Department of Finance Canada | Ministère des Finances Canada

REPORT ON THE MANAGEMENT OF CANADA'S OFFICIAL INTERNATIONAL RESERVES

APRIL 1, 2017 - MARCH 31, 2018

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, 2017 to March 31, 2018 (the 2017–18 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.

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 purposes of the EFA, as specified in the *Currency Act*, are to aid in the control and protection of the external value of the Canadian dollar and to provide a source of liquidity for the Government, 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 for the Government of Canada* (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 3. The framework includes the objectives, principles and governance structure of the EFA. Annex 3 also describes the policies that pertain to investments, risk management, performance measurement and foreign currency funding activities.

Executive Summary

The *Currency Act* stipulates that this report provide a statement of whether the strategic objectives established for the EFA have been met during the review period. These objectives—to maintain an adequate level of liquidity, preserve capital value, and, subject to these two primary objectives, optimize returns—were achieved during 2017–18

Level of the official international reserves: The market value of Canada's official international reserves increased to US$83.3 billion as at March 31, 2018 from US$82.6 billion as at March 31, 2017. The change comprised an US$837 million increase in EFA assets and a US$96 million decrease in the IMF reserve position. EFA assets, which totalled US$81.2 billion as at March 31, 2018, 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, 2018	March 31, 2017	Change
Securities	72,056	62,044	10,012
Deposits[1]	989	10,687	-9,698
Total securities and deposits (liquid reserves)	73,045	72,731	314
SDRs	8,177	7,654	523
Total EFA	81,222	80,385	837
IMF reserve position	2,073	2,169	-96
Total official international reserves	83,295	82,554	741

Note: Numbers may not add due to rounding.
[1] Cash deposits with central banks and the Bank for International Settlements.

Portfolio performance and return: In 2017–18, the EFA earned an average positive spread (or net "coupon return") of 12.1 basis points, down from 18.1 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 26 basis points in 2017–18. This is equivalent to a mark-to-market gain of US$191 million. In the previous year, the EFA reported a total return of 48 basis points (a gain of US$347 million).

EFA composition: As at March 31, 2018, the US-dollar share of EFA liquid investments was US$47.5 billion or 65.0 per cent, the euro share was equivalent to US$16.1 billion or 22.1 per cent, the British pound sterling share was equivalent to US$8.4 billion or 11.5 per cent, and the yen share was equivalent to US$1.1 billion or 1.4 per cent.

Investments in fixed-income securities issued by sovereigns, sub-sovereigns and government agencies made up 82.7 per cent of EFA liquid investments, 15.9 per cent was invested in securities issued by supranational organizations and 1.4 per cent was held in cash.

Based on the second highest rating among those provided by Moody's Investors Service, Standard & Poor's, Fitch Ratings and Dominion Bond Rating Service, as of March 31, 2018, 77.1 per cent of liquid reserve investments were rated AAA and 85.3 per cent were rated AA+ or better.

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 2017–18, EFA operations were financed through cross-currency swaps[1] of domestic obligations, and direct foreign currency issuance. Total cross-currency swap funding and maturities during the reporting period were US$4.3 billion and US$4.6 billion respectively. The swaps were transacted in a number of currencies (and at various terms) at an average cost equivalent to 3-month US$ LIBOR (London Interbank Offered Rate) less 28.0 basis points. This compared to an average rate of 3-month US$ LIBOR less 20.3 basis points for 2016–17. The primary driver of the change in funding costs from the prior year was an increase in Canadian swap spreads[2]—for example, the 10-year swap spread rose from an average of around 23 basis points in fiscal year 2016–17 to an average of about 32 basis points in fiscal year 2017–18. A rise in Canadian swap spreads decreases the cost of funding the EFA with cross-currency swaps, all else being equal.

The level of outstanding short-term US-dollar commercial paper issued under the Canada bills program decreased from US$2.3 billion to US$2.0 billion over the period. The average commercial paper cost was US$ LIBOR less 23 basis points, which was higher than the previous year's funding level (US$ LIBOR less 29 basis points), in line with the three-year average of US$ LIBOR less 22 basis points. The main drivers of higher funding costs in the money market space were an increase in short-term rates including federal funds and LIBOR, as well as an increase in US Treasury bill yields, which was mostly due to a higher overall supply of US Treasury bills and corporate commercial paper.

