014</b>	<b>671</b>	<b>781</b>	<b>477</b>

The deferred tax charge/(credit) in the income statement comprises the following temporary differences:

In \$ millions	The Group		Bank	
	2018	2017	2018	2017
Accelerated tax depreciation	17	5	4	1
Allowances for loan losses	(18)	30	42	5
Other temporary differences	10	(104)	7	(52)
Deferred tax expense/ (credit) to income statement	9	(69)	53	(46)

The tax on the Group's and Bank's profit before tax differs from the theoretical amount that would arise using the Singapore basic tax rate as follows:

In \$ millions	The Group		Bank	
	2018	2017	2018	2017
Profit before tax	6,738	5,179	6,088	4,549
Prima facie tax calculated at a tax rate of 17% (2017: 17%)	1,145	880	1,035	773
Effect of different tax rates in other countries	17	6	#	(2)
Effect of change in country's tax rate <sup>(a)</sup>	34	-	34	-
Net income not subject to tax	(50)	(114)	(135)	(89)
Net income taxed at concessionary rate	(165)	(99)	(165)	(99)
Expenses not deductible for tax	27	13	10	8
Others	6	(15)	2	(114)
<b>Income tax expense charged to income statement</b>	<b>1,014</b>	<b>671</b>	<b>781</b>	<b>477</b>

# Amount under \$500,000

(a) Relates to the remeasurement of deferred taxes due to a change in the applicable tax rate arising from the conversion of India branch to a wholly-owned subsidiary

Deferred income tax relating to FVOCI (2017: AFS) financial assets and others of \$28 million was credited (2017: \$3 million credited) and own credit risk of \$3 million was debited (2017: \$3 million credited) directly to equity for the Group. Deferred income tax relating to FVOCI (2017: AFS) financial assets and others of \$27 million was credited (2017: \$5 million credited) and own credit risk of \$3 million was debited (2017: \$3 million credited) directly to equity for the Bank.

Please refer to Note 21 for further information on deferred tax assets/liabilities.

**14 Classification of Financial Instruments**

	The Group						
	Mandatorily at FVPL <sup>(c)</sup>	FVPL designated	Amortised cost	FVOCI- Debt	FVOCI- Equity	Hedging derivatives	Total
<b>31 Dec 2018</b>							
<b>Assets</b>							
Cash and balances with central banks	381	-	18,642	3,161	-	-	22,184
Government securities and treasury bills	10,583	-	17,394	19,301	-	-	47,278
Due from banks	10,872	-	27,736	1,546	-	-	40,154
Derivatives	16,795	-	-	-	-	247	17,042
Bank and corporate securities	14,471	-	33,452	8,609	1,665	-	58,197
Loans and advances to customers	1,167	406	343,430	-	-	-	345,003
Other financial assets	-	-	13,065	-	-	-	13,065
<b>Total financial assets</b>	<b>54,269</b>	<b>406</b>	<b>453,719</b>	<b>32,617</b>	<b>1,665</b>	<b>247</b>	<b>542,923</b>
Other asset items outside the scope of SFRS(I) 9 <sup>(a)</sup>							7,815
<b>Total assets</b>							<b>550,738</b>
<b>Liabilities</b>							
Due to banks	1,999	-	20,649	-	-	-	22,648
Deposits and balances from customers	-	1,716	392,069	-	-	-	393,785
Derivatives	16,193	-	-	-	-	548	16,741
Other financial liabilities	1,733	-	15,414	-	-	-	17,147
Other debt securities	217	6,915	34,439	-	-	-	41,571
Due to holding company	-	-	6,716	-	-	-	6,716
<b>Total financial liabilities</b>	<b>20,142</b>	<b>8,631</b>	<b>469,287</b>	<b>-</b>	<b>-</b>	<b>548</b>	<b>498,608</b>
Other liability items outside the scope of SFRS(I) 9 <sup>(b)</sup>							1,230
<b>Total liabilities</b>							<b>499,838</b>



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In \$ millions	The Group						Total
	Held for trading	Designated at fair value through profit or loss	Loans and receivables /amortised cost	Available-for-sale	Held to maturity	Hedging derivatives	
<b>31 Dec 2017</b>							
<b>Assets</b>							
Cash and balances with central banks	937	-	22,266	3,260	-	-	26,463
Government securities and treasury bills	9,972	-	-	27,826	1,955	-	39,753
Due from banks	10,747	-	23,576	1,639	-	-	35,962
Derivatives	17,407	-	-	-	-	205	17,612
Bank and corporate securities	13,225	87	26,370	15,907	-	-	55,589
Loans and advances to customers	477	428	322,194	-	-	-	323,099
Other financial assets	-	-	11,657	-	-	-	11,657
<b>Total financial assets</b>	<b>52,765</b>	<b>515</b>	<b>406,063</b>	<b>48,632</b>	<b>1,955</b>	<b>205</b>	<b>510,135</b>
Other asset items outside the scope of FRS 39 <sup>(a)</sup>							7,580
<b>Total assets</b>							<b>517,715</b>
<b>Liabilities</b>							
Due to banks	523	-	17,280	-	-	-	17,803
Deposits and balances from customers	-	1,160	372,474	-	-	-	373,634
Derivatives	17,788	-	-	-	-	251	18,039
Other financial liabilities	1,961	-	13,611	-	-	-	15,572
Other debt securities	187	5,785	30,666	-	-	-	36,638
Due to holding company	-	-	3,927	-	-	-	3,927
Subordinated term debts	-	-	508	-	-	-	508
<b>Total financial liabilities</b>	<b>20,459</b>	<b>6,945</b>	<b>438,466</b>	<b>-</b>	<b>-</b>	<b>251</b>	<b>466,121</b>
Other liability items outside the scope of FRS 39 <sup>(b)</sup>							992
<b>Total liabilities</b>							<b>467,113</b>
<b>1 Jan 2017</b>							
<b>Assets</b>							
Cash and balances with central banks	2,822	-	20,783	3,235	-	-	26,840
Government securities and treasury bills	8,998	-	-	22,441	1,962	-	33,401
Due from banks	5,852	-	22,966	1,182	-	-	30,000
Derivatives	25,357	-	-	-	-	421	25,778
Bank and corporate securities	7,750	57	21,145	16,465	-	-	45,417
Loans and advances to customers	-	459	301,057	-	-	-	301,516
Other financial assets	-	-	10,694	-	-	-	10,694
<b>Total financial assets</b>	<b>50,779</b>	<b>516</b>	<b>376,645</b>	<b>43,323</b>	<b>1,962</b>	<b>421</b>	<b>473,646</b>
Other asset items outside the scope of FRS 39 <sup>(a)</sup>							7,912
<b>Total assets</b>							<b>481,558</b>
<b>Liabilities</b>							
Due to banks	481	-	15,434	-	-	-	15,915
Deposits and balances from customers	-	1,387	346,059	-	-	-	347,446
Derivatives	24,279	-	-	-	-	246	24,525
Other financial liabilities	2,303	-	12,410	-	-	-	14,713
Other debt securities	-	5,049	20,296	-	-	-	25,345
Due to holding company	-	-	2,102	-	-	-	2,102
Subordinated term debts	-	-	2,457	-	-	-	2,457
<b>Total financial liabilities</b>	<b>27,063</b>	<b>6,436</b>	<b>398,758</b>	<b>-</b>	<b>-</b>	<b>246</b>	<b>432,503</b>
Other liability items outside the scope of FRS 39 <sup>(b)</sup>							1,140
<b>Total liabilities</b>							<b>433,643</b>

(a) Includes associates, goodwill and intangibles, properties and other fixed assets, and deferred tax assets

(b) Includes current tax liabilities, deferred tax liabilities and provision for loss in respect of off-balance sheet credit exposures

(c) Assets and liabilities are mandatorily classified as FVPL when they are held for trading. In addition, debt-type financial assets that are not SPPI in nature are mandatorily classified as FVPL

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In \$ millions	Bank						Total
	Mandatorily at FVPL <sup>(c)</sup>	FVPL designated	Amortised cost	FVOCI-Debt	FVOCI-Equity	Hedging derivatives	
<b>31 Dec 2018</b>							
<b>Assets</b>							
Cash and balances with central banks	381	-	13,840	1,360	-	-	15,581
Government securities and treasury bills	7,628	-	16,338	13,614	-	-	37,580
Due from banks	9,840	-	23,230	1,546	-	-	34,616
Derivatives	14,673	-	-	-	-	239	14,912
Bank and corporate securities	12,565	-	32,305	7,502	1,635	-	54,007
Loans and advances to customers	1,167	406	285,085	-	-	-	286,658
Other financial assets	-	-	9,287	-	-	-	9,287
Due from subsidiaries	-	-	16,022	-	-	-	16,022
Total financial assets	46,254	406	396,107	24,022	1,635	239	468,663
Other asset items outside the scope of SFRS(I) 9 <sup>(a)</sup>							12,444
Total assets							481,107
<b>Liabilities</b>							
Due to banks	1,278	-	18,090	-	-	-	19,368
Deposits and balances from customers	-	789	292,814	-	-	-	293,603
Derivatives	14,176	-	-	-	-	530	14,706
Other financial liabilities	1,247	-	9,298	-	-	-	10,545
Other debt securities	217	6,826	31,939	-	-	-	38,982
Due to holding company	-	-	5,431	-	-	-	5,431
Due to subsidiaries	-	-	52,655	-	-	-	52,655
Total financial liabilities	16,918	7,615	410,227	-	-	530	435,290
Other liability items outside the scope of SFRS(I) 9 <sup>(b)</sup>							1,054
Total liabilities							436,344

In \$ millions	Bank						Total
	Held for trading	Designated at fair value through profit or loss	Loans and receivables/ amortised cost	Available-for-sale	Held to maturity	Hedging derivatives	
<b>31 Dec 2017</b>							
<b>Assets</b>							
Cash and balances with central banks	937	-	18,081	1,284	-	-	20,302
Government securities and treasury bills	7,819	-	-	24,027	1,955	-	33,801
Due from banks	7,787	-	18,501	1,639	-	-	27,927
Derivatives	15,904	-	-	-	-	188	16,092
Bank and corporate securities	11,954	87	26,143	13,815	-	-	51,999
Loans and advances to customers	477	428	267,361	-	-	-	268,266
Other financial assets	-	-	7,554	-	-	-	7,554
Due from subsidiaries	-	-	21,877	-	-	-	21,877
Total financial assets	44,878	515	359,517	40,765	1,955	188	447,818
Other asset items outside the scope of FRS 39 <sup>(a)</sup>							12,714
Total assets							460,532
<b>Liabilities</b>							
Due to banks	141	-	14,212	-	-	-	14,353
Deposits and balances from customers	-	778	284,020	-	-	-	284,798
Derivatives	16,121	-	-	-	-	231	16,352
Other financial liabilities	1,209	-	9,510	-	-	-	10,719
Other debt securities	187	5,699	29,121	-	-	-	35,007
Due to holding company	-	-	2,936	-	-	-	2,936
Due to subsidiaries	-	-	51,697	-	-	-	51,697
Subordinated term debts	-	-	508	-	-	-	508
Total financial liabilities	17,658	6,477	392,004	-	-	231	416,370
Other liability items outside the scope of FRS 39 <sup>(b)</sup>							817
Total liabilities							417,187

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In \$ millions	Bank						Total
	Held for trading	Designated at fair value through profit or loss	Loans and receivables/ amortised cost	Available-for-sale	Held to maturity	Hedging derivatives	
<b>1 Jan 2017</b>							
<b>Assets</b>							
Cash and balances with central banks	2,822	-	15,999	1,180	-	-	20,001
Government securities and treasury bills	6,852	-	-	18,467	1,962	-	27,281
Due from banks	5,200	-	18,589	1,182	-	-	24,971
Derivatives	23,662	-	-	-	-	332	23,994
Bank and corporate securities	6,730	57	20,914	13,999	-	-	41,700
Loans and advances to customers	-	459	249,285	-	-	-	249,744
Other financial assets	-	-	7,428	-	-	-	7,428
Due from subsidiaries	-	-	14,910	-	-	-	14,910
<b>Total financial assets</b>	<b>45,266</b>	<b>516</b>	<b>327,125</b>	<b>34,828</b>	<b>1,962</b>	<b>332</b>	<b>410,029</b>
Other asset items outside the scope of FRS 39 <sup>(a)</sup>							12,818
<b>Total assets</b>							<b>422,847</b>
<b>Liabilities</b>							
Due to banks	71	-	12,623	-	-	-	12,694
Deposits and balances from customers	-	744	266,190	-	-	-	266,934
Derivatives	22,800	-	-	-	-	144	22,944
Other financial liabilities	832	-	8,405	-	-	-	9,237
Other debt securities	-	4,965	19,428	-	-	-	24,393
Due to holding company	-	-	1,029	-	-	-	1,029
Due to subsidiaries	-	-	41,205	-	-	-	41,205
Subordinated term debts	-	-	2,457	-	-	-	2,457
<b>Total financial liabilities</b>	<b>23,703</b>	<b>5,709</b>	<b>351,337</b>	<b>-</b>	<b>-</b>	<b>144</b>	<b>380,893</b>
Other liability items outside the scope of FRS 39 <sup>(b)</sup>							1,102
<b>Total liabilities</b>							<b>381,995</b>

(a) Includes investments in subsidiaries, associates, properties and other fixed assets, and deferred tax assets

(b) Includes current tax liabilities, deferred tax liabilities and provision for loss in respect of balance sheet credit exposures

(c) Assets and liabilities are mandatorily classified as FVPL when they are held for trading. In addition, debt-type financial assets that are not SPPI in nature are mandatorily classified as FVPL

Financial assets and liabilities are presented net when there is a legally enforceable right to offset the recognised amounts, and there is intention to settle them on a net basis or to realise the asset and settle the liability simultaneously.

**Financial assets and liabilities offset on the balance sheet**

As at 31 December 2018, "Loans and advances to customers" of \$36 million (2017: \$38 million; 1 January 2017: nil) were set off against "Deposits and balances from customers" of \$36 million (2017: \$38 million; 1 January 2017: nil) for both the Group and Bank because contractually both the Group and Bank has a legally enforceable right to set off these amounts, and intends to settle the loans and the deposits simultaneously at maturity or termination dates.

**Financial assets and liabilities subject to netting agreements but not offset on the balance sheet**

The Group enters into master netting arrangements with counterparties where it is appropriate and feasible to do so to mitigate counterparty risk. The credit risk associated with favourable contracts is reduced by a master netting arrangement to the extent that if an event of default occurs, all amounts with the counterparty are settled on a net basis. Master netting arrangements do not result in an offset of financial assets and liabilities on the balance sheet, as the legal right to offset the transactions is conditional upon default.

These agreements include derivative master agreements (including the International Swaps and Derivatives Association (ISDA) Master Agreement), global master repurchase agreements and global securities lending agreements. The collaterals received and pledged under these agreements are generally conducted under terms that are in accordance with normal market practice. In these agreements, the counterparty is typically allowed to sell or re-pledge those non-cash collateral (i.e. securities) lent or transferred, but has an obligation to return the securities at maturity. If the securities decrease in value, the Group may, in certain circumstances, be required to place additional cash collateral, and typically the counterparty has recourse only to the securities.

In addition, the Group receives cash and other collateral such as marketable securities to reduce its credit exposure. The Group also engages in a variety of counterparty credit mitigation arrangements in addition to netting and collateral arrangements.

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The disclosures set out in the tables below pertain to financial assets and liabilities that are not offset in the Group's and Bank's balance sheets but are subject to master netting arrangement or similar agreement that covers similar financial instruments. The disclosures enable the understanding of both the gross and net amounts, as well as provide additional information on how such credit risk is mitigated.

In \$ millions	The Group					
	Carrying amounts on balance sheet	Not subject to enforceable netting agreement	Subject to enforceable netting agreement			
			Net amounts	Financial instruments	Financial collateral received/pledged	Net amounts
<b>31 Dec 2018</b>						
<b>Financial Assets</b>						
Derivatives	17,042	5,827 <sup>(a)</sup>	11,215	8,837 <sup>(a)</sup>	811	1,567
Reverse repurchase agreements	11,629 <sup>(b)</sup>	6	11,623	-	11,619	4
Securities borrowings	73 <sup>(c)</sup>	-	73	70	-	3
<b>Total</b>	<b>28,744</b>	<b>5,833</b>	<b>22,911</b>	<b>8,907</b>	<b>12,430</b>	<b>1,574</b>
<b>Financial Liabilities</b>						
Derivatives	16,741	5,472 <sup>(a)</sup>	11,269	8,837 <sup>(a)</sup>	2,155	277
Repurchase agreements	7,333 <sup>(d)</sup>	648	6,685	-	6,685	-
Securities lendings	1 <sup>(e)</sup>	-	1	#	-	1
Short sale of securities	1,733 <sup>(f)</sup>	1,246	487	487	-	-
<b>Total</b>	<b>25,808</b>	<b>7,366</b>	<b>18,442</b>	<b>9,324</b>	<b>8,840</b>	<b>278</b>
<b>31 Dec 2017</b>						
<b>Financial Assets</b>						
Derivatives	17,612	6,190 <sup>(a)</sup>	11,422	9,724 <sup>(a)</sup>	935	763
Reverse repurchase agreements	5,312 <sup>(b)</sup>	300	5,012	-	4,980	32
Securities borrowings	56 <sup>(c)</sup>	-	56	54	-	2
<b>Total</b>	<b>22,980</b>	<b>6,490</b>	<b>16,490</b>	<b>9,778</b>	<b>5,915</b>	<b>797</b>
<b>Financial Liabilities</b>						
Derivatives	18,039	5,696 <sup>(a)</sup>	12,343	9,724 <sup>(a)</sup>	1,544	1,075
Repurchase agreements	718 <sup>(d)</sup>	577	141	-	141	-
Securities lendings	56 <sup>(e)</sup>	-	56	49	-	7
Short sale of securities	1,961 <sup>(f)</sup>	1,209	752	752	-	-
<b>Total</b>	<b>20,774</b>	<b>7,482</b>	<b>13,292</b>	<b>10,525</b>	<b>1,685</b>	<b>1,082</b>

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In \$ millions	The Group					
	Carrying amounts on balance sheet	Not subject to enforceable netting agreement	Subject to enforceable netting agreement			
			Net amounts	Financial instruments	Related amounts not offset on balance sheet	Net amounts
				Financial collateral received/pledged		
<b>1 Jan 2017</b>						
<b>Financial Assets</b>						
Derivatives	25,778	8,720 <sup>(a)</sup>	17,058	14,788 <sup>(a)</sup>	1,575	695
Reverse repurchase agreements	6,845 <sup>(b)</sup>	228	6,617	-	6,617	-
Securities borrowings	74 <sup>(c)</sup>	-	74	57	-	17
<b>Total</b>	<b>32,697</b>	<b>8,948</b>	<b>23,749</b>	<b>14,845</b>	<b>8,192</b>	<b>712</b>
<b>Financial Liabilities</b>						
Derivatives	24,525	6,863 <sup>(a)</sup>	17,662	14,788 <sup>(a)</sup>	1,750	1,124
Repurchase agreements	1,423 <sup>(d)</sup>	1,343	80	-	80	-
Short sale of securities	2,303 <sup>(f)</sup>	845	1,458	1,458	-	-
<b>Total</b>	<b>28,251</b>	<b>9,051</b>	<b>19,200</b>	<b>16,246</b>	<b>1,830</b>	<b>1,124</b>

# Amount under \$500,000

- (a) Related amounts under "Financial instruments" are prepared on the same basis as netting arrangements recognised for computation of Capital Adequacy Ratio (CAR) as set out under MAS Notice 637 (unaudited), which incorporates a conservative stance on enforceable netting. Accordingly, the amounts shown under "Not subject to enforceable netting agreement" are those where either no netting agreements exist or where the netting agreements have not been recognised for computation of CAR
- (b) Reverse repurchase agreements are presented under separate line items on the balance sheet, namely "Cash and balances with central banks", "Due from banks" and "Loans and advances to customers"
- (c) Cash collateral pledged under securities borrowings are presented under "Other assets" on the balance sheet
- (d) Repurchase agreements are presented under separate line items on the balance sheet, namely "Due to banks" and "Deposits and balances from customers"
- (e) Cash collateral received under securities lendings are presented under "Other liabilities" on the balance sheet
- (f) Short sale of securities are presented under "Other liabilities" on the balance sheet

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In \$ millions	Bank		Subject to enforceable netting agreement			
	Carrying amounts on balance sheet	Not subject to enforceable netting agreement	Related amounts not offset on balance sheet			Net amounts
			Net amounts	Financial instruments	Financial collateral received/pledged	
<b>31 Dec 2018</b>						
<b>Financial Assets</b>						
Derivatives	14,912	3,481 <sup>(a)</sup>	11,431	8,994 <sup>(a)</sup>	752	1,685
Reverse repurchase agreements	11,629 <sup>(b)</sup>	6	11,623	-	11,619	4
Securities borrowings	73 <sup>(c)</sup>	-	73	70	-	3
<b>Total</b>	<b>26,614</b>	<b>3,487</b>	<b>23,127</b>	<b>9,064</b>	<b>12,371</b>	<b>1,692</b>
<b>Financial Liabilities</b>						
Derivatives	14,706	3,279	11,427	8,994 <sup>(a)</sup>	2,154	279
Repurchase agreements	6,505 <sup>(d)</sup>	541	5,964	-	5,964	-
Securities lendings	1 <sup>(e)</sup>	-	1	#	-	1
<b>Total</b>	<b>21,212</b>	<b>3,820</b>	<b>17,392</b>	<b>8,994</b>	<b>8,118</b>	<b>280</b>
<b>31 Dec 2017</b>						
<b>Financial Assets</b>						
Derivatives	16,092	4,426 <sup>(a)</sup>	11,666	9,923 <sup>(a)</sup>	935	808
Reverse repurchase agreements	5,302 <sup>(b)</sup>	290	5,012	-	4,980	32
Securities borrowings	56 <sup>(c)</sup>	-	56	54	-	2
<b>Total</b>	<b>21,450</b>	<b>4,716</b>	<b>16,734</b>	<b>9,977</b>	<b>5,915</b>	<b>842</b>
<b>Financial Liabilities</b>						
Derivatives	16,352	3,772 <sup>(a)</sup>	12,580	9,923 <sup>(a)</sup>	1,511	1,146
Repurchase agreements	337 <sup>(d)</sup>	196	141	-	141	-
Securities lendings	56 <sup>(e)</sup>	-	56	49	-	7
<b>Total</b>	<b>16,745</b>	<b>3,968</b>	<b>12,777</b>	<b>9,972</b>	<b>1,652</b>	<b>1,153</b>
<b>1 Jan 2017</b>						
<b>Financial Assets</b>						
Derivatives	23,994	6,377 <sup>(a)</sup>	17,617	15,104 <sup>(a)</sup>	1,575	938
Reverse repurchase agreements	6,832 <sup>(b)</sup>	228	6,604	-	6,604	-
Securities borrowings	74 <sup>(c)</sup>	-	74	57	-	17
<b>Total</b>	<b>30,900</b>	<b>6,605</b>	<b>24,295</b>	<b>15,161</b>	<b>8,179</b>	<b>955</b>
<b>Financial Liabilities</b>						
Derivatives	22,944	4,959 <sup>(a)</sup>	17,985	15,104 <sup>(a)</sup>	2,025	856
Repurchase agreements	1,003 <sup>(d)</sup>	932	71	-	71	-
<b>Total</b>	<b>23,947</b>	<b>5,891</b>	<b>18,056</b>	<b>15,104</b>	<b>2,096</b>	<b>856</b>

# Amount under \$500,000

- (a) Related amounts under "Financial instruments" are prepared on the same basis as netting arrangements recognised for computation of Capital Adequacy Ratio (CAR) as set out under MAS Notice 637 (unaudited), which incorporates a conservative stance on enforceable netting. Accordingly, the amounts shown under "Not subject to enforceable netting agreement" are those where either no netting agreements exist or where the netting agreements have not been recognised for computation of CAR
- (b) Reverse repurchase agreements are presented under separate line items on the balance sheet, namely "Cash and balances with central banks", "Due from banks" and "Loans and advances to customers"
- (c) Cash collateral pledged under securities borrowings are presented under "Other assets" on the balance sheet
- (d) Repurchase agreements are presented under separate line items on the balance sheet, namely "Due to banks" and "Deposits and balances from customers"
- (e) Cash collateral received under securities lendings are presented under "Other liabilities" on the balance sheet

## 15 Cash and Balances with Central Banks

In \$ millions	The Group			Bank		
	31 Dec 2018	31 Dec 2017	1 Jan 2017	31 Dec 2018	31 Dec 2017	1 Jan 2017
Cash on hand	2,459	2,205	2,938	2,240	2,017	2,697
Non-restricted balances with central banks	11,761	16,488	17,194	7,396	12,644	12,460
Cash and cash equivalents	14,220	18,693	20,132	9,636	14,661	15,157
Restricted balances with central banks <sup>(a)</sup>	7,964	7,770	6,708	5,945	5,641	4,844
Total <sup>(b)</sup>	22,184	26,463	26,840	15,581	20,302	20,001

(a) Mandatory balances with central banks

(b) 2018 balances are net of ECL

## 16 Government Securities and Treasury Bills

In \$ millions	The Group			Total
	Mandatorily at FVPL	FVOCI	Amortised cost	
<b>31 Dec 2018</b>				
Singapore Government securities and treasury bills (Gross) <sup>(a)</sup>	4,013	1,471	8,630	14,114
Other government securities and treasury bills (Gross) <sup>(b)</sup>	6,570	17,830	8,765	33,165
Less: ECL <sup>(c)</sup>	-	-	(1)	(1)
Total	10,583	19,301	17,394	47,278
In \$ millions	Held for trading	Available-for-sale	Held to maturity	Total
<b>31 Dec 2017</b>				
Singapore Government securities and treasury bills <sup>(a)</sup>	4,406	7,878	1,955	14,239
Other government securities and treasury bills <sup>(b)</sup>	5,566	19,948	-	25,514
Total	9,972	27,826	1,955	39,753
<b>1 Jan 2017</b>				
Singapore Government securities and treasury bills <sup>(a)</sup>	3,567	6,454	1,962	11,983
Other government securities and treasury bills <sup>(b)</sup>	5,431	15,987	-	21,418
Total	8,998	22,441	1,962	33,401

(a) Includes financial assets pledged or transferred of \$831 million (2017: \$467 million; 1 January 2017: \$70 million) (See Note 19)

(b) Includes financial assets pledged or transferred of \$7,184 million (2017: \$2,109 million; 1 January 2017: \$2,740 million) (See Note 19)

(c) ECL for FVOCI securities amounting to \$2 million are not shown in the table, as these securities are recorded at fair value

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In \$ millions	Bank			Total
	Mandatorily at FVPL	FVOCI	Amortised cost	
<b>31 Dec 2018</b>				
Singapore Government securities and treasury bills (Gross) <sup>(a)</sup>	4,013	1,471	8,630	14,114
Other government securities and treasury bills (Gross) <sup>(b)</sup>	3,615	12,143	7,709	23,467
Less: ECL <sup>(c)</sup>	-	-	(1)	(1)
<b>Total</b>	<b>7,628</b>	<b>13,614</b>	<b>16,338</b>	<b>37,580</b>
In \$ millions	Held for trading	Available-for-sale	Held to maturity	Total
<b>31 Dec 2017</b>				
Singapore Government securities and treasury bills <sup>(a)</sup>	4,406	7,878	1,955	14,239
Other government securities and treasury bills <sup>(b)</sup>	3,413	16,149	-	19,562
<b>Total</b>	<b>7,819</b>	<b>24,027</b>	<b>1,955</b>	<b>33,801</b>
<b>1 Jan 2017</b>				
Singapore Government securities and treasury bills <sup>(a)</sup>	3,567	6,454	1,962	11,983
Other government securities and treasury bills <sup>(b)</sup>	3,285	12,013	-	15,298
<b>Total</b>	<b>6,852</b>	<b>18,467</b>	<b>1,962</b>	<b>27,281</b>

(a) Includes financial assets pledged or transferred of \$831 million (2017: \$467 million; 1 Jan 2017: \$70 million) (See Note 19)

(b) Includes financial assets pledged or transferred of \$6,451 million (2017: \$1,139 million; 1 Jan 2017: \$1,130 million) (See Note 19)

(c) ECL for FVOCI securities amounting to \$1 million are not shown in the table, as these securities are recorded at fair value



**17 Bank and Corporate Securities**

In \$ millions	The Group			
	Mandatorily at FVPL	FVOCI	Amortised cost	Total
<b>31 Dec 2018</b>				
Bank and corporate debt securities (Gross) <sup>(a)</sup>	8,527	8,609	33,489	50,625
Less: ECL <sup>(c)</sup>	-	-	(37)	(37)
Bank and corporate debt securities	8,527	8,609	33,452	50,588
Equity securities <sup>(b)</sup>	5,944	1,665	-	7,609
<b>Total</b>	<b>14,471</b>	<b>10,274</b>	<b>33,452</b>	<b>58,197</b>

In \$ millions	Held for trading	Designated at fair value through profit or loss	Loans and receivables	Available-for-sale	Total
<b>31 Dec 2017</b>					
Bank and corporate debt securities (Gross) <sup>(a)</sup>	9,105	87	26,467	14,630	50,289
Less: Impairment allowances	-	-	(97)	-	(97)
Bank and corporate debt securities	9,105	87	26,370	14,630	50,192
Equity securities <sup>(b)</sup>	4,120	-	-	1,277	5,397
<b>Total</b>	<b>13,225</b>	<b>87</b>	<b>26,370</b>	<b>15,907</b>	<b>55,589</b>

<b>1 Jan 2017</b>					
Bank and corporate debt securities (Gross) <sup>(a)</sup>	5,340	57	21,299	14,897	41,593
Less: Impairment allowances	-	-	(154)	-	(154)
Bank and corporate debt securities	5,340	57	21,145	14,897	41,439
Equity securities <sup>(b)</sup>	2,410	-	-	1,568	3,978
<b>Total</b>	<b>7,750</b>	<b>57</b>	<b>21,145</b>	<b>16,465</b>	<b>45,417</b>

