



BANK FOR INTERNATIONAL SETTLEMENTS

Interim financial statements (unaudited)

as at 30 September 2016

These financial statements for the six months ended 30 September 2016 were presented to the Board of Directors on 7 November 2016.

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Management report

Net interest and valuation income for the first half of 2016/17 was SDR 429.2 million, compared to SDR 198.8 million in the same period in the previous financial year. This increase resulted mainly from higher average deposit levels, along with valuation effects and a higher interest margin, arising in the improved market environment of the current financial year.

Net foreign exchange losses were SDR 1.1 million in the six months to September 2016. This compared to net foreign exchange losses of SDR 8.2 million in the same period in 2015.

Operating expense was SDR 143.0 million in the six months ended 30 September 2016, compared to SDR 139.5 million in the first half of the previous financial year.

Reflecting these developments, the Bank's **operating profit** for the first half of 2016/17 was SDR 289.6 million, compared to SDR 53.7 million in the same reporting period last year.

At the end of September, the Bank rebalanced its own fund portfolios to reflect the new SDR basket, which became effective from 1 October 2016. Compared to the previous financial year, this rebalancing exercise resulted in increased volumes of sales of own fund securities, and gains of SDR 44.9 million were realised on these sales (compared to realised gains of SDR 18.5 million in the same period in 2015).

A gain of SDR 23.4 million was realised on the sales of *gold investment assets* during the period, representing the sale of one tonne of the Bank's own gold. By comparison, in the first half of the 2015/16 financial year the Bank sold two and a half tonnes of gold, which realised a gain of SDR 53.1 million.

The Bank recorded a **net profit** of SDR 357.9 million for the six months ended 30 September 2016, which compares with SDR 125.3 million for the equivalent period last year.

In addition to the items reflected in the Bank's profit and loss account, the unrealised gains and losses on the Bank's *available for sale securities* and *gold investment assets* are recorded in the securities and gold revaluation accounts, which are included in the Bank's equity.

The *securities revaluation account* increased by SDR 27.1 million, reflecting unrealised gains on securities held in the Bank's own funds. The *gold revaluation account* increased by SDR 199.9 million as a result of an increase in the gold price.

The Bank's **total comprehensive income** amounted to a gain of SDR 586.7 million. By comparison, the equivalent period last year saw a loss of SDR 174.9 million.

The payment of the dividend for the 2015/16 financial year of SDR 120.0 million was made during the period to September 2016, and after taking this into account, the *Bank's equity* increased over the period by SDR 466.7 million to SDR 18,845.3 million.



Balance sheet

<i>SDR millions</i>	Note	30 September 2016	31 March 2016
Assets			
Cash and sight accounts		40,672.4	25,847.0
Gold and gold loans		25,839.8	13,176.8
Treasury bills		38,029.6	39,578.6
Securities purchased under resale agreements		59,669.4	56,218.6
Loans and advances		21,577.8	17,337.4
Government and other securities		60,955.1	67,128.4
Derivative financial instruments		1,620.6	1,685.3
Accounts receivable and other assets		3,560.2	10,215.9
Land, buildings and equipment	5	193.8	196.4
Total assets		252,118.7	231,384.4
Liabilities			
Gold deposits		11,174.8	10,227.6
Currency deposits		202,394.6	178,790.5
Securities sold under repurchase agreements		1,524.6	1,447.7
Derivative financial instruments		2,861.6	3,902.2
Accounts payable		14,205.3	17,548.8
Other liabilities		1,112.5	1,089.0
Total liabilities		233,273.4	213,005.8
Shareholders' equity			
Share capital	8	698.9	698.9
Less: shares held in treasury		(1.7)	(1.7)
Statutory reserves		15,289.9	14,997.0
Profit and loss account		357.9	412.9
Other equity accounts		2,500.3	2,271.5
Total equity		18,845.3	18,378.6
Total liabilities and equity		252,118.7	231,384.4



Profit and loss account

For the six months ended 30 September

<i>SDR millions</i>	Note	2016	2015
Interest income	6	1,140.3	902.1
Interest expense	6	(696.2)	(463.2)
Net interest income		444.1	438.9
Net valuation movement		(14.9)	(240.1)
Net interest and valuation income		429.2	198.8
Net fee and commission income		2.3	2.6
Net foreign exchange gain / (loss)		1.1	(8.2)
Total operating income		432.6	193.2
Operating expense		(143.0)	(139.5)
Operating profit		289.6	53.7
Net gain on sales of available for sale securities		44.9	18.5
Net gain on sales of gold investment assets		23.4	53.1
Net profit		357.9	125.3



Statement of comprehensive income

For the six months ended 30 September

<i>SDR millions</i>	2016	2015
Net profit	357.9	125.3
Other comprehensive income		
Items either reclassified to profit and loss during the period, or that will be reclassified subsequently when specific conditions are met		
Net movement on revaluation of available for sale securities	27.1	(28.3)
Net movement on revaluation of gold investment assets	199.9	(277.1)
Items that will not be reclassified subsequently to profit and loss		
Re-measurement of defined benefit obligation	1.8	5.2
Total comprehensive income / (expense)	586.7	(174.9)



Statement of cash flows

For the six months ended 30 September

<i>SDR millions</i>	Note	2016	2015
Cash flow from / (used in) operating activities			
Interest and similar income received		978.2	1,324.3
Interest and similar expenses paid		(398.7)	(383.1)
Net fee and commission income		2.3	2.6
Foreign exchange transaction gain		7.4	4.8
Operating expense		(134.4)	(132.1)
Non-cash flow items included in operating profit			
Valuation movement on operating assets and liabilities		(14.9)	(240.1)
Net foreign exchange translation (loss) / gain		(6.3)	(13.0)
Change in accruals and amortisation		(135.2)	(502.2)
Change in operating assets and liabilities			
Currency deposit liabilities held at fair value through profit and loss		20,315.5	(5,265.9)
Currency banking assets		(1,525.0)	3,573.4
Sight and notice deposit account liabilities		8,578.8	1,598.7
Gold deposit liabilities		947.2	(787.4)
Gold and gold loan banking assets		(12,464.1)	1,945.9
Accounts receivable		(0.9)	(6.4)
Other liabilities / accounts payable		272.8	128.4
Net derivative financial instruments		(975.9)	3,842.6
Net cash flow from investment activities		15,446.8	5,090.5
Cash flow from / (used in) investment activities			
Net change in currency investment assets available for sale		(937.9)	438.2
Securities sold under repurchase agreements		365.6	(230.4)
Net change in gold investment assets		24.3	64.5
Net purchase of land, buildings and equipment		(6.0)	(5.1)
Net cash flow (used in) / from investment activities		(554.0)	267.2



<i>SDR millions</i>	Note	2016	2015
Cash flow from / (used in) financing activities			
Dividends paid	7	(120.0)	(125.6)
Net cash flow used in financing activities		(120.0)	(125.6)
Total net cash flow			
		14,772.8	5,232.1
Net effect of exchange rates change on cash and cash equivalents		328.5	(212.5)
Net movement in cash and cash equivalents		14,444.3	5,444.6
Net change in cash and cash equivalents		14,772.8	5,232.1
Cash and cash equivalents, beginning of period	4	26,378.9	11,904.0
Cash and cash equivalents, end of period	4	41,151.7	17,136.1



Movements in the Bank's equity

For the six months ended 30 September 2016

SDR millions	Note	Share capital	Shares held in treasury	Statutory reserves	Profit and loss	Other equity accounts		Total equity
						Defined benefit obligations	Gold and securities revaluation	
As at 31 March 2016		698.9	(1.7)	14,997.0	412.9	(411.2)	2,682.7	18,378.6
Payment of 2015/16 dividend	7	–	–	–	(120.0)	–	–	(120.0)
Allocation of 2015/16 profit		–	–	292.9	(292.9)	–	–	–
Total comprehensive income		–	–	–	357.9	1.8	227.0	586.7
As at 30 September 2016		698.9	(1.7)	15,289.9	357.9	(409.4)	2,909.7	18,845.3

For the six months ended 30 September 2015

SDR millions	Note	Share capital	Shares held in treasury	Statutory reserves	Profit and loss	Other equity accounts		Total equity
						Defined benefit obligations	Gold and securities revaluation	
As at 31 March 2015		698.9	(1.7)	14,579.7	542.9	(249.0)	2,702.3	18,273.1
Payment of 2014/15 dividend	7	–	–	–	(125.6)	–	–	(125.6)
Allocation of 2014/15 profit		–	–	417.3	(417.3)	–	–	–
Total comprehensive expense		–	–	–	125.3	5.2	(305.4)	(174.9)
As at 30 September 2015		698.9	(1.7)	14,997.0	125.3	(243.8)	2,396.9	17,972.6



Notes to the financial statements

These interim financial statements contain selected disclosures, but do not contain all the information provided in the Bank's annual financial statements. They should be read in conjunction with the Bank's 86th Annual Report. All figures are presented in SDR millions unless otherwise stated. Note 11 describes a change to the SDR composition effective from 1 October 2016. Amounts are subject to rounding and consequently there may be small differences both within and between disclosures.