Report on Operations in 2017–18

The following sections describe the impact of market developments on the EFA, policy and program initiatives undertaken during the reporting period, and portfolio performance.

Market Developments

Interest Rates

Over the fiscal year ending March 31, 2018, interest rates in the US rose across the term structure with the yield on US 3-month Treasury bills increasing by 95 basis points while the yield on US 10-year Treasury bonds rose 35 basis points. In Europe, the European Central Bank (ECB) announced a reduction in its bond buying program, which led to rates drifting higher across the European Monetary Union. Overall, rising interest rates in 2017–18 resulted in a decrease of US$665 million in the market value of the liquid foreign reserves.

Credit Spreads

Credit spreads on fixed-income securities issued in US dollars narrowed during the year despite a sharp rise in spreads after the passage of US tax reform in the final quarter of the fiscal year. Spreads on euro-denominated securities also narrowed considerably relative to German government bonds, but some of the tightening was unwound in the final quarter of the fiscal year, coinciding with the beginning of the ECB's plan to reduce asset purchases. Overall, there was an approximately US$104 million increase in the market value of reserves due to changes in credit spreads.

Exchange Rates

In 2017–18, exchange rate movements resulted in an increase of US$3,728 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 since the increase in the market value of assets is offset by a similar increase in the value of associated liabilities.

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[1] A cross-currency swap agreement is a contract in which one party borrows one currency from another party and simultaneously lends the same value, at current spot rates, of a second currency to that party.

[2] A swap spread is the difference between the fixed-rate component of a given swap and the yield on a Treasury item or other fixed-income investment with a similar maturity.

During 2017–18, the euro gained 15.7 per cent against the US dollar, as the US dollar declined in value against most major currencies. Since about 22 per cent of the liquid reserves were held in euro-denominated securities (on March 31, 2018), changes in the value of the euro against the US dollar had a positive impact on the market value of the reserves.

Over the same period, the British pound sterling (GBP) gained nearly 12 per cent against the US dollar, recovering most of the losses suffered 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 positive impact on the total market value of liquid reserves as 11.5 per cent of the reserves were held in GBP-denominated assets on March 31, 2018. During 2017–18, the yen declined 4.6 per cent against the US dollar. Since less than 2 per cent of the reserves were held in yen-denominated securities, the change had a negative but very minor impact on the market value of reserves.

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 3 per cent against the US dollar. The financial statements are based on the prevailing exchange rate on March 31, 2018, which was at 0.776 cents US per Canadian dollar.

Initiatives in 2017–18

In 2017–18, the Department of Finance Canada and the Bank of Canada undertook a strategic portfolio review. The recommended changes to the EFA's investment portfolio do not materially alter the current investment approach. The *Statement of Investment Policy for the Government of Canada* was revised in order to implement the updated investment approach (see Annex 1).

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 maintain an adequate level of liquidity, preserve capital value, and, subject to these two primary objectives, optimize returns—were achieved during 2017–18. 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.

EFA 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 5).

EFA Performance

Given the movements in interest rates and foreign exchange globally, the assets held in the EFA generated lower net revenues in 2017–18 than in 2016–17 (C$1.7 billion versus C$2.0 billion). The cost of advances to the EFA, which represents the estimated economic cost to the Government of financing the EFA, increased compared to the previous fiscal year (C$1.7 billion versus C$1.6 billion).

Table 2
Summary of Main Performance Indicators for the Official International Reserves

	April 1, 2017 to March 31, 2018	April 1, 2016 to March 31, 2017
1) Net revenue of the Exchange Fund Account (C$ millions)	1,713	1,997
2) Cost of advances to the EFA (C$ millions)	1,671	1,627
3) Measures of the net return on assets and liabilities		
Coupon return (basis points/US$ millions)	12.1/88	18.1/130
Total return (basis points/US$ millions)	26/191	48/347
	As at March 31, 2018	**As at March 31, 2017**
4) Risk measures		
Total market risk (99% 10-day VaR, US$ millions)	555	876

Notes: Net revenue and cost of advances are based on actual and forecasted cash payments and receipts. The numbers are presented in Canadian dollars to be consistent with the financial statements. The measures of net return are market-based estimates and are presented in US dollars to be consistent with performance reporting for the EFA. See Annex 5 for further information on performance indicators.