(a) Includes financial assets pledged or transferred of \$1,271 million (2017: \$337 million; 1 Jan 2017: \$414 million) (See Note 19)

(b) Includes financial assets pledged or transferred of less than \$500,000 (2017: \$49 million; 1 Jan 2017: nil) (See Note 19)

(c) ECL for FVOCI securities amounting to \$13 million are not shown in the table, as these securities are recorded at fair value

In \$ millions	Bank			
	Mandatorily at FVPL	FVOCI	Amortised cost	Total
<b>31 Dec 2018</b>				
Bank and corporate debt securities (Gross) <sup>(a)</sup>	6,621	7,502	32,342	46,465
Less: ECL <sup>(c)</sup>	-	-	(37)	(37)
Bank and corporate debt securities	6,621	7,502	32,305	46,428
Equity securities <sup>(b)</sup>	5,944	1,635	-	7,579
<b>Total</b>	<b>12,565</b>	<b>9,137</b>	<b>32,305</b>	<b>54,007</b>

In \$ millions	Held for trading	Designated at fair value through profit or loss	Loans and receivables	Available-for-sale	Total
<b>31 Dec 2017</b>					
Bank and corporate debt securities (Gross)	7,834	87	26,238	12,553	46,712
Less: Impairment allowances	-	-	(95)	-	(95)
Bank and corporate debt securities	7,834	87	26,143	12,553	46,617
Equity securities <sup>(b)</sup>	4,120	-	-	1,262	5,382
<b>Total</b>	<b>11,954</b>	<b>87</b>	<b>26,143</b>	<b>13,815</b>	<b>51,999</b>

<b>1 Jan 2017</b>					
Bank and corporate debt securities (Gross)	4,321	57	21,066	12,479	37,923
Less: Impairment allowances	-	-	(152)	-	(152)
Bank and corporate debt securities	4,321	57	20,914	12,479	37,771
Equity securities <sup>(b)</sup>	2,409	-	-	1,520	3,929
<b>Total</b>	<b>6,730</b>	<b>57</b>	<b>20,914</b>	<b>13,999</b>	<b>41,700</b>

(a) Includes financial assets pledged or transferred of \$640 million (2017: nil; 1 Jan 2017: nil) (See Note 19)

(b) Includes financial assets pledged or transferred of less than \$500,000 (2017: \$49 million; 1 Jan 2017: nil) (See Note 19)

(c) ECL for FVOCI securities amounting to \$12 million are not shown in the table, as these securities are recorded at fair value

**18 Loans and Advances to Customers**

In \$ millions	The Group			Bank		
	31 Dec 2018	31 Dec 2017	1 Jan 2017	31 Dec 2018	31 Dec 2017	1 Jan 2017
Gross	<b>349,645</b>	327,769	305,415	<b>290,449</b>	272,073	252,784
Less: Specific allowances <sup>(a)</sup>	<b>2,440</b>	2,276	1,270	<b>1,994</b>	1,819	845
General allowances <sup>(a)</sup>	<b>2,202</b>	2,394	2,629	<b>1,797</b>	1,988	2,195
	<b>345,003</b>	323,099	301,516	<b>286,658</b>	268,266	249,744
<b>Analysed by product</b>						
Long-term loans	<b>155,115</b>	137,003	136,305	<b>130,585</b>	113,963	114,124
Short-term facilities	<b>76,251</b>	72,215	65,894	<b>64,597</b>	60,713	54,928
Housing loans	<b>75,011</b>	73,293	64,465	<b>63,985</b>	62,438	55,419
Trade loans	<b>43,268</b>	45,258	38,751	<b>31,282</b>	34,959	28,313
Gross total	<b>349,645</b>	327,769	305,415	<b>290,449</b>	272,073	252,784
<b>Analysed by currency</b>						
Singapore dollar	<b>141,838</b>	134,558	123,733	<b>141,780</b>	134,503	123,698
Hong Kong dollar	<b>40,898</b>	38,891	35,588	<b>20,549</b>	18,821	14,416
US dollar	<b>110,086</b>	103,943	102,120	<b>97,212</b>	92,516	90,242
Chinese yuan	<b>12,481</b>	11,055	11,577	<b>2,071</b>	1,277	3,089
Others	<b>44,342</b>	39,322	32,397	<b>28,837</b>	24,956	21,339
Gross total	<b>349,645</b>	327,769	305,415	<b>290,449</b>	272,073	252,784

(a) 2018 balances refer to ECL under SFRS(I) 9 (specific allowances: Stage 3 ECL; general allowances: Stage 1 and Stage 2 ECL). 2017 balances refer to specific and general allowances under FRS 39, modified by MAS Notice 612 requirements

Please refer to Note 44.4 for a breakdown of loans and advances to customers by geography and by industry.

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The table below shows the movements in specific and general allowances for loans and advances to customers during the year.

In \$ millions	The Group					Balance at 31 December
	Balance at 1 January	Charge/ (Write-back) to income statement	Net write-off during the year	Acquisition of new business	Exchange and other movements	
<b>2018</b>						
<b>Specific allowances</b>						
Manufacturing	358	139	(190)	-	(5)	302
Building and construction	96	65	(34)	-	-	127
Housing loans	7	6	(3)	-	-	10
General commerce	231	115	(79)	-	1	268
Transportation, storage and communications	1,350	97	(63)	-	122	1,506
Financial institutions, investment and holding companies	22	(2)	(5)	-	3	18
Professionals and private individuals (excluding housing loans)	121	213	(210)	14	(9)	129
Others	91	24	(34)	-	(1)	80
<b>Total specific allowances</b>	<b>2,276</b>	<b>657</b>	<b>(618)</b>	<b>14</b>	<b>111</b>	<b>2,440</b>
<b>Total general allowances</b>	<b>2,063</b>	<b>94</b>	<b>-</b>	<b>51</b>	<b>(6)</b>	<b>2,202</b>
<b>Total allowances</b>	<b>4,339</b>	<b>751</b>	<b>(618)</b>	<b>65</b>	<b>105</b>	<b>4,642</b>
<b>2017</b>						
<b>Specific allowances</b>						
Manufacturing	298	171	(102)	-	(9)	358
Building and construction	136	37	(72)	-	(5)	96
Housing loans	8	-	(1)	-	-	7
General commerce	271	96	(119)	-	(17)	231
Transportation, storage and communications	316	1,727	(681)	-	(12)	1,350
Financial institutions, investment and holding companies	15	25	(10)	-	(8)	22
Professionals and private individuals (excluding housing loans)	71	137	(123)	38	(2)	121
Others	155	45	(102)	-	(7)	91
<b>Total specific allowances</b>	<b>1,270</b>	<b>2,238</b>	<b>(1,210)</b>	<b>38</b>	<b>(60)</b>	<b>2,276</b>
<b>Total general allowances<sup>(a)</sup></b>	<b>2,629</b>	<b>(522)</b>	<b>-</b>	<b>13</b>	<b>274</b>	<b>2,394</b>
<b>Total allowances</b>	<b>3,899</b>	<b>1,716</b>	<b>(1,210)</b>	<b>51</b>	<b>214</b>	<b>4,670</b>

(a) The methodology for allocating general allowances was modified in 2017 to harmonise the treatment between loans and non-loan assets

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In \$ millions	Bank					Balance at 31 December
	Balance at 1 January	Charge/ (Write-back) to income statement	Net write-off during the year	Acquisition of new business	Exchange and other movements	
<b>2018</b>						
<b>Specific allowances</b>						
Manufacturing	197	62	(94)	-	(4)	161
Building and construction	86	59	(27)	-	(1)	117
Housing loans	1	1	-	-	-	2
General commerce	40	42	(3)	-	1	80
Transportation, storage and communications	1,330	92	(55)	-	120	1,487
Financial institutions, investment and holding companies	17	#	-	-	#	17
Professionals and private individuals (excluding housing loans)	76	98	(93)	-	(9)	72
Others	72	25	(38)	-	(1)	58
<b>Total specific allowances</b>	<b>1,819</b>	<b>379</b>	<b>(310)</b>	<b>-</b>	<b>106</b>	<b>1,994</b>
<b>Total general allowances</b>	<b>1,716</b>	<b>81</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,797</b>
<b>Total allowances</b>	<b>3,535</b>	<b>460</b>	<b>(310)</b>	<b>-</b>	<b>106</b>	<b>3,791</b>
<b>2017</b>						
<b>Specific allowances</b>						
Manufacturing	180	90	(67)	-	(6)	197
Building and construction	133	28	(71)	-	(4)	86
Housing loans	4	(3)	-	-	-	1
General commerce	54	65	(77)	-	(2)	40
Transportation, storage and communications	301	1,723	(679)	-	(15)	1,330
Financial institutions, investment and holding companies	11	24	(10)	-	(8)	17
Professionals and private individuals (excluding housing loans)	36	81	(66)	26	(1)	76
Others	126	26	(75)	-	(5)	72
<b>Total specific allowances</b>	<b>845</b>	<b>2,034</b>	<b>(1,045)</b>	<b>26</b>	<b>(41)</b>	<b>1,819</b>
<b>Total general allowances<sup>(a)</sup></b>	<b>2,195</b>	<b>(514)</b>	<b>-</b>	<b>12</b>	<b>295</b>	<b>1,988</b>
<b>Total allowances</b>	<b>3,040</b>	<b>1,520</b>	<b>(1,045)</b>	<b>38</b>	<b>254</b>	<b>3,807</b>

# Amount under \$500,000

(a) The methodology for allocating general allowances was modified in 2017 to harmonise the treatment between loans and non-loan assets

The opening balance for total general allowances in 2018 includes Stage 1 and Stage 2 ECL following the adoption of SFRS(I) 9. The corresponding comparatives have not been restated.

Included in loans and advances to customers are loans designated at fair value, as follows:

In \$ millions	The Group			Bank		
	2018	31 Dec 2017	1 Jan 2017	2018	31 Dec 2017	1 Jan 2017
<b>Fair value designated loans and advances and related credit derivatives/enhancements</b>						
Maximum credit exposure	406	428	459	406	428	459
Credit derivatives/enhancements – protection bought	(406)	(428)	(459)	(406)	(428)	(459)
Cumulative change in fair value arising from changes in credit risk	(47)	(49)	(98)	(47)	(49)	(98)
Cumulative change in fair value of related credit derivatives/enhancements	47	49	98	47	49	98

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Changes in fair value arising from changes in credit risk are determined as the amount of change in fair value that is not attributable to changes in market conditions that give rise to market risk. These changes in market conditions include changes in a benchmark interest rate, foreign exchange rate or index of prices or rates.

During the year, the amount of change in the fair value of the loans and advances attributable to credit risk was a gain of \$2 million (2017: gain of \$49 million; 1 Jan 2017: gain of \$182 million) for both the Group and Bank. During the year, the amount of change in the fair value of the related credit derivatives/enhancements was a loss of \$2 million (2017: loss of \$49 million; 1 Jan 2017: loss of \$182 million) for both the Group and Bank.

## 19 Financial Assets Pledged or Transferred

The Group pledges or transfers financial assets to third parties in the ordinary course of business. Transferred assets continue to be recognised in the Group's financial statements when the Group retains substantially all their risks and rewards. Among these, as set out below, are securities pledged or transferred pursuant to repurchase, securities lending or collateral swap agreements and for derivative transactions under credit support agreements.

Derecognised assets that were subject to the Group's partial continuing involvement were not material in 2018 and 2017.

### Securities

Securities transferred under repurchase, securities lending or collateral swap arrangements are generally conducted under terms in line with normal market practice. The counterparty is typically allowed to sell or re-pledge the securities but has an obligation to return them at maturity. If the securities decrease in value, the Group may, in certain circumstances, be required to place additional collateral.

For repurchase agreements, the securities pledged or transferred continue to be recorded on the balance sheet while cash received in exchange is recorded as a financial liability. The Group also pledges assets to secure its short position in securities and to facilitate settlement operations. The fair value of the associated liabilities approximates the carrying amount of \$6,161 million (2017: \$1,455 million; 1 January 2017: \$2,881 million) for the Group and \$4,847 million (2017: \$322 million; 1 January 2017: \$1,003 million) for the Bank, which are recorded under "Due to banks", "Deposits and balances from customers" and "Other liabilities" on the balance sheet.

For securities lending transactions, the securities lent continue to be recorded on the balance sheet. As the Group mainly receives other financial assets in exchange, the associated liabilities are not recorded on the balance sheet.

In addition, the Group also pledges securities for derivative transactions under credit support agreements. These assets continue to be recorded on the balance sheet. As the related derivative assets and liabilities are managed on a portfolio basis, there is no direct relationship between the securities pledged and the associated liabilities. As such, the associated liabilities are not disclosed.

In \$ millions	The Group				Bank	
	2018	31 Dec 2017	1 Jan 2017	2018	31 Dec 2017	1 Jan 2017
<b>Financial assets pledged or transferred</b>						
Singapore Government securities and treasury bills	831	467	70	831	467	70
Other government securities and treasury bills	7,184	2,109	2,740	6,451	1,139	1,130
Bank and corporate debt securities	1,271	337	414	640	-	-
Equity securities	#	49	-	#	49	-
<b>Total</b>	<b>9,286</b>	<b>2,962</b>	<b>3,224</b>	<b>7,922</b>	<b>1,655</b>	<b>1,200</b>

# Amount under \$500,000

### Covered bonds

Pursuant to the Bank's Global Covered Bond Programme, selected pools of residential mortgages originated by the Bank have been assigned to a bankruptcy-remote structured entity, Bayfront Covered Bonds Pte Ltd (see Notes 22.2 and 30.4). These residential mortgages continue to be recognised on the Bank's balance sheet as the Bank remains exposed to the risks and rewards associated with them.

As at 31 December 2018, the carrying value of the covered bonds in issue was \$5,268 million (2017: \$5,028 million; 1 January 2017: \$2,227 million), while the carrying value of assets assigned was \$10,506 million (2017: \$12,930 million; 1 January 2017: \$8,636 million) for both the Group and Bank. The difference in values is attributable to an intended over-collateralisation required to maintain the credit ratings of the covered bonds in issue, and additional assets assigned to facilitate future issuances.

**Other financial assets**

The Group also enters into structured funding transactions where it retains the contractual rights to receive cash flows of financial assets extended to third parties but assumes a contractual obligation to pay these cash flows under the issued notes. The carrying amounts and fair values of these financial assets and liabilities of the Group and the Bank both amount to \$406 million (2017: \$428 million; 1 January 2017: \$516 million).

**20 Other Assets**

In \$ millions	The Group			Bank		
	2018	31 Dec 2017	1 Jan 2017	2018	31 Dec 2017	1 Jan 2017
Accrued interest receivable	1,507	1,298	1,165	1,168	1,000	912
Deposits and prepayments	550	555	423	197	183	179
Receivables from securities business	430	990	643	-	-	-
Sundry debtors and others	8,004	6,489	5,495	5,383	4,345	3,369
Cash collateral pledged <sup>(a)</sup>	2,574	2,325	2,968	2,539	2,026	2,968
Deferred tax assets (Note 21)	352	399	333	162	248	204
<b>Total<sup>(b)</sup></b>	<b>13,417</b>	<b>12,056</b>	<b>11,027</b>	<b>9,449</b>	<b>7,802</b>	<b>7,632</b>

(a) Mainly relates to cash collateral pledged in respect of derivative portfolios

(b) Balances are net of specific and general allowances

## 21 Deferred Tax Assets/Liabilities

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when the deferred income taxes relate to the same tax authority. The deferred tax assets and liabilities are determined after appropriate offsetting, as shown in "Other assets" (Note 20) and "Other liabilities" (Note 29) respectively.

Deferred tax assets and liabilities comprise the following temporary differences:

In \$ millions	The Group			Bank		
	31 Dec 2018	31 Dec 2017	1 Jan 2017	31 Dec 2018	31 Dec 2017	1 Jan 2017
<b>Deferred income tax assets</b>						
Allowances for loan losses <sup>(a)</sup>	231	319	356	84	218	226
FVOCI (2017: AFS) financial assets and others	32	7	6	25	1	#
Own credit risk	#	3	#	#	3	#
Other temporary differences	248	239	177	156	156	102
	511	568	539	265	378	328
Amounts offset against deferred tax liabilities	(159)	(169)	(206)	(103)	(130)	(124)
<b>Total</b>	<b>352</b>	<b>399</b>	<b>333</b>	<b>162</b>	<b>248</b>	<b>204</b>
<b>Deferred income tax liabilities</b>						
Accelerated tax depreciation	133	116	114	68	64	63
FVOCI (2017: AFS) financial assets and others	2	5	7	#	3	7
Other temporary differences	98	71	113	77	65	63
	233	192	234	145	132	133
Amounts offset against deferred tax assets	(159)	(169)	(206)	(103)	(130)	(124)
<b>Total</b>	<b>74</b>	<b>23</b>	<b>28</b>	<b>42</b>	<b>2</b>	<b>9</b>
<b>Net deferred tax assets</b>	<b>278</b>	<b>376</b>	<b>305</b>	<b>120</b>	<b>246</b>	<b>195</b>

# Amount under \$500,000

(a) Movement in deferred income tax assets between 2017 and 2018 includes impact on SFRS(I) 9 adoption (a decline in deferred tax assets of \$100 million and \$87 million for Group and Bank respectively)

## 22 Subsidiaries and Consolidated Structured Entities

In \$ millions	Bank		1 Jan 2017
	2018	31 Dec 2017	
Investment in subsidiaries <sup>(a)(b)</sup>			
Ordinary shares	10,937	11,273	11,471
Due from subsidiaries			
Other receivables	16,022	21,877	14,910
<b>Total</b>	<b>26,959</b>	<b>33,150</b>	<b>26,381</b>

(a) The carrying amounts of certain investments which are designated as hedged items in a fair value hedge are adjusted for fair value changes attributable to the hedged risks

(b) The carrying amounts presented are net of impairment allowances

### 22.1 Main operating subsidiaries

The main operating subsidiaries within the Group are listed below.

Name of subsidiary	Incorporated in	Effective shareholding %		
		2018	31 Dec 2017	1 Jan 2017
<b>Commercial Banking</b>				
DBS Bank (Hong Kong) Limited*	Hong Kong	100	100	100
DBS Bank (China) Limited*	China	100	100	100
DBS Bank (Taiwan) Limited*	Taiwan	100	100	100
PT Bank DBS Indonesia*	Indonesia	99	99	99
<b>Stockbroking</b>				
DBS Vickers Securities Holdings Pte Ltd	Singapore	100	100	100

\* Audited by PricewaterhouseCoopers network firms outside Singapore

The Group's main subsidiaries are regulated banks and non-bank financial institutions. Statutory, contractual or regulatory requirements as well as protective rights of non-controlling interests may restrict the ability of the Bank to access and transfer assets freely to or from other entities within the Group and to settle liabilities of the Group. Since the Group did not have any material non-controlling interests as at the balance sheet dates, any protective rights associated with these did not give rise to significant restrictions in 2017 and 2018.

Please refer to Note 36 for information on non-controlling interests.

### 22.2 Consolidated structured entity

The structured entity consolidated by the Group is listed below.

Name of entity	Purpose of consolidated structured entity	Incorporated in
Bayfront Covered Bonds Pte Ltd	Covered bond guarantor	Singapore

Bayfront Covered Bonds Pte Ltd is a bankruptcy-remote structured entity established in conjunction with the Bank's USD 10 billion Global Covered Bond Programme (see Note 30.4). As part of the contractual structures that are integral to this programme, the Bank provides funding and hedging facilities to it.

### Disposal of interest in subsidiary

On 10 February 2017, the Group entered into an agreement to divest DBS China Square Limited (DCS) to an indirect subsidiary of Manulife Financial Corporation. The transaction was completed on 10 March 2017 and a net gain of \$350 million and \$241 million was recorded for the Group and Bank respectively for the year ended 31 December 2017.



## 23 Associates

In \$ millions	The Group		
	2018	31 Dec 2017	1 Jan 2017
Quoted equity securities	-	-	57
Unquoted equity securities <sup>(a)</sup>	857	796	812
Share of post-acquisition reserves	(19)	(13)	21
<b>Total</b>	<b>838</b>	<b>783</b>	<b>890</b>

(a) The carrying amounts of certain investments which are designated as hedged items in a fair value hedge are adjusted for fair value changes attributable to the hedged risks

In \$ millions	Bank		
	2018	31 Dec 2017	1 Jan 2017
Quoted equity securities	-	-	10
Unquoted equity securities <sup>(a)</sup>	208	148	182
<b>Total</b>	<b>208</b>	<b>148</b>	<b>192</b>

(a) The carrying amounts of certain investments which are designated as hedged items in a fair value hedge are adjusted for fair value changes attributable to the hedged risks

The Group's share of income and expenses, assets and liabilities and off-balance sheet items of the associates are as follows:

In \$ millions	The Group		
	2018	31 Dec 2017	1 Jan 2017
<b>Income statement</b>			
Share of income	238	209	155
Share of expenses	(209)	(198)	(202)
<b>Balance sheet</b>			
Share of total assets	2,174	1,793	1,701
Share of total liabilities	1,336	1,010	811
<b>Off-balance sheet</b>			
Share of contingent liabilities and commitments	#	#	#

# Amount under \$500,000

### 23.1 Main associates

The main associates of the Group are listed below.

Name of associate	Incorporated in	Effective shareholding %		
		2018	31 Dec 2017	1 Jan 2017
<b>Unquoted</b>				
Central Boulevard Development Pte Ltd**	Singapore	33.3	33.3	33.3
Network for Electronic Transfers (Singapore) Pte Ltd	Singapore	33.3	33.3	33.3
Changsheng Fund Management Company**	China	33.0	33.0	33.0

\*\* Audited by other auditors

As of 31 December 2018, 31 December 2017 and 1 January 2017, no associate was individually material to the Group. As a non-controlling shareholder, the Group's ability to receive dividends is subject to agreement with other shareholders. The associates may also be subject to statutory, contractual or regulatory requirements restricting dividend payments or to repay loans or advances made.

The Group's share of commitments and contingent liabilities of the associates as well as its commitments to finance or otherwise provide resources to them are not material.

## 24 Unconsolidated Structured Entities

“Unconsolidated structured entities” are structured entities, as defined by SFRS(I) 12, that are not controlled by the Group. In the normal course of business, the Group enters into transactions with these structured entities to facilitate customer transactions and for specific investment opportunities.

While the economic exposures may be the same as those to other type of entities, SFRS(I) 12 specifically requires companies to disclose such exposures arising from transactions with unconsolidated structured entities. The table below reflects exposures to third party securitisation structures where the Group holds an interest in the normal course of business. As is the case with other types of counterparties, the carrying amount from transactions with unconsolidated structured entities have been included in the Group’s financial statements.

The risks arising from such transactions are subject to the Group’s risk management practices.

The table below represents the Group’s and Bank’s maximum exposure to loss which for on-balance sheet assets and liabilities is represented by the carrying amount, and does not reflect mitigating effects from the availability of netting arrangements and financial instruments that the Group may utilise to economically hedge the risks inherent in third party structured entities, or risk-reducing effects of collateral or other credit enhancements.

In \$ millions	The Group			Bank		
	31 Dec 2018	31 Dec 2017	1 Jan 2017	31 Dec 2018	31 Dec 2017	1 Jan 2017
Derivatives	38	100	-	38	100	-
Corporate debt securities	2,693	2,262	1,267	2,662	2,165	1,241
Loans and advances to customers	43	28	19	43	28	19
<b>Total assets</b>	<b>2,774</b>	<b>2,390</b>	<b>1,286</b>	<b>2,743</b>	<b>2,293</b>	<b>1,260</b>
Commitments and guarantees	174	32	23	174	32	23
<b>Maximum Exposure to Loss</b>	<b>2,948</b>	<b>2,422</b>	<b>1,309</b>	<b>2,917</b>	<b>2,325</b>	<b>1,283</b>
Derivatives	#	#	107	#	#	107
<b>Total liabilities</b>	<b>#</b>	<b>#</b>	<b>107</b>	<b>#</b>	<b>#</b>	<b>107</b>

# Amount under \$500,000

SFRS(I) 12 also requires additional disclosures where the Group acts as a sponsor to unconsolidated structured entities. The Group is deemed a sponsor of a third party structured entity if it plays a key role in establishing the entity, and has an on-going involvement with the structured entity or if the Group’s name appears in the structured entity’s name.

The Group has not sponsored any structured entity during the financial year.

## 25 Acquisition

On 31 October 2016, DBS Bank Ltd. agreed to acquire the wealth management and retail banking business of Australia and New Zealand Banking Group Limited (ANZ) in five markets for approximately \$110 million above book value, of which \$53 million represented provisional goodwill. The final goodwill recorded was \$62 million.

The portfolio of businesses being acquired is in Singapore, Hong Kong, China, Taiwan and Indonesia. The acquisition of the businesses in each jurisdiction is independent of each other. With the integration of ANZ Indonesia in February 2018, the Group has completed the acquisition of the businesses in all the five markets.

The Group has received cash consideration of \$5,045 million, largely represented by the difference between the assets acquired (comprising mainly loans and advances to customers) of \$9,229 million and the liabilities assumed (comprising mainly deposit and balances with customers) of \$14,401 million.

The contribution to revenue and net profit from the acquired portfolio for financial year 2018 was \$623 million and \$162 million respectively. The contribution to revenue and net profit from the progressive consolidation of the acquired portfolio for the financial period from 15 July 2017 to 31 December 2017 was not material.

26 Properties and Other Fixed Assets

In \$ millions	The Group					Total (6)=(1)+(5)
	Investment properties (1)	Owner-occupied properties (2)	Software (3)	Other fixed assets <sup>(a)</sup> (4)	Subtotal of owner-occupied properties, software and other fixed assets (5)=(2)+(3)+(4)	
<b>2018</b>						
<b>Cost</b>						
Balance at 1 January	64	542	1,208	948	2,698	2,762
Additions	-	13	332	188	533	533
Acquisition of new business	-	38	-	-	38	38
Disposals	(2)	(22)	(168)	(65)	(255)	(257)
Transfer	6	(6)	-	-	(6)	-
Exchange differences and others	-	5	-	-	5	5
Balance at 31 December	68	570	1,372	1,071	3,013	3,081
<b>Less: Accumulated depreciation</b>						
Balance at 1 January	35	135	625	709	1,469	1,504
Depreciation charge	1	16	180	134	330	331
Disposals	(1)	(9)	(161)	(62)	(232)	(233)
Transfer	3	(3)	-	-	(3)	-
Exchange differences and others	-	4	-	1	5	5
Balance at 31 December	38	143	644	782	1,569	1,607
Less: Allowances for impairment	2	22	-	-	22	24
Net book value at 31 December	28	405	728	289	1,422	1,450
<b>2017</b>						
<b>Cost</b>						
Balance at 1 January	603	545	1,160	896	2,601	3,204
Additions	-	9	225	126	360	360
Acquisition of new business	-	26	-	1	27	27
Disposals	(1)	(11)	(161)	(52)	(224)	(225)
Divestment of subsidiary <sup>(b)</sup>	(507)	-	-	(9)	(9)	(516)
Transfer	(31)	31	-	-	31	-
Exchange differences and others	#	(58)	(16)	(14)	(88)	(88)
Balance at 31 December	64	542	1,208	948	2,698	2,762
<b>Less: Accumulated depreciation</b>						
Balance at 1 January	165	161	620	658	1,439	1,604
Depreciation charge	2	16	153	126	295	297
Disposals	(1)	(11)	(147)	(47)	(205)	(206)
Divestment of subsidiary <sup>(b)</sup>	(129)	-	-	(8)	(8)	(137)
Transfer	(2)	2	-	-	2	-
Exchange differences and others	#	(33)	(1)	(20)	(54)	(54)
Balance at 31 December	35	135	625	709	1,469	1,504
Less: Allowances for impairment	-	25	-	-	25	25
Net book value at 31 December	29	382	583	239	1,204	1,233

# Amount under \$500,000

(a) Refers to computer hardware, office equipment, furniture and fittings and other fixed assets

(b) DBS China Square Limited, which owned PWC Building, was divested in 2017 (refer to Note 22)

**DBS Bank Ltd. and its subsidiaries**  
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In \$ millions	Bank					Total
	Investment properties (1)	Owner-occupied properties (2)	Software (3)	Other fixed assets <sup>(a)</sup> (4)	Subtotal of owner-occupied properties, software and other fixed assets (5)=(2)+(3)+(4)	
<b>2018</b>						
<b>Cost</b>						
Balance at 1 January	43	148	926	616	1,690	1,733
Additions	-	5	220	99	324	324
Transfers	-	-	-	-	-	-
Disposals	(2)	-	(164)	(44)	(208)	(210)
Exchange differences and others	-	-	(1)	(2)	(3)	(3)
Balance at 31 December	41	153	981	669	1,803	1,844
<b>Less: Accumulated depreciation</b>						
Balance at 1 January	20	65	538	399	1,002	1,022
Depreciation charge	1	6	126	90	222	223
Transfers	-	-	-	-	-	-
Disposals	(1)	-	(158)	(42)	(200)	(201)
Exchange differences and others	-	-	(1)	(2)	(3)	(3)
Balance at 31 December	20	71	505	445	1,021	1,041
Net book value at 31 December	21	82	476	224	782	803
<b>2017</b>						
<b>Cost</b>						
Balance at 1 January	38	158	914	565	1,637	1,675
Additions	-	7	178	83	268	268
Transfers	6	(6)	-	-	(6)	-
Disposals	(1)	(11)	(166)	(31)	(208)	(209)
Exchange differences and others	-	-	-	(1)	(1)	(1)
Balance at 31 December	43	148	926	616	1,690	1,733
<b>Less: Accumulated depreciation</b>						
Balance at 1 January	17	74	569	345	988	1,005
Depreciation charge	1	5	115	84	204	205
Transfers	3	(3)	-	-	(3)	-
Disposals	(1)	(11)	(146)	(30)	(187)	(188)
Exchange differences and others	-	-	#	#	-	-
Balance at 31 December	20	65	538	399	1,002	1,022
Net book value at 31 December	23	83	388	217	688	711

# Amount under \$500,000

(c) Refers to computer hardware, office equipment, furniture and fittings and other fixed assets

**26.1** The total market value of all properties as at 31 December 2018 was \$2,111 million for the Group and \$426 million for the Bank, of which investment properties accounted for \$163 million for the Group and \$96 million for the Bank. The market values of the properties are determined using investment method, or using a combination of comparable sales and investment methods. The properties are classified under Level 3 of the fair value hierarchy and the significant unobservable input used for valuation is market yields. As at 31 December 2018, there were no transfers into or out of Level 3.

