



Department of Finance  
Canada

Ministère des Finances  
Canada

April 1, 2016 – March 31, 2017

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

Canada

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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, 2016 to March 31, 2017 (the 2016–17 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, deposits 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.

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# 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 2016–17.

**Level of the official international reserves:** The market value of Canada’s official international reserves increased to \$82.6 billion as at March 31, 2017 from \$82.2 billion as at March 31, 2016. The change comprised a \$551 million increase in EFA assets and a \$189 million decrease in the IMF reserve position. EFA assets, which totalled \$80.4 billion as at March 31, 2017, 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 nominal gross domestic product. Liquid reserve assets are composed primarily of debt securities of highly rated sovereigns, sub-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, 2017	March 31, 2016	Change
Securities	62,044	67,257	-5,213
Deposits <sup>1</sup>	10,687	4,545	6,142
<b>Total securities and deposits (liquid reserves)</b>	72,731	71,802	929
SDRs	7,654	8,032	-378
<b>Total EFA</b>	80,385	79,834	551
IMF reserve position	2,169	2,358	-189
<b>Total official international reserves</b>	82,554	82,192	362

Note: Numbers may not add due to rounding.

<sup>1</sup> Cash deposits with central banks and the Bank for International Settlements.

**EFA composition:** As at March 31, 2017, the US-dollar share of EFA liquid investments was US\$49.0 billion or 67.4 per cent, the euro share was equivalent to US\$15.3 billion or 21.0 per cent, the British pound sterling share was equivalent to US\$7.4 billion or 10.2 per cent, and the yen portion was equivalent to US\$1.0 billion or 1.4 per cent.

Investments in fixed-income securities issued by sovereigns, sub-sovereigns and government agencies made up 70.5 per cent of EFA liquid investments, 14.8 per cent was invested in securities issued by supranational organizations and 14.7 per cent was held in cash. Given the negative short-term bond yields globally, there has been a reallocation of investment from short-term securities to cash deposits with central banks and the Bank for International Settlements.

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, 2017, 77.2 per cent of liquid reserve investments were rated AAA and 94.0 per cent were rated AA+ or better.

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**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 2016–17, EFA operations were financed through cross-currency swaps of domestic obligations, and direct foreign currency issuance. Total cross-currency swap funding and maturities during the reporting period were US\$11.1 billion and US\$5.0 billion respectively. The swaps 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 20.3 basis points. This compared to an average rate of 3-month US\$ LIBOR less 47 basis points for 2015–16. The primary driver of the change in funding costs from the prior year was the large decline of Canadian swap spreads—for example, the 10-year swap spread dropped from an average of around 42 basis points in fiscal year 2015–16 to an average of about 23 basis points in fiscal year 2016–17. (A drop in Canadian swap spreads increases the cost of funding the EFA with cross-currency swaps (all else being equal)). In addition, the equivalent of US\$500 million of medium-term notes were issued in US dollars at a 3-year term at an average funding cost equivalent to 3-month US\$ LIBOR less 0.6 basis points.

The level of outstanding short-term US-dollar commercial paper issued under the Canada bills program increased from \$2.1 billion to \$2.3 billion over the period. The average commercial paper cost was US\$ LIBOR less 29 basis points, which was lower than the previous year's funding level (US\$ LIBOR less 17 basis points).

**Portfolio return:** In 2016–17, the EFA earned an average positive spread (or net “coupon return”) of 18 basis points, down slightly from 21 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 yield to maturity of foreign currency liabilities used to fund the assets at the time of calculation. The spread measures the remaining 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.

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 48 basis points in 2016–17. This is equivalent to a mark-to-market gain of \$347 million. In the previous year, the EFA reported a total return of 99 basis points (a gain of \$676 million).

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# Report on Operations in 2016–17

The following sections describe the impact of market developments on the EFA, portfolio performance and risk measures, and policy and program initiatives undertaken in 2016–17.

## Market Developments

### Interest Rates

During the 2016–17 reporting year, interest rates in the US rose across the term structure, supported by stronger economic activity and labour market participation, and in part by the November 2016 US Presidential election outcome. Over the fiscal year ending March 31, 2017, the yield on US 3-month Treasury bills increased 55 basis points while the yield on 10-year Treasury bonds rose 60 basis points. In Europe, rates ended the fiscal year higher despite a sharp drop in yields after voters in the United Kingdom opted to withdraw from the European Union (Brexit) in June 2016. Changes in interest rates in 2016–17 resulted in a decrease of \$967 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. In the US bond market, rates on the benchmark 10-year US note rose sharply, rising 50 basis points in the week following the US Presidential election, marking a sharp reversal from earlier in the year when the yield touched a record low in the days following the June Brexit vote. The yield on the 10-year note ended near the highs of the 2016–17 fiscal year at 2.4 per cent.

