April 1, 2015 - March 31, 2016

## Report on the Management of Canada's Official International Reserves



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## Purpose of the Report

This edition of the *Report on the Management of Canada's Official International Reserves* provides details on official international reserves operations from April 1, 2015 to March 31, 2016 (the 2015–16 fiscal year).

As required under the *Currency Act*, the report provides a comprehensive account of the framework within which the Exchange Fund Account (EFA) is managed, the composition and changes in the Account during the year, a statement of whether the strategic objectives established for the EFA have been met, and information on agents appointed to perform services concerning the EFA.

Unless otherwise noted, in this report, the official international reserves are reported in US dollars on a market-value settled basis. The unaudited financial statements that appear at the end of this report are in Canadian dollars, as reported in the *Public Accounts of Canada*.

#### **Exchange Fund Account**

The EFA, which is held in the name of the Minister of Finance, represents the largest component of Canada's official international reserves. It is a portfolio that is primarily made up of liquid foreign currency securities and special drawing rights (SDRs). SDRs are international reserve assets created by the International Monetary Fund (IMF) whose value is based on a basket of international currencies. In addition to the EFA, Canada's official international reserves include Canada's reserve position at the IMF. This position, which represents Canada's investment in the activities of the IMF, fluctuates according to drawdowns by and repayments from the IMF.

The legislative objective of the EFA, as specified in the *Currency Act*, is to aid in the control and protection of the external value of the Canadian dollar. Assets held in the EFA are managed to provide foreign currency liquidity to the Government and to promote orderly conditions for the Canadian dollar in the foreign exchange markets, if required. Under the *Currency Act*, the Minister of Finance has the authority to acquire, borrow, sell or lend assets held in the EFA in accordance with the *Statement of Investment Policy* (see Annex 1).

The Department of Finance Canada and the Bank of Canada jointly develop and implement the investment policy and funding program of the EFA. As fiscal agent of the Government, the Bank of Canada executes investment and funding transactions and manages EFA cash flows.

A detailed description of the EFA's management framework is provided in Annex 2. The framework includes the objectives, principles and governance structure of the EFA. Annex 2 also describes the policies that pertain to investments, risk management, performance measurement and foreign currency funding activities.

## **Executive Summary**

The *Currency Act* stipulates that this report provide a statement of whether the strategic objectives established for the EFA have been met during the review period. These objectives—to maximize return on investments once the objectives of liquidity and capital preservation are clearly met—were achieved during 2015–16.

Level of the official international reserves: The market value of Canada's official international reserves increased to \$82.2 billion as at March 31, 2016 from \$77.7 billion as at March 31, 2015. The change comprised a \$4.9 billion increase in EFA assets and a \$399 million decrease in the reserve position in the IMF. EFA assets, which totalled \$79.8 billion as at March 31, 2016, were held at a level that is consistent with the Government's commitment to maintain holdings of liquid foreign exchange reserves at or above 3 per cent of gross domestic product. EFA assets are composed primarily of the debt securities of highly rated sovereigns, agencies and supranational organizations that borrow on public markets.

Table 1

The EFA and Official International Reserves
market value in millions of US dollars, settled basis

	March 31, 2016	March 31, 2015	Change
Securities	67,257	66,510	747
Deposits	4,545	549	3,996
Total securities and deposits (liquid reserves)	71,802	67,059	4,743
Gold	0	114	-114
SDRs	8,032	7,751	281
Total EFA	79,834	74,924	4,910
IMF reserve position	2,358	2,757	-399
Total official international reserves	82,192	77,681	4,511

Note: Numbers may not add due to rounding.

**EFA composition:** As at March 31, 2016, the US-dollar share of EFA liquid investments was US\$48.5 billion or 67.5 per cent, the euro share was equivalent to US\$16.5 billion or 23.0 per cent, the British pound sterling share was equivalent to US\$6.1 billion or 8.5 per cent, and the yen portion was equivalent to US\$693 million or 1.0 per cent.

Investments in fixed-income securities issued by sovereigns and government agencies made up 78.6 per cent of EFA liquid investments, 15.2 per cent was invested in securities issued by supranational organizations and 6.2 per cent was held in cash.

Based on the second highest rating among those provided by Moody's Investors Service, Standard & Poor's, Fitch Ratings and Dominion Bond Rating Service, as of March 31, 2016, 92.8 per cent of liquid reserve investments were rated AAA and 95.2 per cent were rated AA+ or better. In addition, all EFA assets have been assigned an internal credit rating.

**EFA funding sources:** The foreign currency reserve assets held in the EFA are funded in a cost effective manner through a funding framework that mitigates the impacts of movements in interest rates and foreign exchange rates on the Government's fiscal position by matching the funding with the currency, term and duration of the reserve assets.

During 2015–16, EFA operations were financed through cross-currency swaps of domestic obligations and direct issuance. Cross-currency swaps totalling \$8,964 million were transacted in a number of currencies and at various terms at an average cost equivalent to 3-month US\$ LIBOR (London Interbank Offered Rate) less 47 basis points. This compared to an average rate of 3-month US\$ LIBOR less 40 basis points for 2014–15. In addition, \$500 million of medium-term notes were issued in US dollars and euros at various terms during 2015–16 at an average funding cost equivalent to 3-month US\$ LIBOR less 1 basis point. The level of outstanding short-term US-dollar commercial paper issued under the Canada bills program was increased to \$3.66 billion over the period, at an average cost of US\$ LIBOR less 17 basis points, which was higher than the previous year's funding level (US\$ LIBOR less 19 basis points).

**Portfolio return:** In 2015–16, the EFA earned an average positive spread (or net "coupon return") of 21 basis points, up slightly from 20 basis points the previous year. This spread represents the difference between the yield to maturity on foreign currency fixed-income assets held in the EFA and the average cost of foreign currency liabilities used to fund the assets. The spread measures the underlying net return of the portfolio on the assumption that all the assets and liabilities are held to maturity and the coupons are reinvested at their respective yield to maturity.

On a cash flow basis, that is, taking into account realized gains and losses on portfolio rebalancing and coupon flows, the EFA portfolio earned 61.1 basis points (or a gain of \$396 million) in 2015–16, higher than the previous fiscal year's level of 9.0 basis points (or a gain of \$22.9 million).

Taking into account cash flows and unrealized changes in the market value of assets and liabilities due to changes in interest rates and credit spreads, the EFA reported a total return of 99 basis points in 2015–16. This is equivalent to a mark-to-market gain of \$676 million. In the previous year, the EFA reported a total return of -21 basis points (a loss of \$156 million).

## Report on Operations in 2015–16

The following sections describe the impact of market developments on the EFA, portfolio performance and risk measures, and policy and program initiatives undertaken in 2015–16.

## **Market Developments**

#### **Interest Rates**

During the 2015–16 reporting year, short-term interest rates in the US rose while long-term rates fell, resulting in a flattening of the yield curve. Over the fiscal year ending March 31, 2016, the yield on US 3-month Treasury bills increased 19 basis points while the yield on 10-year Treasury bonds decreased 15 basis points. In Europe, rates fell as the European Central Bank reaffirmed its commitment to use unconventional monetary policy tools to raise Eurozone inflation to its target of just below 2 per cent. Changes in interest rates in 2015–16 resulted in an increase of \$141 million in the market value of the liquid foreign reserves.

US-dollar-denominated holdings in the EFA are composed mainly of fixed-income securities issued by the US government and supranational institutions. On December 16, 2015, the Federal Open Market Committee increased the range of its benchmark federal funds interest rate by a quarter of a percentage point to between 0.25 per cent and 0.50 per cent. This marked the first such increase in the target fund rate since 2006, ending years of speculation about when the Committee would begin to normalize interest rates following the 2008–2009 global financial crisis. The impact on yields of US Treasury notes was less significant as most market participants had anticipated the move. In early 2016, heavy losses in global equity markets sparked a shift in investor sentiment, pushing the yield on the benchmark 10-year Treasury down sharply to 1.66 per cent, near an all-time low, on February 11.

Euro-denominated holdings in the EFA are composed of fixed-income securities issued by European countries, their agencies, and supranational institutions. In December 2015, the European Central Bank announced that it would extend its €60-billion-per-month asset purchase program by six months to March 2017 and cut its overnight deposit rate, pushing it deeper into negative territory. At its March 2016 meeting, in addition to reducing the overnight deposit rate further, the central bank reduced the rate on its main refinancing operations to zero per cent for the first time. In Germany, yields on government bonds with a term-to-maturity of 8 years or less ended the year with negative yields for the second consecutive year. And, while the yield on the 10-year government bond ended just 2.8 basis points lower at 0.15 per cent, it was very volatile hitting a high of 0.98 per cent in June 2015. The drop in yields was more severe at the short end, as the 3-month German government bill yield fell 31 basis points to -0.64 per cent.

## **Credit Spreads**

Credit spreads on fixed-income securities issued in US dollars widened as a result of factors including global economic concerns in Europe, China and Japan, and lower oil prices. Credit spreads of European sovereign bonds were little changed relative to German government bonds. Overall, there was an approximately US\$243 million decrease in the market value of reserves due to changes in credit spreads.

## **Exchange Rates**

In 2015–16, exchange rate movements versus the US dollar resulted in a gain of US\$816 million in the market value of the liquid foreign reserve assets. However, the foreign reserves are managed under an asset-liability matching framework, and as such, exchange rate movements had a relatively minor impact on the Government's financial position, as reported in the *Public Accounts of Canada*, since the increase in the market value of assets was offset by a similar increase in the value of associated liabilities.

During 2015–16, the euro appreciated by approximately 6 per cent against the US dollar, despite the European Central Bank continuing with very accommodative monetary policies in the Eurozone. As 23 per cent of the liquid reserves were held in euro-denominated securities (on March 31, 2016), changes in the value of the euro against the US dollar had a positive impact on the market value of the reserves.

During 2015–16, the British pound sterling (GBP) fell 3 per cent against the US dollar. Changes in the GBP/US-dollar exchange rate had a negative impact on the total market value of liquid reserves as 9 per cent of the reserves were held in GBP-denominated assets on March 31, 2016.

During 2015–16, the yen appreciated 6 per cent against the US dollar. Changes in the yen/US-dollar exchange rate, while significant, had little impact on the total market value of liquid reserves since only 1 per cent of the reserves were held in yen-denominated assets on March 31, 2016.

For financial reporting purposes, the results are presented in Canadian-dollar terms. In comparison to the previous year, the Canadian dollar fell almost 2.5 per cent against the US dollar. The financial statements are based on the prevailing exchange rate on March 31, 2016, which was 1.2987 US\$/C\$.

## Initiatives in 2015–16

During 2015–16, the Department of Finance Canada and the Bank of Canada continued to work on initiatives to improve the management of the EFA. These initiatives included reviewing the *Statement of Investment Policy* and working to update the investment process for managing foreign reserves to incorporate a new, customized investment benchmark. This work is being undertaken to improve asset allocation decisions and to clarify the roles and responsibilities of officials who are tasked with managing the EFA.

Other initiatives included: developing a new portfolio risk threshold called Total Market Value at Risk to measure the volatility of foreign-currency assets and the liabilities used to fund the assets; concluding consultations with counterparties on the Government's collateral and margining policies for swaps; conducting negotiations to establish new derivative agreements with most counterparties; and selling the remaining gold in the Exchange Fund Account.

## Statement of Investment Policy and Investment Process

The *Currency Act* requires the Minister of Finance to establish a *Statement of Investment Policy* for the foreign exchange reserves held in the EFA. The Statement highlights the strategic objectives for the EFA and treasury management principles that guide investment decisions. The Statement also establishes the Minister's risk tolerances, which are consistent with meeting the EFA's objectives.

Under the Government of Canada's Treasury Evaluation Program, an external evaluation of the asset management framework of the EFA was completed in March 2012. The evaluators concluded that the Government achieves the strategic objectives of the EFA but that the use of a formalized investment process could enhance the accountability and clarity of investment decisions. A recommendation to include the use of an investment benchmark that more clearly defines investment preferences and risk in the Government's investment process was made.

In response to the evaluators' recommendations (http://www.fin.gc.ca/treas/evaluations/eaafefa-ecracfc-eng.asp), Department of Finance Canada and Bank of Canada officials are developing an updated governance process to incorporate the high-level investment preferences of senior government officials for a medium-term investment strategy. These preferences are then transformed into a strategic asset allocation, which will direct investments across a number fixed-income asset categories that vary by credit quality and liquidity. At the same time, the delegation of responsibilities for establishing these strategic investment preferences and carrying out day-to-day investment decisions is clarified (Annex 2).

A customized investment benchmark is being established to define preferred investment exposures to individual securities by currency and term to maturity. This will aid in tracking the performance of the liquid foreign reserves portfolio more precisely by measuring performance against a benchmark that more closely resembles the risk and return profile of the liquid foreign reserves portfolio. The detailed asset allocation will be reviewed every three to five years or more frequently should its underlying assumptions regarding the market environment change significantly. Reporting in the next fiscal year will be modified to account for the new *Statement of Investment Policy* and benchmark.

The improvements to the investment policy are reflected in an updated *Statement of Investment Policy* (Annex 1, 1B, and 1B1).

#### **Risks Metrics**

The liquid reserves portfolio is managed under an asset-liability matching framework whereby the market value of assets and liabilities is matched to the extent possible by currency, term and/or duration. EFA assets are funded using a combination of direct foreign-currency-denominated debt and cross-currency swaps, each of which has unique risk characteristics. Based on the recommendation of a consultant as part of an external evaluation of the asset allocation framework of the EFA, a new portfolio risk tolerance metric, Total Market Value at Risk, has been developed. This risk measure will allow constant monitoring of all major risks embedded in the asset and liability portfolios on a net basis.