The Group leases out investment properties under operating leases. The leases typically run for an initial period of one to five years, and may contain an option to renew the lease after that date at which time all terms will be renegotiated.

The minimum lease receivables as at the balance sheet date are as follows:

In \$ millions	The Group			Bank		
	2018	2017	1 Jan 2017	2018	2017	1 Jan 2017
<b>Minimum lease receivables<sup>(a)</sup></b>						
Not later than 1 year	5	3	31	3	3	2
Later than 1 year but not later than 5 years	6	4	44	3	4	2
Total	11	7	75	6	7	4

(a) 1 Jan 2017 includes lease receivables from operating leases under PWC Building which was divested in 2017. Refer to Note 22 for disclosure on the sale of DBS China Square Limited, which owned PWC Building

## 27 Goodwill and Intangibles

The carrying amounts of the Group's and Bank's goodwill and intangibles arising from business acquisitions are as follows:

In \$ millions	The Group			Bank		
	31 Dec 2018	31 Dec 2017	1 Jan 2017	31 Dec 2018	31 Dec 2017	1 Jan 2017
DBS Bank (Hong Kong) Limited	4,631	4,631	4,631	-	-	-
Others	544	534	486	334	334	281
<b>Total</b>	<b>5,175</b>	<b>5,165</b>	<b>5,117</b>	<b>334</b>	<b>334</b>	<b>281</b>

The carrying amounts of the CGUs are reviewed at least once a year to determine if the goodwill associated with them should be impaired. If a CGU's carrying amount exceeds its recoverable value, a goodwill impairment charge is recognised in the income statement.

The recoverable value is determined based on a value-in-use calculation. The CGU's five-year projected cash flows, taking into account projected regulatory capital requirements, are discounted by its cost of capital to derive its present value. To derive the value beyond the fifth year, a long-term growth rate is imputed to the fifth-year cash flow and then discounted by the cost of capital to derive the terminal value. The long-term growth rate used does not exceed the historical long-term growth rate of the market the CGU operates in. The recoverable value is the sum of the present value of the five-year cash flows and the terminal value.

A growth rate of 4.5% (2017: 4.5%) and discount rate of 9.0% (2017: 9.0%) were assumed in the value-in-use calculation for DBS Bank (Hong Kong) Limited's franchise.

The process of evaluating goodwill impairment involves management judgement and prudent estimates of various factors including future cash flows as well as the cost of capital and long-term growth rates. The results can be highly sensitive to the assumptions used. Management believes that any reasonably possible change in the key assumptions would not cause the carrying amount of the operating unit to exceed its recoverable amount at 31 December 2018. However, if conditions in Hong Kong and its banking industry were to deteriorate and turn out to be significantly worse than anticipated in the Group's performance forecast, the goodwill may be impaired in future periods.

## 28 Deposits and Balances from Customers

In \$ millions	The Group			Bank		
	31 Dec 2018	31 Dec 2017	1 Jan 2017	31 Dec 2018	31 Dec 2017	1 Jan 2017
<b>Analysed by currency</b>						
Singapore dollar	158,778	156,893	152,115	158,373	156,526	151,792
US dollar	138,153	128,586	112,107	103,128	98,528	87,620
Hong Kong dollar	37,054	35,208	36,234	5,156	5,633	5,434
Chinese yuan	13,073	11,402	9,822	744	461	496
Others	46,727	41,545	37,168	26,202	23,650	21,592
<b>Total</b>	<b>393,785</b>	<b>373,634</b>	<b>347,446</b>	<b>293,603</b>	<b>284,798</b>	<b>266,934</b>
<b>Analysed by product</b>						
Savings accounts	153,443	152,737	140,617	123,975	124,913	115,000
Current accounts	77,140	80,143	73,984	59,651	64,970	62,134
Fixed deposits	159,049	137,696	130,178	107,653	93,747	88,553
Other deposits	4,153	3,058	2,667	2,324	1,168	1,247
<b>Total</b>	<b>393,785</b>	<b>373,634</b>	<b>347,446</b>	<b>293,603</b>	<b>284,798</b>	<b>266,934</b>

## 29 Other Liabilities

In \$ millions	The Group			Bank		
	31 Dec 2018	31 Dec 2017	1 Jan 2017	31 Dec 2018	31 Dec 2017	1 Jan 2017
Cash collateral received <sup>(a)</sup>	1,825	2,128	1,710	1,527	2,115	1,348
Accrued interest payable	793	491	414	538	339	251
Provision for loss in respect of off-balance sheet credit exposures	407	282	453	381	276	434
Payable in respect of securities business	356	823	641	-	-	-
Sundry creditors and others <sup>(b)</sup>	12,440	10,169	9,645	7,233	7,056	6,806
Current tax liabilities	749	687	659	631	539	659
Short sale of securities	1,733	1,961	2,303	1,247	1,209	832
Deferred tax liabilities (Note 21)	74	23	28	42	2	9
<b>Total</b>	<b>18,377</b>	<b>16,564</b>	<b>15,853</b>	<b>11,599</b>	<b>11,536</b>	<b>10,339</b>

(a) Mainly relates to cash collateral received in respect of derivative portfolios

(b) Includes income received in advance of \$1,280 million (2017: \$1,387 million; 1 Jan 2017: \$1,493 million) and \$973 million (2017: \$1,054 million; 1 Jan 2017: \$1,135 million) for the Group and Bank respectively arising from a 15-year regional distribution agreement entered with Manulife Financial Asia Limited. \$107 million (2017: \$107 million) and \$81 million (2017: \$81 million) of the Manulife income received in advance was recognised as fee income during the year for the Group and Bank respectively

**30 Other Debt Securities**

In \$ millions	The Group			Bank		
	31 Dec 2018	31 Dec 2017	1 Jan 2017	31 Dec 2018	31 Dec 2017	1 Jan 2017
Negotiable certificates of deposit (Note 30.1)	4,147	3,793	2,137	2,465	2,465	1,496
Senior medium term notes (Note 30.2)	7,436	4,119	4,119	7,436	4,119	4,119
Commercial papers (Note 30.3)	16,986	17,696	11,586	16,986	17,696	11,586
Covered bonds (Note 30.4)	5,268	5,028	2,227	5,268	5,028	2,227
Other debt securities (Note 30.5)	7,734	6,002	5,276	6,827	5,699	4,965
<b>Total</b>	<b>41,571</b>	<b>36,638</b>	<b>25,345</b>	<b>38,982</b>	<b>35,007</b>	<b>24,393</b>
Due within 1 year	30,170	27,343	17,539	28,668	26,200	17,296
Due after 1 year	11,401	9,295	7,806	10,314	8,807	7,097
<b>Total</b>	<b>41,571</b>	<b>36,638</b>	<b>25,345</b>	<b>38,982</b>	<b>35,007</b>	<b>24,393</b>

30.1 Negotiable certificates of deposit issued and outstanding as at 31 December are as follows:

In \$ millions		The Group			Bank		
Currency	Interest Rate and Repayment Terms	31 Dec 2018	31 Dec 2017	1 Jan 2017	31 Dec 2018	31 Dec 2017	1 Jan 2017
<b>Issued by the Bank and other subsidiaries</b>							
HKD	2.07% to 4.22%, payable quarterly	522	286	314	-	-	-
HKD	2.9% to 4.2%, payable annually	38	93	118	-	-	-
HKD	Zero-coupon, payable on maturity	409	338	84	-	-	-
AUD	1.68% to 2.31%, payable on maturity	2,465	2,465	1,455	2,465	2,465	1,455
TWD	0.52% to 0.68 %, payable on maturity	178	202	-	-	-	-
IDR	6.2%, payable on maturity	21	-	-	-	-	-
INR	Zero-coupon, payable on maturity	-	-	41	-	-	41
CNY	2.97% to 4.51%, payable on maturity	514	409	125	-	-	-
<b>Total</b>		<b>4,147</b>	<b>3,793</b>	<b>2,137</b>	<b>2,465</b>	<b>2,465</b>	<b>1,496</b>

The outstanding negotiable certificates of deposit as at 31 December 2018 were issued between 20 January 2010 and 27 December 2018 (2017: 22 August 2008 and 27 December 2017; 1 January 2017: 22 August 2008 and 22 December 2016) and mature between 2 January 2019 and 16 March 2021 (2017: 2 January 2018 and 16 March 2021; 1 January 2017: 5 January 2017 and 16 March 2021).

30.2 Senior medium term notes issued and outstanding are as follows:

In \$ millions		The Group			Bank		
Currency	Interest Rate and Repayment Terms	31 Dec 2018	31 Dec 2017	1 Jan 2017	31 Dec 2018	31 Dec 2017	1 Jan 2017
<b>Issued by the Bank</b>							
AUD	Floating rate note, payable quarterly	868	313	-	868	313	-
GBP	Floating rate note, payable monthly	572	-	-	572	-	-
GBP	Floating rate note, payable quarterly	3,369	2,254	-	3,369	2,254	-
USD	2.35% to 3.12%, payable semi-annually	137	-	1,447	137	-	1,447
USD	1.45%, payable annually	-	-	145	-	-	145
USD	Floating rate note, payable quarterly	2,388	1,383	2,257	2,388	1,383	2,257
HKD	1.43% payable annually	102	100	109	102	100	109
HKD	2.24%, payable quarterly	-	-	93	-	-	93
CNH	4.4%, payable annually	-	69	68	-	69	68
<b>Total</b>		<b>7,436</b>	<b>4,119</b>	<b>4,119</b>	<b>7,436</b>	<b>4,119</b>	<b>4,119</b>

The senior medium term notes were issued by the Bank under its USD 30 billion Global Medium Term Note Programme. The outstanding senior medium term notes as at 31 December 2018 were issued between 9 October 2014 and 24 October 2018 (2017: 9 October 2014 and 12 December 2017; 1 January 2017: 21 February 2012 and 7 September

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2016) and mature between 20 February 2019 and 23 August 2021 (2017: 6 March 2018 and 20 March 2020; 1 January 2017: 20 January 2017 and 15 January 2020).

**30.3** The commercial papers which are payable on maturity were issued by the Bank under its USD 5 billion Euro Commercial Paper Programme and USD 15 billion US Commercial Paper Programme. These are zero-coupon papers, or floating rate papers pegged to monthly or quarterly market rates. The outstanding notes as at 31 December 2018 were issued between 28 June 2018 and 26 December 2018 (2017: 28 June 2017 and 22 December 2017; 1 January 2017: 21 September 2016 and 16 December 2016) and mature between 2 January 2019 and 27 June 2019 (2017: 2 January 2018 and 17 July 2018; 1 January 2017: 3 January 2017 and 12 April 2017).

**30.4** To augment its sources of wholesale funding, the Bank established a USD 10 billion Global Covered Bond Programme on 16 June 2015. A covered bond is a senior obligation of the Bank backed by a cover pool comprising assets that have been ring-fenced via contractual structures in a bankruptcy-remote structured entity, Bayfront Covered Bonds Pte Ltd. Bayfront Covered Bonds Pte Ltd has provided an unconditional and irrevocable guarantee, which is secured over the cover pool, to the covered bond holders.

The outstanding covered bonds as at 31 December 2018 were issued between 3 June 2016 and 27 November 2018 (2017: 6 August 2015 and 21 November 2017; 1 January 2017: 6 August 2015 and 3 June 2016) and mature between 3 June 2019 and 21 November 2024 (2017: 6 August 2018 and 21 November 2024; 1 January 2017: 6 August 2018 and 3 June 2019).

**30.5** Other debt securities issued and outstanding are as follows:

In \$ millions	The Group			Bank		
	31 Dec 2018	31 Dec 2017	1 Jan 2017	31 Dec 2018	31 Dec 2017	1 Jan 2017
<b>Issued by the Bank and other subsidiaries</b>						
Equity linked notes	1,844	1,260	1,521	1,827	1,247	1,501
Credit linked notes	1,249	1,720	1,202	1,249	1,720	1,202
Interest linked notes	3,365	2,495	2,042	3,365	2,495	2,042
Foreign exchange linked notes	386	237	220	386	237	220
Fixed rate bonds	890	290	291	-	-	-
<b>Total</b>	<b>7,734</b>	<b>6,002</b>	<b>5,276</b>	<b>6,827</b>	<b>5,699</b>	<b>4,965</b>

The outstanding securities as at 31 December 2018 were issued between 23 July 2012 and 31 December 2018 (2017: 23 July 2012 and 29 December 2017; 1 January 2017: 4 October 2011 and 30 December 2016) and mature between 2 January 2019 and 1 June 2048 (2017: 2 January 2018 and 20 June 2047; 1 January 2017: 3 January 2017 and 30 August 2046).

## **31 Due to Subsidiaries**

In \$ millions	Bank		
	31 Dec 2018	31 Dec 2017	1 Jan 2017
Subordinated term debts issued to DBS Capital Funding Corporation II (Note 31.1)	-	1,500	1,500
Due to subsidiaries	52,655	50,197	39,705
<b>Total</b>	<b>52,655</b>	<b>51,697</b>	<b>41,205</b>

**31.1** The \$1,500 million 5.75% subordinated note was issued on 27 May 2008 by the Bank to DBS Capital Funding II Corporation, both wholly-owned subsidiaries of DBSH. Interest is payable in arrears on 15 June and 15 December each year at a fixed rate of 5.75% per annum up to 15 June 2018. Thereafter, interest is payable quarterly in arrears on 15 March, 15 June, 15 September and 15 December each year at a floating rate of three-month Singapore Dollar Swap Offer Rate plus 3.415% per annum. The note has been fully redeemed on 18 June 2018.



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**32 Subordinated Term Debts**

The following subordinated term debts issued by the Bank are classified as liabilities. These term debt instruments have a junior or lower priority claim on the issuing entity's assets in the event of a default or liquidation. These instruments are in the first instance ineligible as capital instruments under Basel III rules as they lack provisions for conversion to ordinary shares or write-down at the point of non-viability as determined by the Monetary Authority of Singapore, but are accorded partial eligibility as Tier 2 capital (subject to a cap) for calculating capital adequacy ratios under the Basel III transitional arrangements for capital instruments issued prior to 1 January 2013.

In \$ millions	Note	Issue Date	Maturity Date	Interest payment	The Group			Bank		
					31 Dec 2018	31 Dec 2017	1 Jan 2017	31 Dec 2018	31 Dec 2017	1 Jan 2017
<b>Issued by the Bank</b>										
S\$1,000m 3.10% Subordinated Notes due 2023 Callable in 2018	32.1	14 Aug 2012	14 Feb 2023	Feb/Aug	-	508	506	-	508	506
S\$1,000m 3.30% Subordinated Notes due 2022 Callable in 2017	32.2	21 Feb 2012	21 Feb 2022	Feb/Aug	-	-	866	-	-	866
US\$750m 3.625% Subordinated Notes due 2022 Callable in 2017	32.2	21 Mar 2012	21 Sep 2022	Mar/Sep	-	-	1,085	-	-	1,085
<b>Total</b>					<b>-</b>	<b>508</b>	<b>2,457</b>	<b>-</b>	<b>508</b>	<b>2,457</b>
Due within 1 year					-	508	866	-	508	866
Due after 1 year					-	-	1,591	-	-	1,591
<b>Total</b>					<b>-</b>	<b>508</b>	<b>2,457</b>	<b>-</b>	<b>508</b>	<b>2,457</b>

**32.1** Interest on the notes is payable at 3.10% per annum up to 14 February 2018. Thereafter, the interest rate resets to the then-prevailing 5-year Singapore Dollar Swap Offer Rate plus 2.085% per annum. Interest is paid semi-annually on 14 February and 14 August each year. The notes are redeemable on 14 February 2018 or on any interest payment date thereafter. Swaps have been entered into to exchange the fixed rate payments on the notes to floating rate payments based on the six-month Singapore Dollar Swap Offer Rate. On 11 January 2016, the holding company purchased \$491.75 million of the notes. Pursuant to a notice of redemption issued on 16 January 2018, the remaining outstanding notes have been fully redeemed on 14 February 2018.

**32.2** These notes have been fully redeemed in 2017.

For more information on each instrument, please refer to the "Capital Disclosures" section (unaudited) at the Group's website (<http://www.dbs.com/investor/capital-disclosures.html>).

**33 Share Capital**

	The Group and Bank			
	Shares ('000)		In \$ millions	
	2018	2017	2018	2017
<b>Ordinary shares</b>				
Balance at 1 January	2,626,196	2,611,242	23,653	23,347
Issue of shares (Note 33.1)	-	14,954	-	306
Balance at 31 December	2,626,196	2,626,196	23,653	23,653
<b>Non-cumulative preference shares</b>				
Balance at 1 January				
S\$800m 4.70% Non-Cumulative, Non-Convertible, Non-Voting Preference Shares Callable in 2020 (Note 33.2)	8,000	8,000	799	799
Balance at 31 December	8,000	8,000	799	799
Issued share capital at 31 December			24,452	24,452

**33.1** The ordinary shares are fully paid-up and do not have par value. In 2017, the Bank issued 15 million ordinary shares to its holding company, DBS Group Holdings Ltd, for a total cash consideration of \$306 million. The issued shares rank pari passu in all respect with the previously issued shares.

**33.2** The preference shares were issued on 22 November 2010 with a liquidation preference of \$100 each. Dividends, if declared by the Board of Directors of the Bank, are payable semi-annually on 22 May and 22 November each year at 4.70% per annum. They are redeemable on 22 November 2020 or on any date thereafter. The preference shares are in the first instance ineligible as capital instruments under Basel III rules as they lack provisions for conversion to ordinary shares or write-off at the point of non-viability as determined by the Monetary Authority of Singapore, but are accorded partial eligibility as Additional Tier 1 capital (subject to a cap) for calculating capital adequacy ratios under the Basel III transitional arrangements for capital instruments issued prior to 1 January 2013.

**34 Other Equity Instruments**

The following perpetual capital securities issued by the Bank are classified as other equity instruments. These instruments are subordinated to all liabilities of the Bank and senior only to ordinary shareholders of the Bank. Their terms require them to be written-off if and when the Monetary Authority of Singapore notifies the Bank that a write-off of the instruments, or a public sector injection of capital (or equivalent support), is necessary, without which the Group would become non-viable. These instruments qualify as Additional Tier 1 capital under MAS Notice 637.

In \$ millions	Note	Issue Date	Distribution Payment	The Group and Bank		
				31 Dec 2018	2017	1 Jan 2017
<b>Issued by the Bank</b>						
S\$550m 3.85% Non-Cumulative, Non-Convertible Perpetual Capital Securities First Callable in 2021	34.1	1 Sep 2016	Sep	550	550	550
US\$185m 4.0% Non-Cumulative, Non-Convertible Perpetual Capital Securities First Callable in 2021	34.2	1 Sep 2016	Sep	252	252	252
US\$750m 3.60% Non-Cumulative, Non-Convertible Perpetual Capital Securities First Callable in 2021	34.3	7 Sep 2016	Mar/Sep	1,011	1,011	1,011
S\$1,000m 3.98% Non-Cumulative, Non-Convertible Perpetual Capital Securities First Callable in 2025	34.4	12 Sep 2018	Mar/Sep	1,000	-	-
Total				2,813	1,813	1,813

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**34.1** Distributions are payable at 3.85% per annum up to 1 September 2021. Thereafter, the distribution rate resets every 5 years to the then-prevailing five-year Singapore Dollar Swap Offer Rate plus 2.13% per annum. Distributions are paid annually on 1 September each year, unless cancelled by the Bank. The capital securities are redeemable on 1 September 2021 or on any date thereafter.

**34.2** Distributions are payable at 4.0% per annum up to 1 September 2021. Thereafter, the distribution rate resets every 5 years to the then-prevailing five-year U.S. Dollar Swap Rate plus 2.84% per annum. Distributions are paid annually on 1 September each year, unless cancelled by the Bank. The capital securities are redeemable on 1 September 2021 or on any date thereafter.

**34.3** Distributions are payable at 3.60% per annum up to 7 September 2021. Thereafter, the distribution rate resets every 5 years to the then-prevailing five-year U.S. Dollar Swap Rate plus 2.39% per annum. Distributions are paid semi-annually on 7 March and 7 September each year, unless cancelled by the Bank. The capital securities are redeemable on 7 September 2021 or on any distribution payment date thereafter.

**34.4** Distributions are payable at 3.98% per annum up to 12 September 2025. Thereafter, the distribution rate resets every 7 years to the then-prevailing seven-year Singapore Dollar Swap Offer Rate plus 1.65% per annum. Distributions are paid semi-annually on 12 March and 12 September each year, unless cancelled by the Bank. The capital securities are redeemable on 12 September 2025 or on any distribution payment date thereafter.

## **35 Other Reserves and Revenue Reserves**

### **35.1 Other reserves**

In \$ millions	The Group			Bank		
	31 Dec		1 Jan	31 Dec		1 Jan
	2018	2017	2017	2018	2017	2017
FVOCI (2017: AFS) revaluation reserves (bonds)	(176)	31	(60)	(151)	56	(31)
FVOCI (2017: AFS) revaluation reserves (equities)	(161)	7	86	(178)	4	97
Cash flow hedge reserves	(60)	36	20	(63)	39	21
General reserves	95	95	95	-	-	-
Capital reserves	(450)	(356)	(182)	(159)	(52)	27
Others	-	-	(78)	-	-	-
<b>Total</b>	<b>(752)</b>	<b>(187)</b>	<b>(119)</b>	<b>(551)</b>	<b>47</b>	<b>114</b>

Movements in other reserves for the Group during the year are as follows:

In \$ millions	The Group						Total
	FVOCI/ AFS revaluation reserves (bonds)	FVOCI/ AFS revaluation reserves (equities)	Cash flow hedge reserves	General reserves	Capital reserves <sup>(b)</sup>	Other reserves <sup>(a)</sup>	
<b>2018</b>							
Balance at 1 January	31	7	36	95	(356)	-	(187)
Impact of adopting SFRS(I) 9 on 1 January	(49)	(37)	-	-	-	-	(86)
Balance at 1 January after adoption of SFRS(I) 9	(18)	(30)	36	95	(356)	-	(273)
Net exchange translation adjustments	-	-	-	-	(94)	-	(94)
Share of associates' reserves	-	-	3	-	-	-	3
FVOCI (2017: AFS) financial assets and others:							
- net valuation taken to equity	(161)	(164)	30	-	-	-	(295)
- transferred to income statement	(5)	-	(141)	-	-	-	(146)
- taxation relating to components of other comprehensive income	8	8	12	-	-	-	28
Transfer to revenue reserves upon disposal of FVOCI equities	-	25	-	-	-	-	25
<b>Balance at 31 December</b>	<b>(176)</b>	<b>(161)</b>	<b>(60)</b>	<b>95</b>	<b>(450)</b>	<b>-</b>	<b>(752)</b>

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<b>The Group</b>							
<b>In \$ millions</b>	<b>FVOCI/ AFS revaluation reserves (bonds)</b>	<b>FVOCI/ AFS revaluation reserves (equities)</b>	<b>Cash flow hedge reserves</b>	<b>General reserves</b>	<b>Capital reserves<sup>(b)</sup></b>	<b>Other reserves<sup>(a)</sup></b>	<b>Total</b>
<b>2017</b>							
Balance at 1 January	(60)	86	20	95	(182)	(78)	(119)
Net exchange translation adjustments	-	-	-	-	(174)	-	(174)
Share of associates' reserves	-	(3)	(1)	-	-	-	(4)
Transfer to revenue reserves (Note 35.2)	-	-	-	-	-	78	78
FVOCI (2017: AFS) financial assets and others:							
- net valuation taken to equity	198	123	75	-	-	-	396
- transferred to income statement	(107) <sup>(c)</sup>	(205)	(55)	-	-	-	(367)
- taxation relating to components of other comprehensive income	-	6	(3)	-	-	-	3
<b>Balance at 31 December</b>	<b>31</b>	<b>7</b>	<b>36</b>	<b>95</b>	<b>(356)</b>	<b>-</b>	<b>(187)</b>

(a) In 2017, the Bank transferred \$78 million of other reserves to revenue reserves

(b) Capital reserves include net exchange translation adjustments arising from translation differences on net investments in foreign subsidiaries, associates and branches, and the related foreign currency financial instruments designated as a hedge

(c) Includes impairment of AFS financial assets of \$4 million

Movements in other reserves for the Bank during the year are as follows:

<b>Bank</b>					
<b>In \$ millions</b>	<b>FVOCI/ AFS revaluation reserves (bonds)</b>	<b>FVOCI/ AFS revaluation reserves (equities)</b>	<b>Cash flow hedge reserves</b>	<b>Capital reserves<sup>(a)</sup></b>	<b>Total</b>
<b>2018</b>					
Balance at 1 January	56	4	39	(52)	47
Impact of adopting SFRS(I) 9 on 1 January	(54)	(49)	-	-	(103)
Balance at 1 January after adoption of SFRS(I) 9	2	(45)	39	(52)	(56)
Net exchange translation adjustments	-	-	-	(107)	(107)
FVOCI (2017: AFS) financial assets and others:					
- net valuation taken to equity	(154)	(167)	32	-	(289)
- transferred to income statement	(6)	-	(143)	-	(149)
- taxation relating to components of other comprehensive income	7	11	9	-	27
Transfer to revenue reserves upon disposal of FVOCI equities	-	23	-	-	23
<b>Balance at 31 December</b>	<b>(151)</b>	<b>(178)</b>	<b>(63)</b>	<b>(159)</b>	<b>(551)</b>
<b>2017</b>					
Balance at 1 January	(31)	97	21	27	114
Net exchange translation adjustments	-	-	-	(79)	(79)
FVOCI (2017: AFS) financial assets and others:					
- net valuation taken to equity	181	121	93	-	395
- transferred to income statement	(94) <sup>(b)</sup>	(221)	(73)	-	(388)
- taxation relating to components of other comprehensive income	-	7	(2)	-	5
<b>Balance at 31 December</b>	<b>56</b>	<b>4</b>	<b>39</b>	<b>(52)</b>	<b>47</b>

(a) Capital reserves include net exchange translation adjustments arising from translation differences on net investments in foreign branches and the related foreign currency instruments designated as a hedge

(b) Includes impairment of AFS financial assets of \$4 million

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**35.2 Revenue reserves**

In \$ millions	The Group		Bank	
	2018	2017	2018	2017
Balance at 1 January	22,040	19,552	17,033	14,779
Impact of adopting SFRS(I) 9 on 1 January	95	-	83	-
Balance at 1 January after adoption of SFRS(I) 9	22,135	19,552	17,116	14,779
Transfer (Note 35.1)	-	(78)	-	-
Net profit attributable to shareholders	5,656	4,388	5,307	4,072
Other comprehensive income attributable to shareholders	86	(109)	86	(105)
Sub-total	27,877	23,753	22,509	18,746
Less: Dividends paid to holding company	4,422	1,675	4,422	1,675
Dividends paid on preference shares	38	38	38	38
Balance at 31 December <sup>(a)</sup>	23,417	22,040	18,049	17,033

(a) 2018 includes regulatory loss allowance reserve of \$376 million for the Group and \$367 million for the Bank, which is a non-distributable reserve

**36 Non-controlling Interests**

The following instruments issued by subsidiaries of the Group are classified as non-controlling interests. These instruments have a deeply subordinated claim on the issuing entity's assets in the event of a liquidation.

In \$ millions	Note	Issue Date	Liquidation Preference	Distribution Payment	The Group		1 Jan 2017
					31 Dec 2018	2017	
<b>Issued by DBS Capital Funding II Corporation</b>							
S\$1,500m 5.75% Non-Cumulative, Non-Convertible, Non-Voting, Guaranteed Preference Shares Callable with Step-up in 2018	36.1	27 May 2008	S\$ 250,000	Jun/Dec	-	1,500	1,500
<b>Issued by Heedum Pte Ltd</b>		12 Nov 2015		Nov	344	344	344
S\$344m 1.6% Perpetual Subordinated Loan							
<b>Issued by DBS Bank (Taiwan) Ltd</b>		20 Jan 2015			355	359	359
TW\$8,000m 4% Non-Cumulative and Perpetual Preferred Shares							
<b>Issued by DBS Bank (Hong Kong) Limited</b>		13 Oct 2016	HK\$ 10,000,000	Mar	244	240	261
HK\$1,400m 3.9% Non-Cumulative Preference Shares							
Non-controlling interests in subsidiaries					27	41	59
Total					970	2,484	2,523

**36.1** Dividends are payable if declared by the Board of Directors of DBS Capital Funding II Corporation. They are payable semi-annually on 15 June and 15 December each year at 5.75% per annum up to 15 June 2018, and thereafter quarterly on 15 March, 15 June, 15 September and 15 December each year at a floating rate of the three-month Singapore Dollar Swap Offer Rate plus 3.415% per annum. The preference shares have been redeemed on 18 June 2018.

### 37 Contingent Liabilities and Commitments

The Group issues guarantees, performance bonds and indemnities in the ordinary course of business. The majority of these facilities are offset by corresponding obligations of third parties.

**Guarantees and performance bonds** are generally written by the Group to support the performance of a customer to third parties. As the Group will only be required to meet these obligations in the event of the customer's default, the cash requirements of these instruments are expected to be considerably below their nominal amount.