In 2017–18, the net coupon return for the EFA, the difference between the yield to maturity of reserve assets and liabilities issued to fund the assets, was 12.1 basis points.

The total return[3] of the EFA decreased to 26 basis points from 48 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, credit and funding spread changes that will not be exceeded 99 per cent of the time if the EFA is held over a 10-holding-day period—stood at US$555 million.

Composition of the Official International Reserves

Table 3 shows the distribution of investments in the official international liquid reserves by currency and term to maturity as at March 31, 2018. US-dollar holdings, which made up of 69.3 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[4] and the IMF reserve position, which have no terms to maturity are translated into US dollars.

[3] The total return 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. It includes the realized coupon return, as well as the unrealized gains or losses due to changes in the market value.

[4] 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 3

Term Structure of the Official International Reserves as at March 31, 2018

market value in millions of US dollars, settled basis

Term	Cash and term deposits	Government securities in domestic currency	Other securities	SDR holdings	Total EFA assets	IMF reserve position	Total official international reserves
US-dollar holdings							
Under 6 months	682	9,331	7,717	–	**17,730**	–	17,730
6 months to under 1 year	–	1,832	2,144	–	3,976	–	3,976
1 year to under 5 years	–	5,070	9,961	–	15,032	–	15,032
5 years and over	–	9,558	1,182	–	10,740	–	10,740
Total US-dollar holdings	682	25,791	21,004	0	47,478	0	47,478
Euro holdings							
Under 6 months	88	128	493	–	709	–	709
6 months to under 1 year	–	416	704	–	1,121	–	1,121
1 year to under 5 years	–	7,491	1,433	–	8,924	–	8,924
5 years and over	–	4,800	586	–	5,386	–	5,386
Total euro holdings	88	12,835	3,216	0	16,140	0	16,140
GBP holdings							
Under 6 months	109	–	–	–	109	–	109
6 months to under 1 year	–	–	–	–	–	–	–
1 year to under 5 years	–	1,509	196	–	1,705	–	1,705
5 years and over	–	6,448	109	–	6,558	–	6,558
Total GBP holdings	109	7,957	305	0	8,372	0	8,372
Yen holdings							
Under 6 months	111	–	–	–	111	–	111
6 months to under 1 year	–	56	–	–	56	–	56
1 year to under 5 years	–	890	–	–	890	–	890
5 years and over	–	–	–	–	–	–	–
Total yen holdings	111	946	0	0	1,057	0	1,057
SDR holdings							
Indefinite term	–	–	–	8,177	–	–	8,177
Total SDR holdings				8,177			8,177
Total	990	47,529	24,525	8,177	81,224	2,073	83,297

Notes: The exchange rates prevailing on March 31, 2018 are used for the euro, GBP and yen assets. Numbers may not add due to rounding.

Liquidity and Preservation of Capital

In practice, the EFA's liquid reserves (which exclude SDR holdings and the IMF reserve position) are mainly invested in the debt of sovereigns and their agencies (82.7 per cent as at March 31, 2018), as these securities both enhance the liquidity and preserve the capital value of the EFA (Table 4). A more detailed description of the changes in the level of the official international reserves is provided in Annex 4.

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

	March 31, 2018	March 31, 2017	Change
Sovereigns and agencies	60,427	51,324	9,103
Supranationals	11,629	10,770	859
Cash	989	10,687	-9,698

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, 2018, the US-dollar share of EFA liquid investments was US$47.5 billion or 65.0 per cent, the euro share was equivalent to US$16.1 billion or 22.1 per cent, the GBP share was equivalent to US$8.4 billion or 11.5 per cent, and the yen portion was equivalent to US$1.1 billion or 1.4 per cent (Table 5). By comparison, as at March 31, 2017, the US dollar share was 67.4 per cent, the euro share was 21.0 per cent, the GBP share was 10.2 per cent and the yen share was 1.4 per cent.