1. Accounting policies

The accounting policies adopted by the Bank for these interim financial statements are consistent with those described in the Bank's 86th Annual Report.

2. Use of estimates

The preparation of the financial statements requires the Bank's Management to make assumptions and use estimates to arrive at reported amounts. In doing so, Management exercises judgment based on reliable information. Actual results could differ significantly from these estimates.

In preparing these interim financial statements, the significant judgments made by Management were similar to those applied in the annual financial statements, and there have been no material revisions to the nature of the amounts reported in the annual financial statements.

3. The fair value hierarchy

The Bank categorises its financial instruments which are measured at fair value according to a hierarchy that reflects the observability of inputs used in measuring that value. A valuation level is assigned according to the least observable input that is significant to the fair value measurement in its entirety. The fair value hierarchy used by the Bank comprises the following levels:

Level 1 – Instruments valued using unadjusted quoted prices in active markets for identical financial instruments.

Level 2 – Instruments valued with valuation techniques using inputs which are observable for the financial instrument either directly (ie as a price) or indirectly (ie derived from prices for similar financial instruments). This includes observable interest rates, spreads and volatilities.

Level 3 – Instruments valued using valuation techniques where the inputs are not observable in financial markets.

As at 30 September 2016 the Bank had no financial instruments categorised as level 3 (31 March 2016: nil).

**As at 30 September 2016**

<i>SDR millions</i>	Level 1	Level 2	Total
Financial assets held at fair value through profit and loss			
Treasury bills	32,314.3	5,715.3	38,029.6
Securities purchased under resale agreements	–	58,628.1	58,628.1
Fixed-term loans	–	21,098.5	21,098.5
Government and other securities	35,138.7	10,952.3	46,091.0
Derivative financial instruments	2.8	1,617.8	1,620.6
Financial assets designated as available for sale			
Government and other securities	14,828.4	35.7	14,864.1
Securities purchased under resale agreements	–	1,041.3	1,041.3
Total financial assets accounted for at fair value	82,284.2	99,089.0	181,373.2
Financial liabilities held at fair value through profit and loss			
Currency deposits	–	(167,638.9)	(167,638.9)
Securities sold under repurchase agreements	–	(483.4)	(483.4)
Derivative financial instruments	(2.1)	(2,859.5)	(2,861.6)
Total financial liabilities accounted for at fair value	(2.1)	(170,981.8)	(170,983.9)

As at 31 March 2016

<i>SDR millions</i>	Level 1	Level 2	Total
Financial assets held at fair value through profit and loss			
Treasury bills	31,792.1	7,786.5	39,578.6
Securities purchased under resale agreements	–	55,340.0	55,340.0
Fixed-term loans	–	16,805.5	16,805.5
Government and other securities	40,077.9	12,247.0	52,324.9
Derivative financial instruments	1.9	1,683.4	1,685.3
Financial assets designated as available for sale			
Government and other securities	14,395.9	407.6	14,803.5
Securities purchased under resale agreements	–	878.6	878.6
Total financial assets accounted for at fair value	86,267.8	95,148.6	181,416.4
Financial liabilities held at fair value through profit and loss			
Currency deposits	–	(152,613.6)	(152,613.6)
Securities sold under repurchase agreements	–	(569.1)	(569.1)
Derivative financial instruments	(2.1)	(3,900.1)	(3,902.2)
Total financial liabilities accounted for at fair value	(2.1)	(157,082.8)	(157,084.9)



A. Transfers between levels in the fair value hierarchy

Of the assets categorised as level 1 at 30 September 2016, SDR 2,698.0 million related to assets that had been held at 31 March 2016 and valued as level 2 at that date. Of the assets categorised as level 2 at 30 September 2016, SDR 604.9 million related to assets that had been held at 31 March 2016 and categorised as level 1 as at that date. The transfer of assets between levels 1 and 2 reflected specific market conditions existing at the reporting dates that affected the observability of the market prices as defined above. No liabilities were transferred between fair value hierarchy levels.

B. Assets and liabilities measured at fair value level 3

During the six-month reporting periods ended 30 September 2016 and 2015 the Bank did not classify any assets or liabilities as level 3 in the fair value hierarchy.

C. Financial instruments not measured at fair value

The Bank accounts for certain financial instruments at amortised cost. Using the same valuation techniques for amortised cost financial instruments as is applied to fair valued financial instruments, the Bank estimates that their fair values would be materially the same as the carrying values shown in these financial statements for both 30 September 2016 and 31 March 2016. If these instruments were included in the fair value hierarchy, the valuation of "Gold loans" and "Securities sold under repurchase agreements" would be considered level 2. All other amortised cost financial instruments would be considered level 1.

D. Impact of changes in the Bank's creditworthiness

The fair value of the Bank's liabilities may be affected by any change in its creditworthiness. If the Bank's creditworthiness deteriorated, the value of its liabilities should decrease, and the change in value would be reflected as a valuation movement in the profit and loss account. The Bank regularly assesses its creditworthiness as part of its risk management processes. The Bank's assessment of its creditworthiness did not indicate a change which could have had an impact on the fair value of the Bank's liabilities during the period under review.

4. Cash and sight accounts

The Bank holds cash and sight accounts predominantly with central banks. Cash and cash equivalents as shown in the statement of cash flows comprise cash and sight accounts as well as notice accounts, which are disclosed under "Loans and advances". The balances are analysed in the table below:

As at 30 September		
<i>SDR millions</i>	2016	2015
Balance at central banks	40,570.3	16,576.7
Balance at commercial banks	102.1	21.8
Total cash and sight accounts	40,672.4	16,598.5
Notice accounts	479.3	537.6
Total cash and cash equivalents	41,151.7	17,136.1



5. Land, buildings and equipment

There have been no material purchases or sales of fixed assets during the reporting period. The depreciation charge for the period ended 30 September 2016 was SDR 8.6 million (30 September 2015: SDR 7.4 million).

6. Interest income and interest expense

For the six months ended 30 September

<i>SDR millions</i>	2016	2015
Interest income	1,090.4	890.9
Interest income on liabilities	49.9	11.2
Total interest income	1,140.3	902.1

<i>SDR millions</i>	2016	2015
Interest expense	(483.3)	(385.9)
Interest expense on assets	(212.9)	(77.3)
Total interest expense	(696.2)	(463.2)

In the profit and loss account, interest income includes "negative" interest on liabilities while interest expense includes "negative" interest on assets. Interest on derivatives is presented as interest income. The presentation of prior period items has been amended to reflect this practice.

7. Dividends

On 28 June 2016, the Bank paid a dividend of SDR 120.0 million for the financial year 2015/16 (2014/15: SDR 125.6 million).