#### **Over-the-Counter Derivatives**

The Government of Canada uses foreign exchange swaps and cross-currency swaps to fund the purchase of EFA assets and to hedge currency movements related to IMF activities. These transactions are executed with a range of counterparties through bilateral contracts under International Swaps and Derivatives Association documentation. The contracts include credit support annexes to mitigate market and credit risk associated with the swaps.

In 2014–15, the Department of Finance Canada and the Bank of Canada concluded consultations with counterparties on the Government's collateral and margining policies for swaps and began establishing symmetric collateral agreements with its counterparties. These agreements are being updated to reflect guidance on margin requirements for non-centrally cleared derivatives, as agreed by the Basel Committee on Banking Supervision and the International Organization of Securities Commissions.

Since moving to two-way margining for swaps, the Government implemented processes for funding, tracking and posting collateral to support its swap program. Through a competitive process, State Street Trust Company Canada, together with State Street Bank and Trust Company, was appointed by the Government to act as an agent for collateral management and custodian services in 2015–16.

#### Gold

In 2014, after the completion of the gold sales program which made available 30,000 medium- to high-quality coins for sale to Canadians, the Exchange Fund Account held approximately 216,000 low-quality King George V \$5 and \$10 gold coins dated 1912, 1913 or 1914, which bore imperfections and carried little numismatic or collectors' value. There were also 36 high-quality King George V \$5 and \$10 gold coins.

The 216,000 low-quality King George V \$5 and \$10 gold coins were melted and the resulting bullion was sold at market prices. The Government took a policy decision in the early 1980s to divest its gold holdings in order to improve the liquidity of its reserves, consistent with the objectives for holding foreign reserves. In addition to improving the overall liquidity of the foreign reserves, the purchase of high credit quality fixed-income securities with the proceeds of gold sales reduced the volatility in the value of the reserves and provided the Government with interest income that compounds over time, which is not the case for a commodity such as gold.

Subsequent to March 31, 2016, 36 high-quality King George V \$5 and \$10 gold coins were sold to the Bank of Canada Museum and the Royal Canadian Mint for a consideration of \$1.00. The sale of these historically important coins to the Museum and the Mint is intended to ensure that the coins are appropriately safeguarded in keeping with their historical value, and remain accessible for current and future generations of Canadians to view. In this context, a condition of this sale is that the Museum and the Mint have agreed to protect these coins indefinitely and make these coins available from time to time to Canadians for viewing at the Museum and Mint or through a loan of the coins.

## Performance Versus Strategic Objectives

The *Currency Act* stipulates that this report provide a statement of whether the strategic objectives established for the EFA have been met during the review period. These objectives—to maximize return on investments once the objectives of liquidity and capital preservation are clearly met—were achieved during 2015–16. The planned level of liquidity was maintained for the reserves portfolio throughout the reporting period, and the portfolio's exposure to market and credit risks was managed within approved limits. In addition, the net underlying return was positive (see Annex 4).

#### **Term Structure of the Official International Reserves**

Table 2 shows the distribution of investments in the official international reserves by currency and term to maturity as at March 31, 2016. US-dollar holdings, which made up slightly less than 71 per cent of the reserves, were primarily distributed across the under 6 months, and the 1 to under 5 year maturity buckets. The euro holdings were more heavily weighted towards the 1 to under 5 year and 5 year and over maturity buckets. Yen holdings remained minimal and relatively unchanged from the previous year. GBP holdings were minimal and were focused in the 1 to under 5 year and 5 year and over maturity buckets.

Gold, SDR holdings<sup>1</sup> and the IMF reserve position, which have no terms to maturity, are translated into US dollars. The IMF reserve position is classified as an investment of indefinite term.

SDRs are international reserve assets created by the IMF in 1969 to supplement the existing official reserves of member countries. SDRs are allocated to member countries in proportion to their IMF quotas.

Table 2

Term Structure of the Official International Reserves as at March 31, 2016
market value in millions of US dollars, settled basis

6 months to under 1 year	Term	Cash and term deposits	Government securities in domestic currency	Other securities	Gold	SDR holdings	Total EFA assets	IMF reserve position	Total official international reserves
6 months to under 1 year	US-dollar holdings								
1 year 1 year 2	=	4,084	7,861	6,443	_	_	18,388	_	18,388
5 years         -         9,330         12,440         -         -         21,770         -         21,775         5 years and over         -         3,547         1,108         -         -         4,655         -         4,6         Indefinite term         -         -         -         8,032         8,032         2,358         10.3         10.0         10.0         8,032         2,558         10.3         10.0         8,032         2,558         10.3         10.0         8,032         2,558         10.3         10.0         8,032         2,558         10.3         10.0         8,032         2,558         10.3         10.0         8,032         2,558         10.3         10.0         8,032         2,558         10.3         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         11.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10		_	1,338	2,351	_	-	3,689	-	3,689
Indefinite term		-	9,330	12,440	_	_	21,770	_	21,770
Euro holdings         4,084         22,075         22,343         0         8,032         56,534         2,358         58,8           Euro holdings           Under 6 months         234         1,396         466         -         -         2,096         -         2,0           6 months to under         1 year         -         204         160         -         -         365         -         3           1 year to under         5 years         -         5,989         1,834         -         -         7,823         -         7,8           5 years and over         -         5,038         1,183         -         -         6,221         -         6,2           Total euro holdings         234         12,627         3,644         0         0         16,505         0         16,5           Yen holdings         139         -         -         -         -         139         -         16,5           Yen holdings         139         -         -         -         -         139         -         16,5           Yen holdings         139         -         -         -         -         -         55         years and over <td>5 years and over</td> <td>-</td> <td>3,547</td> <td>1,108</td> <td>_</td> <td>_</td> <td>4,655</td> <td>_</td> <td>4,655</td>	5 years and over	-	3,547	1,108	_	_	4,655	_	4,655
Euro holdings         Under 6 months         234         1,396         466         -         -         2,096         -         2,096           6 months to under         1 year         -         204         160         -         -         365         -         33           1 year to under         5 years         -         5,989         1,834         -         -         7,823         -         7,88           5 years and over         -         5,038         1,183         -         -         6,221         -         6,2           Total euro holdings         234         12,627         3,644         0         0         16,505         0         16,50           Yen holdings           Under 6 months         139         -         -         -         139         -         16,50           4 6 months to under         1         -         -         -         -         139         -         16,50           5 years         -         554         -         -         -         139         -         16,50           1 year to under         -         -         -         -         -         -         554         -	Indefinite term		-	_	_	8,032	8,032	2,358	10,390
Under 6 months 234 1,396 466 2,096 - 2,066 months to under 1 year - 204 160 365 - 33 1 year to under 5 years - 5,989 1,834 7,823 - 7,82	Total US-dollar holdings	4,084	22,075	22,343	0	8,032	56,534	2,358	58,892
6 months to under 1 year	Euro holdings								
1 year to under       -       204       160       -       -       365       -       33         1 year to under       5 years       -       5,989       1,834       -       -       7,823       -       7,8         5 years and over       -       5,038       1,183       -       -       6,221       -       6,2         Total euro holdings       234       12,627       3,644       0       0       16,505       0       16,5         Yen holdings         Under 6 months       139       -       -       -       -       139       -       1         5 year       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -	Under 6 months	234	1,396	466	_	_	2,096	_	2,096
5 years         -         5,989         1,834         -         -         7,823         -         7,8           5 years and over         -         5,038         1,183         -         -         6,221         -         6,2           Total euro holdings         234         12,627         3,644         0         0         16,505         0         16,5           Yen holdings           Under 6 months         139         -         -         -         -         139         -         1           6 months to under         1 year         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -		_	204	160	_	_	365	_	365
5 years and over         -         5,038         1,183         -         -         6,221         -         6,221           Total euro holdings         234         12,627         3,644         0         0         16,505         0         16,505           Ven holdings           Under 6 months         139         -         -         -         -         139         -         1           6 months to under         1 year         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         - <td>1 year to under</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	1 year to under								
Yen holdings         234         12,627         3,644         0         0         16,505         0         16,505           Yen holdings           Under 6 months         139         -         -         -         -         139         -         1           6 months to under         1 year to under         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -	,	-	•	•	-	-		_	7,823
Yen holdings         Under 6 months       139       -       -       -       -       139       -       1         6 months to under       1 year       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -	5 years and over		5,038	1,183	_	-		_	6,221
Under 6 months 139	Total euro holdings	234	12,627	3,644	0	0	16,505	0	16,505
6 months to under 1 year	Yen holdings								
1 year to under         5 years       -       554       -       -       554       -       -       554       -       554       -       -       554       -       -       -       554       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -	Under 6 months	139	_	_	_	_	139	_	139
5 years       -       554       -       -       554       -       -       554       -       -       554       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -		_		_	_	_		_	
5 years and over       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -	3								
Total yen holdings 139 554 0 0 0 693 0 668  GBP holdings  Under 6 months 88 88 - 6 months to under 1 year	,	_	554	_	_	_	554	_	554
GBP holdings  Under 6 months 888 888 6 months to under 1 year					_	_		_	
Under 6 months       88       -       -       -       -       88       -         6 months to under       1 year       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       1,867       -       -       -       1,867       -       -       1,867       -       -       1,867       -       -       1,867       -       -       1,867       -       -       1,867       -       -       4,147       -       -       4,147       -       4,147       -       4,147       -       4,147       -       4,147       -       4,147       -       4,147       -       -       4,147       -       4,147       -       -       4,147       -       -       4,147       -       -       4,147       -       -       -       6,014       0       0       0       6,102       0       6,11	Total yen holdings	139	554	0	0	0	693	0	693
6 months to under 1 year 1 year to under 5 years - 1,867 1,867 - 1,8 5 years and over - 4,147 4,1 Total GBP holdings 88 6,014 0 0 0 6,102 0 6,1	GBP holdings								
1 year       -       -       -       -       -       -       -       -       -       -       -       -       1,867       -       -       -       1,867       -       -       -       1,867       -       -       1,867       -       -       1,867       -       -       4,147       -       -       -       4,147       -       -       4,147       -       -       4,147       -       4,1       -       -       4,147       -       -       4,1       -       -       4,1       -       -       4,1       -       -       4,1       -       -       4,1       -       -       -       4,1       -       -       -       -       4,1       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       - <td< td=""><td>Under 6 months</td><td>88</td><td>-</td><td>_</td><td>_</td><td>-</td><td>88</td><td>_</td><td>88</td></td<>	Under 6 months	88	-	_	_	-	88	_	88
5 years       -       1,867       -       -       -       1,867       -       1,867       -       1,867       -       1,867       -       -       4,147       -       -       4,147       -       4,147       -       4,147       -       4,1         Total GBP holdings       88       6,014       0       0       0       6,102       0       6,1		-	-	_	_	_	_	_	-
5 years and over       -       4,147       -       -       4,147       -       4,147       -       4,1         Total GBP holdings       88       6,014       0       0       0       6,102       0       6,1			1 047				1 947		1,867
Total GBP holdings 88 6,014 0 0 0 6,102 0 6,1	=	_	•		_			_	4,147
		88		0	0				6,102
TOTAL 1 A FAE 11 271 2 2004 0 0 022 70 024 2 250 024	Total	4,545	41,271	25,986	0	8,032	79,834	2,358	82,192

Notes: The exchange rates prevailing on March 31, 2016 are used for the euro, GBP and yen assets. Numbers may not add due to rounding.

## **Liquidity and Preservation of Capital**

In practice, the EFA's liquid reserves (which exclude SDR holdings) are mainly invested in the debt of sovereigns and their agencies (77.9 per cent as at March 31, 2016), as these securities both enhance the liquidity and preserve the capital value of the EFA (Table 3). A more detailed description of the changes in the level of the official international reserves is provided in Annex 3.

Table 3

Composition of EFA Liquid Reserves
market value in millions of US dollars, settled basis

	March 31, 2016	March 31, 2015	Change
Sovereigns and agencies	55,905	57,208	-1,303
Supranationals	11,352	9,302	2,050
Private sector investments	0	0	0
Cash	4,545	549	3,996

Notes: Liquid reserves exclude SDR holdings. Numbers may not add due to rounding

The largest portion of EFA liquid reserves is in US dollars because foreign currency needs are mostly in US dollars and, historically, foreign exchange market intervention has mainly consisted of transactions involving the US dollar. As at March 31, 2016, the US-dollar share of EFA liquid investments was US\$48.5 billion or 67.5 per cent, the euro share was equivalent to US\$16.5 billion or 23.0 per cent, the GBP share was equivalent to US\$6.1 billion or 8.5 per cent, and the yen portion was equivalent to US\$693 million or 1.0 per cent (Table 4). By comparison, as at March 31, 2015, the US-dollar share was 73.4 per cent, the euro share was 22.7 per cent, the yen share was 1.0 per cent and the GBP share was 2.9 per cent.

Table 4 **Currency Composition of EFA Liquid Reserves**market value in millions of US dollars, settled basis

	March 31, 2016	March 31, 2015	Change
US dollars	48,501	49,215	-714
Euros	16,505	15,220	1,285
GBP	6,102	1,981	4,121
Yen	693	643	50

Notes: Liquid reserves exclude SDR holdings. Numbers may not add due to rounding

As specified in the *Statement of Investment Policy*, to help achieve the objective of preserving capital value, an issuing entity must be deemed by Canada to have a credit rating of A- or higher to be eligible for investment in the EFA. Compliance with counterparty limits is monitored on a real-time basis. The majority of EFA investments are given an AAA rating by external credit rating agencies, as indicated in Table 5.