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

	March 31, 2018	March 31, 2017	Change
US dollars	47,477	49,040	-1,563
Euros	16,140	15,256	884
GBP	8,372	7,431	941
Yen	1,056	1,004	52

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

As specified in the *Statement of Investment Policy for the Government of Canada,* 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, 2018, the majority of EFA investments are given a rating of AA or higher by external credit rating agencies, as indicated in Table 6. 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 6
Credit Composition of EFA Liquid Reserves
market value in millions of US dollars, settled basis

	March 31, 2018	March 31, 2017	Change
AAA	56,344	56,172	172
AA+	5,931	12,223	-6,292
AA	9,713	3,332	6,381
AA-	0	0	0
A+	946	1,005	-59
A	111	0	111
A-	0	0	0
Below A-	0	0	0

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

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$4.3 billion and US$4.6 billion respectively. Total funding of FX swaps was US$2.2 billion, while US$2.7 billion matured during the reporting period.

During 2017–18, foreign currency was raised through cross-currency swaps at an average cost equivalent to 3-month US$ LIBOR less 28.0 basis points. This funding cost was lower than rates obtained during the previous fiscal year, which averaged 3-month US$ LIBOR less 20.3 basis points.

As at March 31, 2018, Government of Canada cross-currency swaps outstanding stood at US$60.2 billion (par value). Swaps of US dollars, euros, GBP and yen made up 63.6 per cent, 21.3 per cent, 13.5 per cent and 1.7 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[5]); a medium-term note program (Canada notes[6] and euro medium-term notes[7]); and a global bond[8] program. 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).

5 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.

6 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.

7 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.

8 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, 2018	March 31, 2017	Change
Swapped domestic issues	60,229	58,143	2,086
Global bonds	8,461	8,634	-173
Canada bills	2,011	2,305	-294
Euro medium-term notes	835	810	25
Canada notes	1,150	1,150	–
Total	72,686	71,042	1,909

Note: Liabilities are stated at the exchange rates prevailing on March 31, 2018.

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 2017–18, no medium-term notes were issued.

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), 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, 2018, 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 incorporated technical amendments made as a result of the IMF’s 14th General Review of Quotas. The maximum lending by Canada to the IMF under these arrangements is SDR 3,874 million. As at March 31, 2018, SDR 414 million or US$775 million (SDR 623.5 million or US$1,125 million in 2017) in lending has been provided by Canada to the IMF under the NAB. Canada recently renewed its participation in the NAB for another five-year period pursuant to the November 2016 NAB Decision (effective November 2017).

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, 2018, 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 amount 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.

At March 31, 2018, a total of SDR 414 million or US$775 million was outstanding under these arrangements. Amounts advanced under these arrangements are considered part of the Official International Reserves of Canada.

Annex 1: Statement of Investment Policy for the Government of Canada (August 2018)

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 establishes the SIP under the *Currency Act.*

2. Purposes of Exchange Fund Account

The EFA is the principal repository of Canada's official international reserves. As stated in the *Currency Act,* the purposes of the EFA are to aid in the control and protection of the external value of the Canadian dollar and provide a source of liquidity to the Government. Assets held in the EFA shall be managed to provide 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 allows 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.

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 (together, "EFA officials"), prepares recommendations for the Minister of Finance and oversees the management of the EFA.

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

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

4. Alignment of EFA Activities with Government of Canada Policy Priorities

4.1 Guiding Principles

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

4.2 Fiscal Prudence

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

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 shall establish the risk tolerances of the portfolio through approvals of the Strategic Portfolio Parameters. The FMC shall establish the risk preferences of the portfolio through approval of the Strategic Asset Allocation. The FRC shall establish a benchmark that details asset allocations to individual counterparties deemed eligible for investment.

6.1 Strategic Portfolio Parameters

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

6.2 Strategic Asset Allocation

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

6.3 Investment Benchmark

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

7. Securities Lending and Use of Derivatives

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

EFA officials shall only use derivatives and undertake related activities in a manner that is consistent with the objectives of the EFA of preserving capital value, maintaining a high standard of liquidity and, subject to these, optimizing returns.

8. Performance Assessment and Risk Management Reporting

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

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

8.1 Public Reporting

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

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

8.2 Commercial Confidentiality

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

9. Review

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

Appendix: Strategic Portfolio Parameters (August 2018)

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,[9] measured on a market-value basis, must be denominated in US dollars.

As a contingency against a short-term interruption of domestic funding markets, at least 6 per cent of liquid foreign reserves on a market-value basis shall comprise US Treasury bills and US dollar cash.