8. Share capital

The Bank's share capital consists of:

As at 30 September

<i>SDR millions</i>	2016	2016
Authorised capital: 600,000 shares, each of SDR 5,000 par value, of which SDR 1,250 is paid up	3,000.0	3,000.0
Issued capital: 559,125 shares	2,795.6	2,795.6
Paid-up capital (25%)	698.9	698.9



The number of shares eligible for dividend is:

As at	30 September 2016	31 March 2016
Issued shares	559,125	559,125
Less: shares held in treasury	(1,000)	(1,000)
Outstanding shares eligible for full dividend	558,125	558,125

9. Related parties

The Bank considers the following to be its related parties:

- the members of the Board of Directors;
- the senior officials of the Bank;
- close family members of the above individuals;
- the Bank's post-employment benefit arrangements; and
- central banks whose Governor is a member of the Board of Directors and institutions that are connected with these central banks.

A listing of the members of the Board of Directors and senior officials is shown in the sections of the 86th Annual Report entitled "Board of Directors" and "BIS Management". Note 12 of the Annual Report provides details of the Bank's post-employment benefit arrangements.

A. Related party individuals

Related party transactions with members of the Board of Directors and senior officials in the period ended 30 September were similar in nature to those disclosed in the most recent Annual Report. No related party transactions that took place with members of the Board of Directors and senior officials materially affected the financial position or performance of the Bank during the financial period.

B. Related party customers

The BIS provides banking services to its customers, which are predominantly central banks, monetary authorities and international financial institutions. In fulfilling this role, the Bank, in the normal course of business, enters into transactions with customers which are related parties (as defined above). These transactions include making advances, and taking currency and gold deposits. It is the Bank's policy to enter into transactions with related party customers on similar terms and conditions to transactions with other, non-related party customers. The following tables show balances relating to these transactions. The Bank believes these are representative of the general level of business undertaken with related party customers during the year.

*Balances with related party customers*

<i>SDR millions / percentages</i>	30 September 2016			31 March 2016		
	Balance sheet total	Balance with related parties		Balance sheet total	Balance with related parties	
	SDR millions	SDR millions	%	SDR millions	SDR millions	%
Assets						
Cash	40,672.4	40,378.1	99.3	25,847.0	25,538.7	98.8
Gold and gold loans	25,839.8	25,820.8	99.9	13,176.8	12,067.2	91.6
Securities purchased under resale agreements	59,669.4	4,738.8	7.9	56,218.6	1,609.3	2.9
Government and other securities	60,955.1	579.8	1.0	67,128.4	1,227.6	1.8
Derivative assets	1,620.6	0.4	–	1,685.3	11.6	0.7
Liabilities						
Currency deposits	(202,394.6)	(86,184.3)	42.6	(178,790.5)	(70,537.9)	39.5
Gold deposits	(11,174.8)	(8,065.3)	72.2	(10,227.6)	(7,491.2)	73.2
Derivative liabilities	(2,861.6)	(6.2)	0.2	(3,902.2)	(64.1)	1.6

*Main profit and loss items arising from transactions with related party customers*For the six months ended
30 September

<i>SDR millions / percentages</i>	2016			2015		
	Profit and loss total	Balance with related parties		Profit and loss total	Balance with related parties	
	SDR millions	SDR millions	%	SDR millions	SDR millions	%
Interest income	1,140.3	42.6	3.7	902.1	10.5	1.2
Interest expense	(696.2)	(254.3)	36.5	(463.2)	(200.8)	43.4

10. Contingent liabilities

In the opinion of the Bank's Management there were no material contingent liabilities at 30 September 2016 (30 September 2015 and 31 March 2016: nil).

11. Subsequent events

The functional and presentation currency of the Bank is the Special Drawing Right (SDR) as defined by the International Monetary Fund (IMF). As of 1 October 2016, the composition of the SDR basket was changed and an SDR is now equivalent to the sum of USD 0.584, EUR 0.387, JPY 11.99, GBP 0.08 and CNY 1.02. These financial statements were prepared using the SDR composition effective as of 30 September. The change in the composition of the SDR basket was such that the values of the SDR under the old and new baskets were equivalent at 30 September 2016 and no significant gains or losses resulted from the change in weights of the currencies.



Capital adequacy

1. Capital adequacy frameworks

As an international financial institution that is overseen by a Board composed of Governors of major central banks and that has no national supervisor, the Bank is committed to maintaining its superior credit quality and financial strength, in particular in situations of financial stress.

The Bank continuously assesses its capital adequacy based on an annual capital planning process that focuses on two elements: an economic capital framework and a financial leverage framework. The disclosures in this section related to credit, market, operational and liquidity risk are based on the Bank's own assessment of capital adequacy derived in accordance with these two BIS frameworks.

Regulatory capital ratios are not used as indicators of BIS capital adequacy because key aspects of the business model for the BIS banking activities are not adequately captured. In the main, these relate to the high level of solvency targeted by the Bank as well as the way regulatory capital ratios reflect portfolio concentrations and interest rate risk in the banking book.

To facilitate comparability, the Bank has implemented a framework that is consistent with the revised *International Convergence of Capital Measurement and Capital Standards* (Basel II framework) issued by the Basel Committee on Banking Supervision (BCBS) in June 2006. Following that framework, the Bank discloses a Tier 1 capital ratio (Pillar 1), risk-weighted assets and more detailed related information. In addition, the Bank calculates for reference a Common Equity Tier 1 capital ratio, leverage ratio and liquidity coverage ratio taking account of banking supervisory recommendations related to Basel III.

The Bank maintains a capital position substantially in excess of the regulatory minimum requirement in order to ensure its superior credit quality.

2. Economic capital

The Bank's economic capital methodology relates its risk-taking capacity to the amount of economic capital needed to absorb potential losses arising from its exposures. The risk-taking capacity is defined as allocatable economic capital that is derived following a prudent assessment of the components of the Bank's equity, which are set out in the following table:

<i>SDR millions</i>	30 September 2016	31 March 2016
Share capital	698.9	698.9
Statutory reserves per balance sheet	15,289.9	14,997.0
Less: shares held in treasury	(1.7)	(1.7)
Share capital and reserves	15,987.1	15,694.2
Securities revaluation account	278.8	251.7
Gold revaluation account	2,630.8	2,431.0
Re-measurement of defined benefit obligations	(409.4)	(411.2)
Other equity accounts	2,500.3	2,271.5
Profit and loss account	357.9	412.9
Total equity	18,845.3	18,378.6



Allocatable economic capital is determined following a prudent evaluation of the Bank's equity components for their loss absorption capacity and sustainability. The components of capital with long-term risk-bearing capacity are the Bank's Tier 1 capital and the sustainable portion of the securities and gold revaluation reserves ("sustainable supplementary capital"). Only this "allocatable capital" is available for allocation to the various categories of risk. The portion of revaluation reserves that is considered more transitory in nature is assigned to the "capital filter" together with the profit accrued during the financial period.

<i>SDR millions</i>	30 September 2016	31 March 2016
Share capital and reserves	15,987.1	15,694.2
Re-measurement of defined benefit obligations	(409.4)	(411.2)
Tier 1 capital	15,577.7	15,283.0
Sustainable supplementary capital	1,722.3	1,917.0
Allocatable capital	17,300.0	17,200.0
Capital filter	1,545.3	1,178.6
Total equity	18,845.3	18,378.6

As part of the annual capital planning process, Management allocates economic capital to risk categories within the amount of allocatable capital. As a first step, capital is assigned to an "economic capital cushion" that provides an additional margin of safety and is sufficient to sustain a potential material loss without the need to reduce the capital allocation to individual risk categories or to liquidate any holdings of assets. The level of the economic capital cushion is determined based on stress tests that explore extreme but still plausible default events. Allocations are then made to each category of financial risk (ie credit, market and "other risks") as well as operational risk. "Other risks" are risks that have been identified but that are not taken account of in the economic capital utilisation calculations, and include model risk and residual basis risk. Reflecting the high level of solvency targeted by the Bank, the economic capital framework measures economic capital to a 99.995% confidence level assuming a one-year horizon, except for settlement risk (included in the utilisation for credit risk) and other risks. The amount of economic capital set aside for settlement risk and other risks is based on an assessment by Management. The Bank's economic capital framework is subject to regular review and calibration.