Table 5 **Credit Composition of EFA Liquid Reserves**market value in millions of US dollars, settled basis

	March 31, 2016	March 31, 2015	Change
AAA	66,636	61,131	5,505
AA+	1,722	3,901	-2,179
AA	2,750	1,384	1,366
AA-	0	0	0
A+	693	643	50
A	0	0	0
A-	0	0	0
Below A-	0	0	0

Notes: Liquid reserves exclude SDR holdings. Numbers may not add due to rounding.

#### **Portfolio Returns**

The EFA is a financial asset portfolio within the *Public Accounts of Canada*. For risk management purposes and to provide transparency on the net economic return or cost to the Government of maintaining the EFA, several performance indicators are measured and tracked on a regular basis and reported to senior management at the Department of Finance Canada and the Bank of Canada. Of these performance indicators, coupon return and carry are reported at book value, while total return is reported at market value. A brief overview of the portfolio's performance is provided below (a more detailed description is provided in Annex 4).

#### **Overview**

Given the decline in interest rates globally and foreign exchange movements, the assets held in the EFA generated higher net revenues in 2015–16 than in 2014–15 (C\$2.19 billion versus C\$0.8 billion). The cost of advances to the EFA, which represents the estimated economic cost to the Government of financing the EFA, increased compared to the previous fiscal year (C\$1.64 billion versus C\$1.45 billion).

Table 6

Summary of Main Performance Indicators for the Official International Reserves

	April 1, 2015 to March 31, 2016	April 1, 2014 to March 31, 2015
Net revenue of the Exchange Fund Account		
(C\$ millions)	2,187	840
2) Measures of the net return on assets and liabilities		
Coupon return (basis points)	21	20
Carry (basis points)	-30.9	-23
Carry including net realized gains or losses (basis points)	61.1	9
Total return (basis points)	99	-21
3) Cost of advances to the EFA (C\$ millions)	1,643	1,452
	As at March 31, 2016	As at March 31, 2015
4) Risk measures		
Total market risk (99% 10-day VaR, US\$ millions)	1,266	561
Foreign exchange-interest rate risk under asset-liability matching (99% 10-day VaR, US\$ millions)	9.6	14
Asset-only market risk (99% 10-day VaR, US\$ millions)	1,436	1,157
Credit risk (99.9% 1-year VaR, US\$ millions)	2,476	1,451

In 2015–16, the coupon return for the EFA, the difference between the yield to maturity of reserve assets and liabilities issued to fund the assets, was 21 basis points.

Two carry performance measures are used for the EFA: carry including only interest receipts and payments; and carry including interest receipts and payments as well as net realized gains and losses from the sale or purchase of assets. When net realized gains and losses are included in the carry measure, the carry improved from -31 basis points to 61 basis points.

Taking into account unrealized changes in the market value of assets and liabilities, the total net return of the EFA increased to 99 basis points. The gain was due primarily to a decrease in the market value of outstanding liabilities caused by changes in funding spreads. This compares to a loss of 21 basis points in the market value of the EFA in 2014–15.

Total Market Value at Risk (which measures the loss on a net basis arising from interest rate, foreign exchange rate, and credit and funding spread changes that will not be exceeded 99 per cent of the time if the EFA is held over a 10-business-day period) stood at \$1.3 billion. The Foreign Exchange–Interest Rate Value at Risk (FX-IR VaR) measure of potential losses due to interest rate and foreign exchange rate movements under the asset-liability matching framework was much lower (\$9.6 million). The asset-only VaR measure, or Asset VaR, looks at potential losses but for assets only. On March 31, 2016, the Asset VaR stood at \$1,436 million. The VaR measure of potential losses due to credit exposure to issuers (Credit VaR) stood at \$2,476 million on March 31, 2016.

## **EFA Financing**

EFA assets are funded by borrowings from a variety of sources (Table 7). Funding requirements are partially met through an ongoing program of cross-currency swaps<sup>2</sup> of domestic obligations. Total cross-currency swap funding and maturities during the reporting period were US\$9.0 billion and US\$3.7 billion respectively.

During 2015–16, foreign currency was raised through cross-currency swaps at an average cost equivalent to 3-month US\$ LIBOR less 47 basis points. This funding cost was lower than rates obtained during the previous fiscal year, which averaged 3-month LIBOR less 40 basis points.

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<sup>&</sup>lt;sup>2</sup> Agreements that exchange one type of obligation for another involving different currencies and the exchange of the principal amounts and interest payments.

As at March 31, 2016, Government of Canada cross-currency swaps outstanding stood at US\$53.1 billion (par value). Swaps of US dollars, euros, yen and GBP made up 64.0 per cent, 23.6 per cent, 1.3 per cent and 11.1 per cent of the swap portfolio respectively. The EFA can also be funded through direct foreign currency issuance using three programs: a short-term US-dollar paper program (Canada bills³); a medium-term note issuance (Canada notes⁴ and euro medium-term notes⁵); and a global bond program.⁶ The choice of direct issuance method depends on funding needs and market conditions.

The changes shown in Table 7 reflect issuance and maturities denominated in US dollars (as the foreign currency issues are reported in US dollars).

Table 7 **Outstanding Foreign Currency Issues**par value in millions of US dollars

	March 31, 2016	March 31, 2015	Change
Swapped domestic issues	53,076	47,036	6,040
Global bonds	11,776	11,650	126
Canada bills	2,125	2,991	-866
Euro medium-term notes	1,221	961	260
Canada notes	650	400	250
Total	68,848	63,038	5,810

Note: Liabilities are stated at the exchange rates prevailing on March 31, 2016.

As at March 31, 2016, the Government of Canada had four global bonds outstanding. As with all foreign currency borrowing conducted by the Government of Canada, the proceeds from global bond issuance supplement Canada's foreign exchange reserves and further diversify the funding base.

Promissory notes denominated in US dollars and issued only in book-entry form. Canada bills mature not more than 270 days from their date of issue, and are discount obligations with a minimum order size of US\$1,000,000 and a minimum denomination of US\$1,000. Delivery and payment occur in same-day funds through Citibank, N.A. in New York City. Primary distribution occurs through four dealers: CIBC World Markets, Credit Suisse First Boston LLC, Goldman, Sachs & Co. and RBC Dominion Securities Inc. Rates on Canada bills are posted daily for terms of one to six months.

Promissory notes usually denominated in US dollars and available in book-entry form. Canada notes are issued in denominations of US\$1,000 and integral multiples thereof. Notes can be issued for terms of nine months or longer, and can be issued at a fixed or a floating rate. The interest rate or interest rate formula, issue price, stated maturity, redemption or repayment provisions, and any other terms are established by the Government of Canada at the time of issuance of the notes and are indicated in the Pricing Supplement. Delivery and payment occur through Citibank, N.A. The Government may also sell notes to other dealers or directly to investors. Canada notes are issued for foreign exchange reserve funding purposes only.

Medium-term notes issued outside the United States and Canada. Government of Canada euro medium-term notes (EMTNs) are sold through TD Securities or by other dealers who are acting as the Government's agent for the particular transaction. The arranger for the EMTN program is TD Securities. The maturities of EMTNs are not fixed, and can range from short- to long-term. Notes issued under this program can be denominated in a range of currencies and structured to meet investor demand. EMTNs are issued for foreign exchange reserve funding purposes only.

Global bonds are syndicated, marketable debt instruments issued in a foreign currency with a fixed interest rate. The majority of global bonds issued by Canada are denominated in US dollars. Global bonds are issued for foreign exchange reserve funding purposes only.

Table 8

Government of Canada Global Bonds Outstanding, as at March 31, 2016

Year of issuance	Market	Amount in original currency	Yield (%)	Term to maturity (years)	Coupon (%)	Benchmark interest rate— government bonds	Spread from benchmark at issuance (basis points)	Spread over swap curve in relevant currency on issuance date (basis points)
2009	Global	US\$3 billion	2.498	5	2.375	US	23.5	LIBOR - 15.0
2010	Global	€2 billion	3.571	10	3.500	Germany	19.4	EURIBOR - 2.0
2012	Global	US\$3 billion	0.888	5	0.875	US	8.0	LIBOR - 23.5
2014	Global	US\$3.5 billion	1.658	5	1.625	US	11.0	LIBOR - 1.0

Note: EURIBOR = Euro Interbank Offered Rate. Source: Department of Finance Canada.

After having been absent from the medium-term note market for several years, Canada returned to the market to further diversify the sources of funding available for its foreign exchange reserves. This program provides the Government with additional flexibility to raise foreign currency. The program allows for issuance in a number of currencies, including the US dollar, euro and British pound sterling, using either a US or EMTN prospectus. During 2015–16, US\$500 million of medium-term notes were issued in US dollars and euros at various terms at an average funding cost equivalent to 3-month US\$ LIBOR less 1 basis point.

Table 9

Government of Canada Medium-Term Notes Outstanding, as at March 31, 2016

Date of issuance	Date of Maturity	Market	Amount	Yield	Term to maturity (years)	Fixed	Interest rate basis	Index maturity	Spread over swap curve in relevant currency on issuance date (basis points)
10-Dec-2013	10-Dec-2019	Canada notes	US\$50,000,000	1.86%	6	Fixed			LIBOR - 2
13-Dec-2013	13-Dec-2019	Canada notes	US\$50,000,000		6	Float	US\$ LIBOR	3 month	LIBOR - 2
20-Dec-2013	20-Dec-2020	Canada notes	US\$50,000,000	2.30%	7	Fixed			LIBOR + 0
27-Jan-2014	27-Jan-2017	Canada notes	US\$400,000,000		3	Float	US\$ LIBOR	3 month	LIBOR - 8
19-Mar-2014	19-Mar-2020	EMTN	US\$125,000,000		6	Float	US\$ LIBOR	3 month	LIBOR + 0
08-May-2014	08-May-2020	EMTN	US\$125,000,000		6	Float	US\$ LIBOR	3 month	LIBOR + 0
10-Jun-2014	10-Jun-2020	Canada notes	US\$100,000,000		6	Float	US\$ LIBOR	3 month	LIBOR - 2
10-Sep-2014	10-Sep-2020	Canada notes	US\$250,000,000		6	Float	US\$ LIBOR	3 month	LIBOR - 2
15-Sep-2014	15-Sep-2020	Canada notes	US\$50,000,000		6	Float	US\$ LIBOR	3 month	LIBOR - 3
									6 month EURIBOR
15-Jan-2015	15-Jan-2021	EMTN	€150,000,000	0.15%	6	Fixed			- 27.5
24-Aug-2015	24-Aug-2021	Canada notes	US\$50,000,000		6	Float	US\$ LIBOR	3 month	LIBOR + 0
25-Aug-2015	25-Aug-2019	Canada notes	US\$50,000,000	1.454%	4	Fixed			LIBOR - 6
27-Aug-2015	27-Aug-2018	EMTN	US\$250,000,000		3	Float	US\$ LIBOR	3 month	LIBOR - 10.5
10-Feb-2016	10-Feb-2020	Canada notes	US\$150,000,000	1.276%	4	Fixed			LIBOR + 15

Note: EURIBOR = Euro Interbank Offered Rate. Source: Department of Finance Canada.

#### **IMF Programs**

The IMF activated a quota increase for its member countries in early 2016. As part of the quota increase implementation under the 14th General Review, Canada's quota share increased from SDR 6,369 million to SDR 11,024 million (increase of approximately SDR 4,655 million). Quota subscriptions are a central component of the IMF's financial resources. Each member country of the IMF is assigned a quota, based broadly on its relative position in the world economy. A member country's quota determines its voting power, and has a bearing on its access to IMF financing.

The Government of Canada participates in two lending arrangements with the IMF outside of the quota system: the multilateral New Arrangements to Borrow (NAB) and General Arrangements to Borrow (GAB). Canada also participates in the Voluntary Standing Arrangement (VSA), which was put in place by the IMF to facilitate the purchase or sale of SDRs held by member countries. The objective of the VSA is to allow less developed countries to exchange SDRs for liquid currencies such as the US dollar. Under the VSA, Canada could be required to buy SDRs from other IMF member countries up to a maximum of 150 per cent of its cumulative SDR allocation (Canada's current cumulative SDR allocation is approximately SDR 6.0 billion). As of March 31, 2016, Canada's SDR holdings were approximately SDR 5.7 billion, implying that Canada could be required to buy up to 3.3 billion SDRs before the 150 per cent maximum is reached. Amounts advanced under these arrangements are considered part of the official international reserves of Canada and directly impact the Government of Canada's consolidated financial statements.

Canada's participation in the expanded NAB became effective on March 11, 2011. The maximum lending by Canada to the IMF under the NAB is limited to SDR 3,874 million. As at March 31, 2016, the amount outstanding under the NAB was SDR 698.5 million. Canada continues to participate in the GAB, which was most recently renewed in December 2013. The maximum lending by Canada to the IMF under the GAB is limited to SDR 893 million. As at March 31, 2016, no lending had been provided by Canada to the IMF under the GAB.

Funding of IMF activities during 2015–16 included \$399 million of issued cross-currency swaps and \$1,225 million of swap maturities.

# Annex 1: Statement of Investment Policy for the Government of Canada (June 2011)

## 1. Purpose of Policy

The Statement of Investment Policy for the Government of Canada sets out the policy, approved by the Minister of Finance under the Currency Act, governing the acquisition, management and divestiture of assets for the Exchange Fund Account (EFA).

## 2. Purpose of EFA

The purpose of the Exchange Fund Account (EFA) is to aid in the control and protection of the external value of the Canadian dollar. Assets held in the EFA are managed to provide foreign-currency liquidity to the Government and to promote orderly conditions for the Canadian dollar in the foreign exchange markets, if required.