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,[10] and supranational institutions.
- 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 appendix are prohibited.

[9] Liquid foreign reserves comprise foreign currency securities, and deposits. Special drawing rights, which are international reserve assets created by the International Monetary Fund, are excluded in the definition of liquid foreign reserves, although they form part of the EFA.

[10] 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.

4. Exposure to Issuers

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

i. **Reference Issuers:** These are government issuers of securities that are deemed by Canada to have reserve currency status and are actively traded, including cash.
   - The minimum exposure to this category is 35 per cent of liquid foreign reserves on a market-value basis.

ii. **High Credit Quality Issuers:** These issuers are deemed by Canada to be of very high credit quality.

iii. **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. 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.

2. 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.

3. Minimum Credit Rating for Issuers of Eligible Assets and Counterparties

In order to mitigate the negative impact of potential credit events on the Government's financial risk exposure related to the EFA, issuers of eligible assets and counterparties must be of acceptable credit quality, a determination that is informed by external credit ratings and internal credit analysis.

- Issuers must be deemed by Canada to have a credit rating of "A-" or higher.
- Counterparties for deposits, certificates of deposit, commercial paper and repurchase agreements must be deemed by Canada to have a credit rating of "A-" or higher.
- Counterparties for swaps and delivery-versus-payment transactions must be deemed by Canada to have a credit rating of "BBB" 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:
  1. securities issued by, and deposits with, central banks where the sovereign's credit quality is acceptable; and
  2. special drawing rights created by the International Monetary Fund.

4. 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.

Annex 2: Statement of Investment Policy for the Government of Canada (October 2016)

1. Purpose of Policy

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

2. Purpose of Exchange Fund Account

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

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

3. Governance

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

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

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

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

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

4. Alignment of EFA Activities with Government of Canada Policy Priorities

4.1 Guiding Principles

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

4.2 Fiscal Prudence

The EFA is an account that forms part of the Government of Canada's balance sheet. Recognizing the importance of fiscal prudence and sustainability in public finances, the EFA shall be managed in a cost effective manner under an asset-liability matching framework, whereby the market value of assets and liabilities are matched to the extent possible by currency, term and/or duration, to mitigate the potentially negative impacts of movements in interest rates and foreign exchange rates on the Government's fiscal position. Credit risks associated with assets and liabilities are not offset under this framework and are therefore addressed by other means (Annex 2B).

4.3 Promoting Financial Stability

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

5. Investment Objectives

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

6. Investment Process

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

6.1 Strategic Portfolio Parameters

Strategic Portfolio Parameters for the EFA shall include, but are not limited to, the level of reserves, criteria for currency and asset class eligibility based on liquidity and capital preservation considerations, and portfolio risk limits. The Strategic Portfolio Parameters are included as Annex 2B. The Minister of Finance may except the liquid assets held in the EFA from the application of some or all the Strategic Portfolio Parameters where any of these assets are: (i) sold to provide foreign currency liquidity to the Government; (ii) sold to promote orderly conditions for the Canadian dollar in the foreign exchange markets; or (iii) sold in other similar circumstances.

6.2 Strategic Asset Allocation

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

6.3 Investment Benchmark

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

7. Securities Lending and Use of Derivatives

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

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

8. Performance Assessment and Risk Management Reporting

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

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

8.1 Public Reporting

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

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

8.2 Commercial Confidentiality

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

9. Review

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

Annex 2B: 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,[11] and supranational institutions.
- Eligible assets also include deposits with commercial banks, central banks and the Bank for International Settlements, repurchase agreements, commercial paper and certificates of deposit issued by private sector entities, gold and International Monetary Fund (IMF) special drawing rights. Bonds with embedded options and holdings of securities issued by and deposits with Canadian-domiciled entities (or entities that derive a majority of their revenues from their Canadian operations) are not permitted.
- All other classes of assets not listed in this annex are prohibited.

4. Exposure to Issuers

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

i. **Reference Issuers:** These are government issuers of securities that are deemed by Canada to have reserve currency status and are actively traded, including cash.
- The minimum exposure to this category is 45 per cent of liquid foreign reserves on a market-value basis.

ii. **Other Liquid Sovereign Issuers:** These are government issuers of securities that are deemed by Canada to trade actively.

iii. **Other Highly Rated Issuers:** These issuers are deemed by Canada to be of the highest credit quality.

iv. **Other Issuers:** These issuers are high credit quality sovereigns and other entities that meet Canada's liquidity and capital preservation requirements.