The following table summarises the Bank's economic capital allocation and utilisation for credit risk, market risk, operational risk and other risks:

<i>SDR millions</i>	30 September 2016		31 March 2016	
	Allocation	Utilisation	Allocation	Utilisation
Insolvency and transfer risk	9,200.0	7,957.0	9,100.0	7,789.1
FX settlement risk	300.0	300.0	300.0	300.0
Credit risk	9,500.0	8,257.0	9,400.0	8,089.1
Market risk	4,000.0	3,489.4	4,000.0	3,491.1
Operational risk	1,200.0	1,200.0	1,200.0	1,200.0
Other risks	300.0	300.0	300.0	300.0
Economic capital cushion	2,300.0	2,300.0	2,300.0	2,300.0
Total economic capital	17,300.0	15,546.4	17,200.0	15,380.2



3. Financial leverage

The Bank complements its capital adequacy assessment with a prudently managed financial leverage framework. The Bank monitors its financial leverage using a ratio that compares the BIS adjusted common equity with its total exposure. However, to reflect the scope and nature of its banking activities, the definition of the BIS adjusted common equity limits the recognition of revaluation reserves to the proportion of the gold and securities revaluation reserves that is considered sustainable ("sustainable supplementary capital"). Further, the exposure measure is supplemented by the inclusion of committed and uncommitted facilities, and pension fund assets.

The following table shows the calculation of the Bank's financial leverage ratio:

<i>SDR millions</i>	30 September 2016	31 March 2016
Share capital and reserves	15,987.1	15,694.2
Sustainable supplementary capital	1,722.3	1,917.0
Share capital, reserves and sustainable supplementary capital	17,709.4	17,611.2
Re-measurement losses on defined benefit obligations	(409.4)	(411.2)
Intangible assets	(23.6)	(23.8)
Prudential adjustments	(433.0)	(435.0)
Total BIS adjusted common equity (A)	17,276.4	17,176.2
Total balance sheet assets	252,118.7	231,384.4
Derivatives	(281.2)	(498.1)
Securities purchased under resale agreements	36.8	–
Committed and uncommitted facilities	4,345.9	4,427.2
Pension fund assets	1,090.2	1,048.2
Exposure adjustments	5,191.7	4,977.3
Total BIS exposure (B)	257,310.4	236,361.7
BIS leverage ratio (A) / (B)	6.7%	7.3%

The Bank also calculates a leverage ratio that is consistent with Basel III recommendations. The Bank's Basel III leverage ratio differs from the BIS leverage ratio in using Common Equity Tier 1 as its capital measure instead of BIS adjusted common equity as defined above. The calculation of Common Equity Tier 1 capital is included in section 4B. At 30 September 2016 the Bank's Basel III leverage ratio stood at 7.2% (31 March 2016: 7.6%).



4. Capital ratios

The economic capital framework and the financial leverage framework described above are the main tools used for assessing the Bank's capital adequacy. Risk-weighted assets, minimum capital requirements and capital ratios are disclosed to facilitate comparability. Guidance issued by the BCBS includes several approaches for calculating risk-weighted assets and the corresponding minimum capital requirements. In principle, the minimum capital requirements are determined by taking 8% of the risk-weighted assets.

For credit risk, the Bank has adopted the advanced internal ratings-based approach for the majority of its exposures. Under this approach, the risk weighting for a transaction is determined by the relevant Basel II risk weight function using the Bank's own estimates for key inputs. Expected loss is calculated for credit risk exposures subject to the advanced internal ratings-based approach. The expected loss is calculated at the balance sheet date taking into account any impairment provision which is reflected in the Bank's financial statements. The Bank had no impaired financial assets at 30 September 2016 (31 March 2016: nil). In accordance with the requirements of the Basel framework, the expected loss is compared with the impairment provision and any shortfall is deducted from the Bank's Tier 1 capital. For securitisation exposures and relevant other assets, the Bank has adopted the standardised approach. Under this approach, risk weightings are mapped to exposure types.

Risk-weighted assets for market risk are derived following an internal models approach. For operational risk, the advanced measurement approach is used. Both these approaches rely on value-at-risk (VaR) methodologies.

More details on the assumptions underlying the calculations are provided in the sections on credit risk, market risk and operational risk.

A. Tier 1 capital ratio

The following table summarises the relevant exposure types and approaches as well as the risk-weighted assets and related minimum capital requirements for credit risk, market risk and operational risk under the Basel II framework:

Approach used	30 September 2016			31 March 2016			
	Amount of exposure	Risk-weighted assets (A)	Minimum capital requirement (B)	Amount of exposure	Risk-weighted assets (A)	Minimum capital requirement (B)	
<i>SDR millions</i>							
Credit risk							
Exposure to sovereigns, banks and corporates	Advanced internal ratings-based approach, where (B) is derived as (A) x 8%	165,929.5	11,670.7	933.7	155,351.0	11,244.4	899.6
Securitisation exposures and other assets	Standardised approach, where (B) is derived as (A) x 8%	530.3	268.8	21.5	540.1	277.0	22.2
Market risk							
Exposure to foreign exchange risk and gold price risk	Internal models approach, where (A) is derived as (B) / 8%	–	10,023.8	801.9	–	8,226.0	658.1
Operational risk							
	Advanced measurement approach, where (A) is derived as (B) / 8%	–	10,802.9	864.2	–	10,476.9	838.2
Total			32,766.2	2,621.3		30,224.3	2,418.1



The capital ratio measures capital adequacy by comparing the Bank's Tier 1 capital with its risk-weighted assets. The Tier 1 capital ratio, consistent with the Basel II framework, is provided in the following table:

<i>SDR millions</i>	30 September 2016	31 March 2016
Share capital and reserves	15,987.1	15,694.2
Re-measurement losses on defined benefit obligations	(409.4)	(411.2)
Tier 1 capital	15,577.7	15,283.0
Expected loss	(23.6)	(22.7)
Tier 1 capital net of expected loss (A)	15,554.1	15,260.3
Total risk-weighted assets (B)	32,766.2	30,224.3
Tier 1 capital ratio (A) / (B)	47.5%	50.5%

B. Common Equity Tier 1 capital ratio

To facilitate comparability, information on risk-weighted assets and related minimum capital requirements calculated under the Basel III framework is provided in the following table. Credit risk-weighted assets differ, mainly due to the asset value correlation multiplier for large financial institutions. Relating to market risk, Basel III risk-weighted assets are calculated as the sum of the Basel II market risk-weighted assets (presented in the previous section) and market risk-weighted assets derived from a stressed VaR.

<i>SDR millions</i>	Approach used	30 September 2016			31 March 2016		
		Amount of exposure	Risk-weighted assets (A)	Minimum capital requirement (B)	Amount of exposure	Risk-weighted assets (A)	Minimum capital requirement (B)
Credit risk							
Exposure to sovereigns, banks and corporates	Advanced internal ratings-based approach, where (B) is derived as (A) x 8%	165,929.5	12,846.1	1,027.7	155,351.0	12,415.2	993.2
Securitisation exposures and other assets	Standardised approach, where (B) is derived as (A) x 8%	530.3	268.8	21.5	540.1	277.0	22.2
Market risk							
Exposure to foreign exchange risk and gold price risk	Internal models approach, where (A) is derived as (B) / 8%	–	25,681.8	2,054.5	–	24,639.7	1,971.2
Operational risk							
	Advanced measurement approach, where (A) is derived as (B) / 8%	–	10,802.9	864.2	–	10,476.9	838.2
Total			49,599.6	3,967.9		47,808.8	3,824.8



The Common Equity Tier 1 capital ratio calculated under the Basel III framework is set out in the table below:

<i>SDR millions</i>	30 September 2016	31 March 2016
Share capital and reserves	15,987.1	15,694.2
Revaluation reserves	2,909.7	2,682.7
Share capital, reserves and revaluation reserves	18,896.8	18,376.9
Re-measurement losses on defined benefit obligations	(409.4)	(411.2)
Expected loss	(23.6)	(22.7)
Intangible assets	(23.6)	(23.8)
Prudential adjustments	(456.6)	(457.7)
Total Common Equity Tier 1 capital (A)	18,440.2	17,919.2
Total risk-weighted assets (B)	49,599.6	47,808.8
Common Equity Tier 1 capital ratio (A) / (B)	37.2%	37.5%



Risk management

1. Risks faced by the Bank

The Bank supports its customers, predominantly central banks, monetary authorities and international financial institutions, in the management of their reserves and related financial activities.