## 3. Governance

Part II of the *Currency Act* governs the management of the EFA. As amended in 2005, the Act requires the Minister of Finance to establish an investment policy for EFA assets. Responsibility for the implementation of approved policy and strategy is delegated to officials of the Department of Finance and the Bank of Canada.

The *Bank of Canada Act* provides statutory authority for the Bank of Canada to act as the Government's fiscal agent in the management of the Government of Canada's Exchange Fund Account.

The Funds Management Committee (FMC), which comprises senior management from the Department of Finance and the Bank of Canada, is responsible for the oversight of EFA investments. For policy development, the FMC is supported by a Risk Committee (RC) and an Asset-Liability Management Committee (ALMC). The RC is an advisory body to the FMC that reviews and provide opinions on the risk implications while the ALMC is responsible for strategic planning and performance evaluation. The Financial Risk Office (FRO) at the Bank of Canada provides support to the RC and the ALMC on risk issues. Officials from the Department of Finance and the Bank of Canada are responsible for the implementation of the strategic plan and day-to-day management of investment. Further information regarding oversight and governance is available within the *Funds Management Governance Framework* document (available at www.fin.gc.ca/treas/Goveev/TMGF\_-eng.asp).

## 4. No Inconsistent Business or Activity

This policy prohibits any business or activity that is inconsistent with the investment objectives set forth below or in a manner that is contrary to the *Currency Act*.

## 5. Investment Objective

There are three investment objectives:

- *Maintain a high standard of liquidity:* Hold reserves in assets that mature or can be sold on very short notice with minimal market impact and therefore loss of value.
- *Preserve capital value*: Minimize risk of loss of market value by holding a diversified portfolio of high quality assets (in terms of credit rating and type of issuer), managing liquid assets and liabilities on a matched basis<sup>7</sup> (in terms of currency and duration), and using appropriate practices to mitigate risks.
- *Optimize return:* Achieve the highest possible level of return, while respecting the liquidity and capital preservation objectives.

## 6. Investment Policy

## **6.1 Eligible Asset Classes**

The EFA may hold the following classes of assets: 1) fixed-income securities (including bonds, notes, bills and short-term discount notes/commercial paper) issued by sovereigns (including, central banks, and explicit agencies<sup>8</sup>) or fully-guaranteed by sovereigns, government-supported entities, sub-sovereign entities<sup>9</sup> and supranational institutions; 2) deposits with commercial banks, central banks and the Bank for International Settlements; 3) repurchase agreements; 4) commercial paper and certificates of deposit issued by private sector entities; 5) gold; and 6) International Monetary Fund (IMF) special drawing rights. Subject to section 6.9, bonds with embedded options (such as callable bonds) and holdings of securities issued by and deposits with Canadian-domiciled entities (or entities that derive a majority of their revenues from their Canadian operations) are not permitted. All other classes of assets not listed in this policy are prohibited.

## **6.2 Eligible Investment Ratings**

Eligibility for investment in the EFA is based on external credit ratings. To be eligible for investment, an entity <sup>10</sup> must have a senior unsecured debt credit rating in the top seven categories from at least two of the four main rating agencies <sup>11</sup>: Moody's Investors Service, Standard & Poor's (S&P), Fitch Ratings and Dominion Bond Rating Service (DBRS). When credit ratings for an entity differ, the rating of the second highest rating agency will be used to assess eligibility <sup>12</sup>, consistent with the Basel II approach.

The only allowable unrated investments are the following: a) securities issued by and deposits with central banks and the Bank for International Settlements and b) investments in special drawing rights created by the IMF.

<sup>&</sup>lt;sup>7</sup> Liabilities, which fund EFA assets, are managed outside the EFA.

<sup>&</sup>lt;sup>8</sup> An agency is deemed to be explicit, if and only if, the government support is guaranteed by law.

<sup>9</sup> Sub-sovereigns are defined as levels of government within a sovereign territory, and hierarchically below the sovereign. For example, this could include, but not limited to, states, provinces or municipalities within a sovereign.

 $<sup>^{10}</sup>$  Under exceptional circumstances, the credit rating of an entity's issuance may be used, at the discretion of the ALMC.

<sup>11</sup> EFA ratings of sovereigns are based on the lower of domestic and foreign currency ratings.

Stand-alone credit ratings for commercial banks by Moody's (Bank Financial Strength Rating (BFSR)) and by DBRS (Intrinsic Assessments) will be used in conjunction with official credit ratings from S&P and Fitch to provide the relative credit quality of entities. The use of stand-alone ratings is to remove the assumption of implicit government support embedded in the official ratings of Moody's and DBRS. However, in cases where two or more ratings are the same, for example, Moody's is AA, S&P is AA, DBRS is AA- and Fitch Ratings is AA-, the EFA rating would be AA (not AA-).

**Eligible Ratings** 

Ratings agency	Minimum rating
Moody's Investors Service	A3 or better
Standard & Poor's	A- or better
Fitch Ratings	A- or better
Dominion Bond Rating Service	A (low) or better

Note: Rating references in this document use the ratings scale of S&P for illustrative purpose.

## **6.3 Credit Exposure Limits**

Exposure limits are based on credit quality for classes of assets, aggregate and individual counterparties.

#### 6.3.1 Fixed-Income Securities

Exposure to fixed-income securities issued by sovereigns (including central banks and explicit agencies), government-supported entities, sub-sovereigns, and supranationals are shown in the tables below.

Limits on sovereigns in domestic and foreign currency (including central banks, and explicit agencies)—Aggregate limits

Aggregate limits (% of reserves target level)				
"AAA"	Unlimited			
"AA-" to "AA+"	25			
"A-" to "A+"	2 (to be included in the above 25% limit)			

Limits on sovereigns in domestic and foreign currency (including central banks, and explicit agencies)—Individual counterparty limits

Issuer type	Individual counterparty limits (% of reserves target level)				
"AAA"	20 (Excluded from above would				
	be direct domestic currency obligations of US, France, Germany and Netherlands)				
"AA-" to "AA+"	10				
"A+"	1.67				
"A"	0.83				
"A-"	0.33				

Limits on Government Supported Entities (senior unsecured obligations) and sub-sovereigns—Aggregate limits

Issuer type	Aggregate limits (% of reserves target level)
"AA-" to "AAA"	25 (10% sub-sovereign limit)
"A-" to "A+"	2 (to be included in the above 25% limit)

Limits on Government Supported Entities (senior unsecured obligations) and sub-sovereigns—Individual counterparty limits

Issuer type	Individual counterparty limits (% of reserves target level)				
"AAA"	3				
"AA-" to "AA+"	1.5				
"A+"	0.3				
"A"	0.2				
"A-"	0.1				

Limits on supranationals—Aggregate limits

Issuer type	Aggregate limits (% of reserves target level)				
"AA-" to "AAA"	25				
"A-" to "A+"	2 (to be included in the above 25% limit)				
Bank for International Settlements	10				

Limits on supranationals—Individual counterparty limits

Issuer type	Individual counterparty limits (% of reserves target level)				
"AAA"	10.0				
"AA-" to "AA+"	5.0				
"A+"	1.0				
"A"	0.5				
"A-"	0.2				
Bank for International Settlements	-				

## 6.3.2 Deposits and Other Short-Term Securities

Individual actual exposure limits to private sector entities in the form of forwards, deposits, commercial paper and certificates of deposit, together with swaps used for funding purposes, are determined by credit rating, as shown in the following table. These limits are cumulative across all lines of EFA business and represent the mark-to-market value for swaps and forwards and the par-value exposure for deposits, commercial paper and certificates of deposit. Total exposure to private sector entities may not exceed 25 per cent of the reserves target level, including a maximum of 2 per cent of the reserves target level for private sector entities rated A+ to A-.

Exposure limits by credit rating of private sector counterparties/issuers<sup>13</sup>—Total actual exposure

Issuer type Total actual exposure (% of reserves target level)			
"AA-" to "AAA"	25		
"A-" to "A+"	2 (to be included in the 25% aggregate limit)		

<sup>13</sup> Exposure limits on deposits, commercial paper, and/or certificate of deposit will be determined at discretion of ALMC.

Exposure limits by credit rating of private sector counterparties/issuers<sup>14</sup>—Individual actual exposure

Issuer type	Individual actual exposure (% of reserves target level)			
"AAA"	1.00			
"AA+" "AA-" "A+"	0.67			
"AA"	0.50			
"AA-"	0.33			
"A+"	0.17			
" A"	0.08			
" A-"	0.03			

## **6.4 Structure of EFA Holdings**

Investments will be held in either a Liquidity Tier or an Investment Tier. Only highly liquid US-dollar-denominated securities are eligible for investment in the Liquidity Tier: 1) sovereign (including explicit agencies and central banks) and "AAA" rated supranational securities; 2) US government-supported entity securities; 3) "AAA" rated US and European government-supported entity discount notes and commercial paper; 4) callable Bank for International Settlement deposits and medium-term investments; 5) overnight commercial bank deposits; 6) commercial paper and certificates of deposit issued by private sector entities; and 7) overnight repurchase agreements. Investment in EFA eligible securities, excluding securities held under the Liquidity Tier, is classified as investment in the Investment Tier.

## 6.5 Eligible Currencies

The Exchange Fund Account may hold US dollars, euros, and Japanese yen and IMF special drawing rights. The minimum floor for US-dollar-denominated assets is US\$12 billion on a market-value basis.

#### **6.6 Terms of Investments**

The maximum term to maturity of EFA assets is based on type of instrument, credit rating and currency of issuance, as shown in the following table.

Maximum Term to Maturity of EFA assets

Instrument	Maximum term to maturity
Marketable securities from issuers rated "AA-" or better	10.5 years
Investments from issuers rated from "A-" to "A+"	5 years
Commercial paper and certificates of deposit	1 year
Commercial bank deposits, repurchase agreements and all non-marketable instruments, such as deposits.	3 months

#### **6.7 Permitted Activities**

EFA officials may acquire or borrow assets to be held in the EFA and sell or lend those assets. Short sales are prohibited.

<sup>&</sup>lt;sup>14</sup> Exposure limits on deposits, commercial paper, and/or certificate of deposit will be determined at discretion of ALMC.

#### **6.8 Use of Derivatives**

EFA officials may use derivatives to mitigate risk and reduce costs. Derivatives shall not be used to establish speculative or leveraged positions.

## 6.9 Securities Lending and Repurchase Agreements

EFA officials may lend or borrow securities held in the EFA through a securities-lending program or repurchase agreements to enhance portfolio returns, provided it does not compromise liquidity or engender material exposure to loss. Officials are responsible for appointing and supervising agents, determining eligible collateral and setting collateral margins. Eligible collateral may include, but is not limited to, bonds with embedded options. Officials have the authority to either manage themselves or delegate to an agent the authority to select borrowers, negotiate terms to maturity and rates, and invest cash or securities collateral.

Individual exposure limits to private sector entities, in the form of repurchase ("repo") transactions, are determined by credit rating, as shown in the following table.

Exposure limits by credit rating of private sector entities for repurchase transactions

	EFA Credit Rating (% of the reserves target level)				
Individual Counterparty Limits	"AAA"	"AA-" to "AA+"	"A-" to "A+"		
Versus US Treasury and US Agency collateral combined	2.50	1.67	1.00		

## **6.10 Exceptions**

In exceptional circumstances such as a ratings downgrade or an event of default, the EFA may hold assets (acquired either through direct investment or by taking possession of collateral following an event of default) that do not otherwise meet the criteria for eligible asset classes and/or breach the credit exposure limits for up to a three-month period, or such longer period as the Minister of Finance may approve.

## 7. Performance Assessment and Risk Management

Officials are responsible for measuring, monitoring and reporting on the performance and risk exposures of the EFA and tracking these positions against appropriate indices. Performance and risk exposures will be reported on a timely and regular basis to the ALMC, the RC, the FMC, the Minister of Finance and Parliament. Measures should be consistent with leading practices in the private sector and provide information on the returns on EFA assets, the cost of associated liabilities and financial risks. Detailed information on the Government's risk management policies is provided in the *Government of Canada Treasury Risk Management Framework*.

## 8. Review

The *Statement of Investment Policy* will be reviewed annually and updated as required. Investment programs and practices should be subject to periodic external review to ensure that they contribute effectively to the achievement of EFA objectives.

# Annex 1B: Statement of Investment Policy for the Government of Canada (October 2016)

## 1. Purpose of Policy

The Statement of Investment Policy for the Government of Canada (SIP) sets out the policy governing the acquisition, management, and divestiture of assets held in the Exchange Fund Account (EFA). The Minister of Finance approves the SIP under the Currency Act.

## 2. Purpose of Exchange Fund Account

The EFA is the principal repository of Canada's official international reserves. As stated in the *Currency Act*, the purpose of the EFA is to aid in the control and protection of the external value of the Canadian dollar. Assets held in the EFA shall be managed to provide foreign currency liquidity to the Government and to promote orderly conditions for the Canadian dollar in the foreign exchange markets, if required. The liquid foreign currency assets held in the EFA also form a key component of the Government of Canada's prudential liquidity, which is available to meet financial requirements in situations where normal access to funding markets may be disrupted or delayed.

The EFA also facilitates Government of Canada transactions with the International Monetary Fund (IMF) under the IMF Articles of Agreement. These transactions include the provision of freely usable currencies to the IMF, through the purchase and sale of special drawing rights, as well as various transactions relating to Canada's reserve position in the IMF (which does not form part of the EFA).

## 3. Governance

Part II of the *Currency Act* governs the management of the EFA and requires the Minister of Finance to establish an investment policy for EFA assets. The Minister of Finance may delegate the responsibility for the implementation of the approved policy to officials of the Department of Finance Canada and the Bank of Canada (EFA officials).