Euro-denominated holdings in the EFA are composed of fixed-income securities issued by euro-zone countries, their agencies, and supranational institutions. The results of the Brexit referendum in June 2016 had a decidedly negative impact on global financial markets. Global equity markets sold off sharply in the days following the referendum as investors shifted resources into the safety of fixed-income securities. The heightened risk aversion in the euro-zone led to the German government issuing a 10-year note at a negative yield for the first time on record in July 2016. Later in the year, however, yields then reversed in response to a more positive growth outlook after the US Presidential election results. German 10-year yields ended the fiscal year in positive territory at 33 basis points, an increase of 17 basis points over the previous year. However, yields on German government bonds with a term to maturity of 7 years or less ended the year with a negative yield. At the short end, yields fell further into negative territory with the benchmark 3-month German treasury bill ending at negative 91 basis points, a drop of 33 basis points.

### Credit Spreads

Credit spreads on fixed-income securities issued in US dollars narrowed considerably during the year on the back of investors' continued search for yield. Peripheral European sovereign spreads also narrowed considerably relative to German government bonds. Overall, there was an approximately US\$404 million increase in the market value of reserves due to changes in credit spreads.



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## Exchange Rates

In 2016–17, exchange rate movements resulted in a decline of US\$2,067 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 decrease in the market value of assets was offset by a similar decrease in the value of associated liabilities.

During 2016–17, the euro fell by 6.4 per cent against the US dollar, as the US dollar gained in value against most major currencies following the US election. As 21 per cent of the liquid reserves were held in euro-denominated securities (on March 31, 2017), changes in the value of the euro against the US dollar had a negative impact on the market value of the reserves.

During 2016–17, the British pound sterling (GBP) fell nearly 13 per cent against the US dollar. The bulk of the drop came in the days following the results of the June 2016 referendum on the United Kingdom's future in the European Union. Changes in the GBP/US-dollar exchange rate had a negative impact on the total market value of liquid reserves as 10.2 per cent of the reserves were held in GBP-denominated assets on March 31, 2017. On a net basis, this decline was offset by a similar decline in the market value of the EFA liabilities given the asset-liability matching framework.

During 2016–17, the yen was little changed against the US dollar.

For financial reporting purposes, the performance of the EFA is presented in Canadian-dollar terms. In comparison to the previous year, the Canadian dollar fell 2.4 per cent against the US dollar. The financial statements are based on the prevailing exchange rate on March 31, 2017, which was 0.752 US\$/C\$.

## Initiatives in 2016–17

During 2016–17, 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 a customized investment benchmark, a new swap management framework and a review of the Canada bills program.

### Investment Benchmark

A customized investment benchmark was established to convey the Government of Canada's investment risk and return preferences. The benchmark defines the preferred investment allocations to individual issuers by currency and term to maturity based on historical and expected risks and returns of securities. The benchmark also specifies bands around the preferred allocations to allow for modest deviations from the benchmark to account for market conditions. Portfolio traders then invest the liquid foreign reserves within benchmark bands.

The customized benchmark allows reserve managers to track the performance of the liquid foreign reserves portfolio against the benchmark. Performance statistics for the liquid reserve portfolio against the benchmark can be found in Annex 4.

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## Swap Management Framework

The Government of Canada uses foreign exchange derivatives and cross-currency swaps to hedge currency movements related to IMF activities and to fund the purchase of EFA assets. 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 risks. The Government has symmetric, daily margining, zero-threshold collateral agreements with its current trading counterparties. To reduce financial risks, swap business is conducted with a number of domestic and international counterparties. Settlement risk is managed through daily maximum swap maturities per individual counterparty. The Government has a comprehensive swap management framework that includes counterparty eligibility criteria and exposure limits, as well as a governance structure, and methods and processes to better manage counterparty exposures.

## Canada Bills Program Review

The Government of Canada has conducted a review of the Canada bills program. The purpose of this review was to determine whether changes could be made to improve the functioning and operations of Canada's short-term US-dollar commercial paper program. The Government reviewed all aspects of the program including the dealer group and program limit. Subsequent to the fiscal year-end, a new dealer group was approved (Royal Bank of Canada, Wells Fargo, Citibank and Barclays) and the Canada bills program limit was increased from US\$10 billion to US\$20 billion. (The US\$10 billion program limit was originally set in 1993 when liquid foreign reserves stood at about US\$10 billion.)

## 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 2016–17. 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 (coupon return) was positive (see Annex 4).