Banking activities form an essential element of meeting the Bank's objectives and ensure its financial strength and independence. The BIS engages in banking activities that are customer-related as well as activities that are related to the investment of its equity, each of which may give rise to financial risk comprising credit risk, market risk and liquidity risk. The Bank is also exposed to operational risk.

Within the risk frameworks defined by the Board of Directors, the Management of the Bank has established risk management policies designed to ensure that risks are identified, appropriately measured and controlled as well as monitored and reported.

2. Credit risk

Credit risk arises because a counterparty may fail to meet its obligations in accordance with the agreed contractual terms and conditions. A financial asset is considered past due when a counterparty fails to make a payment on the contractual due date.

The Bank manages credit risk within a framework and policies set by the Board of Directors and Management. These are complemented by more detailed guidelines and procedures at the level of the independent risk control function.

A. Credit risk assessment

Credit risk is continuously controlled at both a counterparty and an aggregated level. As part of the independent risk control function, individual counterparty credit assessments are performed subject to a well defined internal rating process, involving 18 rating grades. As part of this process, counterparty financial statements and market information are analysed. The rating methodologies depend on the nature of the counterparty. Based on the internal rating and specific counterparty features, the Bank sets a series of credit limits covering individual counterparties and countries. Internal ratings are assigned to all counterparties. In principle, the ratings and related limits are reviewed at least annually. The main assessment criterion in these reviews is the ability of the counterparties to meet interest and principal repayment obligations in a timely manner.

Credit risk limits at the counterparty level are approved by the Bank's Management and fit within a framework set by the Board of Directors.

On an aggregated level, credit risk, including default and country transfer risk, is measured, monitored and controlled based on the Bank's economic capital calculation for credit risk. To calculate economic capital for credit risk, the Bank uses a portfolio VaR model. Management limits the Bank's overall exposure to credit risk by allocating an amount of economic capital to credit risk.

B. Default risk

The following tables show the exposure of the Bank to default risk, without taking into account any collateral held or other credit enhancements available to the Bank. Credit risk is mitigated through the use of collateral and legally enforceable netting or setoff agreements. The corresponding assets and liabilities are not offset on the balance sheet.

The exposures set out in the tables below are based on the carrying value of the assets on the balance sheet as categorised by sector, geographical region and credit quality. The carrying value is the fair value of the financial instruments, including derivatives, except in the case of very short-term financial instruments (sight and notice accounts) and gold, which are shown at amortised cost net of any impairment charge. Commitments are reported at their notional amounts. Gold and gold loans exclude gold bar assets held in custody, and accounts receivable do not include unsettled liability issues, because these items do not represent credit exposures of the Bank.



The vast majority of the Bank's assets are invested in securities issued by governments and financial institutions rated A- or above by at least one of the major external credit assessment institutions. Limitations on the number of high-quality counterparties in these sectors mean that the Bank is exposed to single-name concentration risk.

The Bank conducts an annual review for impairment at the date of each balance sheet. At 30 September 2016 the Bank did not have any financial assets that were considered to be impaired (31 March 2016: nil) and no financial assets were considered past due (31 March 2016: nil). No credit loss was recognised in the current period.

As at 30 September 2016

<i>SDR millions</i>	Sovereign and central banks	Public sector	Banks	Corporate	Securitisation	Total
On-balance sheet exposures						
Cash and sight accounts with banks	40,570.3	–	102.1	–	–	40,672.4
Gold and gold loans	1,885.1	–	19.0	–	–	1,904.1
Treasury bills	36,119.5	1,910.1	–	–	–	38,029.6
Securities purchased under resale agreements	4,738.8	–	50,229.2	4,701.4	–	59,669.4
Loans and advances	3,625.8	846.8	17,105.2	–	–	21,577.8
Government and other securities	35,780.0	11,379.1	5,174.7	8,294.4	326.9	60,955.1
Derivatives	139.0	3.1	1,476.0	0.7	1.8	1,620.6
Accounts receivable	6.1	–	706.8	8.6	–	721.5
Total on-balance sheet exposure	122,864.6	14,139.1	74,813.0	13,005.1	328.7	225,150.5
Commitments						
Undrawn unsecured facilities	214.4	–	–	–	–	214.4
Undrawn secured facilities	2,813.6	–	–	–	–	2,813.6
Total commitments	3,028.0	–	–	–	–	3,028.0
Total exposure	125,892.6	14,139.1	74,813.0	13,005.1	328.7	228,178.5



As at 31 March 2016

<i>SDR millions</i>	Sovereign and central banks	Public sector	Banks	Corporate	Securitisation	Total
On-balance sheet exposures						
Cash and sight accounts with banks	25,729.9	–	117.1	–	–	25,847.0
Gold and gold loans	2,246.7	–	1,109.6	–	–	3,356.3
Treasury bills	37,533.9	2,044.7	–	–	–	39,578.6
Securities purchased under resale agreements	1,609.3	–	46,077.8	8,531.5	–	56,218.6
Loans and advances	491.1	514.3	16,332.0	–	–	17,337.4
Government and other securities	43,567.5	10,415.9	5,123.6	7,692.5	328.9	67,128.4
Derivatives	177.5	11.9	1,495.2	0.7	–	1,685.3
Accounts receivable	6.1	0.5	27.7	7.5	–	41.8
Total on-balance sheet exposure	111,362.0	12,987.3	70,283.0	16,232.2	328.9	211,193.4
Commitments						
Undrawn unsecured facilities	212.9	–	–	–	–	212.9
Undrawn secured facilities	3,121.6	–	–	–	–	3,121.6
Total commitments	3,334.5	–	–	–	–	3,334.5
Total exposure	114,696.5	12,987.3	70,283.0	16,232.2	328.9	214,527.9



C. Default risk by geographical region

The following tables represent the exposure of the Bank to default risk by asset class and geographical region, without taking into account any collateral held or other credit enhancements available to the Bank. The Bank has allocated exposures to regions based on the country of incorporation of each legal entity to which the Bank has exposures.

As at 30 September 2016

<i>SDR millions</i>	Africa and Europe	Asia-Pacific	Americas	International institutions	Total
On-balance sheet exposures					
Cash and sight accounts with banks	34,257.7	6,409.5	5.2	–	40,672.4
Gold and gold loans	1,904.1	–	–	–	1,904.1
Treasury bills	13,695.0	16,462.1	5,962.4	1,910.1	38,029.6
Securities purchased under resale agreements	53,501.5	–	6,167.9	–	59,669.4
Loans and advances	12,337.9	4,900.3	3,492.7	846.9	21,577.8
Government and other securities	29,642.0	11,077.9	13,433.9	6,801.3	60,955.1
Derivatives	1,167.9	182.7	267.2	2.8	1,620.6
Accounts receivable	720.1	1.2	0.2	–	721.5
Total on-balance sheet exposure	147,226.2	39,033.7	29,329.5	9,561.1	225,150.5
Commitments					
Undrawn unsecured facilities	–	214.4	–	–	214.4
Undrawn secured facilities	241.0	2,572.6	–	–	2,813.6
Total commitments	241.0	2,787.0	–	–	3,028.0
Total exposure	147,467.2	41,820.7	29,329.5	9,561.1	228,178.5



As at 31 March 2016

<i>SDR millions</i>	Africa and Europe	Asia-Pacific	Americas	International institutions	Total
On-balance sheet exposures					
Cash and sight accounts with banks	21,876.7	3,963.7	6.6	–	25,847.0
Gold and gold loans	3,300.2	–	56.1	–	3,356.3
Treasury bills	10,472.6	20,111.5	6,949.8	2,044.7	39,578.6
Securities purchased under resale agreements	52,975.8	–	3,242.8	–	56,218.6
Loans and advances	11,623.3	4,436.2	763.7	514.2	17,337.4
Government and other securities	33,494.2	7,883.6	19,216.1	6,534.5	67,128.4
Derivatives	1,280.8	217.2	179.9	7.4	1,685.3
Accounts receivable	39.9	1.7	0.2	–	41.8
Total on-balance sheet exposure	135,063.5	36,613.9	30,415.2	9,100.8	211,193.4
Commitments					
Undrawn unsecured facilities	–	212.9	–	–	212.9
Undrawn secured facilities	242.4	2,879.2	–	–	3,121.6
Total commitments	242.4	3,092.1	–	–	3,334.5
Total exposure	135,305.9	39,706.0	30,415.2	9,100.8	214,527.9



D. Default risk by counterparty / issuer rating

The following tables show the exposure of the Bank to default risk by class of financial asset and counterparty / issuer rating, without taking into account any collateral held or other credit enhancements available to the Bank. The ratings shown reflect the Bank's internal ratings expressed as equivalent external ratings.