The *Bank of Canada Act* provides statutory authority for the Bank of Canada to act as the Government's fiscal agent in the management of the Government of Canada's EFA.

Within the Minister of Finance's delegated authorities, the Funds Management Committee (FMC), composed of senior officials from the Department of Finance Canada and the Bank of Canada, prepares recommendations for the Minister of Finance and oversees the management of the EFA.

The FMC is supported by a Foreign Reserves Committee (FRC) and a Risk Committee (RC). The FRC oversees the funding of and investment of the foreign reserves and provides strategic and policy advice to the FMC related to the management of foreign reserves. The RC is an advisory body to the FMC that reviews and reports on risk exposures, highlights strategic risk issues the FMC should be aware of and identifies measures to mitigate these risks, and advises on broad risk considerations relevant to funds management activities.

Further information regarding oversight and governance is available within the *Funds Management Governance Framework*.

## 4. Alignment of EFA Activities With Government of Canada Policy Priorities

## 4.1 Guiding Principles

The *SIP* is based on principles that a person of ordinary prudence would apply in dealing with the property of others. The EFA shall be managed according to the fundamental principles of fiscal prudence, transparency and accountability, risk management, effectiveness and efficiency, and financial stability in order to protect the interests of Canadians.

#### 4.2 Fiscal Prudence

The EFA is an account that forms part of the Government of Canada's balance sheet. Recognizing the importance of fiscal prudence and sustainability in public finances, the EFA shall be managed in a cost effective manner under an asset-liability matching framework, whereby the market value of assets and liabilities are matched to the extent possible by currency, term and/or duration, to mitigate the potentially negative impacts of movements in interest rates and foreign exchange rates on the Government's fiscal position. Credit risks associated with assets and liabilities are not offset under this framework and are therefore addressed by other means (Annex 1).

## 4.3 Promoting Financial Stability

Canada's international commitments and global regulatory initiatives to support financial stability will be taken into account in conducting EFA activity.

## 5. Investment Objectives

Consistent with the purpose of the EFA as defined in section 2, maintaining liquidity and preserving capital are the primary objectives for managing the EFA. Accordingly, the EFA shall hold assets that can be sold or otherwise deployed on very short notice with minimal market impact and loss of value in order to maintain a high standard of liquidity. The EFA shall hold a diversified portfolio of fixed-income assets of high credit quality, and follow leading risk management practices in order to meet the objective of preserving capital value. The EFA shall be managed to maximize return on investments once the objectives of liquidity and capital preservation are clearly met.

## 6. Investment Process

The EFA shall be governed by a framework that includes a formalized, top-down investment management style that provides clarity on roles, decision-making authority, and accountability to facilitate the achievement of the EFA's objectives. The Minister of Finance, or his/her delegate, shall establish the risk tolerances of the portfolio through approvals of the Strategic Portfolio Parameters. The FMC shall establish the risk preferences of the portfolio through approval of the Strategic Asset Allocation. The FRC shall establish a benchmark that details asset allocations to individual counterparties deemed eligible for investment.

## **6.1 Strategic Portfolio Parameters**

Strategic Portfolio Parameters for the EFA shall include, but are not limited to, the level of reserves, criteria for currency and asset class eligibility based on liquidity and capital preservation considerations, and portfolio risk limits. The Strategic Portfolio Parameters are included as Annex 1B1. The Minister of Finance may except the liquid assets held in the EFA from the application of some or all the Strategic Portfolio Parameters where any of these assets are: (i) sold to provide foreign currency liquidity to the Government; (ii) sold to promote orderly conditions for the Canadian dollar in the foreign exchange markets; or (iii) sold in other similar circumstances.

## **6.2 Strategic Asset Allocation**

The Strategic Asset Allocation shall direct the asset allocation of the portfolio in a manner that is consistent with meeting the EFA's objectives. The Strategic Asset Allocation shall provide a framework to inform the investment decision-making process and to measure progress toward achieving the EFA's objectives of maintaining liquidity and preserving capital.

#### 6.3 Investment Benchmark

The Investment Benchmark shall be established by the FRC. It will specify investment exposures to eligible counterparties while adhering to the Strategic Portfolio Parameters (6.1) and in a manner consistent with achieving the Strategic Asset Allocation (6.2).

## 7. Securities Lending and Use of Derivatives

In order to meet the objectives of the EFA, officials may acquire or borrow assets, sell or lend those assets, and undertake related activities for the purposes of executing those transactions. Short sales are prohibited.

EFA officials shall only use derivatives and undertake related activities in a manner that is consistent with the objectives of the EFA.

## 8. Performance Assessment and Risk Management Reporting

EFA officials shall be responsible for measuring and monitoring the performance and risk exposures of the EFA and tracking these positions against the Strategic Asset Allocation and other appropriate indices, and providing regular reports to senior officials and the Minister of Finance.

Performance and risk measures shall be consistent with leading practices and provide timely and accurate information on the returns on EFA assets, the cost of associated liabilities and the relevant financial risks. An explanation of these measures can be found in the *Government of Canada Treasury Risk Management Framework*.

## 8.1 Public Reporting

The *Currency Act* requires annual reporting to Parliament on whether the objectives of the EFA have been met. This is accomplished through the annual reporting of the EFA's performance in the *Report on the Management of Canada's Official International Reserves*. In addition, the Minister of Finance provides monthly updates on the performance of the EFA, in accordance with the IMF's General Data Dissemination System standards.

The *Financial Administration Act* requires annual reporting to Parliament on the funding associated with the investments.

## 8.2 Commercial Confidentiality

Notwithstanding the requirement to provide timely and comprehensive information on the EFA to Canadians, the names of individual counterparties or the securities held in the EFA shall not be disclosed for reasons of financial stability and commercial confidentiality.

## 9. Review

The *SIP* shall be reviewed regularly. Until the Minister of Finance otherwise amends and approves the *SIP* and the governance and risk management frameworks, they shall remain in effect.

# Annex 1B1: Strategic Portfolio Parameters (October 2016)

The following Strategic Portfolio Parameters have been established to ensure that the liquid assets held in the EFA meet the primary objectives of maintaining liquidity and preserving capital. The parameters define eligible investments for the EFA and specify limits to protect the liquidity and capital value of EFA investments.

## **Liquidity Risk Tolerances**

Liquidity risk tolerances have been established to ensure that a suitable level of EFA investments that can be readily sold during volatile market conditions is available to the Government at all times in the event that regular channels of financing are temporarily unavailable.

## 1. Level of Liquid Foreign Reserves

Liquid foreign reserves are held to safeguard Canada's ability to meet payment obligations in situations where normal access to funding markets may be disrupted or delayed and to support investor confidence in securities issued by the Government of Canada.

- The level for the total market value of all foreign currency-denominated investments must be maintained at or above 3 per cent of Canada's annual nominal gross domestic product.
- The composition of liquid assets shall adhere to the requirements detailed in the Government's Prudential Liquidity Plan and foreign exchange intervention framework.

## 2. US-Dollar Holdings

Currency interventions to support orderly conditions for the Canadian dollar in the foreign exchange markets are likely to involve sales of US dollars to purchase Canadian dollars, highlighting the importance of owning the most liquid US-dollar-denominated assets. Thus, at least 50 per cent of liquid foreign reserves, measured on a market-value basis, must be denominated in US dollars.

## 3. Eligible Assets

Liquid foreign reserves shall be readily available to be sold or otherwise deployed with limited price impact to meet the Government's foreign currency requirements.

• Eligible assets include fixed-income securities issued by sovereigns (including central banks and government-related entities), sovereign-supported issuers, sub-sovereign entities, <sup>15</sup> and supranational institutions.

<sup>&</sup>lt;sup>15</sup> Sub-sovereigns are defined as levels of government within a sovereign territory, and hierarchically below the sovereign. For example, this could include, but is not limited to, states, provinces or municipalities within a sovereign.

- Eligible assets also include deposits with commercial banks, central banks and the Bank for International Settlements, repurchase agreements, commercial paper and certificates of deposit issued by private sector entities, gold and International Monetary Fund (IMF) special drawing rights. Bonds with embedded options and holdings of securities issued by and deposits with Canadian-domiciled entities (or entities that derive a majority of their revenues from their Canadian operations) are not permitted.
- All other classes of assets not listed in this annex are prohibited.

#### 4. Exposure to Issuers

Four categories of asset issuers have been defined for the EFA:

- i. **Reference Issuers:** These are government issuers of securities that are deemed by Canada to have reserve currency status and are actively traded, including cash.
  - The minimum exposure to this category is 45 per cent of liquid foreign reserves on a market-value basis.
- ii. **Other Liquid Sovereign Issuers:** These are government issuers of securities that are deemed by Canada to trade actively.
- iii. **Other Highly Rated Issuers:** These issuers are deemed by Canada to be of the highest credit quality.
- iv. **Other Issuers:** These issuers are high credit quality sovereigns and other entities that meet Canada's liquidity and capital preservation requirements.

## **Capital Preservation Risk Tolerances**

Capital preservation risk tolerances have been established to ensure that the market value of EFA assets will be relatively well preserved during times of market stress.

## 1. Interest Rate Exposure

Money market assets held in the EFA have an original term to maturity of one year or less. The value of these short-term assets is less sensitive than the value of longer-term assets to movements in interest rates. The ratio of money market assets to longer-term assets is, therefore, an important driver of the capital preservation profile of the liquid foreign reserves.

Money market assets in the EFA shall comprise at least 15 per cent of liquid foreign reserves on a market-value basis.

## 2. Maximum Term to Maturity

The term to maturity of individual assets is an important consideration since the value of longer-term fixed-income securities is generally more sensitive than the value of shorter-term fixed-income securities to movements in interest rates. In addition, in many instances longer-term securities are less liquid than shorter-term securities of the same issuer denominated in the same currency. Limiting the maximum term to maturity of assets aids in preserving the liquidity and capital value of assets that can be sold or otherwise deployed.

• The maximum term to maturity of individual assets held in the EFA is 10.5 years.

## 3. Other Eligible Currencies

To meet liquidity requirements and mitigate currency concentration risk, assets held as part of the liquid foreign reserves can be denominated in currencies other than US dollars, whose reference issuers satisfy the established liquidity and capital preservation constraints.

• Other eligible currencies include euros, British pounds and Japanese yen. In order to meet the Government's international commitments, assets can also be denominated in IMF special drawing rights.

## 4. Eligible Counterparties and Issuers

In order to mitigate the negative impact of potential credit events on the market value of liquid foreign reserves, eligible investments, deposits and repurchase counterparties must be of acceptable credit quality, a determination that is informed by external credit ratings and internal credit analysis. <sup>16</sup>

- Eligible issuers and counterparties must be deemed by Canada to have a credit rating of "A-" or higher.
- Reference issuers of securities that are deemed to have reserve currency status and are actively traded are
  exempt from the minimum credit rating requirement, since they are deemed to be the primary issuer of
  eligible securities in their local currency.
- The only allowable unrated investments are the following:
  - a. securities issued by, and deposits with, central banks where the sovereign's credit quality is acceptable;
  - b. special drawing rights created by the International Monetary Fund.

#### 5. Credit and Market Risk

The market value of liquid foreign reserve assets can be preserved by managing credit and market risks. An asset-liability matching framework, whereby the market value of assets and liabilities are matched by currency, term, and/or duration, is used to manage adverse impacts of changes in interest and foreign exchange rates on the Government's fiscal balance. Metrics such as Value at Risk, which measure the maximum potential loss the portfolio could suffer over a given period at a given confidence level, shall be monitored by senior officials to ensure the potential negative impacts of credit and market risk are managed within acceptable levels.

<sup>16</sup> Internal credit ratings and credit opinions are determined jointly by the Department of Finance Canada and Bank of Canada, based on methodologies consistent with international best practice, and use market-accepted rating scales.

# Annex 2: Overview of the Exchange Fund Account Management Framework

## **Objectives**

The objectives of foreign reserves management are to provide foreign-currency liquidity to the Government, support intervention to aid in the control and protection of the external value of the Canadian dollar and promote orderly conditions for the dollar in the foreign exchange markets, if required.

The liquid foreign currency assets held in the Exchange Fund Account (EFA) also form a key component of the Government of Canada's prudential liquidity, which is available to meet financial requirements in situations where normal access to funding markets may be disrupted or delayed.

The EFA, which represents the largest component of the foreign reserves, is an actively managed portfolio of liquid foreign currency securities and deposits. The key strategic objectives of the EFA are to maintain a high standard of liquidity, preserve capital value and optimize return subject to the liquidity and capital preservation objectives.

## **Principles**

In pursuit of these objectives, the Government of Canada manages its foreign exchange reserves according to the following principles:

- Effectiveness and efficiency: Policy development and operations shall take into account, to the extent possible, leading practices of other comparable sovereigns. Regular evaluations shall be conducted to ensure the effectiveness and efficiency of the governance framework and borrowing and investing programs.
- Transparency and accountability: Information on investment and funding plans, activities and outcomes shall be made publicly available in a timely manner. Borrowing costs, investment performance and material exposures to financial risk shall be measured, monitored, controlled and regularly reported, as applicable.
- **Risk management:** Risk monitoring and oversight shall be independent of financial asset and liability management operations.
- **Fiscal prudence:** The EFA is an account that forms part of the Government of Canada's balance sheet. Recognizing the importance of fiscal prudence and sustainability in public finances, the EFA shall be funded in a cost effective manner through a funding framework that mitigates the potentially negative impacts of movements in interest rates and foreign exchange rates on the Government's fiscal position by matching the funding with the currency, term and/or duration of the reserve assets. Credit risks associated with assets and liabilities are not offset under this framework and shall be addressed by other means.
- **Financial stability:** The EFA is an account that supports Canada's preparedness for financial contingencies. As a result, the management of the EFA shall take into account Canada's international commitments and global regulatory initiatives to support financial stability.