## Composition of the Official International Reserves

Table 2 shows the distribution of investments in the official international liquid reserves by currency and term to maturity as at March 31, 2017. US-dollar holdings, which made up of 67.4 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 maturity bucket, and GBP holdings were more heavily weighted towards the 5 year and over maturity bucket. Yen holdings remained minimal and relatively unchanged from the previous year.

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.

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<sup>1</sup> 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, 2017**

market value in millions of US dollars, settled basis

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
<b>US-dollar holdings</b>								
Under 6 months	8,937	3,684	5,870	–	–	18,491	–	18,491
6 months to under 1 year	–	795	2,269	–	–	3,065	–	3,065
1 year to under 5 years	–	5,705	11,384	–	–	17,088	–	17,088
5 years and over	–	9,413	983	–	–	10,396	–	10,396
Indefinite term	–	–	–	–	7,654	7,654	2,169	9,823
<b>Total US-dollar holdings</b>	<b>8,937</b>	<b>19,596</b>	<b>20,506</b>	<b>0</b>	<b>7,654</b>	<b>56,693</b>	<b>2,169</b>	<b>58,863</b>
<b>Euro holdings</b>								
Under 6 months	1,646	85	172	–	–	1,903	–	1,903
6 months to under 1 year	–	305	45	–	–	350	–	350
1 year to under 5 years	–	6,044	2,627	–	–	8,672	–	8,672
5 years and over	–	3,596	735	–	–	4,331	–	4,331
<b>Total euro holdings</b>	<b>1,646</b>	<b>10,030</b>	<b>3,579</b>	<b>0</b>	<b>0</b>	<b>15,256</b>	<b>0</b>	<b>15,256</b>
<b>Yen holdings</b>								
Under 6 months	6	–	–	–	–	6	–	6
6 months to under 1 year	–	90	–	–	–	90	–	90
1 year to under 5 years	–	908	–	–	–	908	–	908
5 years and over	–	–	–	–	–	–	–	–
<b>Total yen holdings</b>	<b>6</b>	<b>998</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>998</b>	<b>0</b>	<b>1,004</b>
<b>GBP holdings</b>								
Under 6 months	99	–	–	–	–	99	–	99
6 months to under 1 year	–	–	–	–	–	–	–	–
1 year to under 5 years	–	1,405	113	–	–	1,518	–	1,518
5 years and over	–	5,814	–	–	–	5,814	–	5,814
<b>Total GBP holdings</b>	<b>99</b>	<b>7,219</b>	<b>113</b>	<b>0</b>	<b>0</b>	<b>7,431</b>	<b>0</b>	<b>7,431</b>
<b>Total</b>	<b>10,688</b>	<b>37,843</b>	<b>24,198</b>	<b>0</b>	<b>7,654</b>	<b>80,378</b>	<b>2,169</b>	<b>82,554</b>

Notes: The exchange rates prevailing on March 31, 2017 are used for the euro, GBP and yen assets. Numbers may not add due to rounding.

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## 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 (70.5 per cent as at March 31, 2017), 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, 2017	March 31, 2016	Change
Sovereigns and agencies	51,324	55,905	-4,581
Supranationals	10,770	11,352	-582
Private sector investments	0	0	0
Cash	10,687	4,545	6,142

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 potential 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, 2017, the US-dollar share of EFA liquid investments was US\$49.0 billion or 67.4 per cent, the euro share was equivalent to US\$15.3 billion or 21.0 per cent, the GBP share was equivalent to US\$7.4 billion or 10.2 per cent, and the yen portion was equivalent to US\$1.0 billion or 1.4 per cent (Table 4). By comparison, as at March 31, 2016, the US-dollar share was 67.5 per cent, the euro share was 23.0 per cent, the GBP share was 8.5 per cent and the yen share was 1.0 per cent.

Table 4

### Currency Composition of EFA Liquid Reserves

market value in millions of US dollars, settled basis

	March 31, 2017	March 31, 2016	Change
US dollars	49,040	48,501	539
Euros	15,256	16,505	-1,249
GBP	7,431	6,102	1,329
Yen	1,004	693	312

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 Government of Canada has committed to reducing mechanistic reliance on external credit ratings, consistent with Financial Stability Board principles and G20 commitments. Hence, Canada does not rely mechanistically on credit ratings from external credit rating agencies, but instead performs an internal assessment to support external credit risk assessments. As of March 31, 2017, the majority of EFA investments are given a rating of AA or higher by external credit rating agencies, as indicated in Table 5. The external rating is based on the second highest rating among those provided by Moody's Investors Service, Standard & Poor's, Fitch Ratings and Dominion Bond Rating Service.