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[11] 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.

Capital Preservation Risk Tolerances

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

1. Interest Rate Exposure

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

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

2. Maximum Term to Maturity

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

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

3. Other Eligible Currencies

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

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

4. Eligible Counterparties and Issuers

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

- 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.

Annex 3: Overview of the Exchange Fund Account Management Framework

Objectives

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

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

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

Principles

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

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

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

Annex 4: Changes in the Level of the Official International Reserves

The level of the official international liquid reserves changes over time due to a variety of factors. As shown in Table A4.1, over the 12-month reporting period the level of reserves increased by US$741 million. The increase was due to revaluation effects (US$3,728) million and return on investments (US$385 million), which was offset by reserves management operations (-US$1,571 million), foreign currency debt charges (-US$1,254 million) and net government operations (-US$547 million).

Table A4.1
Sources of Change in Canada's Official International Reserves Between March 31, 2017 and March 31, 2018
market value in millions of US dollars

	Change
Official intervention	–
Net government operations	-547
Reserves management operations	-1,571
Return on investments	385
Foreign currency debt charges	-1,254
Revaluation effects	3,728
Total change	741

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.[12]

Table A4.2
Official Intervention
millions of US dollars

	2010–11	2011–12	2012–13	2013–14	2014–15	2015–16	2016–17	2017–18
Purchases	-124[1]	–	–	–	–	–	–	–
Sales	–	–	–	–	–	–	–	–
Net	-124	–	–	–	–	–	–	–

[1] 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).

[12] Official intervention is separate from net purchases of foreign currency for government foreign exchange requirements and for additions to reserves.

Net Government Operations

The net purchase of foreign currencies for government foreign exchange requirements and for additions to reserves totalled -US$547 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 -US$1.6 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 US$18.5 billion, were less than debt maturities totalling US$20.1 billion (including Canada bill maturities of US$9.3 billion, FX swap maturities of US$2.7 billion, cross-currency swap maturities of US$4.6 billion, and bond maturities of US$3.5 billion).

Return on Investments

Return on investments comprises interest earned on investments (US$1,050 million) and a decrease in the market value of securities resulting from changes in interest rates (-US$665 million). The overall effect on the official international reserves was a net increase of US$385 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 an increase in the market value of the official international reserves of US$3,728 million, primarily due to the appreciation 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 2017–18, 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 Table A4.3.

Table A4.3
Canada's Official International Reserves
Month-to-Month Changes
market value in millions of US dollars

Month-end	Securities	Deposits	Special drawing rights[1]	Reserve position in the IMF[2]	Total	Total monthly change
2017						
March	62,044	10,687	7,654	2,169	82,554	463
2017–18						
April	65,769	9,020	7,729	2,192	84,710	2,156
May	66,445	9,131	7,801	2,212	85,589	879
June	65,332	9,302	7,791	2,201	84,626	-963
July	65,104	9,764	7,867	2,213	84,948	322
August	65,516	9,509	7,901	2,177	85,103	155
September	64,400	9,862	7,900	2,177	84,339	-764
October	62,244	11,171	7,851	2,121	83,387	-952
November	69,932	6,825	7,911	2,137	86,805	3,418
December	68,753	7,898	7,975	1,999	86,625	-180
January	68,676	7,828	8,160	2,084	86,748	123
February	72,716	3,568	8,134	2,068	86,486	-262
March	72,056	989	8,177	2,073	83,295	-3,191
Total	n/a	n/a	n/a	n/a	n/a	741

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

1 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.

2 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.

Annex 5: Detailed Portfolio Return and 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 2017–18, income totalled C$1,713 million compared to C$1,997 million in 2016–17. The main categories of income are summarized in Table A5.1.