For a complete description of the governance framework for managing the Government of Canada's financial assets and liabilities, see http://www.fin.gc.ca/treas/Goveev/tmrf16-eng.asp.

# Annex 3: Changes in the Level of the Official International Reserves

Unless otherwise noted, in this report the official international reserves are reported in US dollars on a market-value settled basis.

The level of the official international reserves changes over time due to a variety of factors. As shown in Table A3.1, over the 12-month reporting period the level of reserves increased by \$4,511 million. The increase was due to reserves management operations (\$4,806 million), return on investments (\$952 million), revaluation effects (\$816 million) and gains on the sale of gold (\$2 million), which was partially offset by foreign currency debt charges (-\$1,115 million) and net government operations (-\$949 million).

Table A3.1

Sources of Change in Canada's Official International Reserves

Between March 31, 2015 and March 31, 2016

market value in millions of US dollars

	Change		
Official intervention	-		
Net government operations	-949		
Reserves management operations	4,806		
Gains and losses on gold sales	2		
Return on investments	952		
Foreign currency debt charges	-1,115		
Revaluation effects	816		
Other			
Total change	4,511		

## Official Intervention

Official intervention involves buying or selling foreign currencies in exchange for Canadian dollars, and would therefore affect the level of the official international reserves. Intervention in the foreign exchange markets for the Canadian dollar might be considered if there were signs of a serious near-term market breakdown (e.g., extreme price volatility with buyers and/or sellers increasingly unwilling to transact), indicating a severe lack of liquidity in the Canadian-dollar market. It might also be considered if extreme currency movements seriously threatened the conditions that support sustainable long-term growth of the Canadian economy. The goal would be to help stabilize the currency and to signal a commitment to back up the intervention with further policy actions, as necessary.

Since September 1998, the Bank of Canada has not undertaken any foreign exchange market intervention in the form of either purchases or sales of US dollars versus the Canadian dollar. <sup>17</sup>

<sup>17</sup> Official intervention is separate from net purchases of foreign currency for government foreign exchange requirements and for additions to reserves.

Table A3.2

Official Intervention
millions of US dollars

	2008-09	2009–10	2010–11 <sup>1</sup>	2011–12	2012–13	2013–14	2014–15	2015–16
Purchases	_	_	-124	_	_	_	_	_
Sales	_	_	_	-	-	_	_	-
Net	_	_	-124	_	_	_	_	_

In March 2011, the Bank of Canada joined central banks in the United States, Europe and Japan in a concerted intervention to stabilize the Japanese currency by selling yen in an amount equivalent to US\$124 million (C\$120 million).

## **Net Government Operations**

The net purchase of foreign currencies for government foreign exchange requirements and for additions to reserves totalled -\$949 million.

## **Reserves Management Operations**

The purchase and sale of foreign currency assets along with the issuance and maturity of debt used to fund those assets totalled \$4.8 billion. Over the reporting period, funds raised through the issuance of bonds, foreign exchange (FX) swaps, cross-currency swaps, medium-term notes and Canada bills, totalling \$22.9 billion, exceeded debt maturities totalling \$18.1 billion (including Canada bill maturities of \$1.3 billion, FX swap maturities of \$1.3 billion and cross-currency swap maturities of \$3.7 billion).

## Gains and Losses on Gold Sales

This factor reflects the gains or losses on sales of gold which are the difference between the proceeds of the sales and the market value of gold sold. During the period, the gold coins with little numismatic value were melted, and the resulting bullion was sold at market prices. The 36 museum piece gold coins, those historically important coins with high numismatic value, were sold to the Royal Canadian Mint and the Bank of Canada Museum. The purpose of the sale was to ensure that the coins are appropriately safeguarded in keeping with their historical value, and remain accessible for current and future generations of Canadians to view.

## **Return on Investments**

Return on investments comprises interest earned on investments (\$1.093 billion) and increase or a decrease in the market value of securities resulting from changes in interest rates (\$141 million). The overall effect on the official international reserves was a net increase of \$952 million.

## **Revaluation Effects**

Revaluation effects resulting from movements in exchange rates and gold market rates reflect changes in the market value of the official international reserves. Revaluation effects increased the official international reserves by \$816 million, primarily due to the appreciation of the euro versus the US dollar during the reporting period.

## **International Monetary Fund Reserve Position**

Each member country of the International Monetary Fund (IMF) is assigned a quota that represents the maximum amount of resources that it is obliged to provide to the IMF, upon request. As well, the IMF typically has on deposit with each government holdings in the form of non-interest-bearing notes and non-interest-bearing accounts. Canada's reserve position at the IMF represents the difference between Canada's quota and the IMF's holdings of Canadian dollars, which is equivalent to the cumulative amount of all the money that Canada has advanced to the IMF over the years.

Canada's reserve position at the IMF is an asset that is included as a component of the official international reserves but is not held in the EFA. As such, changes in Canada's reserve position that may result from advances, repayments or revaluations directly impact the Government of Canada's consolidated financial statements. During 2015–16, the reserve position decreased over the previous fiscal year.

More detailed information on monthly levels and changes in Canada's official international reserves is provided in Tables A3.3 and A3.4.

Table A3.3

Canada's Official International Reserves

Month-to-Month Changes

market value in millions of US dollars

				Special drawing	Reserve position		Total monthly
Month-end	Securities	Deposits	Gold <sup>1</sup>	rights <sup>2</sup>	in the IMF <sup>3</sup>	Total	change
2015							
March	66,510	549	114	7,751	2,757	77,681	2,913
2015–16							
April	65,926	1,110	113	7,902	2,792	77,843	162
May	63,145	3,461	114	7,813	2,736	77,269	-574
June	65,061	569	112	7,902	2,751	76,395	-874
July	65,569	742	105	7,837	2,728	76,981	586
August	66,021	1,062	109	7,916	2,745	77,853	872
September	62,318	5,325	107	7,916	2,770	78,436	583
October	63,803	4,570	110	7,942	2,728	79,153	717
November	64,547	3,082	102	7,801	2,680	78,212	-941
December	62,036	7,041	58	7,899	2,719	79,753	1,541
January	64,829	5,751	24	7,869	2,709	81,182	1,429
February	65,842	5,247	0	7,874	2,327	81,290	108
March	67,257	4,545	0	8,032	2,358	82,192	902
Total	n/a	n/a	n/a	n/a	n/a	n/a	4,511

Note: Numbers are from the Official International Reserves press release.

<sup>&</sup>lt;sup>1</sup> Gold valuation is based on the London p.m. fix on the last business day of the reporting month.

<sup>2</sup> SDR-denominated assets are valued in US dollars at the SDR rate established by the IMF. A rise in the SDR in terms of the US dollar generates an increase in the US-dollar value of Canada's holdings of SDR-denominated assets.

<sup>3</sup> The reserve position in the IMF represents the amount of foreign exchange that Canada is entitled to draw from the IMF on demand for balance of payments purposes. It equals the Canadian quota, less IMF holdings of Canadian dollars, plus loans to the IMF.

Table A3.4

Canada's Official International Reserves

Details of Month-to-Month Changes

market value in millions of US dollars

Month-end	Reserves management operations <sup>1</sup>	Gains and losses on gold sales	Return on investments <sup>2</sup>	Foreign currency debt charges	Revaluation effects	Net government operations <sup>3</sup>	Official intervention tra	Other insactions4	Total monthly change
2015									
March	3,698	0	231	-73	-924	-19	0	0	2,913
2015–16									
April	-613	0	-96	-69	940	0	0	0	162
May	-6	0	2	-78	-492	0	0	0	-574
June	-945	0	-191	-143	405	0	0	0	-874
July	815	0	201	-89	-341	0	0	0	586
August	653	0	-13	-109	341	0	0	0	872
September	462	0	327	-95	-111	0	0	0	583
October	1,073	0	-52	-75	-229	0	0	0	717
November	53	0	-14	-75	-905	0	0	0	-941
December	1,405	0	-187	-61	429	-44	0	-1	1,541
January	1,190	1	625	-118	-243	-26	0	0	1,429
February	761	1	293	-100	-67	-780	0	0	108
March	-42	0	57	-103	1,089	-99	0	0	902
Total	4,806	2	952	-1,115	816	-949	0	-1	4,511

Note: Numbers are from the Official International Reserves press release.

Net change in securities and deposits resulting from foreign currency funding activities of the Government. (Issuance of foreign currency liabilities used to acquire assets increases reserves, while maturities decrease reserves).

<sup>2</sup> Return on investments comprises interest earned on investments and changes in the market value of securities resulting from changes in interest rates.

<sup>3</sup> Net government operations are the net purchases of foreign currency for government foreign exchange requirements and for additions to reserves.

<sup>4</sup> Related to the securities assumed by the Government of Canada following the privatization of Petro-Canada in July 1991 and the subsequent dissolution of Petro-Canada Limited in 2001.

# Annex 4: Detailed Portfolio Performance

Unless otherwise noted, in this report the official international reserves are reported in US dollars on a market-value settled basis.

This annex provides detailed technical information on indicators used to measure the portfolio's performance in four areas: 1) revenues; 2) net return on assets; 3) cost of advances to the EFA; and 4) market and credit risk measures.

# 1) Revenues

Revenues include income from investments and foreign exchange gains. Data are reported in Canadian dollars, as EFA revenues are reported in Canadian dollars in the attached financial statements. In 2015–16, income totalled C\$2.2 billion compared to C\$840 million in 2014–15. The main categories of income are summarized in Table A4.1.

Table A4.1 **Revenues of the Exchange Fund Account**millions of Canadian dollars

	April 1, 2015 to March 31, 2016	April 1, 2014 to March 31, 2015
Net revenue from investments		
Marketable securities	2,026	1,386
Cash and cash equivalents	7	-
Special drawing rights	5	6
Gains on sale of gold	140	-
Total net revenue from investments	2,178	1,392
Other income		
Net foreign exchange gain/loss	9	(552)
Net revenue	2,187	840

# 2) Net Return on Assets

The net return on assets of the EFA is reported using two separate measures. The first is called "carry" and represents the net revenue generated by funding and holding reserve assets from a cash only perspective (i.e., interest paid and received and realized gains or losses). The second measure is called "total return." It represents the net return generated by the EFA by including the cash flows used in the carry measure, as well as the changes in the market values of the assets and liabilities over the reporting period. By including the market or fair values of the EFA's assets and corresponding liabilities, the total return measure includes unrealized gains or losses, which is the difference between what an asset (or liability) is worth compared to what it cost.

#### **Carry**

Carry represents the interest received on the EFA's assets minus the interest paid on the liabilities that fund the assets. The carry measure is also reported including any realized gains or losses stemming from asset sales, which is the difference between the amount for which an asset is sold and the amount it originally cost.

Table A4.2 provides an estimate of the carry for the EFA and its constituent currency portfolios. The carry for the 2015–16 fiscal year is estimated at -28.9 basis points, a 5.7-basis-point difference from 2014–15. This result indicates that the coupon rates on newly purchased assets are lower than the coupons of the replaced assets.

Taking into account gains or losses on the sale of assets during 2015–16, the EFA incurred net gains of \$396 million, or 61 basis points. These sales resulted in a realized gain of \$602 million and a net loss in interest income of \$206 million. The EFA realized \$226 million in gains on US asset sales and \$376 million in gains on euro asset sales.

Table A4.2

Carry of the Official International Reserves<sup>1</sup>

		April 1, 2015 to March 31, 2016				April 1, 2014 to March 31, 2015	
	Interest earned on assets (millions of US dollars)	Interest paid on liabilities (millions of US dollars)	Net interest earned on assets (millions of US dollars)	Carry (basis points)	Carry (including net realized gains) (basis points)	Carry (basis points)	Carry (including net realized gains) (basis points)
Euro portfolio	236.9	363.5	-126.6	-18.3	37.9	-18.9	-3.4
GBP portfolio	62.8	48.8	14	2.2	2.2	0.4	0.4
Yen portfolio	1.4	-2.8	4.2	0.6	0.6	0.6	0.6
US\$ portfolio	625.3	723.0	-97.7	-13.4	20.4	-5.4	11.3
Total carry <sup>2</sup>	926.4	1,132.4	-206.1	-28.9	61.1	-23.2	8.9

Note: Numbers may not add due to rounding

#### **Total Return on a Market-Value Basis**

The total return measure is used in several different ways. It is used to compare the performance of the EFA's assets to its liabilities in order to depict the net return of the portfolio on a market-value basis. It is also compared to an external benchmark index in order to provide an independent measure of the performance of the EFA and to enhance the understanding of performance in relation to broader market developments. Lastly, the EFA's total return is decomposed into the key sources of return. This is done by decomposing the total return measures for both the assets and liabilities through a technique called "performance attribution." Performance attribution allows management to discern what aspects of total return resulted from controllable influences as compared to those sources that are market-driven. As well, the attribution analysis provides an indication as to how well objectives of the asset-liability management framework of the EFA are being met.

<sup>&</sup>lt;sup>1</sup> The carry figures show the contribution of each currency portfolio to the overall carry.

<sup>&</sup>lt;sup>2</sup> Excludes gold holdings, and IMF reserve position and associated liabilities.

Table A4.3 provides an estimate of the total return on a market-value basis for the EFA as a whole and its key portfolios compared to the corresponding liabilities. The total net return was 99 basis points, or a gain of \$676 million, in the fiscal year ending March 31, 2016, compared to -21 basis points, or a loss of \$156 million, in the year ending March 31, 2015. This reflects net returns in US-dollar terms of 89 basis points for the US-dollar portfolio, 98 basis points for the euro portfolio, 234 basis points for the GBP portfolio and 81 basis points for the yen portfolio. The net total return was due primarily to a decrease in the market value of outstanding liabilities caused by changes in funding spreads. These numbers include interest flows as well as all gains or losses earned over the period, regardless of whether they were realized or not.