**Endorsements** are residual liabilities of the Group in respect of bills of exchange, which have been paid and subsequently rediscounted.

In \$ millions	The Group			Bank		
	2018	31 Dec 2017	1 Jan 2017	2018	31 Dec 2017	1 Jan 2017
Guarantees on account of customers	14,990	13,378	15,078	15,826	13,584	14,930
Endorsements and other obligations on account of customers	9,613	7,441	7,636	8,940	5,433	5,488
Undrawn credit commitments <sup>(a)</sup>	272,486	244,397	235,324	224,476	200,898	191,783
Undisbursed and underwriting commitments in securities	7	76	9	7	11	9
<b>Sub-total</b>	<b>297,096</b>	<b>265,292</b>	<b>258,047</b>	<b>249,249</b>	<b>219,926</b>	<b>212,210</b>
Operating lease commitments (Note 37.1)	672	717	549	386	417	262
Capital commitments	81	74	69	59	63	37
<b>Total</b>	<b>297,849</b>	<b>266,083</b>	<b>258,665</b>	<b>249,694</b>	<b>220,406</b>	<b>212,509</b>
<b>Analysed by industry (excluding operating lease and capital commitments)</b>						
Manufacturing	42,516	40,884	42,718	33,125	31,837	33,135
Building and construction	24,483	23,540	23,436	22,829	21,196	20,753
Housing loans	5,740	6,849	7,155	5,483	6,618	6,942
General commerce	55,308	47,231	50,338	43,890	36,932	36,810
Transportation, storage and communications	14,454	12,350	13,933	12,173	10,100	11,796
Financial institutions, investment and holding companies	28,654	25,312	22,686	27,011	24,148	22,380
Professionals and private individuals (excluding housing loans)	99,999	87,057	75,615	80,455	69,082	59,940
Others	25,942	22,069	22,166	24,283	20,013	20,454
<b>Total</b>	<b>297,096</b>	<b>265,292</b>	<b>258,047</b>	<b>249,249</b>	<b>219,926</b>	<b>212,210</b>
<b>Analysed by geography<sup>(b)</sup> (excluding operating lease and capital commitments)</b>						
Singapore	123,899	111,986	105,141	123,722	111,842	104,256
Hong Kong	49,289	44,364	48,334	23,227	19,135	20,342
Rest of Greater China	31,715	26,987	22,533	13,784	11,155	10,339
South and Southeast Asia	28,138	26,280	25,750	25,943	24,173	24,003
Rest of the World	64,055	55,675	56,289	62,573	53,621	53,270
<b>Total</b>	<b>297,096</b>	<b>265,292</b>	<b>258,047</b>	<b>249,249</b>	<b>219,926</b>	<b>212,210</b>

(a) Include commitments that are unconditionally cancellable at any time by the Group (2018: \$230,291 million; 2017: \$204,338 million; 1 Jan 2017: \$193,016 million) and Bank (2018: \$184,597 million; 2017: \$163,038 million; 1 Jan 2017: \$152,153 million)

(b) Based on the location of incorporation of the counterparty or borrower

**37.1** The Group has existing significant operating lease commitments including the leasing of office premises in Changi Business Park and Marina Bay Financial Centre in Singapore, and One Island East in Hong Kong. These include lease commitments for which the payments will be determined in the future based on the prevailing market rates in accordance with the lease agreements, of which the related amounts have not been included. The leases have varying terms, escalation clauses and renewal rights.

## 38 Financial Derivatives

Financial derivatives are financial instruments whose characteristics are derived from the underlying assets, or from interest and exchange rates or indices. These include forwards, swaps, futures and options. The following sections outline the nature and terms of the most common types of derivatives used by the Group.

### Interest rate derivatives

**Forward rate agreements** give the buyer the ability to determine the underlying rate of interest for a specified period commencing on a specified future date (the settlement date). There is no exchange of principal and settlement is effected on the settlement date. The settlement amount is the difference between the contracted rate and the market rate prevailing on the settlement date.

**Interest rate swaps** involve the exchange of interest obligations with a counterparty for a specified period without exchanging the underlying (or notional) principal.

**Interest rate futures** are exchange-traded agreements to buy or sell a standard amount of a specified fixed income security or time deposit at an agreed interest rate on a standard future date.

**Interest rate options** give the buyer on payment of a premium the right, but not the obligation, to fix the rate of interest on a future deposit or loan, for a specified period and commencing on a specified future date.

**Interest rate caps and floors** give the buyer the ability to fix the maximum or minimum rate of interest. There is no facility to deposit or draw down funds, instead the writer pays to the buyer the amount by which the market rate exceeds or is less than the cap rate or the floor rate respectively. This category includes combinations of interest rate caps and floors, which are known as interest rate collars.

### Foreign exchange derivatives

**Forward foreign exchange** contracts are agreements to buy or sell fixed amounts of currency at agreed rates of exchange on a specified future date.

**Cross currency swaps** are agreements to exchange, and on termination of the swap, re-exchange principal amounts denominated in different currencies. Cross currency swaps may involve the exchange of interest payments in one specified currency for interest payments in another specified currency for a specified period.

**Currency options** give the buyer, on payment of a premium, the right but not the obligation, to buy or sell specified amounts of currency at agreed rates of exchange on or before a specified future date.

### Equity derivatives

**Equity options** give the buyer, on payment of a premium, the right but not the obligation, either to purchase or sell a specified stock or stock index at a specified price or level on or before a specified date.

**Equity swaps** involve the exchange of a set of payments whereby one of these payments is based on an equity-linked return while the other is typically based on an interest reference rate.

### Credit derivatives

**Credit default swaps** involve the transfer of credit risk of a reference asset from the protection buyer to the protection seller. The protection buyer makes one or more payments to the seller in exchange for an undertaking by the seller to make a payment to the buyer upon the occurrence of a predefined credit event.

### Commodity derivatives

**Commodity contracts** are agreements between two parties to exchange cash flows which are dependent on the price of the underlying physical assets.

**Commodity futures** are exchange-traded agreements to buy or sell a standard amount of a commodity at an agreed price on a standard future date.

**Commodity options** give the buyer, on payment of a premium, the right but not the obligation, to buy or sell a specific amount of commodity at an agreed contract price on or before a specified date.

#### 38.1 Trading derivatives

Most of the Group's derivatives relate to sales and trading activities. Sales activities include the structuring and marketing of derivatives to customers to enable them to take, transfer, modify or reduce current or expected risks. Trading activities are entered into principally for dealer's margin or for the purpose of generating a profit from short-term fluctuations in price.

Trading includes mainly market-making and warehousing to facilitate customer orders. Market-making involves quoting bid and offer prices to other market participants with the intention of generating revenues based on spread and volume. Warehousing involves holding on to positions in order to liquidate in an orderly fashion with timing of unwinding determined by market conditions and traders' views of markets as they evolve.

#### 38.2 Hedging derivatives

The accounting treatment of the hedge derivative transactions varies according to the nature of the hedge and whether the hedge meets the specified criteria to qualify for hedge accounting. Derivatives transacted as economic hedges but do not qualify for hedge accounting are treated in the same way as derivative instruments held for trading purposes.

Please refer to Note 39 for more details on derivatives used for hedging.

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The following table summarises the contractual or underlying principal amounts of derivative financial instruments held or issued for trading and hedging purposes outstanding at balance sheet date. They do not represent amounts at risk.

In the financial statements, trading derivative financial instruments are revalued on a gross position basis and the unrealised gains or losses are reflected as derivative assets or derivative liabilities. Derivative assets and liabilities arising from different transactions are only offset if the transactions are done with the same counterparty, a legal right of offset exists, and the parties intend to settle the cash flows on a net basis. There were no offset of derivative assets and liabilities in 2018 and 2017.

In \$ millions	The Group								
	2018			2017			1 Jan 2017		
	Underlying notional	Assets	Liabilities	Underlying notional	Assets	Liabilities	Underlying notional	Assets	Liabilities
<b>Derivatives held for trading</b>									
<b>Interest rate derivatives</b>									
Forward rate agreements	4,370	-	1	-	-	-	1,000	#	#
Interest rate swaps	1,077,522	6,599	7,116	1,066,143	5,639	5,654	1,084,216	6,767	6,630
Interest rate futures	19,257	9	57	17,648	5	2	14,554	5	3
Interest rate options	9,115	103	73	7,624	85	69	8,002	72	84
Interest rate caps/floors	31,079	500	867	27,770	385	787	27,707	510	953
Sub-total	1,141,343	7,211	8,114	1,119,185	6,114	6,512	1,135,479	7,354	7,670
<b>Foreign exchange (FX) derivatives</b>									
FX contracts	574,744	3,953	3,820	518,374	5,561	5,911	576,932	8,227	8,070
Currency swaps	196,987	4,063	3,115	208,225	4,900	4,299	208,102	8,373	7,109
Currency options	81,572	473	562	72,219	458	561	94,173	983	1,008
Sub-total	853,303	8,489	7,497	798,818	10,919	10,771	879,207	17,583	16,187
<b>Equity derivatives</b>									
Equity options	7,342	231	385	4,964	67	135	2,934	29	69
Equity swaps	4,319	597	38	3,125	9	82	1,766	21	33
Sub-total	11,661	828	423	8,089	76	217	4,700	50	102
<b>Credit derivatives</b>									
Credit default swaps and others	27,302	197	81	27,070	209	258	31,969	191	192
Sub-total	27,302	197	81	27,070	209	258	31,969	191	192
<b>Commodity derivatives</b>									
Commodity contracts	572	29	43	966	64	21	1,072	115	52
Commodity futures	1,532	36	29	343	22	6	1,217	52	62
Commodity options	570	5	6	631	3	3	742	12	14
Sub-total	2,674	70	78	1,940	89	30	3,031	179	128
<b>Total derivatives held for trading</b>	<b>2,036,283</b>	<b>16,795</b>	<b>16,193</b>	<b>1,955,102</b>	<b>17,407</b>	<b>17,788</b>	<b>2,054,386</b>	<b>25,357</b>	<b>24,279</b>
<b>Derivatives held for hedging</b>									
Interest rate swaps held for fair value hedge	11,623	123	52	9,318	77	77	11,081	112	79
Interest rate swaps held for cash flow hedge	2,899	1	33	1,692	7	#	900	5	1
FX contracts held for fair value hedge	36	-	2	-	-	-	-	-	-
FX contracts held for cash flow hedge	2,932	1	42	3,161	18	63	3,630	106	133
FX contracts held for hedge of net investment	372	1	2	1,417	2	16	1,332	7	15
Currency swaps held for fair value hedge	410	18	#	325	#	-	-	-	-
Currency swaps held for cash flow hedge	13,880	103	417	5,973	100	95	1,966	191	18
Currency swaps held for hedge of net investment	-	-	-	1,767	1	-	-	-	-
<b>Total derivatives held for hedging</b>	<b>32,152</b>	<b>247</b>	<b>548</b>	<b>23,653</b>	<b>205</b>	<b>251</b>	<b>18,909</b>	<b>421</b>	<b>246</b>
<b>Total derivatives</b>	<b>2,068,435</b>	<b>17,042</b>	<b>16,741</b>	<b>1,978,755</b>	<b>17,612</b>	<b>18,039</b>	<b>2,073,295</b>	<b>25,778</b>	<b>24,525</b>
<b>Impact of netting arrangements recognised for computation of Capital Adequacy Ratio (CAR)(unaudited)</b>									
		(8,837)	(8,837)		(9,724)	(9,724)		(14,788)	(14,788)
		8,205	7,904		7,888	8,315		10,990	9,737
Of which: derivatives with holding company	5,057	13	54	2,787	27	36	2,743	22	29

# Amount under \$500,000



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In \$ millions	Bank								
	31 Dec			2017			1 Jan		
	2018			2017			2017		
Underlying notional	Assets	Liabilities	Underlying notional	Assets	Liabilities	Underlying notional	Assets	Liabilities	
<b>Derivatives held for trading</b>									
<b>Interest rate derivatives</b>									
Forward rate agreements	4,370	-	1	-	-	-	1,000	#	#
Interest rate swaps	914,804	5,465	5,960	874,602	5,385	5,415	954,852	6,459	6,328
Interest rate futures	19,189	9	57	17,648	5	2	14,535	4	3
Interest rate options	9,115	103	73	7,624	85	69	8,002	72	84
Interest rate caps/floors	31,079	500	867	27,769	384	787	27,707	510	953
Sub-total	978,557	6,077	6,958	927,643	5,859	6,273	1,006,096	7,045	7,368
<b>Foreign exchange (FX) derivatives</b>									
FX contracts	516,228	3,133	3,142	440,991	4,504	4,645	499,642	7,043	7,026
Currency swaps	194,557	4,008	3,056	206,461	4,832	4,277	205,281	8,235	7,039
Currency options	64,314	361	441	54,981	336	421	85,555	919	945
Sub-total	775,099	7,502	6,639	702,433	9,672	9,343	790,478	16,197	15,010
<b>Equity derivatives</b>									
Equity options	7,257	229	382	4,937	66	135	2,829	29	69
Equity swaps	4,322	598	38	3,122	9	82	1,766	21	33
Sub-total	11,579	827	420	8,059	75	217	4,595	50	102
<b>Credit derivatives</b>									
Credit default swaps and others	27,302	197	81	27,070	209	258	31,969	191	192
Sub-total	27,302	197	81	27,070	209	258	31,969	191	192
<b>Commodity derivatives</b>									
Commodity contracts	575	29	43	966	64	21	1,072	115	52
Commodity futures	1,532	36	29	343	22	6	1,217	52	62
Commodity options	566	5	6	632	3	3	742	12	14
Sub-total	2,673	70	78	1,941	89	30	3,031	179	128
<b>Total derivatives held for trading</b>	<b>1,795,210</b>	<b>14,673</b>	<b>14,176</b>	<b>1,667,146</b>	<b>15,904</b>	<b>16,121</b>	<b>1,836,169</b>	<b>23,662</b>	<b>22,800</b>
<b>Derivatives held for hedging</b>									
Interest rate swaps held for fair value hedge	11,089	117	52	8,718	63	67	10,298	93	64
Interest rate swaps held for cash flow hedge	2,899	1	33	1,692	7	#	900	5	1
FX contracts held for fair value hedge	313	#	3	1,085	-	15	1,090	6	8
FX contracts held for cash flow hedge	1,860	1	42	1,650	17	53	1,604	37	52
FX contracts held for hedge of net investment	-	-	-	140	-	1	93	-	1
Currency swaps held for fair value hedge	410	18	#	342	#	-	-	-	-
Currency swaps held for cash flow hedge	12,888	102	400	5,973	100	95	1,966	191	18
Currency swaps held for hedge of net investment	-	-	-	1,328	1	-	-	-	-
<b>Total derivatives held for hedging</b>	<b>29,459</b>	<b>239</b>	<b>530</b>	<b>20,928</b>	<b>188</b>	<b>231</b>	<b>15,951</b>	<b>332</b>	<b>144</b>
<b>Total derivatives</b>	<b>1,824,669</b>	<b>14,912</b>	<b>14,706</b>	<b>1,688,074</b>	<b>16,092</b>	<b>16,352</b>	<b>1,852,120</b>	<b>23,994</b>	<b>22,994</b>
<b>Impact of netting arrangements recognised for computation of Capital Adequacy Ratio (CAR) (unaudited)</b>									
		(8,994)	(8,994)		(9,923)	(9,923)		(15,104)	(15,104)
		5,918	5,712		6,169	6,429		8,890	7,890
Of which: derivatives with subsidiaries and holding company	64,191	592	266	50,770	349	347	60,304	634	375

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The contractual or underlying principal amounts of derivative financial instruments of bank and non-bank counterparties amounted to \$1,015 billion (2017: \$1,044 billion; 1 January 2017: \$1,127 billion) and \$1,053 billion (2017: \$935 billion; 1 January 2017: \$946 billion) respectively for the Group and \$796 billion (2017: \$771 billion; 1 January 2017: \$933 billion) and \$1,029 billion (2017: \$917 billion; 1 January 2017: \$919 billion) respectively for the Bank. These positions are mainly booked in Singapore. For purpose of managing its credit exposures, the Group maintains collateral agreements and enters into master netting agreements with most of these counterparties. For those arrangements that comply with the regulatory requirements as set out in MAS Notice 637, the Group recognises the netting arrangements in the computation of its Capital Adequacy Ratios.

## **39 Hedge Accounting**

The Group enters into hedging transactions to manage exposures to interest rate and foreign currency risks. Hedge accounting is applied to minimise volatility in earnings arising from changes in interest rate and foreign exchange rates.

Refer to Note 45 for more information on market risk and the Group's risk management practices and Note 2.19 for the Group's accounting policy for hedge accounting.

### **39.1 Fair value hedges**

In accordance with the risk management strategy in place, the Group enters into interest rate swaps to mitigate the risk of changes in interest rates on the fair value of the following:

- issued fixed rate debt;
- a portion of purchased fixed rate bonds; and
- some large exposures to corporate loans.

In such instances, the Group hedges the benchmark interest rate risk component which is an observable and reliably measurable component of interest rate risk. Specifically, the Group has designated fair value hedge relationships, on a hedge-by-hedge basis, to hedge against movements in the benchmark interest rate. This effectively results in the recognition of interest expense (for fixed rate liabilities), or interest income (for fixed rate assets) at floating rates. The Group also uses cross currency swaps when there is a need to hedge both interest rate and foreign exchange risks.

The Group manages all other risks arising from these exposures, such as credit risk, but hedge accounting is not applied for those risks.

The Group assesses prospective hedge effectiveness by comparing the changes in fair value of the hedged item resulting from movements in the benchmark interest rate with the changes in fair value of the interest rate swaps used to hedge the exposure. The Group determines the hedge ratio by comparing the notional of the derivative with the principal of the debt issued or the bond asset purchased, or the loan granted.

For all interest rate swaps used for hedging purposes, critical terms match or nearly match those of the underlying hedged items.

The Group has identified the following possible sources of ineffectiveness:

- the use of derivatives as a protection against interest rate risk creates an exposure to the derivative counterparty's credit risk which is not offset by the hedged item. This risk is minimised by entering into derivatives with high credit quality counterparties;
- the use of different discounting curves when measuring the fair value of the hedged items and hedging instruments. For derivatives the discounting curve used depends on collateralisation and the type of collateral used; and
- difference in the timing of settlement of hedging instruments and hedged items.

No other significant sources of ineffectiveness were identified in these hedge relationships.

The Group typically uses foreign currency denominated borrowings/deposits to fund its investments in non-SGD denominated FVOCI equity instruments. To reduce the accounting mismatch on the borrowings/deposits and FVOCI equity instruments because of foreign exchange rate movements, the Group designates the borrowings/deposits as the hedging instruments in fair value hedges of the FVOCI equity instruments. The hedge ratio is determined by comparing the principal of the borrowings/deposits with the investment costs of the FVOCI equity instruments. A potential source of ineffectiveness is a decrease in the fair value of the equity instruments below their investment costs.

The following table sets out the maturity profile of the hedging instruments used in fair value hedges. The amounts shown in the table reflect the notional amounts of derivatives and the carrying amounts of borrowings and deposits. Please refer to Note 38 for the carrying values of the derivatives.

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2018		The Group			
In \$ millions	Type of risk hedged	Less than 1 year	1 to 5 years	More than 5 years	Total
<b>Derivatives (notional)</b>					
Interest rate swaps	Interest rate	1,326	10,076	221	11,623
Currency swaps	Interest rate & Foreign exchange	125	213	72	410
FX Contracts	Foreign exchange	36	-	-	36
<b>Total derivatives</b>		<b>1,487</b>	<b>10,289</b>	<b>293</b>	<b>12,069</b>
Non-derivative instruments (e.g. borrowings, deposits)	Foreign exchange	1,005	-	-	1,005
<b>Total non-derivative instruments</b>		<b>1,005</b>	<b>-</b>	<b>-</b>	<b>1,005</b>

2018		Bank			
In \$ millions	Type of risk hedged	Less than 1 year	1 to 5 years	More than 5 years	Total
<b>Derivatives (notional)</b>					
Interest rate swaps	Interest rate	1,072	9,812	205	11,089
Currency swaps	Interest rate & Foreign exchange	125	213	72	410
FX Contracts	Foreign exchange	313	-	-	313
<b>Total derivatives</b>		<b>1,510</b>	<b>10,025</b>	<b>277</b>	<b>11,812</b>
Non-derivative instruments (e.g. borrowings, deposits)	Foreign exchange	1,005	-	-	1,005
<b>Total non-derivative instruments</b>		<b>1,005</b>	<b>-</b>	<b>-</b>	<b>1,005</b>

The table below provides information on hedged items relating to fair value hedges.

2018	The Group		Bank	
	Carrying amounts (including hedge adjustments)	Fair value hedge adjustments included in carrying amounts	Carrying amounts (including hedge adjustments)	Fair value hedge adjustments included in carrying amounts
<b>In \$ millions</b>				
<b>Assets</b>				
Loans and advances to Customers	897	4	897	4
Government securities and treasury Bills <sup>(a)</sup>	1,142	-	1,098	-
Bank and corporate securities <sup>(a)</sup>	6,649	(43)	6,555	(42)
Subsidiaries	-	-	277	4
<b>Liabilities</b>				
Other debt securities	4,291	38	3,895	35

(a) The carrying amounts of debt and equity instruments at fair value through other comprehensive income do not include fair value hedge adjustments as the hedged assets are measured at fair value. The accounting for the hedge relationship results in a transfer from other comprehensive income to the income statement

At the Group, for the year ended 31 December 2018, the net gains on hedging instruments used to calculate hedge effectiveness was \$116 million (2017: \$45 million). The net losses on hedged items attributable to the hedged risk amounted to \$116 million (2017: \$52 million).

At the Bank, for the year ended 31 December 2018, the net gains on hedging instruments used to calculate hedge effectiveness was \$111 million (2017: \$45 million). The net losses on hedged items attributable to the hedged risk amounted to \$111 million (2017: \$51 million).

### 39.2 Cash flow hedges

The Group is predominantly exposed to variability in future cash flows due to interest rate movements and foreign currency fluctuations against SGD from the following:

- SGD assets subject to repricing, reinvestment or refinancing risk;

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- forecasted interest earnings denominated in foreign currency;
- issued floating or fixed rate foreign currency debt; and
- a portion of purchased floating or fixed rate foreign currency bonds.

In accordance with the Group risk management strategy the Group enters into interest rate swaps, forward contracts or cross currency swaps to protect against the variability of cash flows due to changes in interest rates and/or foreign currency exchange rates.

In such instances, cash flow hedge relationships are designated. These are applied on a hedge-by-hedge basis, except for cash flows from SGD assets subject to repricing, reinvestment or refinancing risk, for which a portfolio cash flow hedge relationship is designated using interest rate swaps. A dynamic process is applied for this hedge as the portfolio composition can change e.g. due to maturities and new originations. The portfolio cash flow hedge relationships effectively extend the duration of the assets, such that the interest cash flows are transformed from a floating rate basis to a fixed rate basis.

The Group enters into forward contracts to hedge against variability in future cash flows arising from USD-denominated interest income.

The Group also enters into cross currency swaps to mitigate 100% of the risk of fluctuation of coupon and principal cash flows due to changes in foreign currency rates of issued foreign currency debt and a portion of purchased foreign currency bonds. Critical terms of the cross-currency swaps match that of the issued foreign currency debt or purchased foreign currency bonds. In this way the Group exchanges foreign currency interest and principal cash flows, to SGD cash flows.

The Group manages all other risks derived by these exposures, such as credit risk, but they do not apply hedge accounting for these risks.

The Group assesses hedge effectiveness by comparing the changes in fair value of a hypothetical derivative reflecting the terms of the hedged item due to movements in the hedged risk with the changes in fair value of the derivatives used to hedge the exposure.

The Group determines the hedge ratio by comparing the notional of the derivatives with the SGD assets subject to repricing/reinvestment/ refinancing risk or amount of forecast earnings denominated in foreign currency or the principal of the debt securities issued or purchased foreign currency bonds.

The Group has identified the following possible sources of ineffectiveness in its cash flow hedge relationships:

- the use of derivatives as a protection against currency and interest rate risk creates an exposure to the derivative counterparty's credit risk which is not offset by the hedged item. This risk is minimised by entering into derivatives with high credit quality counterparties;
- difference in tenor of hedged items and hedging instruments;
- difference in timing of settlement of the hedging instrument and hedged item; and
- designation of off-market hedging instruments.

The following table sets out the maturity profile of the hedging instruments used in cash flow hedges. The amounts shown in the table reflect the notional amounts of derivatives and the carrying amounts of loans and deposits. Please refer to Note 38 for the carrying values of the derivatives.

2018		The Group			
In \$ millions	Type of risk hedged	Less than 1 year	1 to 5 years	More than 5 years	Total
<b>Derivatives (notional)</b>					
Interest rate swaps	Interest rate	450	2,449	-	2,899
Currency swaps	Interest rate & Foreign exchange	1,465	11,423	992	13,880
FX contracts	Foreign exchange	2,932	-	-	2,932
Total		4,847	13,872	992	19,711

2018		Bank			
In \$ millions	Type of risk hedged	Less than 1 year	1 to 5 years	More than 5 years	Total
<b>Derivatives (notional)</b>					
Interest rate swaps	Interest rate	450	2,449	-	2,899
Currency swaps	Interest rate & Foreign exchange	1,465	11,423	-	12,888
FX contracts	Foreign exchange	1,860	-	-	1,860
Total		3,775	13,872	-	17,647

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The hedge ineffectiveness arising from these hedges was insignificant.

Please refer to Note 35 for information on the cash flow hedge reserves.

**39.3 Net investment hedges**

The Group could manage currency risk arising from its net investment in foreign operations (or structural foreign exchange risk) using foreign currency borrowings, FX forwards and FX swaps.

Structural foreign exchange exposures are managed with the primary aim of ensuring that consolidated capital ratios are largely protected from the effect of fluctuations in foreign exchange rates against SGD.

Under the Group's hedging strategy, the cost of these investments could be fully hedged, partially hedged or not hedged at all. The Group regularly reviews its hedging strategy, taking into account the long-term outlook of currency fundamentals and the impact of fluctuations in foreign exchange rates on capital adequacy ratios. As part of this review, the Group and Bank reduced its net investment hedges and fair value hedges respectively for investment cost in foreign operations during the year.

The tables below analyses the currency exposure of the Group by functional currency.

<b>In \$ millions</b>	<b>Net investments in foreign operations<sup>(a)</sup></b>	<b>31 Dec 2018 Financial instruments which hedge the net investments</b>	<b>Remaining unhedged currency exposures</b>
Hong Kong dollar	11,955	82	11,873
Chinese yuan	2,483	277	2,206
Others	5,739	13	5,726
<b>Total</b>	<b>20,177</b>	<b>372</b>	<b>19,805</b>

<b>In \$ millions</b>	<b>Net investments in foreign operations<sup>(a)</sup></b>	<b>31 Dec 2017 Financial instruments which hedge the net investments</b>	<b>Remaining unhedged currency exposures</b>
Hong Kong dollar	10,189	9,169	1,020
Chinese yuan	2,276	286	1,990
Others	5,111	2,352	2,759
<b>Total</b>	<b>17,576</b>	<b>11,807</b>	<b>5,769</b>

<b>In \$ millions</b>	<b>Net investments in foreign operations<sup>(a)</sup></b>	<b>1 Jan 2017 Financial instruments which hedge the net investments</b>	<b>Remaining unhedged currency exposures</b>
Hong Kong dollar	10,161	9,065	1,096
Chinese yuan	2,292	290	2,002
Others	5,174	2,223	2,951
<b>Total</b>	<b>17,627</b>	<b>11,578</b>	<b>6,049</b>

(a) Refers to net tangible assets of subsidiaries, associates and overseas branches

Please refer to Note 35 for information on the capital reserves. Capital reserves include the effect of translation differences on net investments in foreign subsidiaries, associates and branches, and the related foreign currency financial instruments designated for hedge accounting.

#### **40 Share-based Compensation Plans**

As part of the Group's remuneration policy, the Group provides various share-based compensation plans to foster a culture that aligns employees' interests with shareholders', enable employees to share in the Bank's performance and enhance talent retention.

Main Scheme/Plan	Note
<b>DBSH Share Plan (Share Plan)</b>	
<ul style="list-style-type: none"> <li>• The Share Plan is granted to Group executives as determined by the Committee appointed to administer the Share Plan from time to time.</li> <li>• Participants are awarded shares of DBSH or, at the Committee's discretion, their equivalent cash value or a combination.</li> <li>• Awards consist of main award and retention award (20% of main award). Dividends on unvested shares do not accrue to employees.</li> <li>• The main award vests from 2 to 4 years after grant i.e. 33% will vest 2 years after grant; another 33% will vest on the third year and the remaining 34% plus the retention award will vest 4 years after grant.</li> <li>• The awards will lapse immediately upon termination of employment, except in the event of ill health, injury, disability, redundancy, retirement or death.</li> <li>• The market price of shares on the grant date is used to estimate the fair value of the shares awarded.</li> <li>• Vested and unvested shares are subject to clawback/malus. Conditions that trigger such clawback/malus are in the Corporate Governance section of DBSH's Annual Report.</li> <li>• Shares are awarded to non-executive directors as part of director's remuneration. Details of these awards are disclosed in the Corporate Governance section of DBSH's Annual Report.</li> </ul>	40.1
<b>DBSH Employee Share Plan (ESP)</b>	
<ul style="list-style-type: none"> <li>• The ESP caters to employees not eligible to participate in the above listed Share Plan. Eligible employees are awarded ordinary shares of DBSH, their equivalent cash value or a combination of both (at the discretion of the Committee), when time-based conditions are met.</li> <li>• The awards structure and vesting conditions are similar to DBSH Share Plan.</li> <li>• There are no additional retention awards for shares granted to top performers and key employees.</li> <li>• However, in specific cases where the award forms part of an employee's annual performance remuneration, the retention award which constitutes 20% of the shares given in the main award will be granted. The shares in the retention award will vest 4 years after the date of grant. For such cases, vested and unvested shares are subject to clawback/malus. Conditions that trigger such clawback/malus are in the Corporate Governance section of DBSH's Annual Report.</li> </ul>	40.1
<b>DBSH Share Ownership Scheme</b>	
<ul style="list-style-type: none"> <li>• All Singapore-based employees with at least one year of service who hold the rank of Assistant Vice President and below are eligible.</li> <li>• Participants contribute up to 10% of monthly salary and the Group will match up to 5% of monthly base salary to buy units of the DBSH's ordinary shares.</li> </ul>	40.2

#### **40.1 DBSH Share Plan and DBSH Employee Share Plan**

The following table sets out the movements of the awards during the year.