As at 30 September 2016

<i>SDR millions</i>	AAA	AA	A	BBB	BB and below	Unrated	Total
On-balance sheet exposures							
Cash and sight accounts with banks	26,128.0	6,339.2	7,562.0	642.9	0.3	–	40,672.4
Gold and gold loans	–	1,885.1	19.0	–	–	–	1,904.1
Treasury bills	3,138.5	14,169.9	17,838.2	2,883.0	–	–	38,029.6
Securities purchased under resale agreements	–	9,440.2	38,384.9	11,844.3	–	–	59,669.4
Loans and advances	634.4	662.7	16,452.1	1,541.2	2,287.4	–	21,577.8
Government and other securities	11,556.2	31,669.0	16,693.1	1,036.8	–	–	60,955.1
Derivatives	–	11.9	1,523.7	38.5	40.9	5.6	1,620.6
Accounts receivable	–	0.2	706.8	0.6	0.7	13.2	721.5
Total on-balance sheet exposure	41,457.1	64,178.2	99,179.8	17,987.3	2,329.3	18.8	225,150.5
Commitments							
Undrawn unsecured facilities	–	–	–	214.4	–	–	214.4
Undrawn secured facilities	–	631.1	918.9	1,022.7	240.9	–	2,813.6
Total commitments	–	631.1	918.9	1,237.1	240.9	–	3,028.0
Total exposure	41,457.1	64,809.3	100,098.7	19,224.4	2,570.2	18.8	228,178.5



As at 31 March 2016

<i>SDR millions</i>	AAA	AA	A	BBB	BB and below	Unrated	Total
On-balance sheet exposures							
Cash and sight accounts with banks	19,153.4	1,492.9	5,200.1	0.3	0.3	–	25,847.0
Gold and gold loans	–	2,246.7	1,109.6	–	–	–	3,356.3
Treasury bills	2,568.7	11,919.2	21,630.2	3,460.5	–	–	39,578.6
Securities purchased under resale agreements	–	10,140.8	35,739.1	10,338.7	–	–	56,218.6
Loans and advances	721.4	–	15,622.1	497.1	496.8	–	17,337.4
Government and other securities	15,385.6	37,181.1	13,416.9	1,112.2	32.6	–	67,128.4
Derivatives	0.5	53.7	1,589.8	26.4	3.8	11.1	1,685.3
Accounts receivable	–	0.2	28.2	0.6	1.1	11.7	41.8
Total on-balance sheet exposure	37,829.6	63,034.6	94,336.0	15,435.8	534.6	22.8	211,193.4
Commitments							
Undrawn unsecured facilities	–	–	–	212.9	–	–	212.9
Undrawn secured facilities	–	930.8	952.4	996.0	242.4	–	3,121.6
Total commitments	–	930.8	952.4	1,208.9	242.4	–	3,334.5
Total exposure	37,829.6	63,965.4	95,288.4	16,644.7	777.0	22.8	214,527.9

E. Credit risk mitigation**Netting**

Netting agreements give the Bank a legally enforceable right to net transactions with counterparties under potential future conditions, notably an event of default. Such master netting or similar agreements apply to counterparties with whom the Bank conducts most of its derivative transactions, as well as to counterparties used for repurchase and reverse repurchase agreement transactions. Where required, netting is applied when determining the amount of collateral to be requested or provided, but the Bank does not settle assets and liabilities on a net basis during the normal course of business. As such, the amounts shown on the Bank's balance sheet are the gross amounts.

Collateral

The Bank also mitigates the credit risk it is exposed to by requiring counterparties to provide collateral. The Bank receives collateral in respect of most derivative contracts, reverse repurchase agreements and for advances made under collateralised facility agreements. During the term of these transactions, further collateral may be called or collateral may be released based on the movements in value of both the underlying instrument and the collateral that has been received. The Bank is required to provide collateral in respect of repurchase agreements.

For derivative contracts and reverse repurchase agreements, the Bank accepts as collateral high-quality sovereign, state agency and supranational securities and, in a limited number of cases, cash. For advances made under collateralised facility agreements, eligible collateral accepted includes currency deposits with the Bank as well as units in the BIS Investment Pools.

Under the terms of its collateral arrangements, the Bank is permitted to sell ("re-hypothecate") collateral received on derivative contracts and reverse repurchase agreements, but upon expiry of the transaction must return equivalent financial instruments to the counterparty. At 30 September 2016 the Bank had not sold any of the collateral it held (31 March 2016: nil).

The fair value of collateral held which the Bank had the right to sell was:



<i>SDR millions</i>	30 September 2016	31 March 2016
Collateral held in respect of:		
Derivative financial instruments	195.2	247.6
Securities purchased under resale agreements	42,244.8	40,423.5
Total	42,440.0	40,671.1

Financial assets and liabilities subject to netting or collateralisation

The tables below show the categories of assets and liabilities which are subject to collateralisation, or for which netting agreements would apply under potential future conditions such as the event of default of a counterparty.

The amount of collateral required is usually based on valuations performed on the previous business day, whereas the Bank's balance sheet reflects the valuations of the reporting date. Due to this timing difference, the valuation of collateral can be higher than the valuation of the underlying contract in the Bank's balance sheet. The amount of the collateral obtained is also impacted by thresholds, minimum transfer amounts and valuation adjustments ("haircuts") specified in the contracts. In these tables, the mitigating effect of collateral has been limited to the balance sheet value of the underlying net asset.

As at 30 September 2016	Effect of risk mitigation				Analysed as:		
<i>SDR millions</i>	Gross carrying amount as per balance sheet	Adjustments for settlement date effects	Enforceable netting agreements	Collateral (received) / provided limited to balance sheet value	Exposure after risk mitigation	Amounts not subject to risk mitigation agreements	Amounts subject to risk mitigation agreements
Financial assets							
Securities purchased under resale agreements	59,669.4	(13,083.5)	–	(46,550.7)	35.2	–	35.2
Advances	3,452.5	–	–	(3,452.5)	–	–	–
Derivative financial instruments	1,620.6	–	(1,241.9)	(191.0)	187.7	43.8	143.9
Financial liabilities							
Securities sold under repurchase agreements	(1,524.6)	–	–	1,524.6	.	.	.
Derivative financial instruments	(2,861.6)	–	1,241.9	–	.	.	.



As at 31 March 2016

	Effect of risk mitigation				Analysed as:		
	Gross carrying amount as per balance sheet	Adjustment for settlement date effects	Enforceable netting agreements	Collateral (received) / provided limited to balance sheet value	Exposure after risk mitigation	Amounts not subject to risk mitigation agreements	Amounts subject to risk mitigation agreements
<i>SDR millions</i>							
Financial assets							
Securities purchased under resale agreements	56,218.6	(14,456.4)	–	(41,762.2)	–	–	–
Advances	496.8	–	–	(496.8)	–	–	–
Derivative financial assets	1,685.3	–	(1,357.8)	(168.6)	158.9	106.9	52.0
Financial liabilities							
Securities sold under repurchase agreements	(1,447.7)	203.0	–	1,244.7	.	.	.
Derivative financial liabilities	(3,902.2)	–	1,357.8	–	.	.	.