Table 5

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

	March 31, 2017	March 31, 2016	Change
AAA	56,172	66,636	-10,464
AA+	12,223	1,722	10,501
AA	3,332	2,750	582
AA-	0	0	0
A+	1,005	693	311
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, total return and coupon return are reported at market value. In addition, the net revenue of the EFA and corresponding cost of advances to the EFA are reported at book value. A brief overview of the portfolio's performance is provided below (a more detailed description is provided in Annex 4).

## Overview

Given the movements in interest rates and foreign exchange globally, the assets held in the EFA generated slightly lower net revenues in 2016–17 than in 2015–16 (C\$2.0 billion versus C\$2.2 billion). The cost of advances to the EFA, which represents the estimated economic cost to the Government of financing the EFA, decreased slightly compared to the previous fiscal year (C\$1.63 billion versus C\$1.64 billion).

Table 6

**Summary of Main Performance Indicators for the Official International Reserves**

	April 1, 2016 to March 31, 2017	April 1, 2015 to March 31, 2016
1) Net revenue of the Exchange Fund Account (C\$ millions)	1,997	2,187
2) Cost of advances to the EFA (C\$ millions)	1,627	1,643
3) Measures of the net return on assets and liabilities		
Coupon return (basis points)	18.1	21
Total return (basis points)	48	99
	<b>As at March 31, 2017</b>	<b>As at March 31, 2016</b>
4) Risk measures		
Total market risk (99% 10-day VaR, US\$ millions)	876	1,266
Asset-only market risk (99% 10-day VaR, US\$ millions)	1,383	1,436
Credit risk (99.9% 1-year VaR, US\$ millions) <sup>1</sup>	2,460	n/a

<sup>1</sup> A new data source for the AAA credit curves for the US dollar, euro and GBP was implemented in December 2016.

In 2016–17, the coupon return for the EFA, the difference between the yield to maturity of reserve assets and liabilities issued to fund the assets, was 18.1 basis points.

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Taking into account unrealized changes in the market value of assets and liabilities, the total net return of the EFA decreased to 48 basis points from 99 basis points the previous year. The decline was due primarily to an increase in the market value of outstanding liabilities caused by changes in funding spreads.

Total Market Value at Risk (Total Market VaR)—which measures the potential 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 \$876 million. The asset-only VaR measure, or Asset VaR, looks at potential losses but for assets only. On March 31, 2017, the Asset VaR stood at \$1,383 million. The VaR measure of potential losses due to credit exposure to issuers (Credit VaR) stood at \$2,460 million on March 31, 2017.

## 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 of domestic obligations. Total cross-currency swap funding and maturities during the reporting period were US\$11.1 billion and US\$5.0 billion respectively. Total funding of FX swaps was US\$1.2 billion, while US\$844 million matured during the reporting period.

During 2016–17, foreign currency was raised through cross-currency swaps at an average cost equivalent to 3-month US\$ LIBOR less 20.3 basis points. This funding cost was higher than rates obtained during the previous fiscal year, which averaged 3-month LIBOR less 47 basis points.

As at March 31, 2017, Government of Canada cross-currency swaps outstanding stood at US\$58.1 billion (par value). Swaps of US dollars, euros, GBP and yen made up 61.5 per cent, 17.4 per cent, 17.3 per cent and 3.8 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 bills<sup>2</sup>); a medium-term note program (Canada notes<sup>3</sup> and euro medium-term notes<sup>4</sup>); and a global bond program.<sup>5</sup> 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).

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<sup>2</sup> 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. Rates on Canada bills are posted daily.

<sup>3</sup> 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.

<sup>4</sup> Medium-term notes issued anywhere outside the United States and Canada. Government of Canada euro medium-term notes (EMTNs) are sold through dealers acting as a Government agent for particular transactions. The arranger for the EMTN program is TD Securities. Notes issued under this program can be denominated in EFA-eligible currencies and structured to meet investor demand. EMTNs are issued for foreign exchange reserve funding purposes only.

<sup>5</sup> 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 7

**Outstanding Foreign Currency Issues**

par value in millions of US dollars

	March 31, 2017	March 31, 2016	Change
Swapped domestic issues	58,143	53,076	5,067
Global bonds	8,634	11,776	-3,142
Canada bills	2,305	2,125	180
Euro medium-term notes	810	1,221	-411
Canada notes	1,150	650	500
<b>Total</b>	<b>71,042</b>	<b>68,848</b>	<b>2,194</b>

Note: Liabilities are stated at the exchange rates prevailing on March 31, 2017.

As at March 31, 2017, the Government of Canada had three global bonds outstanding.