	The Group			
	2018		2017	
Number of shares	Share Plan	ESP	Share Plan	ESP
Balance at 1 January	19,238,282	2,338,534	19,663,278	2,287,414
Granted <sup>(a)</sup>	4,329,124	642,731	5,483,617	901,838
Vested	(5,989,489)	(700,182)	(5,372,256)	(610,968)
Forfeited	(388,874)	(248,563)	(536,357)	(239,750)
Balance at 31 December	17,189,043	2,032,520	19,238,282	2,338,534
Weighted average fair value of the shares granted during the year	\$26.24	\$26.46	\$18.58	\$18.50

(a) 2018 includes adjustments (320,063 shares) made to all unvested share awards following the shareholders' approval for the special dividend of \$0.50 per ordinary share at DBSH's Annual General Meeting held on 25 April 2018 in accordance with the terms of the Share Plan and ESP

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Number of shares	Bank			
	2018		2017	
	Share Plan	ESP	Share Plan	ESP
Balance at 1 January	16,106,085	1,347,549	16,672,078	1,298,010
Granted <sup>(a)</sup>	3,665,869	357,021	4,676,747	512,738
Vested	(4,977,098)	(400,379)	(4,408,830)	(348,841)
Transferred	56,449	(1,203)	(400,786)	5,711
Forfeited	(308,870)	(127,199)	(433,124)	(120,069)
Balance at 31 December	14,542,435	1,175,789	16,106,085	1,347,549
Weighted average fair value of the shares granted during the year	\$26.26	\$26.45	\$18.57	\$18.50

(a) 2018 includes adjustments (262,120 shares) made to all unvested share awards following the shareholders' approval for the special dividend of \$0.50 per ordinary share at DBS's Annual General Meeting held on 25 April 2018 in accordance with the terms of the Share Plan and ESP

#### 40.2 DBSH Share Ownership Scheme

The outstanding shares held under DBSH Share Ownership Scheme are as follows:

	The Group and Bank			
	Ordinary shares			
	Number of shares		Market value (In \$ millions)	
	2018	2017	2018	2017
Balance at 1 January	6,967,989	8,388,820	173	145
Balance at 31 December	7,036,093	6,967,989	167	173

## 41 Related Party Transactions

**41.1** Transactions between the Bank and its subsidiaries, including consolidated structured entities and associates which are related parties of the Bank, are disclosed in Notes 41.4 to 41.6.

**41.2** During the financial year, the Group had banking transactions with related parties, consisting of subsidiaries, associates and key management personnel of the Group. These included the taking of deposits and extension of credit card and other loan facilities. These transactions were made in the ordinary course of business and carried out at arms-length commercial terms, and were not material.

In addition, key management personnel received remuneration for services rendered during the financial year. Non-cash benefits including performance shares were also granted.

**41.3** Total compensation and fees to key management personnel<sup>(a)</sup> are as follows:

In \$ millions	The Group			Bank		
	31 Dec 2018	31 Dec 2017	1 Jan 2017	31 Dec 2018	31 Dec 2017	1 Jan 2017
Short-term benefits <sup>(b)</sup>	48	41	37	39	33	30
Share-based payments <sup>(c)</sup>	31	29	30	27	26	27
Total	79	70	67	66	59	57
Of which: Bank Directors' remuneration and fees	12	12	11	12	12	11

(a) Includes Bank Directors and members of the Management Committee who have authority and responsibility in planning the activities and direction of the Group. The composition and number of Directors and Management Committee members may differ from year to year. The Management Committee members have increased from 19 in 2017 to 22 in 2018

(b) Includes cash bonus based on amount accrued during the year, to be paid in the following year

(c) Share-based payments are expensed over the vesting period in accordance with SFRS(I) 2

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**41.4 Income received from and expenses paid to related parties**

In addition to the related party information shown elsewhere in the financial statements, the following transactions took place between the Bank and related parties during the financial year on terms agreed by the parties concerned.

In \$ millions	The Group		Bank	
	2018	2017	2018	2017
<b>Income received from:</b>				
-Holding company	8	1	8	1
-Subsidiaries	-	-	1,310	452
-Associates	47	43	55	49
<b>Total</b>	<b>55</b>	<b>44</b>	<b>1,373</b>	<b>502</b>
<b>Expenses paid to:</b>				
-Holding company	125	52	86	16
-Subsidiaries	-	-	1,332	785
-Associates	92	83	92	83
<b>Total</b>	<b>217</b>	<b>135</b>	<b>1,510</b>	<b>884</b>

**41.5 Amounts due from and to related parties**

In \$ millions	2018	31 Dec	Bank	
			2017	1 Jan 2017
<b>Amounts due from:</b>				
-Subsidiaries (Note 22)	16,022		21,877	14,910
-Associates	970		972	981
<b>Total</b>	<b>16,992</b>		<b>22,849</b>	<b>15,891</b>
<b>Amounts due to:</b>				
-Holding company	5,431		2,936	1,029
-Subsidiaries (Note 31)	52,655		51,697	41,205
-Associates	138		137	167
<b>Total</b>	<b>58,224</b>		<b>54,770</b>	<b>42,401</b>

**41.6 Guarantees issued to and received from related parties**

Guarantees issued to and received from subsidiaries amounted to \$2,253 million (2017: \$1,350 million; 1 January 2017: \$1,952 million) and \$1,224 million (2017: \$1,055 million; 1 January 2017: \$1,455 million) respectively.

The Bank also finances customer through discounting bills issued by related parties. As at 31 December 2018, outstanding amount of such bills was \$40 million (2017: \$44 million; 1 January 2017: \$93 million).



## **42 Fair Value of Financial Instruments**

### **42.1 Valuation Process**

The valuation processes within the Group are governed by the Valuation Policy which is approved by the Board Risk Management Committee.

The Valuation Policy applies to all financial assets and liabilities that are measured at fair value, covering both market prices as well as model inputs. Financial assets and liabilities are marked directly using reliable and independent quoted market prices where available, or by using reliable and independent market parameters (as model inputs) in conjunction with a valuation model.

Valuation models go through an assurance process carried out by the Risk Management Group (RMG), independent of the model developers. This assurance process covers the review of the underlying methodology including its logic and conceptual soundness together with the model inputs and outputs. Model assurances are conducted prior to implementation and subject to regular review or when there are significant changes arising from market or portfolio changes. Where necessary, the Group also imposes model reserves and other adjustments in determining fair value. Models are approved by the Group Market and Liquidity Risk Committee.

A process of independent price verification (IPV) is in place to establish the accuracy of the market parameters used when the marking is performed by the Front Office. The IPV process entails independent checks to compare traders' marks to independent sources such as broker/dealer quotes or market consensus providers.

Where market parameters are sourced independently for the marking of financial assets and liabilities, or used as inputs into a valuation model, these are checked for reliability and accuracy, for example by reviewing large daily movements or by referencing other similar sources, or transactions.

Valuation adjustments and reserves are taken to account for close-out costs, model and market parameter uncertainty, and any other factor that may affect valuations. Valuation adjustment and reserve methodologies are approved by the Group Market and Liquidity Risk Committee and governed by the Valuation Policy.

The main valuation adjustments and reserves are described below.

#### *Model and Parameter Uncertainty Adjustments*

Valuation uncertainties may occur during fair value measurement either due to uncertainties in the required input parameters or uncertainties in the modelling methods used in the valuation process. In such situations, adjustments may be necessary to take these factors into account.

For example, where market data such as prices or rates for an instrument are no longer observable after an extended period of time, these inputs used to value

the financial instruments may no longer be relevant in the current market conditions. In such situations, adjustments may be necessary to address the pricing uncertainty arising from the use of stale market data inputs.

#### *Credit Valuation Adjustments*

Credit valuation adjustments are taken to reflect the impact on fair value of counterparty credit risk. Credit valuation adjustments are based upon the creditworthiness of the counterparties, magnitude of the current or potential exposure on the underlying transactions, netting and collateral arrangements, and the maturity of the underlying transactions.

#### *Funding Valuation Adjustments*

Funding valuation adjustments represent an estimate of the adjustment to fair value that a market participant would make in incorporating funding costs and benefits that arise in relation to uncollateralised derivatives positions.

#### *Day 1 Profit or Loss (P&L) Reserve*

In situations where the market for an instrument is not active and its fair value is established using a valuation model based on significant unobservable market parameters, the Day 1 P&L arising from the difference in transacted price and end-of-day model valuation is set aside as reserves. A market parameter is defined as being significant when its impact on the Day 1 P&L is greater than an internally determined threshold. The Day 1 P&L reserve is released to the income statement when the parameters become observable or when the transaction is closed out or amortised over the duration of the transaction. At year end, the unamortised Day 1 P&L was not material.

#### *Bid-Offer Adjustments*

The Group often holds, at varying points in time, both long or short positions in financial instruments which are valued using mid-market levels. Bid-offer adjustments are then made to account for close-out costs.

### **42.2 Fair Value Hierarchy**

The fair value hierarchy accords the highest level to observable inputs such as unadjusted quoted prices in active markets for identical assets or liabilities and the lowest level to unobservable inputs. The fair value measurement of each financial instrument is categorised in accordance with the same level of the fair value hierarchy as the input with the lowest level that is significant to the entire measurement. If unobservable inputs are deemed significant, the financial instrument will be categorised as Level 3.

Financial instruments that are valued using quoted prices in active markets are classified as Level 1 within the fair value hierarchy. These would include government and sovereign securities, listed equities and corporate debt securities which are actively traded. Derivatives contracts which are traded in an active exchange market are also classified as Level 1 of the valuation hierarchy.

Where fair value is determined using quoted market prices in less active markets or quoted prices for similar

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assets and liabilities, such instruments are generally classified as Level 2. In cases where quoted prices are generally not available, the Group will determine the fair value based on valuation techniques that use market parameters as inputs including but not limited to yield curves, volatilities and foreign exchange rates. The majority of valuation techniques employ only observable market data so that reliability of the fair value measurement is high. These would include corporate debt securities, repurchase, reverse repurchase agreements and most of the Group's OTC derivatives.

The Group classifies financial instruments as Level 3 when there is reliance on unobservable market parameters, whether used directly to value a financial asset or liability, or used as inputs to a valuation model, attributing to a significant contribution to the instrument value. These would include all input parameters which are derived from historical data, for example, asset correlations or certain volatilities. Level 3 instruments also include unquoted equity securities which are measured based on the net asset value of the investments. In addition, Level 3 inputs include all stale security prices and other approximations (e.g. bonds valued using credit default swap spreads).

The following table presents assets and liabilities measured at fair value, classified by level within the fair value hierarchy.

In \$ millions	The Group				The Group			
	31 Dec 2018				31 Dec 2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Assets</b>								
Financial assets at fair value through profit or loss (FVPL)								
- Government securities and treasury bills	8,707	1,876	-	10,583	8,001	1,971	-	9,972
- Bank and corporate securities	9,323	4,715	433 <sup>(a)</sup>	14,471	9,443	3,844	25	13,312
- Other financial assets	-	12,826	-	12,826	-	12,589	-	12,589
FVOCI (2017: AFS) financial assets								
- Government securities and treasury bills	17,907	1,394	-	19,301	26,907	919	-	27,826
- Bank and corporate securities <sup>(b)</sup>	8,828	1,119	327 <sup>(a)</sup>	10,274	14,278	1,379	72	15,729
- Other financial assets	27	4,680	-	4,707	-	4,899	-	4,899
Derivatives	52	16,988	2	17,042	27	17,585	-	17,612
<b>Liabilities</b>								
Financial liabilities at fair value through profit or loss (FVPL)								
- Other debt securities	-	7,132	-	7,132	-	5,972	-	5,972
- Other financial liabilities	1,733	3,715	-	5,448	1,961	1,683	-	3,644
Derivatives	90	16,642	9	16,741	9	18,028	2	18,039
<b>The Group</b>								
<b>1 Jan 2017</b>								
In \$ millions	Level 1	Level 2	Level 3	Total				
<b>Assets</b>								
Financial assets at fair value through profit or loss (FVPL)								
- Government securities and treasury bills	7,713	1,285	-	8,998				
- Bank and corporate securities	5,022	2,743	42	7,807				
- Other financial assets	-	9,133	-	9,133				
FVOCI (2017: AFS) financial assets								
- Government securities and treasury bills	21,352	1,089	-	22,441				
- Bank and corporate securities <sup>(b)</sup>	14,510	1,598	115	16,223				
- Other financial assets	-	4,417	-	4,417				
Derivatives	57	25,720	1	25,778				
<b>Liabilities</b>								
Financial liabilities at fair value through profit or loss (FVPL)								
- Other debt securities	-	5,045	4	5,049				
- Other financial liabilities	2,290	1,881	-	4,171				
Derivatives	66	24,443	16	24,525				

(a) Increases in Level 3 financial assets at FVPL and FVOCI are mainly due to notes purchased during the year which are marked using approximations and unquoted equities which have to be measured at fair value on SFRS (I) 9 adoption

(b) 31 Dec 2017 excludes unquoted equities stated at cost of \$178 million (1 Jan 2017: \$242 million)

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In \$ millions	Bank							
	31 Dec 2018				31 Dec 2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Assets</b>								
Financial assets at fair value through profit or loss (FVPL)								
- Government securities and treasury bills	6,604	1,024	-	7,628	6,818	1,001	-	7,819
- Bank and corporate securities	9,323	2,843	399 <sup>(a)</sup>	12,565	9,296	2,720	25	12,041
- Other financial assets	-	11,794	-	11,794	-	9,629	-	9,629
FVOCI (2017: AFS) financial assets								
- Government securities and treasury bills	13,509	105	-	13,614	23,866	161	-	24,027
- Bank and corporate securities <sup>(b)</sup>	8,437	402	298 <sup>(a)</sup>	9,137	12,588	994	71	13,653
- Other financial assets	27	2,879	-	2,906	-	2,923	-	2,923
Derivatives	52	14,860	-	14,912	27	16,065	-	16,092
<b>Liabilities</b>								
Financial liabilities at fair value through profit or loss (FVPL)								
- Other debt securities	-	7,043	-	7,043	-	5,886	-	5,886
- Other financial liabilities	1,247	2,067	-	3,314	1,208	920	-	2,128
Derivatives	92	14,605	9	14,706	9	16,341	2	16,352

In \$ millions	Bank			
	1 Jan 2017			
	Level 1	Level 2	Level 3	Total
<b>Assets</b>				
Financial assets at fair value through profit or loss (FVPL)				
- Government securities and treasury bills	5,983	869	-	6,852
- Bank and corporate securities	4,742	2,003	42	6,787
- Other financial assets	-	8,481	-	8,481
FVOCI (2017: AFS) financial assets				
- Government securities and treasury bills	18,093	374	-	18,467
- Bank and corporate securities <sup>(b)</sup>	12,533	1,160	96	13,789
- Other financial assets	-	2,362	-	2,362
Derivatives	57	23,936	1	23,994
<b>Liabilities</b>				
Financial liabilities at fair value through profit or loss (FVPL)				
- Other debt securities	-	4,965	4	4,969
- Other financial liabilities	832	815	-	1,647
Derivatives	66	22,862	16	22,944

- (a) Increases in Level 3 financial assets at FVPL and FVOCI are mainly due to notes purchased during the year which are marked using approximations and unquoted equities which have to be measured at fair value on SFRS (I) 9 adoption
- (b) 31 Dec 2017 excludes unquoted equities stated at cost of \$163 million (1 Jan 2017: \$210 million)

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The following table presents the changes in Level 3 instruments for the Group.

In \$ millions	The Group				
	Financial assets			Financial liabilities	
	FVPL	FVOCI/ AFS	Derivatives	FVPL	Derivatives
	Bank and corporate securities	Bank and corporate securities		Other debt securities	
<b>2018</b>					
Balance at 1 January <sup>(a)</sup>	25	280	-	-	(2)
Purchases/ Issues	392	21	-	(2)	-
Settlements	(6)	(20)	-	-	-
Transfers:					
- Transfers into Level 3	11	59	-	-	-
- Transfers out of Level 3	-	-	-	1	-
Gains/(losses) recorded in the income statement	11	-	2	1	(7)
Gains/(losses) recognised in other comprehensive income	-	(13)	-	-	-
Balance at 31 December	433	327	2	-	(9)
<b>2017</b>					
Balance at 1 January	42	115	1	(4)	(16)
Purchases/ Issues	5	1	-	(1)	-
Settlements	(18)	(21)	-	-	-
Transfers:					
- Transfers into Level 3	2	-	-	-	-
- Transfers out of Level 3	-	(17)	(1)	5	8
Gains/(losses) recorded in the income statement	(6)	11	-	-	6
Gains/(losses) recognised in other comprehensive income	-	(17)	-	-	-
Balance at 31 December	25	72	-	-	(2)

(a) The opening balance of Level 3 instruments included adjustment arising from re-classification of unquoted equities at cost to fair value on adoption of SFRS(l) 9

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The following table presents the changes in Level 3 instruments for the Bank.

In \$ millions	Bank				
	Financial assets			Financial liabilities	
	FVPL	FVOCI/ AFS	Derivatives	FVPL	Derivatives
	Bank and corporate securities	Bank and corporate securities		Other debt securities	
<b>2018</b>					
Balance at 1 January <sup>(a)</sup>	25	249	-	-	(2)
Purchases/ Issues	361	21	-	(2)	-
Settlements	(6)	(17)	-	-	-
Transfers:					
- Transfers into Level 3	10	59	-	-	-
- Transfers out of Level 3	-	-	-	1	-
Gains/(losses) recorded in the income statement	9	-	-	1	(7)
Gains/(losses) recognised in other comprehensive income	-	(14)	-	-	-
Balance at 31 December	399	298	-	-	(9)
<b>2017</b>					
Balance at 1 January	42	96	1	(4)	(16)
Purchases/ Issues	5	1	-	(1)	-
Settlements	(18)	(21)	-	-	-
Transfers:					
- Transfers into Level 3	2	-	-	-	-
- Transfers out of Level 3	-	-	(1)	5	8
Gains/(losses) recorded in the income statement	(6)	11	-	-	6
Gains/(losses) recognised in other comprehensive income	-	(16)	-	-	-
Balance at 31 December	25	71	-	-	(2)

(a) The opening balance of Level 3 instruments included adjustment arising from re-classification of unquoted equities at cost to fair value on adoption of SFRS(I) 9

Economic hedges entered into for Level 2 exposures may be classified within a different category (i.e. Level 1) and similarly, hedges entered for Level 3 exposures may also be classified within a different category (i.e. Level 1 and/or Level 2). The effects are presented gross in the table.

During the year, the Group transferred financial assets and liabilities from Level 1 to Level 2 due to reduced market activity and from Level 2 to Level 1 arising from increased market activity.

**Gains and losses on Level 3 financial assets and liabilities measured at fair value for the Group and the Bank**

The Group			
In \$ millions	Net trading Income	Net income from investment securities	Total
<b>2018</b>			
Total gain for the period included in income statement	7	-	7
Of which:			
Change in unrealised gain/(loss) for assets and liabilities held at the end of the reporting period	9	-	9
<b>2017</b>			
Total gain for the period included in income statement	-	11	11
Of which:			
Change in unrealised gain/(loss) for assets and liabilities held at the end of the reporting period	3	-	3

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Bank			
In \$ millions	Net trading Income	Net income from investment securities	Total
<b>2018</b>			
Total gain for the period included in income statement	3	-	3
<i>Of which:</i>			
<i>Change in unrealised gain/(loss) for assets and liabilities held at the end of the reporting period</i>	5	-	5
<b>2017</b>			
Total gain for the period included in income statement	-	11	11
<i>Of which:</i>			
<i>Change in unrealised gain/(loss) for assets and liabilities held at the end of the reporting period</i>	3	-	3

Fair value gains or losses taken to other comprehensive income are reported in the Statement of Comprehensive Income as "Net valuation taken to equity".

**Effect of changes in significant unobservable inputs to reflect reasonably possible alternatives**

As at 31 December 2018, financial instruments measured with valuation techniques using significant unobservable inputs (Level 3) included equity investments, bank and corporate debt securities, interest rate, foreign exchange and credit derivatives.

There are limited inter-relationships between unobservable inputs as the financial instruments are usually categorised as Level 3 because of a single unobservable input.

In assessing whether the unobservable inputs are significant to the valuations, the Group performed sensitivity analysis based on methodologies applied for fair value adjustments. These adjustments reflect the values which the Group estimates to be appropriate to reflect uncertainties in the inputs used (e.g. based on stress testing methodologies on the unobservable input). The methodologies used can be statistical or based on other relevant approved techniques.

The movement in fair value arising from reasonably possible changes to the significant unobservable inputs was assessed as not significant.

The Group In \$ millions	31 Dec 2018	31 Dec 2017	1 Jan 2017	Classification	Valuation technique	Unobservable input
<b>Assets</b>						
Bank and corporate debt securities	433	25	42	FVPL	Discounted cash flows	Credit spreads
Bank and corporate debt securities	-	-	20	AFS	Discounted cash flows	Credit spreads
Equity securities (Unquoted)	327	72	95	FVOCI/ AFS	Net asset value	Net asset value of securities
Derivatives	2	-	1	FVPL	Option & interest rate pricing models	Volatility
<b>Total</b>	<b>762</b>	97	158			
<b>Liabilities</b>						
Other debt securities	-	-	4	FVPL	Discounted cash flows / Option pricing model	Credit spreads / Correlations
Derivatives	9	2	16	FVPL	Discounted cash flows / CDS models / Option & interest rate pricing model	Credit spreads / Correlations / Volatility
<b>Total</b>	<b>9</b>	2	20			

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<b>Bank In \$ millions</b>	<b>31 Dec 2018</b>	<b>31 Dec 2017</b>	<b>1 Jan 2017</b>	<b>Classification</b>	<b>Valuation technique</b>	<b>Unobservable input</b>
<b>Assets</b>						
Bank and corporate debt securities	399	25	42	FVPL	Discounted cash flows	Credit spreads
Bank and corporate debt securities	-	-	1	AFS	Discounted cash flows	Credit spreads
Equity securities (Unquoted)	298	71	95	FVOCI/ AFS	Net asset value	Net asset value of securities
Derivatives	-	-	1	FVPL	Option & interest rate pricing model	Volatility
<b>Total</b>	<b>697</b>	<b>96</b>	<b>139</b>			
<b>Liabilities</b>						
Other debt securities	-	-	4	FVPL	Discounted cash flows / Option pricing model	Credit spreads / Correlations
Derivatives	9	2	16	FVPL	Discounted cash flows / CDS models / Option & interest rate pricing model	Credit spreads / Correlations / Volatility
<b>Total</b>	<b>9</b>	<b>2</b>	<b>20</b>			

#### **42.3 Own credit adjustments on financial liabilities designated at fair value through profit or loss**

Changes in the fair value of financial liabilities designated at fair value through profit or loss related to the Group's own credit risk are recognised in other comprehensive income. As the Group does not hedge changes in own credit risk arising from financial liabilities, presenting the own credit movements within other comprehensive income does not create or increase an accounting mismatch in the income statement.

The change in fair value attributable to changes in own credit risk has been determined as the amount of change in fair value that is attributable to changes in funding spreads above benchmark interest rates. Fair value changes arising from factors other than the Group's own credit risk are insignificant.

The cumulative amounts attributable to changes in own credit risk for these financial liabilities as at 31 December 2018 was immaterial for the Group (2017: unrealised loss of \$115 million; 1 Jan 2017: unrealised loss of \$3 million) and the Bank (2017: unrealised loss of \$113 million; 1 Jan 2017: unrealised loss of \$5 million).

Realised gains or losses attributable to changes in own credit risk for 2018 were insignificant.

#### **42.4 Financial assets & liabilities not carried at fair value**

For financial assets and liabilities not carried at fair value in the financial statements, the Group has ascertained that their fair values were not materially different from their carrying amounts at year-end.

For cash and balances with central banks, due from banks, loans and advances to customers, as well as due to banks and deposits and balances from customers, the basis of arriving at fair values is by discounting cash flows using the relevant market interest rates for the respective currencies.

For investment debt securities and subordinated term debts and other debts issued, fair values are determined based on independent market quotes, where available. Where market prices are not available, fair values are estimated using discounted cash flow method.

The fair value of variable interest-bearing as well as short-term financial instruments accounted for at amortised cost is assumed to be approximated by their carrying amounts.

**43 Risk Governance**

The Group Board oversees the Group's affairs and provides sound leadership for the CEO and management. Authorised by the Board, various Board committees oversee specific responsibilities based on clearly defined terms of reference.

Under the Group's risk management approach, the Board, through the Board Risk Management Committee (BRMC), sets the Group's risk appetite, oversees the establishment of enterprise-wide risk management policies and processes, and sets risk appetite limits to guide risk-taking within the Group.

The BRMC oversees the identification, monitoring, management and reporting of credit, market, liquidity, operational and reputational risks. To facilitate the BRMC's risk oversight, the following risk management committees have been established:

1. Risk Executive Committee (Risk ExCo);
2. Group Credit Risk Committee (GCRC);
3. Group Credit Policy Committee (GCPC);
4. Group Credit Risk Models Committee (GCRMC);
5. Group Market and Liquidity Risk Committee (GMLRC);
6. Group Operational Risk Committee (GORC);
7. Group Scenario and Stress Testing Committee (GSSTC); and
8. Product Approval Committee (PAC).

As the overall executive body regarding risk matters, the Risk ExCo oversees the Group's risk management as a whole.

Each of the committees reports to the Risk ExCo, and the committees as a whole serve as an executive forum to discuss and implement the Group's risk management.

Key responsibilities:

- Assess and approve risk-taking activities;
- Oversee the Group's risk management infrastructure, which includes frameworks, decision criteria, authorities, people, policies, standards, processes, information and systems;
- Approve risk policies such as model governance standards, stress testing scenarios, and the evaluation and endorsement of risk models;
- Assess and monitor specific credit concentration; and
- Recommend stress-testing scenarios (including macroeconomic variable projections) and review the results.

The members in these committees comprise representatives from the Risk Management Group (RMG) as well as key business and support units. The PAC oversees new product approvals, which are vital for mitigating risk within the Group. The committee assesses the reputational risk and suitability of products. In addition, the committee assesses whether the Group has the appropriate systems to monitor and manage the resulting risks.

Most of the above committees are supported by local risk committees in all major locations, where appropriate. These local risk committees oversee the local risk positions for all businesses and support units, ensuring that they keep within the limits set by the Group risk committees. They also approve location-specific risk policies.

The Chief Risk Officer (CRO), who is a member of the Group Executive Committee and reports to the Chairman of the BRMC and the CEO, oversees the risk management function. The CRO is independent of business lines and is actively involved in key decision-making processes. He often engages with regulators to discuss risk matters, enabling a more holistic risk management perspective.

Working closely with the risk and business committees, the CRO is responsible for the following:

- Management of the Group's risks, including systems and processes to identify, approve, measure, monitor, control and report risks;
- Engagement with senior management about material matters regarding all risk types;
- Development of risk controls and mitigation processes; and
- Ensuring the Group's risk management is effective and the Risk Appetite established by the Board is adhered to.



**44 Credit Risk**

The most significant measurable risk the Group faces is credit risk, which arises from the Group's daily activities in various businesses. These activities include lending to retail, corporate and institutional customers; it includes the risk of lending, pre-settlement and settlement risk of foreign exchange, derivatives and debt securities.

**Credit Risk Management**

The Group's approach to credit risk management comprises the following building blocks:

• **Policies**

The dimensions of credit risk and the scope of its application are defined in the Group Credit Risk Management Policy. Senior management sets the overall direction and policy for managing credit risk at the enterprise level.

The Group Core Credit Risk Policies (CCRPs) established for Consumer Banking/Wealth Management and Institutional Banking set forth the principles by which the Group conducts its credit risk management and control activities. These policies, supplemented by a number of operational standards and guidelines, ensure consistency in identifying, assessing, underwriting, measuring, reporting and controlling credit risk across the Group, and provide guidance in the formulation of business-specific and/or location-specific credit risk policies and standards.

The operational standards and guidelines are established to provide greater details on the implementation of the credit principles within the Group CCRPs and are adapted to reflect different credit environments and portfolio risk profiles. The CCRPs are considered and approved by GCPC.

• **Risk Methodologies**

Credit risk is managed by thoroughly understanding the Group's corporate customers – the businesses they are in, as well as the economies in which they operate. It is also managed through statistical models and data analytics for retail customers.

The assignment of credit risk ratings and setting of lending limits are integral parts of the Group's credit risk management process, and it uses an array of rating models for its corporate and retail portfolios. Most of these models are built internally using the Group's loss data, and the limits are driven by the Group's Risk Appetite Statement and the Target Market and Risk Acceptance Criteria (TMRAC).

Wholesale borrowers are assessed individually using both judgmental credit risk models and statistical credit risk models. They are further reviewed and evaluated by experienced credit risk managers who consider relevant credit risk factors in the final determination of the borrower's risk. For some portfolios within the small and medium-sized enterprises (SME) segment, the Group also uses a programme-based approach to achieve a balanced management of risks and rewards. Retail exposures

are assessed using credit score models, credit bureau records, as well as internally and externally available customer behaviour records supplemented by the Group's Risk Acceptance Criteria (RAC).