F. Minimum capital requirements for credit risk

Exposure to sovereigns, banks and corporates

For the calculation of risk-weighted assets for exposures to banks, sovereigns and corporates, the Bank has adopted an approach that is consistent with the advanced internal ratings-based approach.

As a general rule, under this approach risk-weighted assets are determined by multiplying the credit risk exposures with risk weights derived from the relevant Basel II risk weight function using the Bank's own estimates for key inputs. These estimates for key inputs are also relevant to the Bank's economic capital calculation for credit risk.

The credit risk exposure for a transaction or position is referred to as the exposure at default (EAD). The Bank determines the EAD as the notional amount of on- and off-balance sheet credit exposures, except for securities and derivative contracts. The EAD for derivatives is calculated using an approach consistent with the internal models method proposed under the Basel II framework. In line with this methodology, the Bank calculates effective expected positive exposures that are then multiplied by a factor alpha as set out in the framework.

Key inputs to the risk weight function are a counterparty's estimated one-year probability of default (PD) as well as the estimated loss-given-default (LGD) and maturity for each transaction.

Due to the high credit quality of the Bank's investments and the conservative credit risk management process at the BIS, the Bank is not in a position to estimate PDs and LGDs based on its own default experience. The Bank calibrates each counterparty PD estimate through a mapping of internal rating grades to external credit assessments taking external default data into account. Similarly, LGD estimates are derived from external data. Where appropriate, these estimates are adjusted to reflect the risk-reducing effects of collateral obtained giving consideration to market price volatility, re-margining and revaluation frequency. The recognition of the risk-reducing effects of collateral obtained for derivative contracts, reverse repurchase agreements and collateralised advances is accounted for in calculating the EAD.

The table below details the calculation of risk-weighted assets. The exposures are measured taking netting and collateral benefits into account. The total amount of exposures reported in the table as at 30 September 2016 includes SDR 106.5 million for interest rate contracts (31 March 2016: SDR 118.9 million) and SDR 247.5 million for FX and gold contracts (31 March 2016: SDR 283.5 million). In line with the Basel II framework, the minimum capital requirement is determined as 8% of risk-weighted assets.



As at 30 September 2016

Internal rating grades expressed as equivalent external rating grades	Amount of exposure	Exposure-weighted PD	Exposure-weighted average LGD	Exposure-weighted average risk weight	Risk-weighted assets
<i>SDR millions / percentages</i>	<i>SDR millions</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>SDR millions</i>
AAA	40,824.8	0.01	35.6	2.2	906.4
AA	59,863.7	0.02	39.7	6.1	3,652.5
A	59,329.7	0.04	48.3	9.1	5,397.4
BBB	5,896.7	0.18	51.6	28.8	1,697.7
BB and below	14.6	3.13	52.0	114.6	16.7
Total	165,929.5				11,670.7

As at 31 March 2016

Internal rating grades expressed as equivalent external rating grades	Amount of exposure	Exposure-weighted PD	Exposure-weighted average LGD	Exposure-weighted average risk weight	Risk-weighted assets
<i>SDR millions / percentages</i>	<i>SDR millions</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>SDR millions</i>
AAA	37,006.0	0.01	35.7	2.4	879.5
AA	54,277.8	0.02	39.6	6.4	3,496.3
A	58,498.3	0.04	48.4	9.1	5,296.6
BBB	5,518.4	0.17	51.1	27.6	1,525.0
BB and below	50.5	1.20	53.4	93.1	47.0
Total	155,351.0				11,244.4

At 30 September 2016 the minimum capital requirement for credit risk related to exposures to sovereigns, banks and corporates amounted to SDR 933.7 million (31 March 2016: SDR 899.6 million).

The table below summarises the impact of collateral arrangements on the amount of credit exposure after taking netting into account.

<i>SDR millions</i>	Amount of exposure after taking netting into account	Benefits from collateral arrangements	Amount of exposure after taking into account netting and collateral arrangements
As at 30 September 2016	227,735.4	61,805.9	165,929.5
As at 31 March 2016	213,873.1	58,522.1	155,351.0

Securitisation exposures

The Bank invests in highly rated securitisation exposures based on traditional, ie non-synthetic, securitisation structures. Given the scope of the Bank's activities, risk-weighted assets under the Basel II framework are determined according to the standardised approach for securitisation. Under this approach, external credit assessments of the securities are used to determine the relevant risk weights. External credit assessment institutions used for this purpose are Moody's Investors Service, Standard & Poor's and Fitch Ratings. Risk-weighted assets are then derived as the product of the market values of the exposures and the associated risk weights. In line with the Basel II Framework, the minimum capital requirement is determined as 8% of risk-weighted assets.



The following table shows the Bank's investments in securitisation analysed by type of securitised assets:

As at 30 September 2016

<i>SDR millions</i>	External rating	Amount of exposures	Risk weight	Risk-weighted assets
Securities backed by other receivables (government-sponsored)	AAA	326.9	20%	65.4
Total		326.9		65.4

As at 31 March 2016

<i>SDR millions</i>	External rating	Amount of exposures	Risk weight	Risk-weighted assets
Securities backed by other receivables (government-sponsored)	AAA	328.9	20%	65.8
Total		328.9		65.8

At 30 September 2016 the minimum capital requirement for securitisation exposures amounted to SDR 5.2 million (31 March 2016: SDR 5.3 million).

3. Market risk

The Bank is exposed to market risk through adverse movements in market prices. The main components of the Bank's market risk are gold price risk, interest rate risk and foreign exchange risk. The Bank measures market risk and calculates economic capital based on a VaR methodology using a Monte Carlo simulation technique. Risk factor volatilities and correlations are estimated, subject to an exponential weighting scheme, over a six-year observation period. Furthermore, the Bank computes sensitivities to certain market risk factors.

In line with the Bank's objective of maintaining its superior credit quality, economic capital is measured at the 99.995% confidence level assuming a one-year holding period. The Bank calculates the economic capital utilisation for market risk on the basis of a stressed market data set. The Bank's Management manages market risk economic capital usage within a framework set by the Board of Directors. VaR limits are supplemented by operating limits.

To ensure that models provide a reliable measure of potential losses over the one-year time horizon, the Bank has established a comprehensive regular back-testing framework, comparing daily performance with corresponding VaR estimates. The results are analysed and reported to Management.

The Bank also supplements its market risk measurement based on VaR modelling and related economic capital calculations with a series of stress tests. These include severe historical scenarios, adverse hypothetical macroeconomic scenarios and sensitivity tests of gold price, interest rate and foreign exchange rate movements.

A. Gold price risk

Gold price risk is the exposure of the Bank's financial condition to adverse movements in the price of gold.

The Bank is exposed to gold price risk principally through its holdings of gold investment assets, which amounted to 103 tonnes as at 30 September 2016 (31 March 2016: 104 tonnes). These gold investment assets are held in custody or placed on deposit with commercial banks. At 30 September 2016 the Bank's net gold investment assets amounted to SDR 3,143.6 million (31 March 2016: SDR 2,944.6 million), approximately 16.7% of its equity (31 March 2016: 16.0%). The Bank sometimes also has small exposures to gold price risk arising from its banking activities with central and commercial banks. Gold price risk is measured within the Bank's VaR methodology, including its economic capital framework and stress tests.

B. Interest rate risk

Interest rate risk is the exposure of the Bank's financial condition to adverse movements in interest rates including credit spreads. The Bank is exposed to interest rate risk through the interest bearing assets relating to the management of its equity held in its investment portfolios and investments relating to its banking portfolios. The investment portfolios are managed using a fixed-duration benchmark of bonds.



The Bank measures and monitors interest rate risk using a VaR methodology and sensitivity analyses taking into account movements in relevant money market rates, government bonds, swap rates and credit spreads.