Table 8

**Government of Canada Global Bonds Outstanding, as at March 31, 2017**

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)
<b>2010</b>	Global	€2 billion	3.571	10	3.500	Germany	19.4	EURIBOR + 2.0
<b>2014</b>	Global	US\$3 billion	1.658	5	1.625	US	11.0	LIBOR - 1.0
<b>2015</b>	Global	US\$3.5 billion	1.199	3	1.125	US	9.0	LIBOR - 12

Note: EURIBOR = Euro Interbank Offered Rate.

Source: Department of Finance Canada.

The medium-term note (MTN) 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 MTN or EMTN prospectus. During 2016–17, US\$500 million of medium-term notes were issued in US dollars with a 3-year term at an average funding cost equivalent to 3-month US\$ LIBOR less 0.6 basis points.

Table 9

**Government of Canada Medium-Term Notes Outstanding, as at March 31, 2017**

Date of issuance	Date of Maturity	Market	Amount	Yield	Term to maturity (years)	Fixed /float	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
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 EUROIBOR
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				LIBOR+ 15
21-Jul-2016	21-Jul-2019	Canada notes	US\$150,000,000		3	Float	US\$ LIBOR	3 month	LIBOR + 2
07-Sep-2016	06-Sep-2019	Canada notes	US\$100,000,000		3	Float	US\$ LIBOR	3 month	LIBOR - 6
13-Jan-2017	13-Jan-2020	Canada notes	US\$250,000,000		3	Float	US\$ LIBOR	3 month	LIBOR + 0

Note: EURIBOR = Euro Interbank Offered Rate.

Source: Department of Finance Canada.



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## IMF Programs

The Government of Canada participates in three lending arrangements with the IMF outside of the quota system: the multilateral New Arrangements to Borrow (NAB) and General Arrangements to Borrow (GAB), and the temporary bilateral borrowing agreement. Canada also participates in the Voluntary Trading Arrangement (VTA), which was put in place by the IMF to facilitate the purchase or sale of SDRs held by member countries. The objective of the VTA is to allow less developed countries to exchange SDRs for liquid currencies such as the US dollar. Under the VTA, 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, 2017, Canada's SDR holdings were approximately SDR 5.6 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 current participation in the NAB is governed by the November 2012 NAB Decision, which was renewed in November 2016 (effective November 2017). The maximum lending by Canada to the IMF under these arrangements is SDR 3,874 million. As at March 31, 2017, SDR 623.5 million or \$1,125 million (SDR 699 million or \$1,278 million in 2016) in lending has been provided by Canada to the IMF under the NAB.

Canada also participates in the GAB, which was most recently renewed in December 2013. The maximum lending by Canada to the IMF under these arrangements is limited to SDR 893 million. As at March 31, 2017, no lending had been provided to the IMF under the GAB.

In early 2017, Canada extended a temporary bilateral credit line to the IMF in the order of SDR 8,200 million for a maximum period of four years, as part of a collective effort with 34 other nations to foster global economic and financial stability.

Collectively, the outstanding loans under multilateral and bilateral arrangements with the IMF cannot exceed SDR 12,967 million at any given time. This reflects the maximum commitment under the NAB, GAB and bilateral borrowing agreement.

As at March 31, 2017, a total of SDR 623.5 million or \$1,125 million was outstanding under these arrangements. Amounts advanced under these arrangements are considered part of the official international reserves of Canada.

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# Annex 1: 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.

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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 1B).

### 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.

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## 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 1B. The Minister of Finance may exempt 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*.

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## 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.

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# Annex 1B: 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>6</sup> and supranational institutions.

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<sup>6</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.

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- 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:

- 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.
- Other Liquid Sovereign Issuers:** These are government issuers of securities that are deemed by Canada to trade actively.
- Other Highly Rated Issuers:** These issuers are deemed by Canada to be of the highest credit quality.
- 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.

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### **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.

- 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; and
  - 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.



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# 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>.

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## 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 liquid 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 \$362 million.

The increase was due to reserves management operations (\$3,643 million) and return on investments (\$76 million), which was offset by revaluation effects (-\$2,067 million), foreign currency debt charges (-\$1,201 million) and net government operations (-\$89 million).