Credit applications are proposed by the business unit, and applications outside the RAC are independently assessed by the credit risk managers.

Pre-settlement credit risk for traded products arising from a counterparty potentially defaulting on its obligations is quantified by evaluation of the market price, plus potential future exposure. This is used to calculate the Group's regulatory capital under the Current Exposure Method (CEM), and is included within the Group's overall credit limits to counterparties for internal risk management.

The Group actively monitors and manages its exposure to counterparties for over-the-counter (OTC) derivative trades to protect its balance sheet in the event of a counterparty default. Counterparty risk exposures that may be adversely affected by market risk events are identified, reviewed and acted upon by management, and highlighted to the appropriate risk committees. Specific wrong-way risk arises when the credit exposure of a counterparty (from the traded product transaction) directly correlates with the probability of default of the counterparty. The Group has a policy to guide the handling of specific wrong-way risk transactions, and its risk measurement metric takes into account the higher risks associated with such transactions.

Issuer default risk that may also arise from derivatives notes and securities are generally measured based on jump-to-default computations.

**Concentration Risk Management**

The Group's risk management processes, which are aligned with its Risk Appetite, ensure that an acceptable level of risk diversification is maintained across the Group.

For credit risk, the Group uses Economic Capital (EC) as its measurement tool, since it combines the individual risk factors of probability of default (PD), loss given default (LGD) and exposure at default (EAD), as well as portfolio concentration factors. Granular EC thresholds are set to ensure that the allocated EC stays within its Risk Appetite.

Thresholds are set on major industry groups and single counterparty exposures and notional limits are established for country exposures. Governance processes are in place to ensure that the Group's exposures are regularly monitored with these thresholds in mind, and appropriate actions are taken when the thresholds are breached.

The Group continually examines how it can enhance the scope of its thresholds to improve management of concentration risk.

**Country Risk**

Country risk refers to the risk of loss due to events in a specific country (or a group of countries). This includes political, exchange rate, economic, sovereign and transfer risks.

The Group manages country risk through the requirements of the Group CCRPs and the said risk is part of its concentration risk management. The way the Group manages transfer risk is set out in its Country Risk Management Standard. This includes an internal transfer risk and sovereign risk rating system, where assessments are made independently of business decisions. The Group's transfer risk limits are set in accordance with the Group Risk Appetite Policy.

Transfer risk limits for priority countries are set based on country-specific strategic business considerations as well as the acceptable potential loss according to the Group's Risk Appetite. Senior management and credit management actively evaluate and determine the appropriate level of transfer risk exposures for these countries taking into account the risks and rewards and whether they are in line with the Group's strategic intent. Limits for all other non-priority countries are set using a model-based approach.

All transfer risk limits are approved by the BRMC.

**Credit stress testing**

The Group engages in various types of credit stress testing, and these are driven either by regulators or internal requirements and management.

The Group's credit stress tests are performed at total portfolio or sub-portfolio level, and are generally performed to assess the impact of changing economic conditions on asset quality, earnings performance, capital adequacy and liquidity. The Group's stress testing programme is comprehensive, and covers all major functions and areas of business.

The Group typically performs the following types of credit stress testing at a minimum and others as necessary:

Pillar 1 credit stress testing	The Group conducts Pillar 1 credit stress testing regularly as required by regulators. Under Pillar 1 credit stress testing, the Group assesses the impact of a mild stress scenario (at least two consecutive quarters of zero GDP growth) on Internal Ratings-Based (IRB) estimates (i.e. PD, LGD and EAD) and the impact on regulatory capital. The purpose of the Pillar 1 credit stress test is to assess the robustness of internal credit risk models and the cushion above minimum regulatory capital.
Pillar 2 credit	The Group conducts Pillar 2 credit stress testing once a year as part of the internal capital adequacy

stress testing	assessment process (ICAAP). Under Pillar 2 credit stress testing, the Group assesses the impact of stress scenarios, with different levels of severity, on asset quality, earnings performance, as well as internal and regulatory capital. The results of the credit stress tests form inputs to the capital planning process under ICAAP. The purpose of the Pillar 2 credit stress testing is to examine, in a rigorous and forward-looking manner, the possible events or changes in market conditions that could adversely impact the Group and to develop the appropriate action plan.
Industry-wide stress testing	The Group participates in the annual industry-wide stress test (IWST) conducted by the Monetary Authority of Singapore (MAS) to facilitate the ongoing assessment of Singapore's financial stability. Under the IWST, the Group is required to assess the impact of adverse scenarios, as defined by the regulator, on asset quality, earnings performance and capital adequacy.
Sensitivity and scenario analyses	The Group also conducts multiple independent sensitivity analyses and credit portfolio reviews based on various scenarios. The intent of these analyses and reviews is to identify vulnerabilities for the purpose of developing and executing mitigating actions.

• **Processes, Systems and Reports**

The Group constantly invests in systems to support risk monitoring and reporting for its Institutional Banking and Consumer Banking/Wealth Management businesses.

The end-to-end credit process is continually being reviewed and improved through various front-to-back initiatives involving the business units, the operations unit, the risk management units and other key stakeholders. Day-to-day monitoring of credit exposures, portfolio performance and external environmental factors potentially affecting credit risk profiles is key to its philosophy of effective credit risk management.

In addition, credit trends, which may include industry analysis, early warning alerts and significant weak credits, are submitted to the various risk committees, allowing key strategies and action plans to be formulated and evaluated. Credit control functions also ensure that any credit risk taken complies with credit risk policies and standards. These functions ensure that approved limits are activated, credit excesses and policy exceptions are appropriately endorsed, compliance with credit standards is carried out, and covenants established are monitored.

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Independent risk management functions that report to the CRO are jointly responsible for developing and maintaining a robust credit stress testing programme. These units oversee the implementation of credit stress tests as well as the analysis of the results, of which management, various risk committees and regulators are informed.

**Non-performing assets**

The Group's credit facilities are classified as "Performing assets" or "Non-performing assets" (NPA), in accordance with the MAS Notice 612.

Credit exposures are categorised into one of the following five categories, according to the Group's assessment of a borrower's ability to repay a credit facility from its normal sources of income and/or the repayment behaviour of the borrower.

<b>Classification Grade</b>	<b>Description</b>
<b>Performing Assets</b>	
<b>Pass</b>	Indicates that the timely repayment of the outstanding credit facilities is not in doubt.
<b>Special mention</b>	Indicates that the borrower exhibits potential weaknesses that, if not corrected in a timely manner, may adversely affect future repayments and warrant close attention by the Group.
<b>Classified or NPA</b>	
<b>Substandard</b>	Indicates that the borrower exhibits definable weaknesses in its business, cash flow or financial position that may jeopardise repayment on existing terms.
<b>Doubtful</b>	Indicates that the borrower exhibits severe weaknesses such that the prospect of full recovery of the outstanding credit facilities is questionable and the prospect of a loss is high, but the exact amount remains undeterminable as yet.
<b>Loss</b>	Indicates that the outstanding credit facility is not collectable, and little or nothing can be done to recover the outstanding amount from any collateral or from the assets of the borrower generally.

A default is considered to have occurred with regards to a particular borrower when either or both of the following events have taken place:

- Subjective default: Borrower is considered to be unlikely to pay its credit obligations in full, without the Group taking actions such as realising security (if held)
- Technical default: Borrower is more than 90 days past due on any credit obligation to the Group

For retail borrowers, the categorisation into the respective MAS loan grades is at facility level and consistent with the MAS Notice 612.

Credit facilities are classified as restructured assets when the Group grants non-commercial concessions to a borrower because its financial position has deteriorated or is unable to meet the original repayment schedule. A restructured credit facility is classified into the appropriate non-performing grade based on the assessment of the borrower's financial condition and its ability to repay according to the restructured terms.

Such credit facilities are not returned to the performing status until there are reasonable grounds to conclude that the borrower will be able to service all future principal and interest payments on the credit facility in accordance with the restructured terms and MAS Notice 612. Apart from what has been described, the Group does not grant concessions to borrowers in the normal course of business.

In addition, it is not within the Group's business model to acquire debts that have been restructured at inception (e.g. distressed debts).

Refer to Note 2.11 for the Group's accounting policies regarding specific and general allowances for credit losses. In general, specific allowances are recognised for defaulting credit exposures rated substandard and below.

The breakdown of the Group's NPA by loan grading and industry and the related amounts of specific allowances can be found in Note 44.2. A breakdown of past due loans can also be found in the same note.

When required, the Group will take possession of all collateral and dispose them as soon as practicable. Realised proceeds are used to reduce outstanding indebtedness. A breakdown of collateral held for NPA is shown in Note 44.2.

Reposessed collateral is classified in the balance sheet as other assets. The amounts of such other assets for 2018 and 2017 were not material.

**Credit Risk Mitigants**

**Collateral received**

Where possible, the Group takes collateral as a secondary source of repayment. This includes, but is not limited to cash, marketable securities, real estate, trade receivables, inventory, equipment, and other physical and/or financial collateral. The Group may also take fixed and floating charges on the assets of borrowers.

Policies are in place to determine the eligibility of collateral for credit risk mitigation. These include requiring specific collateral to meet minimum requirements in order to be considered as effective risk mitigants. The Group's collateral is generally diversified and periodic valuations of collateral are required. Real estate constitutes the bulk of its collateral, while marketable securities and cash are immaterial.

For derivatives, repurchase agreements (repo) and other repo-style transactions with financial market counterparties, collateral arrangements are typically covered under market-standard documentation, such

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as International Swaps & Derivatives Association (ISDA) Agreements and Master Repurchase Agreements. The collateral received is mark-to-market on a frequency which the Group and the counterparties mutually agreed upon. This is governed by internal guidelines with respect to collateral eligibility. In the event of a default, the credit risk exposure is reduced by master-netting arrangements where the Group is allowed to offset what it owes a counterparty against what is due from that counterparty in a netting-eligible jurisdiction.

Collateral held against derivatives generally consists of cash in major currencies and highly rated government or quasi-government bonds. Exceptions may arise in certain countries, where due to domestic capital markets and business conditions, the Group may be required to accept less highly rated or liquid government bonds and currencies. Reverse repo-transactions are generally limited to large institutions with reasonably good credit standing. The Group takes haircuts against the underlying collateral of these

**44.1 Maximum exposure to credit risk**

The following table shows the exposure to credit risk of on-balance sheet and off-balance sheet financial instruments, before taking into account any collateral held, other credit enhancements and netting arrangements. For on-balance sheet financial assets, the maximum credit exposure is the carrying amounts. For contingent liabilities, the maximum exposure to credit risk is the amount the Group would have to pay if the instrument is called upon. For undrawn facilities, the maximum exposure to credit risk is the full amount of the undrawn credit facilities granted to customers.

In \$ millions	The Group		
	2018	31 Dec 2017	1 Jan 2017
<b>On-balance sheet</b>			
Cash and balances with central banks (excluding cash on hand)	19,725	24,258	23,902
Government securities and treasury bills	47,278	39,753	33,401
Due from banks	40,154	35,962	30,000
Derivatives	17,042	17,612	25,778
Bank and corporate debt securities	50,588	50,192	41,439
Loans and advances to customers	345,003	323,099	301,516
Other assets (excluding deferred tax assets)	13,065	11,657	10,694
	<b>532,855</b>	<b>502,533</b>	<b>466,730</b>
<b>Off-balance sheet</b>			
Contingent liabilities and commitments (excluding operating lease and capital commitments)	297,096	265,292	258,047
Total	<b>829,951</b>	<b>767,825</b>	<b>724,777</b>

The Group's exposures to credit risk, measured using the expected gross credit exposures that will arise upon a default of the end obligor are as shown in the Group's Pillar 3 Disclosures. These exposures, which include both on-balance sheet and off-balance sheet financial instruments, are shown without taking into account any collateral held or netting arrangements.

**Analysis of Collateral**

Whilst the Group's maximum exposure to credit risk is the carrying amount of the assets or, in the case of off-balance sheet instruments, the amount guaranteed, committed, accepted or endorsed, the likely exposure may be lower due to offsetting collateral, credit guarantees and other actions taken to mitigate the Group's exposure.

The description of collateral for each class of financial asset is set out below.

*Balances with central banks, government securities and treasury bills, due from banks and bank and corporate debt securities*

Collateral is generally not sought for these assets.

transactions that commensurate with collateral quality to ensure credit risks are adequately mitigated.

In times of difficulty, the Group will review the customers' specific situation and circumstances to assist them in restructuring their financial obligations. However, should the need arise, disposal and recovery processes are in place to dispose collateral held by the Group. The Group maintains a panel of agents and solicitors to assist in the disposal of non-liquid assets and specialised equipment quickly.

**Other credit risk mitigants**

The Group accepts guarantees as credit risk mitigants. Internal thresholds for considering the eligibility of guarantors for credit risk mitigation are in place.

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*Derivatives*

The Group maintains collateral agreements and enters into master netting agreements with most of the counterparties for derivative transactions. Please refer to Note 38 for the impact of netting arrangements recognised for the computation of Capital Adequacy Ratio (CAR).

*Loans and advances to customers, contingent liabilities and commitments*

Certain loans and advances to customers, contingent liabilities and commitments are typically collateralised to a substantial extent. In particular, residential mortgage exposures are generally fully secured by residential properties. Income-producing real estate, which is a sub-set of the Specialised Lending exposure, is fully secured by the underlying assets financed.

The extent to which credit exposures are covered by Basel-eligible collateral, besides real estate, after the application of the requisite regulatory hair-cuts, is shown in the Group's Pillar 3 Disclosures. The amounts are a sub-set of the actual collateral arrangements entered by the Group as Basel imposes strict legal and operational standards before collateral can be admitted as credit risk mitigants. As a result, certain collateral arrangements which do not meet its criteria will not be included. Certain collateral types which are not permitted as credit risk mitigants for credit exposures under the Standardised Approach are also excluded.

**44.2 Loans and advances to customers**

In \$ millions	The Group		1 Jan 2017
	2018	31 Dec 2017	
Loans and advances to customers			
Performing Loans			
- Neither past due nor impaired (i)	342,237	320,270	299,602
Pass	339,442	316,787	295,010
Special Mention	2,795	3,483	4,592
- Past due but not impaired (ii)	2,157	1,982	1,397
Non-Performing Loans			
- Impaired (iii)	5,251	5,517	4,416
Total gross loans (Note 18)	349,645	327,769	305,415

**(i) Neither past due nor impaired loans by grading and industry**

The credit quality of the portfolio of loans and advances that are neither past due nor impaired can be assessed by reference to the loan gradings in MAS Notice 612.

In \$ millions	The Group		
	Pass	Special Mention	Total
<b>31 Dec 2018</b>			
Manufacturing	35,928	255	36,183
Building and construction	76,012	134	76,146
Housing loans	74,119	3	74,122
General commerce	46,134	438	46,572
Transportation, storage and communications	26,380	1,122	27,502
Financial institutions, investment and holding companies	24,616	40	24,656
Professionals and private individuals (excluding housing loans)	29,639	34	29,673
Others	26,614	769	27,383
Total	339,442	2,795	342,237

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In \$ millions	The Group		
	Pass	Special Mention	Total
<b>31 Dec 2017</b>			
Manufacturing	31,082	633	31,715
Building and construction	63,632	567	64,199
Housing loans	72,455	10	72,465
General commerce	49,436	770	50,206
Transportation, storage and communications	26,837	761	27,598
Financial institutions, investment and holding companies	17,001	36	17,037
Professionals and private individuals (excluding housing loans)	28,368	4	28,372
Others	27,976	702	28,678
<b>Total</b>	<b>316,787</b>	<b>3,483</b>	<b>320,270</b>
<b>1 Jan 2017</b>			
Manufacturing	29,184	1,053	30,237
Building and construction	57,416	514	57,930
Housing loans	63,859	3	63,862
General commerce	44,873	1,005	45,878
Transportation, storage and communications	28,815	1,585	30,400
Financial institutions, investment and holding companies	16,535	71	16,606
Professionals and private individuals (excluding housing loans)	24,387	37	24,424
Others	29,941	324	30,265
<b>Total</b>	<b>295,010</b>	<b>4,592</b>	<b>299,602</b>

**(ii) Past due but not impaired loans by past due period and industry**

In \$ millions	The Group			
	Less than 30 days past due	30 to 59 days past due	60 to 90 days past due	Total
<b>31 Dec 2018</b>				
Manufacturing	110	3	-	113
Building and construction	127	1	10	138
Housing loans	588	88	31	707
General commerce	218	30	5	253
Transportation, storage and communications	175	2	1	178
Financial institutions, investment and holding companies	277	14	27	318
Professionals and private individuals (excluding housing loans)	337	53	23	413
Others	19	17	1	37
<b>Total</b>	<b>1,851</b>	<b>208</b>	<b>98</b>	<b>2,157</b>
<b>31 Dec 2017</b>				
Manufacturing	99	4	1	104
Building and construction	89	2	1	92
Housing loans	529	87	45	661
General commerce	261	25	4	290
Transportation, storage and communications	38	19	1	58
Financial institutions, investment and holding companies	99	19	-	118
Professionals and private individuals (excluding housing loans)	378	74	78	530
Others	119	8	2	129
<b>Total</b>	<b>1,612</b>	<b>238</b>	<b>132</b>	<b>1,982</b>
<b>1 Jan 2017</b>				
Manufacturing	87	3	4	94
Building and construction	45	1	1	47
Housing loans	370	76	23	469
General commerce	108	10	5	123
Transportation, storage and communications	104	24	9	137
Financial institutions, investment and holding companies	53	-	-	53
Professionals and private individuals (excluding housing loans)	298	65	24	387
Others	82	4	1	87
<b>Total</b>	<b>1,147</b>	<b>183</b>	<b>67</b>	<b>1,397</b>

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**(iii) Non-performing assets (NPAs)**

**Non-performing assets by grading and industry**

In \$ millions	The Group							
	Sub-standard	NPAs		Total	Sub-standard	Specific allowances		Total
		Doubtful	Loss			Doubtful	Loss	
<b>31 Dec 2018</b>								
Manufacturing	291	209	72	572	40	190	72	302
Building and construction	143	54	51	248	28	48	51	127
Housing loans	164	8	10	182	-	-	10	10
General commerce	286	267	92	645	8	168	92	268
Transportation, storage and communications	1,376	323	1,170	2,869	200	136	1,170	1,506
Financial institutions, investment and holding companies	22	19	7	48	3	8	7	18
Professional and private individuals (excluding housing loans)	447	40	17	504	76	36	17	129
Others	80	83	20	183	29	31	20	80
<b>Total non-performing loans</b>	<b>2,809</b>	<b>1,003</b>	<b>1,439</b>	<b>5,251</b>	<b>384</b>	<b>617</b>	<b>1,439</b>	<b>2,440</b>
Debt securities, contingent liabilities and others	201	163	69	433	16	87	69	172
<b>Total</b>	<b>3,010</b>	<b>1,166</b>	<b>1,508</b>	<b>5,684</b>	<b>400</b>	<b>704</b>	<b>1,508</b>	<b>2,612</b>
Of which: restructured assets	744	302	510	1,556	105	126	510	741
<b>31 Dec 2017</b>								
Manufacturing	461	231	125	817	33	200	125	358
Building and construction	145	64	20	229	24	52	20	96
Housing loans	158	6	3	167	-	4	3	7
General commerce	341	232	50	623	11	170	50	231
Transportation, storage and communications	1,548	348	928	2,824	223	199	928	1,350
Financial institutions, investment and holding companies	36	21	9	66	2	11	9	22
Professional and private individuals (excluding housing loans)	445	32	14	491	78	29	14	121
Others	151	139	10	300	11	70	10	91
<b>Total non-performing loans</b>	<b>3,285</b>	<b>1,073</b>	<b>1,159</b>	<b>5,517</b>	<b>382</b>	<b>735</b>	<b>1,159</b>	<b>2,276</b>
Debt securities, contingent liabilities and others	276	143	134	553	15	94	134	243
<b>Total</b>	<b>3,561</b>	<b>1,216</b>	<b>1,293</b>	<b>6,070</b>	<b>397</b>	<b>829</b>	<b>1,293</b>	<b>2,519</b>
Of which: restructured assets	545	256	47	848	76	182	47	305
<b>1 Jan 2017</b>								
Manufacturing	661	142	101	904	73	124	101	298
Building and construction	263	111	7	381	29	100	7	136
Housing loans	121	8	5	134	-	3	5	8
General commerce	523	310	47	880	48	176	47	271
Transportation, storage and communications	1,147	44	236	1,427	37	43	236	316
Financial institutions, investment and holding companies	62	21	-	83	11	4	-	15
Professional and private individuals (excluding housing loans)	254	18	8	280	46	17	8	71
Others	238	29	60	327	71	24	60	155
<b>Total non-performing loans</b>	<b>3,269</b>	<b>683</b>	<b>464</b>	<b>4,416</b>	<b>315</b>	<b>491</b>	<b>464</b>	<b>1,270</b>
Debt securities, contingent liabilities and others	170	109	161	440	23	87	161	271
<b>Total</b>	<b>3,439</b>	<b>792</b>	<b>625</b>	<b>4,856</b>	<b>338</b>	<b>578</b>	<b>625</b>	<b>1,541</b>
Of which: restructured assets	467	139	7	613	91	93	7	191

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**Non-performing assets by geography<sup>(a)</sup>**

In \$ millions	The Group	
	NPAs	Specific allowances
<b>31 Dec 2018</b>		
Singapore	3,335	1,488
Hong Kong	511	258
Rest of Greater China	411	130
South and Southeast Asia	908	521
Rest of the World	86	43
Total non-performing loans	5,251	2,440
Debt securities, contingent liabilities and others	433	172
<b>Total</b>	<b>5,684</b>	<b>2,612</b>
<b>31 Dec 2017</b>		
Singapore	3,191	1,322
Hong Kong	625	279
Rest of Greater China	436	131
South and Southeast Asia	1,078	489
Rest of the World	187	55
Total non-performing loans	5,517	2,276
Debt securities, contingent liabilities and others	553	243
<b>Total</b>	<b>6,070</b>	<b>2,519</b>
<b>1 Jan 2017</b>		
Singapore	1,725	383
Hong Kong	687	187
Rest of Greater China	432	136
South and Southeast Asia	1,188	425
Rest of the World	384	139
Total non-performing loans	4,416	1,270
Debt securities, contingent liabilities and others	440	271
<b>Total</b>	<b>4,856</b>	<b>1,541</b>

(a) Based on the location of incorporation of the borrower

**Non-performing assets by past due period**

In \$ millions	The Group		
	2018	31 Dec 2017	1 Jan 2017
Not overdue	1,271	1,448	705
Within 90 days	432	865	698
Over 90 to 180 days	436	1,097	1,215
Over 180 days	3,545	2,660	2,238
Total past due assets	4,413	4,622	4,151
<b>Total</b>	<b>5,684</b>	<b>6,070</b>	<b>4,856</b>

**Secured non-performing assets by collateral type**

In \$ millions	The Group		
	2018	31 Dec 2017	1 Jan 2017
Properties	799	959	973
Shares and debentures	185	224	312
Cash deposits	22	33	11
Others	1,551	1,876	1,318
<b>Total</b>	<b>2,557</b>	<b>3,092</b>	<b>2,614</b>



**44.3 Credit quality of Government securities and treasury bills and Bank and corporate debt securities**

The table below presents an analysis of Government securities and treasury bills and bank and corporate debt securities for the Group by external rating bands.

Analysed by external ratings	Singapore Government securities and treasury bills (Gross)	The Group Other government securities and treasury bills (Gross)	Bank and corporate debt securities (Gross)
In \$ millions			
<b>31 Dec 2018</b>			
AAA	14,114	8,232	21,074
AA- to AA+	-	11,075	4,245
A- to A+	-	9,431	7,296
Lower than A-	-	4,427	4,898
Unrated	-	-	13,112
<b>Total</b>	<b>14,114</b>	<b>33,165</b>	<b>50,625</b>
<b>31 Dec 2017</b>			
AAA	14,239	8,414	20,236
AA- to AA+	-	9,388	5,703
A- to A+	-	3,678	6,369
Lower than A-	-	4,034	5,806
Unrated	-	-	12,175
<b>Total</b>	<b>14,239</b>	<b>25,514</b>	<b>50,289</b>
<b>1 Jan 2017</b>			
AAA	11,983	5,454	16,194
AA- to AA+	-	10,715	5,133
A- to A+	-	1,283	4,146
Lower than A-	-	3,966	4,009
Unrated	-	-	12,111
<b>Total</b>	<b>11,983</b>	<b>21,418</b>	<b>41,593</b>

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**44.4 Credit risk by geography and industry**

Analysed by geography <sup>(a)</sup>	The Group					Total
	Government securities and treasury bills (Gross)	Due from banks (Gross)	Derivatives	Bank and corporate debt securities (Gross)	Loans and advances to customers (Gross)	
In \$ millions						
<b>31 Dec 2018</b>						
Singapore	14,114	610	1,691	16,214	163,449	196,078
Hong Kong	4,916	1,402	833	1,351	54,333	62,835
Rest of Greater China	3,367	18,443	3,032	4,674	50,925	80,441
South and Southeast Asia	4,484	4,408	1,719	5,206	28,377	44,194
Rest of the World	20,398	15,301	9,767	23,180	52,561	121,207
<b>Total</b>	<b>47,279</b>	<b>40,164</b>	<b>17,042</b>	<b>50,625</b>	<b>349,645</b>	<b>504,755</b>
<b>31 Dec 2017</b>						
Singapore	14,239	285	1,911	15,185	155,299	186,919
Hong Kong	3,144	395	1,011	1,502	51,017	57,069
Rest of Greater China	2,924	19,742	2,021	4,443	53,020	82,150
South and Southeast Asia	4,026	2,860	1,362	4,940	24,474	37,662
Rest of the World	15,420	12,680	11,307	24,219	43,959	107,585
<b>Total</b>	<b>39,753</b>	<b>35,962</b>	<b>17,612</b>	<b>50,289</b>	<b>327,769</b>	<b>471,385</b>
<b>1 Jan 2017</b>						
Singapore	11,983	569	2,373	13,398	145,025	173,348
Hong Kong	3,845	148	1,744	1,720	50,223	57,680
Rest of Greater China	2,440	15,576	2,903	2,595	43,060	66,574
South and Southeast Asia	3,964	2,817	1,498	4,594	27,389	40,262
Rest of the World	11,169	10,890	17,260	19,286	39,718	98,323
<b>Total</b>	<b>33,401</b>	<b>30,000</b>	<b>25,778</b>	<b>41,593</b>	<b>305,415</b>	<b>436,187</b>

(a) Based on the location of incorporation of the issuer (for debt securities), counterparty (for derivatives), borrower (for loans) or the issuing bank in the case of bank backed export financing

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Analysed by industry In \$ millions	The Group					
	Government securities and treasury bills (Gross)	Due from banks (Gross)	Derivatives	Bank and corporate debt securities (Gross)	Loans and advances to customers (Gross)	Total
<b>31 Dec 2018</b>						
Manufacturing	-	-	307	2,586	36,868	39,761
Building and construction	-	-	355	4,359	76,532	81,246
Housing loans	-	-	-	-	75,011	75,011
General commerce	-	-	139	1,199	47,470	48,808
Transportation, storage and communications	-	-	462	3,849	30,549	34,860
Financial institutions, investment and holding companies	-	40,164	14,652	26,667	25,022	106,505
Government	47,279	-	-	-	-	47,279
Professionals and private individuals (excluding housing loans)	-	-	671	-	30,590	31,261
Others	-	-	456	11,965	27,603	40,024
<b>Total</b>	<b>47,279</b>	<b>40,164</b>	<b>17,042</b>	<b>50,625</b>	<b>349,645</b>	<b>504,755</b>
<b>31 Dec 2017</b>						
Manufacturing	-	-	195	2,542	32,636	35,373
Building and construction	-	-	426	4,680	64,520	69,626
Housing loans	-	-	-	-	73,293	73,293
General commerce	-	-	179	1,205	51,119	52,503
Transportation, storage and communications	-	-	650	3,840	30,480	34,970
Financial institutions, investment and holding companies	-	35,962	15,421	26,261	17,221	94,865
Government	39,753	-	-	-	-	39,753
Professionals and private individuals (excluding housing loans)	-	-	420	-	29,393	29,813
Others	-	-	321	11,761	29,107	41,189
<b>Total</b>	<b>39,753</b>	<b>35,962</b>	<b>17,612</b>	<b>50,289</b>	<b>327,769</b>	<b>471,385</b>
<b>1 Jan 2017</b>						
Manufacturing	-	-	457	2,644	31,235	34,336
Building and construction	-	-	414	3,229	58,358	62,001
Housing loans	-	-	-	-	64,465	64,465
General commerce	-	-	460	1,069	46,881	48,410
Transportation, storage and communications	-	-	669	2,527	31,964	35,160
Financial institutions, investment and holding companies	-	30,000	22,737	19,313	16,742	88,792
Government	33,401	-	-	-	-	33,401
Professionals and private individuals (excluding housing loans)	-	-	740	-	25,091	25,831
Others	-	-	301	12,811	30,679	43,791
<b>Total</b>	<b>33,401</b>	<b>30,000</b>	<b>25,778</b>	<b>41,593</b>	<b>305,415</b>	<b>436,187</b>

**45 Market Risk**

The Group's exposure to market risk is categorised into:

- Trading portfolios: Arising from positions taken for (i) market-making, (ii) client-facilitation, and (iii) benefiting from market opportunities.
- Non-trading portfolios: Arising from (i) positions taken to manage the interest rate risk of the Group's Institutional Banking and Consumer Banking/Wealth Management assets and liabilities, (ii) debt securities and equities comprising investments held for yield and/or long-term capital gains, (iii) strategic stakes in entities, and (iv) structural foreign exchange risk arising mainly from the Group's strategic investments, which are denominated in currencies other than the Singapore Dollar.