Table A4.3

Total Return of the EFA Compared to Liability Benchmarks

						April 1, 2014 to March 31, 2015
	US\$ portfolio	Euro portfolio	GBP portfolio	Yen portfolio	Total EFA	Total EFA
EFA asset portfolio						
Return in original currency	1.26%	1.20%	4.69%	0.82%	n/a	n/a
Return in US\$ (A)	1.26%	7.12%	1.35%	7.45%	2.55%	-3.72%
Liability benchmarks						
Return in original currency	0.36%	0.28%	2.27%	0.06%	n/a	n/a
Return in US\$ (B)	0.36%	6.15%	-0.99%	6.63%	1.55%	-3.51%
Return vs. liability benchmark in basis points (A – B) in US\$	89	98	234	81	99	-21

Table A4.4 compares the total return of the EFA to a set of Merrill Lynch government securities indices. <sup>18</sup> This provides some insight into how the total return of the EFA compares to a portfolio invested solely in US Treasury and German government securities. While the indices have been combined and weighted to reflect the currency composition and duration of the EFA, they only provide a general indication of its performance because the EFA is invested in a broader range of high quality assets. In the fiscal year ending March 31, 2016, the EFA's total return was higher than the return on the external indices by 4 basis points. This was due to the US Treasury and German government securities in the external indices underperforming the more diversified holdings in the EFA. The EFA's total return was higher than the external indices by 25 basis points in the fiscal year ending March 31, 2015.

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<sup>18</sup> Merrill Lynch, used with permission. "MERRILL LYNCH IS LICENSING THE MERRILL LYNCH INDICES 'AS IS,' MAKES NO WARRANTIES REGARDING SAME, DOES NOT GUARANTEE THE QUALITY, ACCURACY AND/OR COMPLETENESS OF THE MERRILL LYNCH INDICES OR ANY DATA INCLUDED THEREIN OR DERIVED THEREFROM, AND ASSUMES NO LIABILITY IN CONNECTION WITH THEIR USE."

Table A4.4

Total Return of the EFA Compared to External Indices 1.2.3.4

April 1, 2015 to March 31, 2016

	US\$ portfolio	Euro portfolio	GBP portfolio	Yen portfolio	Total EFA
EFA asset portfolio					
Return in original currency (A)	1.26%	1.20%	4.69%	0.82%	n/a
Return in US\$	1.26%	7.12%	1.35%	7.45%	2.55%
External indices					
Return in original currency (B)	1.22%	1.15%			n/a
Return in US\$	1.22%	7.07%	n/a	n/a	2.51%
Return vs. external indices in basis points					
(A - B) in original currency <sup>5</sup>	4	5	n/a	n/a	4

- 1 Composite index for the US portfolio is constructed as weighted average of the following Merrill Lynch indices: US Treasury Bills (G0BA), US Treasuries 1-3yr (G1O2), US Treasuries 3-5yr (G2O2), US Treasuries 5-7yr (G3O2) and US Treasuries 7-10yr (G4O2). The weights for the composite index are updated on a monthly basis according to the holdings of the EFA US asset portfolio.
- <sup>2</sup> Composite index for the euro portfolio is constructed as weighted average of the following Merill Lynch indices: German Govt Bills (G0DB), German Federal Govts 1-3yr (G1D0), German Federal Govts 3-5yr (G2D0), German Federal Govts 5-7yr (G3D0) and German Federal Govts 7-10yr (G4D0). The weights for the composite index are updated on a monthly basis according to the holdings of the EFA euro asset portfolio.
- 3 EFA liability returns for the yen portfolio were used in place of external indices for the purpose of determining the aggregate EFA comparison between assets and external indices.
- <sup>4</sup> EFA liability returns for the GBP portfolio were used in place of external indices for the purpose of determining the aggregate EFA comparison between assets and external indices
- 5 Return versus external indices is expressed in original currency except for the total EFA, where both assets and index returns are converted to US dollars.

#### **Performance Attribution of Total Return**

Table A4.5 summarizes the attribution results for the EFA's US-dollar and euro portfolios for the fiscal year ending March 31, 2016. Total return is decomposed into four underlying return factors: coupon and amortization, changes in credit spreads, changes in interest rates and securities-lending activities. For 2015–16, the attribution results indicate that the yield curve effect and credit spread effect contributed positively to portfolio returns, resulting in an overall positive total return for the portfolio.

The coupon effect (the difference between the yield to maturity of reserve assets and liabilities issued to fund the assets) contributed positively to total return. The coupon effect generally represents the underlying return of the portfolio if matched assets and liabilities are held to maturity.

The credit spread effect (the difference between the change in the market value of EFA assets and the foreign liabilities due to changes in the credit quality of EFA issuers and Canada) was the main driver of the positive total return in the EFA's portfolio. Although changes in the credit spreads impacted both assets and liabilities, the effects were smaller for assets than for liabilities, resulting in an overall positive impact on the EFA. The credit spread effect is transitory to the extent that assets are held to maturity.

The yield curve effect (the impact of changes in the general level of interest rates) demonstrates the extent to which the EFA's assets and liabilities are matched in terms of their sensitivity to changes in interest rates. The small difference for the US and euro portfolios demonstrate the benefit of the asset-liability management framework of the EFA over the reporting period.

Any difference between the actual return and the sum of the above effects is the residual return, which reflects the fact that performance attribution approximately explains total return.

Table A4.5

Performance Attribution for the US-Dollar and Euro Portfolios Compared to Liability Benchmarks

April 1, 2015 to March 31, 2016

per cent

	US\$	US\$ portfolio		Euro portfolio		
	Assets	Liabilities	Difference	Assets	Liabilities	Difference
Coupon effect	0.83	0.68	0.15	0.02	-0.39	0.41
Yield curve effect	0.87	0.89	-0.02	1.23	1.15	0.08
Credit spread effect	-0.46	-1.16	0.70	-0.10	-0.49	0.39
Securities-lending activities	0.00					
Residual return	0.01	-0.04	0.05	0.07	0.02	0.05
Return in original currency	1.26	0.36	0.90	1.20	0.28	0.92
Exchange rate effect				5.92	5.86	0.06
Total return in US\$	1.26	0.36	0.90	7.12	6.15	0.97

Note: Numbers may not add due to rounding.

# 3) Notional Cost of Advances to the EFA

#### From the Consolidated Revenue Fund

The cost of advances represents an estimate of the cost of maintaining the EFA by adding the cost of foreign debt payments (including the interest on cross-currency swaps) to the notional amount of foreign interest that would be paid on non-interest-bearing items or items funded in Canadian dollars. For 2015–16, the cost of advances to the EFA was C\$1,643 million. The EFA is a stand-alone account of assets while foreign liabilities are paid out of the Consolidated Revenue Fund (CRF). EFA advances represent funds (liabilities) from the CRF in support of maintaining the EFA. The level of foreign currency advances, measured in Canadian dollars, varies with the flow of foreign currencies between the EFA and the CRF.

**Actual foreign interest charges:** The proceeds from foreign currency borrowings are remitted to the CRF and concurrently advanced to the EFA. Foreign debt interest and principal repayments are charged to the CRF but are paid using the foreign assets of the EFA, reducing the amount advanced to the EFA. Actual foreign interest paid is converted into Canadian currency for the purpose of determining this portion of the notional cost of advances; for 2015–16, this value was C\$1,455 million.

**Notional interest charged in Canadian dollars:** Because domestically funded EFA assets, SDR advances and the portion of net revenues reinvested in the EFA (i.e., cumulative net revenues of the EFA less cumulative foreign debt interest payments) are not linked to foreign liabilities, an imputed interest cost is used to approximate the notional interest charge on the portion of advances from the CRF related to those assets. For 2015–16, a weighted cost of domestic and foreign funding (2.03 per cent) was used in calculating notional interest paid in Canadian dollars, resulting in a value of C\$187.8 million.

# 4) Risk Measures

The risk management framework covers market, credit, liquidity, legal and operational risks related to the financing and investment of the foreign reserves. Risk measures are reported on a monthly basis to management at the Department of Finance Canada and the Bank of Canada.

#### **Market Risk**

Market risk stems from changes in interest rates, credit spreads and exchange rates. Several industry-standard measures of market risk exposure are employed: scenario analysis, stress testing and Value at Risk (VaR) (Table A4.6). Stress testing and scenario analysis are used to evaluate the portfolio's performance under extraordinary circumstances in the market. VaR is a statistical measure for estimating potential losses to the EFA portfolio arising from extreme but plausible market movements such as changes in interest and exchange rates.

Stress tests are regularly carried out to gauge the sensitivity of the EFA portfolio to large changes in exchange rates and interest rates, including the portfolio impact of a 1 per cent depreciation of the euro, GBP and yen vis-à-vis the US dollar and a 1 per cent increase in interest rates across the yield curve. The results showed that, on a net basis during the reporting period, the EFA assets and the associated liabilities had very minimal exposure to currency depreciations and upward shifts in the yield curve.

In addition, some hypothetical scenario analyses that mimic market conditions during four previous extraordinary market events were regularly conducted: the tightening of monetary policy by the US Federal Reserve in 1994; the 1997 Asian financial crisis; the 1998 Russian debt default and Long-Term Capital Management (LTCM) collapse; and the 2001 terrorist attacks on the US. The scenario analyses showed that the EFA would generally perform well during such periods of market turbulence. The March 31, 2016 results were broadly in line with those reported for March 31, 2015. Scenario creation is a dynamic process. New scenarios continue to be considered and will be added when relevant and feasible.

Total Market VaR is a statistical measure that estimates the possible loss in portfolio value within a specific time period during normal market conditions as a result of interest rate, foreign exchange rate and credit spread changes. This is regularly reported for the entire EFA portfolio and on the net position of assets and liabilities. As of March 31, 2016, the EFA had a 99-per-cent 10-day Total Market VaR of \$1,266 million, which implied that 99 per cent of the time, the value of the portfolio was not expected to decline by more than \$1,266 million, on a net basis, over a 10-trading-day period. The Foreign Exchange-Interest Rate VaR (FX-IR VaR) under asset-liability matching measures only the loss arising from interest rate and foreign exchange rate changes that will not be exceeded 99 per cent of the time if the EFA is held over a 10-business-day period. As of March 31, 2016, the FX-IR VaR component was \$10 million on a net basis over a 10-trading-day period. The asset-only VaR measure estimates the possible loss in the value of EFA assets within a 10-day period during normal market conditions as a result of interest rate, exchange rate and credit spread changes. As of March 31, 2016, the Asset VaR was \$1,436 million.

Table A4.6

Market Risk Measures
millions of US dollars

	March 31, 2016		March	31, 2015
	Assets only	Assets vs. liabilities (net)	Assets only	Assets vs. liabilities (net)
Single factor stress tests				
1% depreciation of euro, GBP and yen	-233	-1	-178	-2
1% upward parallel shift in yield curve	-2,139	-20	-1,915	15
Scenario analyses				
1994 Fed tightening	-4,354	57	-4,632	72
1997 Asian financial crisis	-812	135	-652	181
1998 Russian default/LTCM collapse	-726	268	-453	322
2001 terrorist attacks	1,567	93	1,638	159
99% 10-day Total Market VaR		1,266		561
99% 10-day Asset VaR	1,436		1,157	
99% 10-day FX-IR VaR		10		14

#### **Credit Risk**

Credit risk includes the risk that a counterparty or issuer will be unable or unwilling to meet their obligations to pay as well as the risk that the value of an instrument will change as a result of actual or perceived changes in the credit quality of a counterparty or issuer.

Credit risk, which is the most important risk faced by the EFA, is controlled by setting limits on both actual and potential exposures to counterparties and issuers. A collateral management framework is used for managing the credit risk to financial institution counterparties arising from the cross-currency swaps used to fund the EFA. Under this framework, high quality collateral is placed with collateral managers for the EFA when the market value of the swap contracts exceeds specified thresholds. The Credit VaR model and some selected credit risk stress tests were used to measure the EFA's exposure to credit risk during the reporting period (Table A4.7). However, the Credit VaR estimate does not capture the market risk effect of cross-currency funding and therefore does not reflect the total risk of the EFA.

Table A4.7

Credit Risk Measures
millions of US dollars

	March 31, 2016	March 31, 2015
Credit VaR and expected shortfall		
99.9% 1-year Credit VaR	2,476	1,451
Expected shortfall	4,737	4,802
Stress test		
Potential loss if counterparties with negative outlook or negative watch are downgraded one notch	161.6	29.7

The Credit VaR model provides an estimate of the maximum potential loss in portfolio value within a year as a result of a credit event, such as the downgrade or default of counterparties or issuers, under normal market conditions. As of March 31, 2016, the EFA had a 99.9-per-cent 1-year Credit VaR of \$2.5 billion, which implied that 99.9 per cent of the time, the value of the portfolio was not expected to decline by more than \$2.5 billion over a 1-year period due to credit events. The increase in Credit VaR from the previous year reflects wider credit spreads, which increase the possible losses associated with downgrades and defaults. An associated measure, expected shortfall, computes the expected average loss in portfolio value during a 1-year period due to an extreme, unexpected credit event, whose possibility of happening (less than 0.1 per cent) was not captured by the Credit VaR statistic. The expected shortfall measure for the EFA was \$4.7 billion as of March 31, 2016.