Table A3.1

### Sources of Change in Canada's Official International Reserves Between March 31, 2016 and March 31, 2017

market value in millions of US dollars

	Change
Official intervention	–
Net government operations	-89
Reserves management operations	3,643
Return on investments	76
Foreign currency debt charges	-1,201
Revaluation effects	-2,067
<b>Total change</b>	<b>362</b>

## 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>7</sup>

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<sup>7</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

	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15	2015–16	2016–17
Purchases	–	-124	–	–	–	–	–	–
Sales	–	–	–	–	–	–	–	–
<b>Net</b>	–	-124	–	–	–	–	–	–

<sup>1</sup> 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 -\$89 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 \$3.6 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 \$23.1 billion, exceeded debt maturities totalling \$19.5 billion (including Canada bill maturities of \$10.2 billion, FX swap maturities of \$844 million, cross-currency swap maturities of \$5 billion, bond maturities of \$3 billion and euro medium-term note maturities of \$400 million).

## Return on Investments

Return on investments comprises interest earned on investments (\$1,043 million) and a decrease in the market value of securities resulting from changes in interest rates (-\$967 million). The overall effect on the official international reserves was a net increase of \$76 million.

## Revaluation Effects

Revaluation effects resulting from movements in exchange rates reflect changes in the market value of the official international reserves. Revaluation effects led to a decrease in market value of the official international reserves of \$2,067 million, primarily due to the depreciation of the euro and GBP relative to 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 2016–17, 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

Month-end	Securities	Deposits	Special drawing rights <sup>1</sup>	Reserve position in the IMF <sup>2</sup>	Total	Total monthly change
<b>2016</b>						
March	67,257	4,545	8,032	2,358	82,192	902
<b>2016–17</b>						
April	67,206	6,264	8,080	2,372	83,922	1,730
May	65,766	8,194	7,990	2,348	84,298	376
June	67,956	5,347	7,897	2,321	83,521	-777
July	67,291	5,452	7,849	2,312	82,904	-617
August	67,748	5,840	7,855	2,313	83,756	852
September	64,452	9,575	7,862	2,306	84,195	439
October	63,705	9,673	7,735	2,270	83,383	-812
November	65,493	7,798	7,633	2,206	83,130	-253
December	64,010	8,939	7,578	2,191	82,718	-412
January	62,385	12,542	7,660	2,196	84,783	2,065
February	60,955	11,339	7,633	2,164	82,091	-2,692
March	62,044	10,687	7,654	2,169	82,554	463
Total	n/a	n/a	n/a	n/a	n/a	362

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

<sup>1</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>2</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	Other transactions <sup>4</sup>	Total monthly change
<b>2016</b>									
March	-42	0	57	-103	1,089	-99	0	0	902
<b>2016-17</b>									
April	1,586	0	-93	-70	307	0	0	0	1,730
May	1,040	0	79	-84	-652	-7	0	0	376
June	-857	0	725	-128	-517	0	0	0	-777
July	-612	0	129	-90	43	-87	0	0	-617
August	1,120	0	-75	-114	-79	0	0	0	852
September	464	0	43	-122	55	-1	0	0	439
October	566	0	-451	-83	-841	-3	0	0	-812
November	1,044	0	-655	-87	-565	10	0	0	-253
December	-204	0	81	-75	-213	-1	0	0	-412
January	1,696	0	-72	-125	566	0	0	0	2,065
February	-2,554	0	365	-114	-389	0	0	0	-2,692
March	354	0	0	-109	218	0	0	0	463
<b>Total</b>	<b>3,643</b>	<b>0</b>	<b>76</b>	<b>-1,201</b>	<b>-2,067</b>	<b>-89</b>	<b>0</b>	<b>0</b>	<b>362</b>

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

<sup>1</sup> 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.

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## 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 2016–17, income totalled C\$1,997 million compared to C\$2,187 million in 2015–16. 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, 2016 to March 31, 2017	April 1, 2015 to March 31, 2016
<b>Net revenue from investments</b>		
Marketable securities	2,098	2,026
Cash and cash equivalents	37	7
Special drawing rights	15	5
Gains on sale of gold	–	140
Total net revenue from investments	2,150	2,178
<b>Other income</b>		
Net foreign exchange gain/loss	(153)	9
<b>Net revenue</b>	1,997	2,187

### 2) Total Net Return on Assets

The net return on assets of the EFA is reported using a measure called “total return.” It represents the net return generated by the EFA by including 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.

## 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 used to decompose the EFA 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.