The Group uses a variety of financial derivatives such as swaps, forwards and futures, and options for trading and hedging against movements in interest rates, foreign exchange rates, equity prices and other market risks of the Group's (i) investments, (ii) maturity mismatches between loans and deposits, (iii) structured product issuances, and (iv) other assets and liabilities.

**Market Risk Management**

The Group's approach to market risk management comprises the following building blocks:

• **Policies**

The Group Market Risk Management Policy sets the Group's overall approach towards market risk management, while the Market Risk Management Standard establishes the basic requirements for the said management within the Group. The Market Risk Management Guide complements the Market Risk Management Standard by providing more details regarding specific subject matters. Both the Market Risk Management Standard and Market Risk Management Guide facilitate the identification, measurement, control, monitoring and reporting of market risk in a consistent manner. They also set out the overall approach, standards and controls governing market risk stress testing across the Group. The criteria for determining the positions to be included in the trading book are stipulated in the Trading Book Policy Statement.

• **Risk Methodologies**

Value-at-Risk (VaR) is a method that computes the potential losses of risk positions as a result of market movement over a specified time horizon and according to a given level of confidence.

The Group's VaR model is based on historical simulation with a one-day holding period. The Group uses Expected Shortfall (ES), which is the average of potential loss beyond a given level of confidence, to monitor and limit market risk exposures, as well as to monitor net open positions net of hedges. The market risk economic capital that is allocated by the BRMC is linked to ES by a multiplier. ES is supplemented by risk control metrics such as sensitivities to risk factors and loss triggers for management action.

The Group conducts backtesting to verify the predictiveness of the VaR model. Backtesting compares VaR calculated for positions at the close of each business day with the profit and loss (P&L) that arises from those positions on the following business day. The backtesting P&L excludes fees and commissions, revenues from intra-day trading, non-daily valuation adjustments and time effects.

For backtesting, VaR at the 99% level of confidence and over a one-day holding period is used. The Group adopts the standardised approach to compute market risk regulatory capital under the MAS Notice 637 for the trading book positions. As such, VaR backtesting does not impact the Group's regulatory capital for market risk.

VaR models allow the Group to estimate the aggregate portfolio market risk potential loss due to a range of market risk factors and instruments. However, there are limitations to VaR models; for example, past changes in market risk factors may not provide accurate predictions of future market movements, and the risk arising from adverse market events may be understated.

To monitor the Group's vulnerability to unexpected but plausible extreme market risk-related events, it conducts multiple market risk stress tests regularly. These cover trading and non-trading portfolios and follow a combination of historical and hypothetical scenarios depicting risk-factor movement.

ES and Net Interest Income (NII) variability are the key risk metrics used to manage the Group's assets and liabilities. As an exception, credit risk arising from loans and receivables is managed under the credit risk management framework. The Group also manages banking book interest rate risk arising from mismatches in the interest rate profiles of assets, liabilities and capital instruments (and associated hedges), which includes basis risk arising from different interest rate benchmarks, interest rate repricing risk, yield curve risk and embedded optionality. Behavioural assumptions are applied when managing the interest rate risk of banking book deposits with indeterminate maturities. The Group measures interest rate risk in the banking book on a weekly basis.

• **Processes, Systems and Reports**

Robust internal control processes and systems have been designed and implemented to support the Group's market risk management approach. The Group reviews these control processes and systems regularly, and these reviews allow senior management to assess their effectiveness.

The RMG Market and Liquidity Risk unit – an independent market risk management function reporting to the CRO – monitors, controls and analyses the Group's market risk daily. The unit comprises risk control, risk analytics, production and reporting teams.

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**Market Risk**

The main risk factors driving the Group's trading portfolios in 2018 were interest rates, foreign exchange, equities and credit spreads. The following table shows the period-end, average, high and low diversified ES (based on a 97.5% level of confidence) and ES by risk class for the Group's trading portfolios.

In \$ millions	The Group			
	As at 31 Dec 2018	Average	High	Low
Diversified	14	11	19	8
Interest Rates	11	10	21	8
Foreign Exchange	4	3	6	2
Equity	6	2	6	#
Credit Spread	6	5	6	4
Commodity	#	#	1	#

In \$ millions	1 Jan 2017 to 31 Dec 2017			
	As at 31 Dec 2017	Average	High	Low
Diversified	16	21	29	13
Interest Rates	15	16	20	14
Foreign Exchange	5	5	16	3
Equity	1	1	1	#
Credit Spread	4	14	24	4
Commodity	#	#	1	#

# Amount under \$500,000

The Group's trading portfolios experienced four backtesting exceptions in 2018, which occurred in February, June and July. The backtesting exceptions were largely due to swings in equity and USD interest rate volatilities, and movements in bond credit spreads.

In 2018, the key market risk drivers of the Group's non-trading portfolios were interest rates (Singapore Dollar and US Dollar) and foreign exchange.

The economic value impact of changes in interest rates was assessed with plausible rates movements and characteristics of the non-trading portfolio assets and liabilities. The economic value changes based on the worse outcome of an upward or downward parallel shift in the yield curve of 100 basis points and 200 basis points were negative \$1,219 million and negative \$2,305 million (2017: negative \$1,221 million and negative \$2,311 million) respectively.

Foreign exchange risk in the Group's non-trading portfolios was primarily from structural foreign exchange positions, arising mainly from the Group's strategic investments and retained earnings in overseas branches and subsidiaries. Please refer to Note 39.3 for more information on the Group's structural foreign exchange positions.

**46 Liquidity Risk**

The Group's liquidity risk arises from its obligations to honour withdrawals of deposits, repayments of borrowed funds at maturity, and its commitments to extend loans to its customers. The Group seeks to manage its liquidity to ensure that its liquidity obligations will continue to be honoured under normal as well as adverse circumstances.

**Liquidity Risk Management**

***Liquidity Management and Funding Strategy***

The Group strives to develop a diversified funding base with access to funding sources across retail and wholesale channels. The Group's funding strategy is anchored on strengthening its core deposit franchise as the foundation of the Group's long-term funding advantage.

With increasing diversification of funding sources, optimising the mismatch in fund deployment against sources with respect to pricing, size, currency and tenor remains challenging. To this end, where practicable and transferable without loss in value, the Group makes appropriate use of the swap markets for different currencies, commensurate with the liquidity of each, in the conversion and deployment of surplus funds across locations. As these swaps typically mature earlier than loans, the Group is exposed to potential cash flow mismatches arising from the risk that counterparties may not roll over maturing swaps with us to support the continual funding of loans. The Group mitigates this risk by setting triggers on the number of swaps transacted with the market and making conservative assumptions on the cash flow behaviour of swaps under its cash flow maturity gap analysis.

Overseas locations centralise the majority of their borrowing and deployment of funds with the Group's head office, taking into account the relevant regulatory restrictions while maintaining a commensurate level of presence and participation in the local funding markets.

During the Group's annual budget and planning process, each overseas location conducts an in-depth review of its projected loan and deposit growth as well as its net funding and liquidity profile for the next year. Each overseas location is required to provide justification if head office funding support is required.

The Group Assets and Liabilities Committee and respective Location Assets and Liabilities Committee regularly review the Group's balance sheet composition, the growth in loans and deposits, its utilisation of wholesale funding, the momentum of its business activities, market competition, the economic outlook, market conditions and other factors that may affect liquidity in the continual refinement of the Group's funding strategy.

***Approach to Liquidity Risk Management***

The Group's approach to liquidity risk management comprises the following building blocks:

- **Policies**

The Group Liquidity Risk Management Policy sets its overall approach towards liquidity risk management and describes the range of strategies the Group employs to manage its liquidity.

These strategies include maintaining an adequate counterbalancing capacity to address potential cash flow shortfalls and having diversified sources of liquidity.

The Group's counterbalancing capacity includes liquid assets, the capacity to borrow from the money markets (including the issuance of commercial papers and covered bonds), and forms of managerial interventions that improve liquidity. In the event of a potential or actual crisis, the Group has in place a set of liquidity contingency and recovery plans to ensure that it maintains adequate liquidity.

The Group Liquidity Risk Management Policy is supported by Standards that establish the detailed requirements for liquidity risk identification, measurement, reporting and control within the Group. The set of Policies, Standards and supporting Guides communicate these baseline requirements to ensure consistent application throughout the Group.

- **Risk Methodologies**

The primary measure used to manage liquidity within the tolerance defined by the Board is cash flow maturity mismatch analysis.

This form of analysis is performed on a regular basis under normal and adverse scenarios. It assesses the adequacy of the Group's counterbalancing capacity to fund or mitigate any cash flow shortfalls that may occur as forecasted in the cash flow movements across successive time bands. To ensure that liquidity is managed in line with the Group's Risk Appetite, core parameters such as the types of scenarios, the survival period and the minimum level of liquid assets, are pre-specified for monitoring and control on a group-wide basis. Any occurrences of forecasted shortfalls that cannot be covered by the Group's counterbalancing capacity will be escalated to the relevant committees for evaluation and action.

Liquidity risk stress testing is performed regularly using cash flow maturity mismatch analysis, and covers adverse scenarios including general market and idiosyncratic stress scenarios. Stress tests assess the Group's vulnerability when liability run-offs increase, asset rollovers increase and/or liquid asset buffers decrease. In addition, ad hoc stress tests are performed as part of the Group's recovery planning and ICAAP exercises.

Liquidity risk control measures such as liquidity-related ratios and balance sheet analysis are complementary tools for cash flow maturity mismatch analysis, and they are performed regularly to obtain deeper insights and finer

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control over the Group's liquidity profile across different locations. The liquidity risk control measures also include concentration measures regarding top depositors, wholesale borrowing and swapped funds ratios.

- **Processes, systems and reports**

Robust internal control processes and systems support the Group's overall approach in identifying, measuring, aggregating, controlling and monitoring liquidity risk across the Group.

Continuous improvement in data and reporting platforms has allowed most elements of internal liquidity risk reporting to be centralised.

The RMG Market and Liquidity Risk unit manages the day-to-day liquidity risk monitoring, control reporting and analysis.

### **Liquidity risk in 2018**

The Group actively monitors and manages its liquidity profile through cash flow maturity mismatch analysis.

In forecasting cash flow under the analysis, behavioural profiling is necessary in cases where a product has indeterminate maturity or the contractual maturity does not realistically reflect the expected cash flow.

Two examples are maturity-indeterminate savings and current account deposits, which are generally viewed as sources of stable funding for commercial banks. In fact, they consistently exhibit stability even under historical periods of stress. A conservative view is adopted in the behavioural profiling of assets, liabilities and off-balance sheet commitments that have exhibited cash flow patterns that differ significantly from the contractual maturity profile shown under Note 46.1.

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**46.1 Contractual maturity profile of assets and liabilities**

The table below analyses assets and liabilities of the Group as at 31 December based on the remaining period as at balance sheet date to the contractual maturity date.

<b>The Group</b>	<b>Less than 7 days</b>	<b>1 week to 1 month</b>	<b>1 to 3 months</b>	<b>3 to 12 months</b>	<b>1 to 3 years</b>	<b>3 to 5 years</b>	<b>More than 5 years</b>	<b>No specific maturity</b>	<b>Total</b>
<b>31 Dec 2018</b>									
Cash and balances with central banks	13,745	1,262	5,313	1,325	539	-	-	-	22,184
Government securities and treasury bills	830	2,040	3,695	8,778	7,448	10,900	13,587	-	47,278
Due from banks	15,454	4,903	5,218	12,983	581	1,015	-	-	40,154
Derivatives <sup>(a)</sup>	17,042	-	-	-	-	-	-	-	17,042
Bank and corporate securities	65	503	2,813	6,423	20,577	12,040	8,167	7,609	58,197
Loans and advances to customers	29,658	55,685	34,803	42,147	67,385	41,553	73,772	-	345,003
Other assets	6,521	1,413	1,590	2,839	130	10	26	888	13,417
Associates	-	-	-	-	-	-	-	838	838
Properties and other fixed assets	-	-	-	-	-	-	-	1,450	1,450
Goodwill and intangibles	-	-	-	-	-	-	-	5,175	5,175
<b>Total assets</b>	<b>83,315</b>	<b>65,806</b>	<b>53,432</b>	<b>74,495</b>	<b>96,660</b>	<b>65,518</b>	<b>95,552</b>	<b>15,960</b>	<b>550,738</b>
Due to banks	11,014	6,217	2,962	1,617	174	664	-	-	22,648
Deposits and balances from customers	262,137	47,670	49,165	31,514	2,428	162	709	-	393,785
Derivatives <sup>(a)</sup>	16,741	-	-	-	-	-	-	-	16,741
Other liabilities	8,619	1,614	2,183	3,095	57	4	9	2,796	18,377
Other debt securities	456	6,672	13,066	9,976	6,166	79	5,156	-	41,571
Due to holding company	1,786	-	9	6	-	737	4,178	-	6,716
<b>Total liabilities</b>	<b>300,753</b>	<b>62,173</b>	<b>67,385</b>	<b>46,208</b>	<b>8,825</b>	<b>1,646</b>	<b>10,052</b>	<b>2,796</b>	<b>499,838</b>
Non-controlling interests	-	-	-	-	-	-	-	970	970
Shareholders' funds	-	-	-	-	-	-	-	49,930	49,930
<b>Total equity</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>50,900</b>	<b>50,900</b>
<b>31 Dec 2017</b>									
Cash and balances with central banks	16,184	5,545	3,201	1,242	291	-	-	-	26,463
Government securities and treasury bills	474	1,038	1,149	5,650	12,383	5,701	13,358	-	39,753
Due from banks	12,114	4,182	6,476	12,075	559	556	-	-	35,962
Derivatives <sup>(a)</sup>	17,612	-	-	-	-	-	-	-	17,612
Bank and corporate securities	57	988	2,612	7,291	16,806	13,984	8,454	5,397	55,589
Loans and advances to customers	28,790	50,041	32,914	45,969	55,605	40,631	69,149	-	323,099
Other assets	6,186	1,412	1,503	2,017	166	51	21	700	12,056
Associates	-	-	-	-	-	-	-	783	783
Properties and other fixed assets	-	-	-	-	-	-	-	1,233	1,233
Goodwill and intangibles	-	-	-	-	-	-	-	5,165	5,165
<b>Total assets</b>	<b>81,417</b>	<b>63,206</b>	<b>47,855</b>	<b>74,244</b>	<b>85,810</b>	<b>60,923</b>	<b>90,982</b>	<b>13,278</b>	<b>517,715</b>
Due to banks	11,652	2,747	1,700	1,129	71	471	33	-	17,803
Deposits and balances from customers	260,035	43,618	38,806	28,618	1,479	364	714	-	373,634
Derivatives <sup>(a)</sup>	18,039	-	-	-	-	-	-	-	18,039
Other liabilities	7,747	1,384	2,071	2,559	87	11	117	2,588	16,564
Other debt securities	3,129	5,657	11,281	7,276	4,295	449	4,551	-	36,638
Due to holding company	2,439	-	499	-	-	-	989	-	3,927
Subordinated term debts	-	-	508	-	-	-	-	-	508
<b>Total liabilities</b>	<b>303,041</b>	<b>53,406</b>	<b>54,865</b>	<b>39,582</b>	<b>5,932</b>	<b>1,295</b>	<b>6,404</b>	<b>2,588</b>	<b>467,113</b>
Non-controlling interests	-	-	-	-	-	-	-	2,484	2,484
Shareholders' funds	-	-	-	-	-	-	-	48,118	48,118
<b>Total equity</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>50,602</b>	<b>50,602</b>



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<b>The Group</b>	<b>Less than 7 days</b>	<b>1 week to 1 month</b>	<b>1 to 3 months</b>	<b>3 to 12 months</b>	<b>1 to 3 years</b>	<b>3 to 5 years</b>	<b>More than 5 years</b>	<b>No specific maturity</b>	<b>Total</b>
<b>1 Jan 2017</b>									
Cash and balances with central banks	15,674	6,853	2,394	1,300	619	-	-	-	26,840
Government securities and treasury bills	470	1,475	3,178	7,524	6,874	4,452	9,428	-	33,401
Due from banks	11,458	2,971	4,197	10,078	1,082	214	-	-	30,000
Derivatives <sup>(a)</sup>	25,778	-	-	-	-	-	-	-	25,778
Bank and corporate securities	23	1,196	919	4,183	14,889	12,213	8,016	3,978	45,417
Loans and advances to customers	27,832	39,568	28,797	44,478	54,008	39,447	67,386	-	301,516
Other assets	5,540	917	1,315	2,322	143	24	32	734	11,027
Associates	-	-	-	-	-	-	-	890	890
Properties and other fixed assets	-	-	-	-	-	-	-	1,572	1,572
Goodwill and intangibles	-	-	-	-	-	-	-	5,117	5,117
<b>Total assets</b>	<b>86,775</b>	<b>52,980</b>	<b>40,800</b>	<b>69,885</b>	<b>77,615</b>	<b>56,350</b>	<b>84,862</b>	<b>12,291</b>	<b>481,558</b>
Due to banks	10,660	2,877	1,094	926	179	179	-	-	15,915
Deposits and balances from customers	239,622	43,131	34,511	26,475	3,127	187	393	-	347,446
Derivatives <sup>(a)</sup>	24,525	-	-	-	-	-	-	-	24,525
Other liabilities	6,502	1,082	2,080	3,229	37	7	128	2,788	15,853
Other debt securities	1,074	3,516	8,891	4,058	4,155	1,584	2,067	-	25,345
Due to holding company	413	-	134	-	-	781	774	-	2,102
Subordinated term debts	-	-	866	-	-	-	1,591	-	2,457
<b>Total liabilities</b>	<b>282,796</b>	<b>50,606</b>	<b>47,576</b>	<b>34,688</b>	<b>7,498</b>	<b>2,738</b>	<b>4,953</b>	<b>2,788</b>	<b>433,643</b>
Non-controlling interests	-	-	-	-	-	-	-	2,523	2,523
Shareholders' funds	-	-	-	-	-	-	-	45,392	45,392
<b>Total equity</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>47,915</b>	<b>47,915</b>

(a) Derivative financial assets and liabilities are included in the "Less than 7 days" bucket as they are mainly held for trading. Refer to the tables in Note 39 for the maturity profile of hedging derivatives

The above table includes disclosure of the contractual maturity of financial liabilities, which approximates the same analysis on an undiscounted basis, as total future interest payments are not material relative to the principal amounts. Assets and liabilities (including non-maturing savings/current deposits) are represented on a contractual basis or in a period when it can legally be withdrawn. The cash flows of assets and liabilities may behave differently from their contractual terms.

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**46.2 Contingent liabilities and commitments**

The table below shows the Group's contingent liabilities and commitments based on the remaining period as at the balance sheet date to contractual expiry date.

In \$ millions	The Group				Total
	Less than 1 year	1 to 3 years	3 to 5 years	Over 5 years	
<b>31 Dec 2018</b>					
Guarantees, endorsements and other contingent liabilities	24,603	-	-	-	24,603
Undrawn credit commitments <sup>(a)</sup> and other facilities	241,895	14,759	13,263	2,576	272,493
Operating lease commitments	262	336	60	14	672
Capital commitments	73	8	-	-	81
<b>Total</b>	<b>266,833</b>	<b>15,103</b>	<b>13,323</b>	<b>2,590</b>	<b>297,849</b>
<b>31 Dec 2017</b>					
Guarantees, endorsements and other contingent liabilities	20,819	-	-	-	20,819
Undrawn credit commitments <sup>(a)</sup> and other facilities	217,081	13,146	12,048	2,198	244,473
Operating lease commitments	330	342	42	3	717
Capital commitments	42	32	-	-	74
<b>Total</b>	<b>238,272</b>	<b>13,520</b>	<b>12,090</b>	<b>2,201</b>	<b>266,083</b>
<b>1 Jan 2017</b>					
Guarantees, endorsements and other contingent liabilities	22,714	-	-	-	22,714
Undrawn credit commitments <sup>(a)</sup> and other facilities	206,183	11,970	13,028	4,152	235,333
Operating lease commitments	234	267	42	6	549
Capital commitments	54	12	3	-	69
<b>Total</b>	<b>229,185</b>	<b>12,249</b>	<b>13,073</b>	<b>4,158</b>	<b>258,665</b>

(a) Includes commitments that are unconditionally cancellable at any time by the Group

The Group expects that not all of the contingent liabilities and undrawn credit commitments will be drawn before expiry.

**47 Operational Risk**

Operational risk is inherent in the Group's business activities and it may arise from inadequate or failed internal processes, people, systems, or from external events.

The Group's objective is to keep operational risk at appropriate levels, taking into account the markets it operates in, the characteristics of the businesses as well as its economic and regulatory environment.

**Operational Risk Management**

The Group's approach to operational risk management comprises the following building blocks:

- **Policies**

The Group Operational Risk Management (ORM) Policy sets its overall approach for managing operational risk in a structured, systematic and consistent manner.

There are policies, standards, tools and programmes in place to govern ORM practices across the Group. These include corporate operational risk policies and standards that are owned by the respective corporate oversight and control functions. The key policies address risk areas relating to technology, compliance, fraud, money laundering, financing of terrorism and sanctions, new product and outsourcing.

- **Risk Methodologies**

The Group adopts the standardised approach to compute operational risk regulatory capital.

To manage and control operational risk, the Group uses various tools, including risk and control self-assessment, operational risk event management and key risk indicator monitoring.

The Group's three lines of defence adopt one common risk taxonomy, and a consistent risk assessment approach to manage operational risk. Risk and control self-assessment is conducted by each business or support unit to identify key operational risk and assess the effectiveness of internal controls. When control issues are identified, the units develop action plans and track the resolution of the issues.

Operational risk events are classified in accordance with Basel standards. Such events, including any significant incidents that may impact the Group's reputation, must be reported based on certain established thresholds. Key risk indicators with pre-defined escalation triggers are employed to facilitate risk monitoring in a forward-looking manner.

Additional methodologies are in place to address subject-specific risks, including, but not limited to, the following:

**Technology risk**

Information Technology (IT) risk is managed through an enterprise technology risk approach. This covers risk governance, communication, monitoring, assessment, mitigation and acceptance, and is supported by a set of IT policies and standards, control processes and risk mitigation programmes.

Along with the Group's digital journey and the evolving cyber risk landscape, the Group has defined Cybersecurity as a key priority which is managed by a dedicated technology team led by the Group's Chief Information Security Officer (CISO). The CISO oversees the cyber security function, a one-stop competency centre for all cybersecurity related matters.

**Compliance risk**

Compliance risk refers to the risk of the Group not being able to successfully conduct its business because of any failure to comply with laws, regulatory requirements, industry codes or standards of business and professional conduct applicable to the financial sector.

This includes, in particular, laws and regulations applicable to the licensing and conducting of banking or other financial businesses, financial crime such as anti-money laundering and countering the financing of terrorism, fraud and bribery/corruption. The Group maintains a compliance programme designed to identify, assess, measure, mitigate and report on such risks through a combination of policy and relevant systems and controls.

The Group also provides relevant training and implements assurance processes. The Group strongly believes in the need to promote a strong compliance culture as well, and this is developed through the leadership of its Board and senior management.

**Fraud risk**

The Group has established minimum standards for its business and support units to prevent, detect, investigate and remediate fraud and related events. This is based on the Fraud Management Programme, through which standards are implemented at the unit and geographical levels. These standards aim to provide end-to-end management for fraud and related issues within the Group.

**Money laundering, financing of terrorism and sanctions risks**

There are minimum standards for the Group's business and support units to mitigate and manage its actual and/or potential exposure to money laundering, terrorist financing, sanctions, corruption, or other illicit financial activities. Accountabilities have also been established for the protection of the Group's assets and reputation, as well as the interests of its customers and shareholders.

***New product and outsourcing risks***

Each new product, service or outsourcing initiative is subject to a risk review and sign-off process, where relevant risks are identified and assessed by departments independent of the risk-taking unit proposing the product or service. Variations of existing products or services and outsourcing initiatives are also subject to a similar process.

***Other mitigation programmes***

To manage business disruptions effectively, business continuity management is vital as part of the Group's risk mitigation programme.

A robust business continuity management programme is in place to ensure that essential banking services can continue in the event of unforeseen events or business disruptions. Planning for business resilience includes the identification of key business processes and resources via Business Impact Analysis and documented in the Business Continuity Plan (BCP).

The Group's BCP aims to minimise the impact of business interruption stemming from severe loss scenarios and provide a reasonable level of service until normal business operations are resumed. Within the crisis management structure, an incident management process is established which provides guidance on incident severity assessment, roles and responsibilities of process owners and escalation protocols for the effective management of a crisis.

Exercises are conducted annually, simulating different scenarios to test BCPs and crisis management protocol. These scenarios include technology issues affecting essential banking services across the Group, natural disasters with wide geographical impact, safety-at-risk incidents (e.g. terrorism) and other events leading to significant business disruption. The effectiveness of these exercises, as well as the Group's business continuity readiness, its alignment to regulatory guidelines and its disclosure of residual risks, are communicated and attested by senior management to the BRMC on an annual basis.

To mitigate losses from specific unexpected and significant event risks, the Group purchases group-wide insurance policies – under the Group Insurance Programme – from third-party insurers. The Group has acquired insurance policies relating to crime and professional indemnity, directors and officers liability, cyber risk, property damage and business interruption, general liability and terrorism.

- **Processes, Systems and Reports**

Robust internal control processes and systems are integral to identifying, assessing, monitoring, managing and reporting operational risk.

The Group's units are responsible for the day-to-day management of operational risk in their products, processes, systems and activities, in accordance with the various frameworks and

policies. The RMG Operational Risk unit and other corporate oversight and control functions oversee and monitor the effectiveness of operational risk management, assess key operational risk issues with the units, and report and/or escalate key operational risks to risk committees with recommendations on appropriate risk mitigation strategies.

The Group has implemented an integrated governance, risk and compliance system with aligned risk assessment methodology, common taxonomy and unified processes for the three lines of defence.

## 48 Capital Management

The Board is responsible for setting the Group's capital management objective, which is to maintain a strong capital position consistent with regulatory requirements under the MAS Notice 637 and the expectations of various stakeholders, e.g. customers, investors and rating agencies. The Board articulates this objective in the form of capital targets. This objective is pursued while delivering returns to shareholders and ensuring that adequate capital resources are available for business growth and investment opportunities as well as adverse situations, taking into consideration the Group's strategic plans and risk appetite.

The Group's capital management objective is implemented via a capital management and planning process that is overseen by the Capital Committee. The Chief Financial Officer chairs the Capital Committee. The Capital Committee receives regular updates on the Group's current and projected capital position. A key tool for capital planning is the annual Internal Capital Adequacy Assessment Process (ICAAP) through which the Group assesses its forecast capital supply and demand relative to regulatory requirements and internal capital targets. The ICAAP has a three-year horizon and covers various scenarios, including stress scenarios of differing scope and severity.

The Group is subject to and has complied with the capital adequacy requirements set out in the MAS Notice 637, which effects the Basel Committee on Banking Supervision's capital adequacy framework in Singapore, throughout the year. The Group's capital adequacy ratios as at 31 December 2018 have been subject to an external limited assurance review, pursuant to the MAS Notice 609 "Auditors' Reports and Additional Information to be submitted with Annual Accounts".

**49 Segment Reporting**

**49.1 Business segment reporting**

The business segment results are prepared based on the Group's internal management reporting which reflects the organisation management structure. As the activities of the Group are highly integrated, internal allocation has been made in preparing the segment information. Amounts for each business segment are shown after the allocation of certain centralised costs, funding income and the application of transfer pricing, where appropriate. Transactions between segments are recorded within the segment as if they are third party transactions and are eliminated on consolidation.

The Group's various business segments are described below.

**Consumer Banking/Wealth Management**

Consumer Banking/ Wealth Management provides individual customers with a diverse range of banking and related financial services. The products and services available to customers include current and savings accounts, fixed deposits, loans and home finance, cards, payments, investment and insurance products.

**Institutional Banking**

Institutional Banking provides financial services and products to institutional clients including bank and non-bank financial institutions, government-linked companies, large corporates and small and medium-sized businesses. The business focuses on broadening and deepening customer relationships. Products and services comprise the full range of credit facilities from short-term working capital financing to specialised lending. It also provides global transactional services such as cash management, trade finance and securities and fiduciary services, treasury and markets products, corporate finance and advisory banking as well as capital markets solutions.

**Treasury Markets**

Treasury Markets' activities primarily include structuring, market-making and trading across a broad range of treasury products.

Income from sale of treasury products offered to customers of Consumer Banking/Wealth Management and Institutional Banking is not reflected in the Treasury Markets segment, but in the respective customer segments.

**Others**

The Others segment encompasses the results of corporate decisions that are not attributed to business segments. It includes earnings on capital deployed into high quality assets, earnings from non-core asset sales and certain other head office items such as centrally raised allowances. DBS Vickers and the Islamic Bank of Asia are also included in this segment.

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The following table analyses the results, total assets and total liabilities of the Group by business segment.