Credit risk stress tests were also carried out to evaluate potential losses to the EFA assets and the associated liabilities arising from extraordinary credit events in the market. These tests subjected the EFA to hypothetical scenarios, such as all counterparties or issuers with a negative outlook being downgraded by one notch. The difference between this year and last is mainly attributed to changes in the level of credit spreads. As a result, the potential loss to the EFA under this hypothetical scenario has decreased compared to the previous fiscal year.

# Annex 5: List of Agents and Mandataries as Defined by the *Currency Act*

The *Currency Act* stipulates that this report include a list of the following agents and mandataries appointed by the Minister under subsection 17.2(3) of the Act to perform services concerning the EFA.

#### **Bank of Canada**

The Bank of Canada, as specified under the *Bank of Canada Act*, is the fiscal agent for the Government of Canada. As part of its fiscal agency responsibilities, the Bank manages the Government's foreign exchange reserves.

# **RBC Investor Services Trust and State Street Corporation**

RBC Investor Services Trust (formerly RBC Dexia Investor Services) and State Street Corporation manage the securities-lending program for the EFA. As the Government's agents and mandataries, they carry out securities lending on behalf of the Government. The program involves loaning a security from the Government to a counterparty, who must eventually return the same security, in order to earn additional return on the portfolio.

# State Street Trust Company Canada, Together With State Street Bank and Trust Company

State Street Trust Company Canada, together with State Street Bank and Trust Company, is responsible for managing the collateral pledged in connection with foreign exchange swaps and cross-currency swaps.

# Unaudited Statement of Financial Position and Statement of Operations of the Exchange Fund Account

Year Ended 31 March 2016

#### **Statement of Financial Position** (unaudited)

#### As at 31 March

(in millions of Canadian dollars)

	2016	2015
Financial Assets		
Cash and cash equivalents (Note 2 and Note 3)	5,902	695
Investments (Note 2 and Note 3)		
Marketable securities	85,046	81,442
Special drawing rights	10,431	9,818
Gold	-	6
Total investments	95,477	91,266
Total financial assets	101,379	91,961
Liabilities		
Due to the Consolidated Revenue Fund (Note 4)	101,379	91,961

The accompanying notes are an integral part of these financial statements.

Paul Rochon

Deputy Minister

Department of Finance

Christopher Meyers, CPA, CA

Chief Financial Officer

Department of Finance

## **Statement of Operations** (unaudited)

# for the year ended 31 March (in millions of Canadian dollars)

	2016	2015
Net revenue from investments		
Marketable securities		
Interest	1,235	1,152
Net gains on sales of marketable securities	793	238
Transaction costs and other	(2)	(4)
Interest on cash and cash equivalents	7	-
Interest on special drawing rights	5	6
Gains on sales of gold	140	-
Total net revenue from investments	2,178	1,392
Other		
Net foreign exchange gain (loss)	9	(552)
Net revenue for the year (Note 2)	2,187	840

The accompanying notes are an integral part of these financial statements.

# Notes to the Financial Statements for the year ended 31 March 2016 (unaudited)

# 1. Authority and Objectives

The Exchange Fund Account (the Account) is governed by Part II of the *Currency Act*. The Account is in the name of the Minister of Finance and is administered by the Bank of Canada as fiscal agent. The *Financial Administration Act* does not apply to the Account.

The legislative mandate of the Account is to aid in the control and protection of the external value of the Canadian dollar. The Minister of Finance empowers the Account to acquire or sell assets deemed appropriate for this purpose, in accordance with the Account's *Statement of Investment Policy*.

Assets held in the Account are managed to provide foreign-currency liquidity to the government and to promote orderly conditions for the Canadian dollar in foreign exchange markets, if required. Canada's current policy is to intervene in foreign exchange markets on a discretionary, rather than a systematic, basis and only in the most exceptional of circumstances. Since September 1998, no transactions have been aimed at moderating movements in the value of Canadian dollar.

In accordance with the *Currency Act*, the net revenue for the year is paid to or charged to the Consolidated Revenue Fund (CRF) of the Government of Canada within three months after the end of the fiscal year, and the Minister of Finance reports to Parliament on the operations of the Account within the first 60 days on which Parliament is sitting after the end of the fiscal year. These statements have been prepared by the Department of Finance.

# 2. Significant Accounting Policies

As stipulated in the *Currency Act*, the financial statements of the Account are prepared in a manner consistent with the accounting policies used by the Government of Canada to prepare its financial statements.

# a) Revenue recognition

Revenue from investments is recognized on an accrual basis and includes interest earned (including the amortization of premiums and discounts), gains or losses on sales of securities and on sales of gold, and revenues from securities lending activities. Interest is accrued on short-term deposits, deposits held under repurchase agreements, marketable securities, and special drawing rights (SDRs).

## b) Expense recognition

The Account's administrative, custodial, and fiscal agency services are provided and paid for by the Bank of Canada and the Department of Finance. These costs have not been recognized in the Statements.

In addition, the notional cost of the funding of the Account's assets and advances from the CRF is not recognized in the Statements.

#### c) Financial assets

# Cash and cash equivalents

Cash and cash equivalents consists of cash on hand and short-term deposits. Short-term deposits are measured at cost and are generally held to maturity. The resulting revenue is included in interest on cash and cash equivalents.

#### Deposits held under repurchase agreements

Deposits held under repurchase agreements are measured at cost. The resulting revenue is included in Net revenue from marketable securities. As of 31 March 2016 and 31 March 2015 the Account did not hold any deposits held under repurchase agreements.

#### Marketable securities

Purchases and sales of securities are recognized at the settlement dates. Marketable securities are measured at cost and are adjusted for amortization of purchase discounts and premiums on a straight-line basis over the term to maturity of the security. The carrying value of marketable securities includes accrued interest.

On de-recognition of a financial asset measured at amortized cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in net revenue.

For short-term deposits, deposits held under repurchase agreements and marketable securities, the Bank assesses at the end of each reporting period whether there is an other-than-temporary impairment in value. Once impaired, these assets remeasured at their recoverable amount with the amount of the impairment recognized in Total net revenue from investments in the Statement of Operations.

## Securities lending program

Under the securities lending program, the Account has agency agreements with two major financial institutions. Loans of securities are effected on behalf of the Account by these agents, who guarantee the loans and obtain collateral of equal or greater value from approved counterparties. These transactions can range from 1 to 31 days in duration. The securities loaned continue to be accounted for as investment assets. Income on securities lending transactions is included in Total net revenue from investments in the Statement of Operations.

#### Special drawing rights

The SDR serves as the unit of account for the International Monetary Fund (IMF) and its value is based on a "basket" of four major currencies: the Euro, the US dollar, the British pound sterling and the Japanese yen. On 30 November 2015 the Executive Board of the IMF decided to include the Chinese renminbi in the SDR basket effective 1 October 2016.

SDRs are initially recognized at cost and are subsequently remeasured at each reporting date into Canadian dollars at market exchange rates.

#### Gold

Gold is carried in the Account at a value of 35 SDRs per fine ounce.

#### Translation of foreign currencies and special drawing rights

Assets denominated in foreign currencies and SDRs are translated into Canadian-dollar equivalents at the rates prevailing as of March 31, which were as follows:

	2016	2015
US dollar	1.2987	1.2666
Euro	1.4777	1.3615
Japanese yen	0.0115	0.0106
British pound sterling	1.8654	1.8792
SDR	1.8296	1.7473

Gains or losses resulting from the translation of assets and advances from the CRF denominated in foreign currencies and SDRs, as well as from transactions throughout the fiscal year, are recognized as net foreign exchange gains or losses and are included in the Statement of Operations.

Investment revenue in foreign currencies and SDRs is translated into Canadian-dollars at the foreign exchange rates prevailing on the date the revenue is earned.

#### d) Use of estimates and measurement uncertainty

The preparation of the Statements requires management to make estimates and assumptions based on information available as of the date of the Statements. Significant estimates are primarily in the area of the fair values of financial instruments, including any impairment (Note 3).

## 3. Financial Instruments

#### Fair value of financial assets

(in millions of Canadian dollars)

	31 Ma	arch 2016	31 Ma	ch 2015
	Carrying amount	Fair value	Carrying amount	Fair value
Cash and cash equivalents				
US dollar	5,303	5,303	441	441
Euro	304	304	189	189
Japanese yen	181	181	17	17
British pound sterling	114	114	48	48
Total cash and cash equivalents	5,902	5,902	695	695
Investments				
Marketable securities				
US dollar	56,638	57,685	60,558	61,895
Euro	20,161	21,132	17,685	19,088
Japanese yen	712	720	794	797
British pound sterling	7,535	7,810	2,405	2,461
Total marketable securities	85,046	87,347	81,442	84,241
SDR	10,431	10,431	9,818	9,818
Gold	-	-	6	144
Total investments	95,477	97,778	91,266	94,203
Total financial assets	101,379	103,680	91,961	94,898

The estimated fair value of cash and cash equivalents approximates their carrying value, given their short term to maturity.

The estimated fair values of marketable securities are based on quoted market prices and include accrued interest. If such prices are not available, the fair value is determined by discounting future cash flows using an appropriate yield curve. During the year, and in the prior year, no marketable securities were written down to reflect an other-than-temporary impairment in value.

Since SDRs are translated into Canadian-dollar equivalents at the rates prevailing at the Statements date, the carrying value approximates fair value on the reporting date.

The portfolio of gold holdings was sold during the year for a gain of \$140 million. The estimated fair value of gold at 31 March 2015 was based on the London gold fixing of \$1,503.45 per fine ounce.

#### **Credit risk**

Credit risk is the risk that a counterparty to a financial contract will cause a loss to the Account by failing to discharge its obligations in accordance with agreed upon terms.

To ensure that the Account's asset portfolio is prudently diversified with respect to credit risk, the *Statement of Investment Policy* prescribed by the Minister of Finance specifies limits on holdings by class of issuer (sovereign, agency, supranational, corporation or commercial financial institution), by any one issuer or counterparty, and by type of instruments.

The *Statement of Investment Policy* also specifies the treatment of holdings that do not meet eligibility criteria or limits due to exceptional circumstances such as ratings downgrades.

With respect to the *Statement of Investment Policy*, the Account may hold fixed income securities of highly rated sovereigns, central banks, government-supported entities and supranational organizations. To be eligible for investment, an entity must have a credit rating in the top seven categories from two of four designated rating agencies (Standard & Poor's, Moody's, Fitch, and Dominion Bond Rating Service). The Account may also make deposits and execute other transactions, up to prescribed limits, with commercial financial institutions that meet the same rating criteria.

As stipulated in the *Currency Act*, the Minister of Finance may appoint agents to perform services concerning the Account. Through the securities-lending program, agents can lend securities only up to a prescribed maximum amount and only to a list of approved counterparties. Each borrower must enter into a Securities Loan Agreement with at least one of the agents. Borrowers are also required to provide collateral for securities borrowed, according to a specific list approved by the Government. Collateral is limited to specific security types, terms to maturity, and credit ratings.

The agents also provide an indemnity in the event of default by the borrower. The Account enters into securities lending transactions in order to increase its return on investments.

#### Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market prices. Market risk comprises three types of risk: interest rate risk, currency risk, and other price risk. Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market interest rates. Currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. Other price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices, other than those arising from interest rate risk or currency risk. The Account is not exposed to significant other price risk.

Interest rate and currency risks are managed, with due consideration of the risk to the Government of Canada, through the asset-liability management policy. This policy utilizes a strategy of matching the duration structure and the currency of the Account's assets with the foreign currency borrowings of the Government of Canada that notionally finance the Account's assets. Other price risks are mitigated by holding high quality liquid assets.

#### Liquidity risk

Liquidity risk is the risk that an entity will encounter difficulty in meeting its obligations associated with financial liabilities. Liquidity risk is minimized by limiting the portion of the Government of Canada's foreign liabilities that needs to be renewed within a one year period. In addition, liquidity risk is mitigated by holding short-term investments that are matched to the Government of Canada's maturing liabilities in foreign currencies.

#### **Securities lending**

As at 31 March 2016, the Account's investments included securities held by its agents in connection with the securities-lending program. Investments with a fair market value of \$385 million (\$387 million at 31 March 2015) and an amortized cost of \$387 million (\$380 million at 31 March 2015) were being used in the securities-lending program.

No securities were lent to eligible borrowers at the reporting date (nil at 31 March 2015).

# 4. Due to the Consolidated Revenue Fund (CRF)

The Account is funded by the Government of Canada through interest-free advances from the CRF. Advances to the Account from the CRF are authorized by the Minister of Finance under the terms and conditions prescribed by the Minister of Finance. Pursuant to Section 19 of the *Currency Act*, these advances are limited to US \$150 billion by order of the Minister of Finance effective 26 March 2015.

The CRF advances the proceeds of the Government of Canada's borrowings in foreign currencies and allocations of SDRs by IMF to the Account. Subsequent repayments of foreign currency debt are made using the assets of the Account and result in reductions of foreign currency advances from the CRF.

The Account requires Canadian-dollar advances to settle its purchases of foreign currencies. Canadian dollars received from sales of foreign currencies are remitted to the CRF. This, together with foreign currency payments made on behalf of the Government of Canada, causes reductions in the level of outstanding Canadian-dollar advances and can result in overall net deposits of Canadian-dollars by the Account with the CRF.

At 31 March, advances from the CRF were comprised of the following currencies:

#### Currency composition of advances from the CRF

(in millions of Canadian dollars)

	2016	2015
US dollar	64,406	63,301
Euro	19,415	16,822
Japanese yen	871	2,440
British pound sterling	7,653	797
SDR	6,285	8,035
Subtotal - Foreign currencies	98,630	91,395
Canadian dollar	562	(274)
Net revenue	2,187	840
Total	101,379	91,961