Table A4.2 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 48 basis points, or a gain of \$347 million, in the fiscal year ending March 31, 2017, compared to 99 basis points, or a gain of \$676 million, in the year ending March 31, 2016. This reflects net returns in US-dollar terms of 22 basis points for the US-dollar portfolio, 105 basis points for the euro portfolio, 102 basis points for the GBP portfolio and 202 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 A4.2

### Total Return of the EFA Compared to Liability Benchmarks

	April 1, 2016 to March 31, 2017					April 1, 2015 to March 31, 2016	
	US\$ portfolio	Euro portfolio	GBP portfolio	Yen portfolio	Total EFA	Total Benchmark	Total EFA
<b>EFA asset portfolio</b>							
Return in original currency	-0.28%	0.06%	4.30%	-0.03%	n/a	n/a	n/a
Return in US\$ (A)	-0.28%	-6.17%	-9.02%	1.06%	-2.21%	-2.28%	2.55%
<b>Liability benchmarks</b>							
Return in original currency	-0.50%	-1.06%	3.13%	-2.03%	n/a		n/a
Return in US\$ (B)	-0.50%	-7.22%	-10.04%	-0.96%	-2.68%		1.55%
<b>Return vs. liability benchmark in basis points (A – B) in US\$</b>	22	105	102	202	48	41	99

## Performance Attribution of Total Return

Table A4.3 summarizes the attribution results for the EFA's US-dollar and euro portfolios for the fiscal year ending March 31, 2017. Total return is decomposed into three underlying return factors: coupon and amortization, changes in credit spreads, and changes in interest rates.

For 2016–17 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 return (the difference between the yield to maturity of reserve assets and liabilities issued to fund the assets) contributed positively to total return. The coupon return 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 larger 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 A4.3

**Performance Attribution for the US-Dollar and Euro Portfolios Compared to Liability Benchmarks**  
**April 1, 2016 to March 31, 2017**  
per cent

	US\$ portfolio			Euro portfolio		
	Assets	Liabilities	Difference	Assets	Liabilities	Difference
Coupon return	1.03	0.91	0.11	-0.35	-0.70	0.34
Yield curve effect	-1.76	-1.79	0.03	-0.21	-0.16	-0.05
Credit spread effect	0.47	0.35	0.12	0.56	-0.20	0.76
Residual return	-0.01	0.04	-0.05	0.06	-0.00	0.07
Return in original currency	-0.28	-0.50	0.22	0.06	-1.06	1.12
Exchange rate effect				-6.23	-6.16	-0.07
<b>Total return in US\$</b>	-0.28	-0.50	0.22	-6.17	-7.22	1.05

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 2016–17, the cost of advances to the EFA was C\$1,627 million. EFA advances represent funds (liabilities) from the Consolidated Revenue Fund (CRF) in support of maintaining the EFA. The EFA is a stand-alone account of assets while foreign liabilities are paid out of the CRF.



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**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 2016–17, this value was C\$1,508 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 2016–17, a weighted cost of domestic and foreign funding (1.9 per cent) was used in calculating notional interest paid in Canadian dollars, resulting in a value of C\$119 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 A4.4). 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, during the reporting period, the EFA assets and the associated liabilities (on a net basis) 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 six 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; the 2001 terrorist attacks on the US; the 2008 financial crisis; and the 2010 European debt crisis. The scenario analyses showed that the EFA would generally perform well during such periods of market turbulence.

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, 2017, the EFA had a 99-per-cent 10-day Total Market VaR of \$876 million, which implied that 99 per cent of the time, the value of the portfolio was not expected to decline by more than \$876 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, 2017, the Asset VaR was \$1,383 million.

Table A4.4

**Market Risk Measures**

millions of US dollars

	March 31, 2017		March 31, 2016	
	Assets only	Assets vs. liabilities (net)	Assets only	Assets vs. liabilities (net)
<b>Single factor stress tests</b>				
1% depreciation of euro, GBP and yen	-233	-1	-178	-2
1% upward parallel shift in yield curve	-2,419	-10	-2,139	-20
<b>Scenario analyses</b>				
1994 Fed tightening	-4,848	-37	-4,354	57
1997 Asian financial crisis	-790	-11	-812	135
1998 Russian default/LTCM collapse	-794	-21	-726	268
2001 terrorist attacks				
2008 financial crisis	1,429	16		
2010 European debt crisis	-240	2,364		
	-2,816	56	1,567	93
<b>99% 10-day Total Market VaR</b>		876		1,266
<b>99% 10-day Asset VaR</b>	1,383		1,436	

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## 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.

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, Initial Margin, composed of high quality collateral, is pledged by the swap counterparties for the EFA at the initiation of the swap. In addition, Variation Margin is received or paid based on whether the market value of the swaps with each counterparty is positive or negative to the Government of Canada. The Government relies on a collateral manager and the Bank of Canada for the daily management of Initial and Variation Margin.

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 A4.5). 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 A4.5

### Credit Risk Measures

millions of US dollars

	March 31, 2017
<b>Credit VaR and expected shortfall</b>	
99.9% 1-year Credit VaR	2,460
Expected shortfall	4,758
<b>Stress test</b>	
Potential loss if counterparties with negative outlook or negative watch are downgraded one notch	29

Note: A new data source for the AAA credit curves for the US dollar, euro and GBP was implemented in December 2016.