In \$ millions	The Group				Total
	Consumer Banking/ Wealth Management	Institutional Banking	Treasury Markets	Others	
<b>2018</b>					
Net interest income	3,596	4,116	319	984	9,015
Net fee and commission income	1,627	1,125	-	36	2,788
Other non-interest income	430	519	353	142	1,444
Total income	5,653	5,760	672	1,162	13,247
Total expenses	3,039	1,839	602	319	5,799
Allowances for credit and other losses	228	550	(20)	(48)	710
Profit before tax	2,386	3,371	90	891	6,738
Income tax expense					1,014
Net profit attributable to shareholders					5,656
Total assets before goodwill and intangibles	115,470	263,125	108,646	58,322	545,563
Goodwill and intangibles					5,175
Total assets					550,738
Total liabilities	212,853	191,287	47,641	48,057	499,838
Capital expenditure	106	16	10	401	533
Depreciation	46	10	3	272	331
<b>2017</b>					
Net interest income	2,843	3,622	563	776	7,804
Net fee and commission income	1,408	1,168	-	47	2,623
Other non-interest income	420	485	293	642	1,840
Total income	4,671	5,275	856	1,465	12,267
Total expenses	2,575	1,755	572	292	5,194
Allowances for credit and other losses	161	2,326	1	(594)	1,894
Profit before tax	1,935	1,194	283	1,767	5,179
Income tax expense					671
Net profit attributable to shareholders					4,388
Total assets before goodwill and intangibles	110,718	246,863	103,158	51,811	512,550
Goodwill and intangibles					5,165
Total assets					517,715
Total liabilities	207,485	177,418	40,209	42,001	467,113
Capital expenditure	87	15	8	250	360
Depreciation	48	13	4	232	297

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**49.2 Geographical segment reporting**

The performance by geography is classified based on the location in which income and assets are recorded. Hong Kong comprises mainly DBS Bank (HK) Limited and DBS HK branch. Rest of Greater China comprises mainly DBS Bank (China) Ltd, DBS Bank (Taiwan) Ltd and DBS Taipei branch. South and Southeast Asia comprises mainly PT Bank DBS Indonesia, DBS India branches and DBS Labuan branch. All results are prepared in accordance with SFRS(I).

In \$ millions	The Group					Total
	Singapore	Hong Kong	Rest of Greater China	South and Southeast Asia	Rest of the World	
<b>2018</b>						
Net interest income	5,724	1,830	675	530	256	9,015
Net fee and commission income	1,730	617	175	206	60	2,788
Other non-interest income	784	294	270	56	40	1,444
Total income	8,238	2,741	1,120	792	356	13,247
Total expenses	3,338	1,057	725	573	106	5,799
Allowances for credit and other losses	408	72	44	183	3	710
Profit before tax	4,492	1,612	351	36	247	6,738
Income tax expense	582	251	81	35	65	1,014
Net profit attributable to shareholders	3,842	1,361	270	1	182	5,656
Total assets before goodwill and intangibles	349,928	90,523	51,283	23,612	30,217	545,563
Goodwill and intangibles	5,137	30	-	8	-	5,175
Total assets	355,065	90,553	51,283	23,620	30,217	550,738
Non-current assets <sup>(a)</sup>	1,633	362	145	144	4	2,288
<b>2017</b>						
Net interest income	5,114	1,439	545	457	249	7,804
Net fee and commission income	1,695	591	139	138	60	2,623
Other non-interest income	1,332	193	171	101	43	1,840
Total income	8,141	2,223	855	696	352	12,267
Total expenses	3,048	958	632	457	99	5,194
Allowances for credit and other losses	1,483	80	131	184	16	1,894
Profit before tax	3,610	1,185	92	55	237	5,179
Income tax expense	392	200	26	(11)	64	671
Net profit attributable to shareholders	3,099	985	66	65	173	4,388
Total assets before goodwill and intangibles	335,906	79,361	49,966	19,731	27,586	512,550
Goodwill and intangibles	5,136	29	-	-	-	5,165
Total assets	341,042	79,390	49,966	19,731	27,586	517,715
Non-current assets <sup>(a)</sup>	1,487	338	118	69	4	2,016

(a) Includes investments in associates, properties and other fixed assets

## DBS Bank Ltd. and its subsidiaries

### Directors' Statement

The Directors are pleased to submit their statement to the Member, together with the audited consolidated financial statements of DBS Bank Ltd. (the Bank) and its subsidiaries (the Bank Group) and the financial statements of the Bank for the financial year ended 31 December 2018. These have been prepared in accordance with the provisions of the Companies Act, Chapter 50 (the Companies Act) and the Singapore Financial Reporting Standards (International).

In the opinion of the Directors, the consolidated financial statements of the Bank Group, consisting of the Bank and its subsidiaries, and the financial statements of the Bank, together with the notes thereon, as set out on pages 1 to 101, are drawn up so as to give a true and fair view of the financial position of the Bank and Bank Group, as at 31 December 2018, and the performance and changes in equity of the Bank and Bank Group, and cash flow statement of the Bank Group for the financial year ended on that date. As at the date of this statement, there are reasonable grounds to believe that the Bank and the Bank Group will be able to pay their debts as and when they fall due.

### DBSH Share Plan

During the financial year, time-based awards in respect of an aggregate of 4,010,066 ordinary shares were granted pursuant to the DBSH Share Plan to selected employees of the Bank Group. This included 226,509 ordinary shares comprised in awards granted to the executive Director, Mr Piyush Gupta, which formed part of his remuneration for 2017.

Following shareholders' approval for the special dividend of 50 cents per ordinary share at DBSH's annual general meeting held on 25 April 2018, adjustments were made to all unvested share awards granted under the DBSH Share Plan on 26 April 2018. As a result of such adjustments, the total number of ordinary shares comprised in such unvested share awards have increased by 286,509 shares.

In addition, during the financial year, certain non-executive Directors received an aggregate of 32,549 share awards, which formed part of their directors' fees for acting as Directors of DBS Group Holdings Ltd (DBSH). Details are set out below.

Directors of the Bank	Share awards granted during the financial year under review	Share awards vested during the financial year under review
Mr Peter Seah <sup>(2)</sup>	18,443	18,443
Mr Piyush Gupta	243,332 <sup>(1)</sup>	366,676
Ms Euleen Goh <sup>(2)</sup>	3,554	3,554
Mr Ho Tian Yee <sup>(2)</sup>	2,216	2,216
Mr Olivier Lim	299	299
Mr Nihal Kaviratne <sup>(2)</sup>	2,468	2,468
Mr Andre Sekulic <sup>(2)</sup>	2,581	2,581
Mr Danny Teoh <sup>(2)</sup>	2,988	2,988

(1) This represents the aggregate of (a) 226,509 share awards which formed part of Mr Piyush Gupta's remuneration for 2017; and (b) the increase in the total number of ordinary shares comprised in Mr Piyush Gupta's unvested share awards by 16,823 shares arising from adjustments made to all unvested share awards granted under the DBSH Share Plan on 26 April 2018.

(2) The awards of these non-executive Directors formed part of their directors' fees for acting as Directors of DBSH in 2017. All the awards granted to these non-executive Directors during the financial year under review vested immediately upon grant.

Information on the DBSH Share Plan is as follows:

- (i) Awards over DBSH's ordinary shares may be granted to Bank Group executives who hold such rank as may be determined by the Compensation and Management Development Committee of DBSH from time to time. Awards may also be granted to (amongst others) executives of associated companies of the Bank who hold such rank as may be determined by the Compensation and Management Development Committee from time to time, and non-executive Directors of DBSH. As at the date of this statement, the members of the Compensation and Management Development



Committee are Mr Andre Sekulic (Chairman), Mr Peter Seah, Ms Euleen Goh, Mr Olivier Lim and Mr Nihal Kaviratne.

The participants of the DBSH Share Plan shall not be eligible to participate in the DBSH Employee Share Plan or other equivalent plans.

- (ii) Where time-based awards are granted, participants are awarded ordinary shares of DBSH or, at the Compensation and Management Development Committee's discretion, their equivalent cash value or a combination of both as part of their deferred bonus, at the end of the prescribed vesting periods. Awards are granted under the DBSH Share Plan at the absolute discretion of the Compensation and Management Development Committee. Dividends on unvested shares do not accrue to employees.
- (iii) The DBSH Share Plan shall continue to be in force at the discretion of the Compensation and Management Development Committee, subject to a maximum period of ten years. At an Extraordinary General Meeting of DBSH held on 8 April 2009, the DBSH Share Plan was extended for another ten years, from 18 September 2009 to 17 September 2019, provided always that the DBSH Share Plan may continue beyond the above stipulated period with the approval of the shareholders of DBSH by ordinary resolution in general meeting and of any relevant authorities which may then be required.
- (iv) Awards under the DBSH Share Plan may be granted at any time in the course of a financial year, and may lapse by reason of cessation of employment or misconduct of the participant, except in cases such as retirement, redundancy, ill health, injury, disability, death, bankruptcy of the participant, or by reason of the participant, being a non-executive Director, ceasing to be a Director, or in the event of a take-over, winding up or reconstruction of DBSH.
- (v) Subject to the prevailing legislation and the rules of the Singapore Exchange, DBSH will have the flexibility to deliver ordinary shares of DBSH to participants upon vesting of their awards by way of an issue of new ordinary shares and/or the transfer of existing ordinary shares (which may include ordinary shares held by DBSH in treasury).
- (vi) The class and/or number of ordinary shares of DBSH comprised in an award to the extent not yet vested, and/or which may be granted to participants, are subject to adjustment by reason of any variation in the ordinary share capital of DBSH (whether by way of a capitalisation of profits or reserves or rights issue, reduction, subdivision, consolidation, or distribution) or if DBSH makes a capital distribution or a declaration of a special dividend (whether in cash or in specie), upon the written confirmation of the auditor of DBSH that such adjustment (other than in the case of a capitalisation issue) is fair and reasonable.

## **Board of Directors**

The Directors in office at the date of this statement are:

Mr Peter Seah	- Chairman
Mr Piyush Gupta	- Chief Executive Officer
Dr Bonghan Cho	- (Appointed 26 April 2018)
Ms Euleen Goh	
Mr Ho Tian Yee	- Lead Independent Director
Mr Olivier Lim	
Mr Nihal Kaviratne	
Mr Andre Sekulic	
Mr Danny Teoh	
Mr Tham Sai Choy	- (Appointed 3 September 2018)
Mrs Ow Foong Pheng	

Ms Euleen Goh, Mr Danny Teoh and Mr Nihal Kaviratne will retire in accordance with Article 95 of the Bank's Constitution at the forthcoming annual general meeting (AGM) and will offer themselves for re-election at the AGM.

Dr Bonghan Cho and Mr Tham Sai Choy will retire in accordance with Article 74(b) of the Bank's Constitution at the forthcoming AGM and will offer themselves for re-election at the AGM.

### Arrangements to enable Directors to acquire shares or debentures

Neither at the end of, nor at any time during the financial year, was the Bank a party to any arrangement, the object of which is to enable the Directors to acquire benefits through the acquisition of shares in or debentures of the Bank or any other body corporate, save as disclosed in this statement.

### Directors' interests in shares or debentures

Each of the following Directors, who held office at the end of the financial year, had, according to the register of directors' shareholdings required to be kept under Section 164 of the Companies Act, an interest in shares of the Bank and related corporations as stated below:

	Holdings in which Directors have a direct interest		Holdings in which Directors are deemed to have an interest	
	As at 31 Dec 2018	As at 1 Jan 2018 (or date of appointment if later)	As at 31 Dec 2018	As at 1 Jan 2018 (or date of appointment if later)
<b>DBSH ordinary shares</b>				
Mr Peter Seah	220,661	202,218	-	-
Mr Piyush Gupta	1,169,560	802,884	318,000	318,000
Dr Bonghan Cho	-	-	-	-
Ms Euleen Goh	54,414	50,860	-	-
Mr Ho Tian Yee	44,229	32,013	-	-
Mr Olivier Lim	38,299	10,000	-	-
Mr Nihal Kaviratne	33,768	31,300	-	-
Mr Andre Sekulic	24,575	21,994	-	-
Mr Danny Teoh	41,726	38,738	19,099	19,099
Mr Tham Sai Choy	88,000	88,000	-	-
Mrs Ow Foong Pheng	25,839	25,839	-	-
<b>Share awards (unvested) granted under the DBSH Share Plan</b>				
Mr Piyush Gupta <sup>(1)</sup>	1,000,845	1,124,189	-	-
<b>DBS Bank 4.7% non-cumulative non-convertible redeemable perpetual preference shares</b>				
Ms Euleen Goh	3,000	3,000	-	-

(1) Mr Piyush Gupta's share awards form part of his remuneration. Details of the DBSH Share Plan are set out in Note 40 of the Notes to the 2018 Bank Group's financial statements

There was no change in any of the above-mentioned interests between the end of the financial year and 21 January 2019.

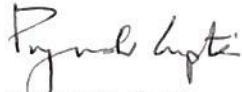
**Independent Auditor**

PricewaterhouseCoopers LLP has expressed its willingness to accept re-appointment as independent external auditor.

On behalf of the Directors



**Mr Peter Seah**



**Mr Piyush Gupta**

15 February 2019  
Singapore

# **INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF DBS BANK LTD.**

## **Report on the Audit of the Financial Statements**

### **Our opinion**

In our opinion, the accompanying consolidated financial statements of DBS Bank Ltd. (the "Bank") and its subsidiaries (the "Bank Group") and the balance sheet, income statement, statement of comprehensive income and statement of changes in equity of the Bank are properly drawn up in accordance with the provisions of the Companies Act, Chapter 50 (the "Act") and Singapore Financial Reporting Standards (International) ("SFRS(I)s") so as to give a true and fair view of the consolidated financial position of the Bank Group and the financial position of the Bank as at 31 December 2018 and of the consolidated financial performance, consolidated changes in equity and consolidated cash flows of the Bank Group, and of the financial performance and changes in equity of the Bank for the financial year ended on that date.

### *What we have audited*

The financial statements of the Bank Group and the Bank, as set out on pages 1 to 101, comprise:

- the income statements of the Bank Group and the Bank for the year ended 31 December 2018;
- the statements of comprehensive income of the Bank Group and the Bank for the year then ended;
- the balance sheets of the Bank Group and of the Bank as at 31 December 2018;
- the consolidated statement of changes in equity of the Bank Group for the year then ended;
- the statement of changes in equity of the Bank for the year then ended;
- the consolidated cash flow statement of the Bank Group for the year then ended; and
- the notes to the financial statements, including a summary of significant accounting policies.

### **Basis for opinion**

We conducted our audit in accordance with Singapore Standards on Auditing ("SSAs"). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

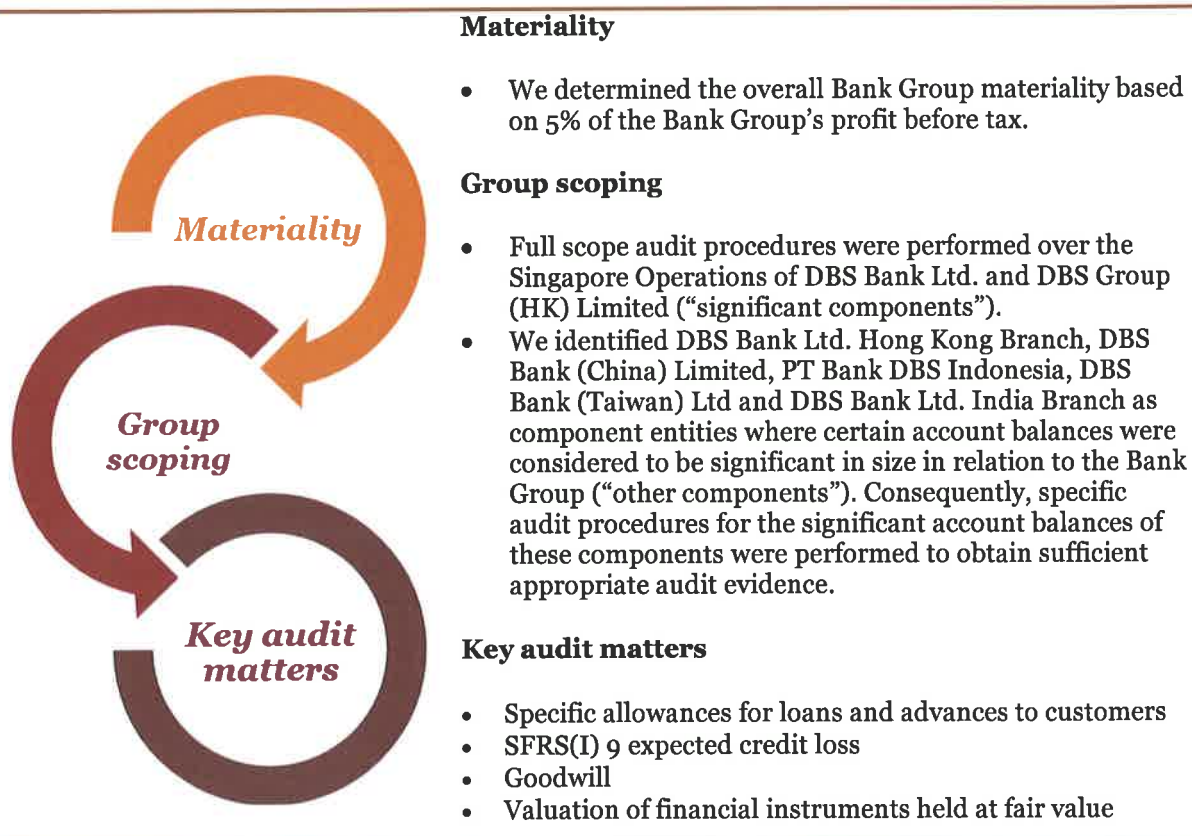
### *Independence*

We are independent of the Bank Group in accordance with the Accounting and Corporate Regulatory Authority Code of Professional Conduct and Ethics for Public Accountants and Accounting Entities ("ACRA Code") together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ACRA Code.

# INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF DBS BANK LTD. (continued)

## Our audit approach

### Overview



As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the accompanying financial statements. In particular, we considered where management made subjective judgements; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

### Materiality

The scope of our audit was influenced by our application of materiality. An audit is designed to obtain reasonable assurance whether the consolidated financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall Bank Group materiality for the consolidated financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and on the financial statements as a whole.

**INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF  
DBS BANK LTD. (continued)**

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<i>How we determined overall Bank Group materiality</i>	5% of the Bank Group's profit before tax
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<i>Rationale for benchmark applied</i>	<ul style="list-style-type: none"><li>• We chose 'profit before tax' as in our view, it is the benchmark against which performance of the Bank Group is most commonly measured.</li><li>• We selected 5% based on our professional judgement, noting that it is also within the range of commonly accepted profit-related thresholds.</li></ul>
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In performing our audit, we allocated materiality levels to the significant components and other components of the Bank Group. These are less than the overall Bank Group materiality.

*How we developed the audit scope*

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the financial statements as a whole, taking into account the structure of the Bank Group, the accounting processes and controls, and the industry in which the Bank Group operates. The Bank Group's financial reporting process is dependent on its IT systems. Our audit scope included testing the operating effectiveness of the controls over the integrity of key financial data processed through the IT systems that are relevant to financial reporting.

In establishing the overall Bank Group audit approach, we determined the extent of audit procedures that are needed to be performed across the Bank Group by us, or by other PwC network firms operating under our instruction who are familiar with the local laws and regulations in each of these territories (the "component auditors"). Where the work was performed by component auditors, we determined the level of involvement we needed to have in the procedures to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the financial statements as a whole.

In addition, we visited several of the Bank Group's key locations and held a Bank Group audit planning meeting with the auditors of the significant components. We also held regular conference calls with all component auditors.

**INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF  
DBS BANK LTD. (continued)**

*Key audit matters*

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the financial year ended 31 December 2018. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon and we do not provide a separate opinion on these matters.

Key audit matter	How our audit addressed the key audit matter
<p><b>Specific allowances for loans and advances to customers</b></p> <p>As at 31 December 2018, the specific allowances for loans and advances to customers of the Bank Group was \$2,440 million, the majority of which related to Institutional Banking Group (“IBG”) customers. Specific allowances refer to loss allowance for credit-impaired exposures (i.e. Stage 3) per SFRS(I) 9. The matter relating to expected credit losses on non-impaired exposures (i.e. Stage 1 and Stage 2) is set out under the ‘SFRS(I) 9 expected credit loss’ key audit matter.</p> <p>We focused on this area because of the subjective judgements by management in determining the necessity for, and then estimating the size of, allowances against loans and advances.</p> <p>In particular, we focused on specific allowances for loans and advances to IBG customers because any assessment of impairment can be inherently subjective and involve significant judgement over both timing of recognition of any impairment and the estimation of the size of such impairment. This includes:</p> <ul style="list-style-type: none"> <li>• the principal assumptions underlying the calculation of specific allowances for loans and advances to IBG customers where there is evidence of impairment losses (including the future profitability of the borrowers and the expected realisable value of collateral held); and</li> </ul>	<p>We assessed the design and evaluated the operating effectiveness of the controls over the specific allowances for loans and advances to IBG customers. These controls included:</p> <ul style="list-style-type: none"> <li>• oversight of credit risk by the Credit Risk Committee;</li> <li>• timely review of credit risk;</li> <li>• the watchlist identification and monitoring process;</li> <li>• timely identification of impairment events;</li> <li>• classification of loans and advances in line with MAS 612; and</li> <li>• the collateral valuation processes.</li> </ul> <p>We determined that we could rely on these controls for the purposes of our audit.</p> <p>We inspected a sample of loans and advances to IBG customers to assess whether the classification of the loans and advances is in line with MAS 612 and, where there was evidence of an impairment loss, whether it had been identified in a timely manner including, where relevant, how forbearance had been considered.</p> <p>Where impairment had been identified, for a sample of loans and advances, our work included:</p> <ul style="list-style-type: none"> <li>• considering the latest developments in relation to the borrower;</li> <li>• examining the forecasts of future cash flows prepared by management including key assumptions in relation to the amount and timing of recoveries;</li> <li>• comparing the collateral valuation and other sources of repayment to support the calculation of the impairment against external evidence where available, including independent valuation reports;</li> <li>• challenging management’s assumptions; and</li> <li>• testing the calculations.</li> </ul>

**INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF  
DBS BANK LTD. (continued)**

Key audit matter	How our audit addressed the key audit matter
<ul style="list-style-type: none"> <li>the classification of loans and advances in line with MAS Notice 612 ("MAS 612").</li> </ul> <p>We applied judgement in selecting samples focused on borrowers incorporated in China, India and Indonesia, and with exposures to the oil and gas support services and other commodities sectors in view of continued heightened credit risks impacting some parts of the portfolio.</p> <p>(Refer also to Notes 3 and 18 to the financial statements)</p>	<p>For a sample of performing loans and advances to IBG customers which had not been identified by management as potentially impaired, considering the latest developments in relation to the borrower, we challenged management's assumptions on whether management's classification was appropriate, using external evidence where available in respect of the relevant borrower.</p> <p>Based on procedures performed, we have assessed that the specific allowances for loans and advances is appropriate.</p>
<p><b>SFRS(I) 9 expected credit loss</b></p> <p>On 1 January 2018, the Bank Group adopted the new SFRS(I) 9 <i>Financial Instruments</i> ("SFRS(I) 9").</p> <p>SFRS(I) 9 introduced a new impairment measurement framework, referred to as Expected Credit Loss ("ECL"). In estimating ECL over future time periods, significant judgement is required.</p> <p>We focused on the Bank Group's measurement of ECL on non-impaired exposures (\$2,569 million). This covers both 'Stage 1' exposures (where there has not been a significant increase in credit risk), and 'Stage 2' exposures (where a significant increase in credit risk has been observed). The ECL framework implemented by the Bank Group involves significant judgement and assumptions that relate to, amongst others:</p> <ul style="list-style-type: none"> <li>adjustments to the Bank Group's Basel credit models and parameters;</li> <li>use of forward-looking and macro-economic information;</li> <li>estimates for the expected lifetime of revolving credit facilities;</li> <li>assessment of significant increase in credit risk; and</li> </ul>	<p>We made a critical assessment of methodologies and assumptions used to estimate the ECL for retail and non-retail portfolios as at 1 January 2018 and 31 December 2018, involving credit risk and accounting specialists to assist us in this assessment. This included assessing refinements in methodologies made during the year.</p> <p>We tested the design and operating effectiveness of key controls focusing on:</p> <ul style="list-style-type: none"> <li>involvement of governance committees, including review and approval of post model adjustments;</li> <li>completeness and accuracy of external and internal data inputs into the ECL calculations; and</li> <li>accuracy and timeliness of allocation of exposures into Stage 1 and Stage 2 based on quantitative and qualitative triggers.</li> </ul> <p>The Bank Group's internal experts performed an independent model validation of the ECL methodologies and assumptions. We reviewed the outcomes from this work as part of our assessment of the ECL estimate.</p> <p>We involved specialists to review selected ECL model source codes to test whether these appropriately reflected the Bank Group's methodologies.</p> <p>We challenged the rationale and calculation basis of post model adjustments.</p>



**INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF  
DBS BANK LTD. (continued)**

Key audit matter	How our audit addressed the key audit matter
<ul style="list-style-type: none"> <li>post model adjustments to account for limitations in the ECL models for example the risk to the portfolio from the current geopolitical trade conditions.</li> </ul> <p>(Refer also to Notes 4 and 12 to the financial statements)</p>	<p>Overall, we assessed the methodologies and assumptions used by the Bank Group to estimate the ECL on non-impaired exposures to be appropriate.</p>
<p><b>Goodwill</b></p> <p>As at 31 December 2018, the Bank Group had \$5,175 million of goodwill as a result of acquisitions.</p> <p>We focused on this area as management makes significant judgement in estimating future cash flows in undertaking its annual goodwill impairment testing.</p> <p>The key assumptions used in the discounted cash flow analyses relate to:</p> <ul style="list-style-type: none"> <li>Cash flow forecasts;</li> <li>Discount rate; and</li> <li>Growth rate.</li> </ul> <p>(Refer also to Notes 3 and 27 to the financial statements)</p>	<p>We assessed the appropriateness of management's identification of the Bank Group's cash generating units and the process by which indicators of impairment were identified.</p> <p>For DBS Bank (Hong Kong) Limited's franchise (goodwill of \$4,631 million as at 31 December 2018), we evaluated management's cash flow forecasts and the process by which they were developed. Together with valuation specialists in our team, we assessed the discount rate and growth rate to the Bank Group's own historical performance and available external industry and economic indicators.</p> <p>We reviewed management's sensitivity analysis over the key assumptions to determine whether any reasonably possible change in these assumptions would result in an impairment, and also performed our own stress analysis.</p> <p>We concur with management's assessment that goodwill balances are not impaired as at 31 December 2018.</p>
<p><b>Valuation of financial instruments held at fair value</b></p> <p>Financial instruments held by the Bank Group at fair value include derivative assets and liabilities, trading securities, certain debt instruments and other assets and liabilities designated at fair value.</p> <p>The Bank Group's financial instruments are predominantly valued using quoted market prices ('Level 1') or market observable prices ('Level 2'). The valuation of 'Level 3' instruments rely on significant unobservable inputs.</p> <p>We considered the overall valuation of financial instruments (Level 1, 2 and 3)</p>	<p>We assessed the design and tested the operating effectiveness of the controls over the Bank Group's financial instruments valuation processes, including over Level 3 instruments. These included the controls over:</p> <ul style="list-style-type: none"> <li>management's testing and approval of new models and revalidation of existing models;</li> <li>the completeness and accuracy of the pricing data inputs into valuation models;</li> <li>the monitoring of collateral disputes; and</li> <li>governance mechanisms and monitoring over the valuation processes by the Group Market and Liquidity Risk Committee, including over derivative valuation adjustments.</li> </ul> <p>We determined that we could rely on the controls for the purposes of our audit. In addition, we:</p>

**INDEPENDENT AUDITOR’S REPORT TO THE MEMBERS OF DBS BANK LTD. (continued)**

Key audit matter	How our audit addressed the key audit matter
<p>to be a key audit matter given the financial significance to the Bank Group, nature of underlying products and estimation involved to determine fair value.</p> <p>In determining fair value, management also make adjustments to recognise credit risk, funding costs, bid-offer spreads and in other cases parameter and model risk limitations. This is broadly consistent with the banking industry albeit the methodology to calculate some of these adjustments continues to evolve.</p> <p>(Refer also to Notes 3 and 42 to the financial statements)</p>	<ul style="list-style-type: none"> <li>• engaged our own specialists to use their own models and input sources to determine an independent estimate of fair value for a sample of the Bank Group's Level 1 and Level 2 financial instruments. We compared these to the Bank Group’s calculations of fair value to assess individual material valuation differences or systemic bias;</li> <li>• assessed the reasonableness of the methodologies used and the assumptions made for a sample of financial instrument valuations with significant unobservable valuation inputs (Level 3 instruments);</li> <li>• performed procedures on collateral disputes to identify possible indicators of inappropriate valuations; and</li> <li>• performed tests of inputs and assessed the methodology over fair value adjustments, in light of available market data and industry trends.</li> </ul> <p>Overall, the valuation of financial instruments held at fair value was within a reasonable range of outcomes.</p>

**Other Information**

Management is responsible for the other information. The other information comprises the Directors’ Statement included in pages 102 to 105 (but does not include the financial statements and our auditor’s report thereon), which we obtained prior to the date of this auditor’s report, and the other sections of the Annual Report (“the Other Sections”) which are expected to be made available to us after that date.

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor’s report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

When we read the Other Sections, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance and take appropriate actions in accordance with SSAs.

## **INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF DBS BANK LTD. (continued)**

### **Responsibilities of Management and Directors for the Financial Statements**

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with the provisions of the Act and SFRS(I)s, and for devising and maintaining a system of internal accounting controls sufficient to provide a reasonable assurance that assets are safeguarded against loss from unauthorised use or disposition; and transactions are properly authorised and that they are recorded as necessary to permit the preparation of true and fair financial statements and to maintain accountability of assets.

In preparing the financial statements, management is responsible for assessing the Bank Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Bank Group or to cease operations, or has no realistic alternative but to do so.

The directors' responsibilities include overseeing the Bank Group's financial reporting process.

### **Auditor's Responsibilities for the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Bank Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Bank Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Bank Group to cease to continue as a going concern.

**INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF  
DBS BANK LTD. (continued)**

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Bank Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Bank Group audit. We remain solely responsible for our audit opinion.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the directors, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

**Report on Other Legal and Regulatory Requirements**

In our opinion, the accounting and other records required by the Act to be kept by the Bank and by those subsidiary corporations incorporated in Singapore of which we are the auditors, have been properly kept in accordance with the provisions of the Act.

The engagement partner on the audit resulting in this independent auditor's report is Melvin Poon.



PricewaterhouseCoopers LLP  
Public Accountants and Chartered Accountants  
Singapore, 15 February 2019