The following tables show the impact on the Bank's equity of a 1% upward shift in the relevant yield curve per time band:

As at 30 September 2016

<i>SDR millions</i>	Up to 6 months	6 to 12 months	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	Over 5 years	Total
Euro	(0.1)	(21.6)	11.2	(31.5)	(38.8)	(46.4)	(72.6)	(199.8)
Japanese yen	1.5	0.2	0.1	–	–	–	–	1.8
Pound sterling	0.3	(1.3)	(8.8)	(14.1)	(15.8)	(0.9)	6.1	(34.5)
Swiss franc	10.0	(0.3)	(0.6)	(0.1)	–	(1.2)	(1.4)	6.4
US dollar	1.5	(13.4)	(36.1)	(56.1)	(57.6)	(41.0)	(11.1)	(213.8)
Other currencies	(3.1)	(5.1)	(7.9)	(2.6)	(1.4)	0.2	–	(19.9)
Total	10.1	(41.5)	(42.1)	(104.4)	(113.6)	(89.3)	(79.0)	(459.8)

As at 31 March 2016

<i>SDR millions</i>	Up to 6 months	6 to 12 months	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	Over 5 years	Total
Euro	(1.3)	(5.5)	(33.5)	1.5	(45.6)	(48.3)	(74.0)	(206.7)
Japanese yen	1.5	(0.3)	0.2	(0.2)	–	–	–	1.2
Pound sterling	(1.6)	(0.8)	(10.4)	(17.0)	(19.7)	(5.8)	–	(55.3)
Swiss franc	7.5	(0.4)	(0.8)	(0.2)	–	–	1.4	7.5
US dollar	(2.7)	(12.2)	(37.8)	(56.5)	(51.3)	(59.2)	(7.7)	(227.4)
Other currencies	1.0	0.2	(1.2)	(1.0)	(1.0)	(0.6)	0.1	(2.5)
Total	4.4	(19.0)	(83.5)	(73.4)	(117.6)	(113.9)	(80.2)	(483.2)

C. Foreign exchange risk

The Bank's functional currency, the SDR, is a composite currency comprising fixed amounts of USD, EUR, JPY and GBP. Currency risk is the exposure of the Bank's financial condition to adverse movements in exchange rates. The Bank is exposed to foreign exchange risk primarily through the assets relating to the management of its equity. The Bank is also exposed to foreign exchange risk through managing its customer deposits and through acting as an intermediary in foreign exchange transactions. The Bank reduces its foreign exchange exposures by matching the relevant assets to the constituent currencies of the SDR on a regular basis, and by limiting currency exposures arising from customer deposits and foreign exchange transaction intermediation.

D. Minimum capital requirements for market risk

For the calculation of minimum capital requirements for market risk under the Basel II framework, the Bank has adopted a banking book approach consistent with the scope and nature of its business activities. Consequently, market risk-weighted assets are determined for gold price risk and foreign exchange risk, but not interest rate risk. The related minimum capital requirement is derived using the VaR-based internal models method. Under this method, VaR calculations are performed using the Bank's VaR methodology, assuming a 99% confidence level and a 10-day holding period.

The actual minimum capital requirement is derived as the higher of the VaR on the calculation date and the average of the daily VaR measures on each of the preceding 60 business days (including the calculation date) subject to a multiplication factor of three plus a potential add-on depending on backtesting results. For the period under consideration, the number of backtesting outliers observed remained within the range where no add-on is required. The following table summarises the market risk development relevant to the calculation of minimum capital requirements and the related risk-weighted assets over the reporting period.



	30 September 2016			31 March 2016		
	VaR	Risk-weighted assets (A)	Minimum capital requirement (B)	VaR	Risk-weighted assets (A)	Minimum capital requirement (B)
<i>SDR millions</i>						
Market risk, where (A) is derived as (B) / 8%	267.3	10,023.8	801.9	219.4	8,226.0	658.1

4. Operational risk

Operational risk is defined by the Bank as the risk of financial loss, or damage to the Bank's reputation, or both, resulting from human factors, failed or inadequate processes, or external events.

For the measurement of operational risk economic capital and operational risk-weighted assets, the Bank has adopted a VaR approach using a Monte Carlo simulation technique that is consistent with the advanced measurement approach proposed under the Basel II framework. In line with the assumptions of the Basel II framework, the quantification of operational risk does not take reputational risk into account. Internal and external loss data, scenario estimates and control self-assessments to reflect changes in the business and control environment of the Bank are key inputs in the calculations. In quantifying its operational risk, the Bank does not take potential protection it may obtain from insurance into account.

Minimum capital requirements for operational risk

In line with the key parameters of the Basel II framework, the calculation of the minimum capital requirement for operational risk is determined assuming a 99.9% confidence level and a one-year time horizon. The following table shows the minimum capital requirements for operational risk and related risk-weighted assets.

	30 September 2016			31 March 2016		
	VaR	Risk-weighted assets (A)	Minimum capital requirement (B)	VaR	Risk-weighted assets (A)	Minimum capital requirement (B)
<i>SDR millions</i>						
Operational risk, where (A) is derived as (B) / 8%	864.2	10,802.9	864.2	838.2	10,476.9	838.2

5. Liquidity risk

Liquidity risk arises when the Bank may not be able to meet expected or unexpected current or future cash flows and collateral needs without affecting its daily operations or its financial condition.

Outstanding balances in the currency and gold deposits from central banks, international organisations and other public institutions are the key drivers of the size of the Bank's balance sheet. The Bank is exposed to funding liquidity risk mainly because of the short-term nature of its deposits and because it undertakes to repurchase at fair value certain of its currency deposit instruments at one or two business days' notice. In line with the Bank's objective to maintain a high level of liquidity, it has developed a liquidity management framework, including a ratio, based on conservative assumptions for estimating the liquidity available and the liquidity required.

Liquidity ratio

The Bank has adopted a liquidity risk framework taking into account regulatory guidance issued by the Basel Committee on Banking Supervision related to the liquidity coverage ratio (LCR). The framework is based on a liquidity ratio that compares the Bank's available liquidity to a liquidity requirement over a one-month time horizon assuming a stress scenario. In line with the Basel III liquidity framework, the underlying stress scenario combines an idiosyncratic and a market crisis. However, the liquidity ratio differs in construction from the LCR to reflect the nature and scope of the BIS banking activities – in particular, the short-



term nature of the Bank's assets and liabilities. Within the Bank's liquidity framework, the Board of Directors has set a limit for the Bank's liquidity ratio which requires the liquidity available to be at least 100% of the potential liquidity requirement.

The liquidity available is determined as the cash inflow from financial instruments over a one-month horizon, along with potential additional liquidity which could be generated from the disposal of highly liquid securities, or by entering into sale and repurchase agreements for a part of the Bank's remaining unencumbered high-quality liquid securities. In calculating the amount of potential additional liquidity an assessment is performed to identify securities which are of high credit quality and highly liquid. This is followed by a projection of the amounts that could reasonably be generated through selling these securities or entering into repurchase transactions.

The Bank determines the liquidity required as the sum of the cash outflow from financial instruments over a one-month horizon, the estimated early withdrawal of currency deposits, and the estimated drawings of undrawn facilities. As regards currency deposits, it is assumed that all deposits that mature within the time horizon are not rolled over and that a proportion of non-maturing currency deposits is withdrawn from the Bank prior to contractual maturity. At 30 September 2016 the estimated outflow of currency deposits in response to the stress scenario amounted to 45.1% (31 March 2016: 49.8%) of the total stock of currency deposits. Moreover, it is assumed that undrawn facilities committed by the Bank would be fully drawn by customers, along with a proportion of undrawn uncommitted facilities.

The following table shows the Bank's estimated liquidity available, liquidity required and the resulting liquidity ratio:

<i>SDR billions</i>	30 September 2016	31 March 2016
Liquidity available		
Estimated cash inflows	87.7	74.1
Estimated liquidity from sales of highly liquid securities	42.9	51.7
Estimated sale and repurchase agreements	6.7	3.0
Total liquidity available (A)	137.3	128.8
Liquidity required		
Estimated withdrawal of currency deposits	89.5	84.5
Estimated drawings of facilities	5.0	5.1
Estimated other outflows	1.9	2.3
Total liquidity required (B)	96.4	91.9
Liquidity ratio (A) / (B)	142.5%	140.2%

For reference, the Bank also calculates an LCR following the principles set out in the guidance issued by the BCBS. As at 30 September 2016 the Bank's LCR stood at 208.6% (31 March 2016: 208.5%).