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, 2017, the EFA had a 99.9-per-cent 1-year Credit VaR of \$2,460 million, 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. 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 \$4,758 million as of March 31, 2017.

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 potential loss to the EFA under this hypothetical scenario was \$29 million.

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## 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 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

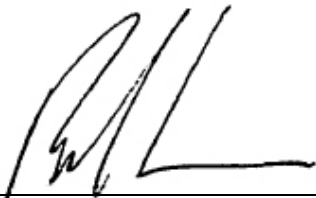
Year Ended 31 March 2017



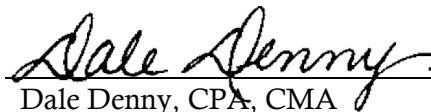
**Statement of Financial Position (unaudited)**  
**as at 31 March**  
(in millions of Canadian dollars)

	2017	2016
<b>Financial Assets</b>		
Cash and cash equivalents (notes 2, 3)	14,213	5,902
Investments (note 2, 3)		
Marketable securities	82,277	85,046
Special drawing rights	10,178	10,431
Total investments	92,455	95,477
Total financial assets	106,668	101,379
<b>Liabilities</b>		
Due to the Consolidated Revenue Fund (note 4)	106,668	101,379

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



Paul Rochon  
*Deputy Minister*  
*Department of Finance*



Dale Denny, CPA, CMA  
*Acting Chief Financial Officer*  
*Department of Finance*

**Statement of Operations** *(unaudited)*  
**for the year ended 31 March**  
(in millions of Canadian dollars)

	<b>2017</b>	<b>2016</b>
<b>Net revenue from investments</b>		
Marketable securities		
Interest	<b>1,098</b>	1,235
Net gains on sales of marketable securities	<b>1,002</b>	793
Transaction costs and other	<b>(2)</b>	(2)
Interest on cash and cash equivalents	<b>37</b>	7
Interest on special drawing rights	<b>15</b>	5
Gains on sales of gold	-	140
Total net revenue from investments	<b>2,150</b>	2,178
<b>Other</b>		
Net foreign exchange gain (loss)	<b>(153)</b>	9
<b>Net revenue for the year (note 2)</b>	<b>1,997</b>	2,187

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



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# Notes to the Financial Statements for the year ended 31 March 2017 (*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.

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## **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 2017 and 31 March 2016 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 are re-measured 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 five major currencies: The Euro, the US dollar, the British pound sterling, the Japanese yen, and the Chinese renminbi.

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

## 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:

	2017	2016
US dollar	1.3299	1.2987
Euro	1.4189	1.4777
Japanese yen	0.0120	0.0115
British sterling	1.6662	1.8654
SDRs	1.8045	1.8296

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 March 2017		31 March 2016	
	Carrying amount	Fair value	Carrying amount	Fair value
Cash and cash equivalents				
US dollar	11,819	11,819	5,303	5,303
Euro	2,188	2,188	304	304
Japanese yen	8	8	181	181
British pound sterling	131	131	114	114
Short-term deposits	67	67	-	-
Total cash and cash equivalents	14,213	14,213	5,902	5,902
Investments				
Marketable securities				
US dollar	53,723	53,333	56,638	57,685
Euro	17,937	18,100	20,161	21,132
Japanese yen	1,323	1,328	712	720
British pound sterling	9,294	9,751	7,535	7,810
Total marketable securities	82,277	82,512	85,046	87,347
SDR	10,178	10,178	10,431	10,431
Total investments	92,455	92,690	95,477	97,778
Total financial assets	106,668	106,903	101,379	103,680

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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.

## **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 an acceptable credit rating based on external credit ratings and internal credit analysis. 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.

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## **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 2017, the Account's investments did not include any securities held by its agents in connection with the securities lending program. As at 31 March 2016, the Account's investments used in the securities lending program had a fair market value of \$385 million and an amortized cost of \$387 million. A lower fair value compared to amortized cost was attributable to regular market fluctuations.

No securities were lent to eligible borrowers at the reporting date (nil at 31 March 2016).

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## 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)

	2017	2016
US dollar	67,839	64,406
Euro	18,750	19,415
Japanese yen	1,305	871
British pound sterling	9,385	7,653
SDRs	6,198	6,285
Subtotal - Foreign currencies	103,477	98,630
Canadian dollar	1,194	562
Net revenue	1,997	2,187
<b>Total</b>	<b>106,668</b>	<b>101,379</b>