Table A5.1
Revenues of the Exchange Fund Account
millions of Canadian dollars

	April 1, 2017 to March 31, 2018	April 1, 2016 to March 31, 2017
Net revenue from investments		
Marketable securities	1,193	2,098
Cash and cash equivalents	94	37
Special drawing rights	66	15
Total net revenue from investments	1,353	2,150
Other income		
Net foreign exchange gain/loss	360	(153)
Net revenue	1,713	1,997

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 A5.2 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 return of the asset benchmark is also included—4.48 per cent versus 4.61 per cent for the EFA asset portfolio. The total net return was 26 basis points, or a gain of US$191 million, in the fiscal year ending March 31, 2018, compared to a total net return of 48 basis points, or a gain of US$347 million, in the year ending March 31, 2017. For 2017–18 the total net return reflects net returns in US-dollar terms of 3 basis points for the US-dollar portfolio, 50 basis points for the euro portfolio, 86 basis points for the GBP portfolio and 108 basis points for the yen portfolio. The total net return was due to an increase in the value of assets, mainly caused by the coupon effect, which was partially offset by an increase in the market value of outstanding liabilities. The total return numbers include interest flows as well as all gains or losses earned over the period, regardless of whether they were realized or not.

Table A5.2

Total Return of the EFA Compared to Liability Benchmarks

	April 1, 2017 to March 31, 2018						April 1, 2016 to March 31, 2017
	US$ portfolio	Euro portfolio	GBP portfolio	Yen portfolio	Total EFA	Total benchmark	Total EFA
EFA asset portfolio							
Return in original currency	0.56%	-0.04%	-0.73%	-0.13%	n/a	n/a	n/a
Return in US$ (A)	0.56%	15.28%	11.17%	4.49%	4.61%	4.48%	-2.21%
Liability benchmarks							
Return in original currency	0.53%	-0.47%	-1.50%	-1.17%	n/a		n/a
Return in US$ (B)	0.53%	14.78%	10.30%	3.40%	4.34%		-2.68%
Return vs. liability benchmark in basis points (A – B) in US$	3	50	86	108	26	13	48

Performance Attribution of Total Return

Table A5.3 summarizes the attribution results for the EFA's US-dollar and euro portfolios for the fiscal year ending March 31, 2018. Total return is decomposed into three underlying return factors: coupon and amortization, changes in credit spreads, and changes in interest rates.

For 2017–18, 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 A5.3

Performance Attribution for the US-Dollar and Euro Portfolios Compared to Liability Benchmarks
April 1, 2017 to March 31, 2018

per cent

	US$ portfolio			Euro portfolio		
	Assets	Liabilities	Difference	Assets	Liabilities	Difference
Coupon return	1.67	1.59	0.09	-0.25	-0.43	0.18
Yield curve effect	-1.26	-1.28	0.03	0.03	0.01	0.02
Credit spread effect	0.11	0.21	-0.10	0.20	-0.09	0.29
Residual return	0.04	0.02	0.02	-0.01	0.04	-0.06
Return in original currency	0.56	0.53	0.03	-0.04	-0.47	0.43
Exchange rate effect				15.32	15.25	0.07
Total return in US$	0.56	0.53	0.03	15.28	14.78	0.50

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 2017–18, the cost of advances to the EFA was C$1,671 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.

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 2017–18, this value was C$1,531 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 2017–18, 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$192 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 A5.4). 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, 2018, the EFA had a 99-per-cent 10-day Total Market VaR of US$555 million, which implied that 99 per cent of the time, the value of the portfolio was not expected to decline by more than US$555 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, 2018, the Asset VaR was US$933 million.

Table A5.4
Market Risk Measures
millions of US dollars

	March 31, 2018		March 31, 2017	
	Assets only	Assets vs. liabilities (net)	Assets only	Assets vs. liabilities (net)
Single factor stress tests				
1% depreciation of euro, GBP and yen	-253	1	-233	-1
1% upward parallel shift in yield curve	-2,532	-10	-2,419	-10
Scenario analyses				
1994 Fed tightening	-5,160	-73	-4,848	-37
1997 Asian financial crisis	-808	5	-790	-11
1998 Russian default/LTCM collapse	-811	36	-794	-21
2001 terrorist attacks			1,429	16
2008 financial crisis	1,498	15	-240	2,364
2010 European debt crisis			-2,816	56
99% 10-day Total Market VaR		555		876
99% 10-day Asset VaR	933		1,383	

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 A5.5). 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 A5.5
Credit Risk Measures
millions of US dollars

	March 31, 2018
Credit VaR and expected shortfall	
99.9% 1-year Credit VaR	2,057
Expected shortfall	5,706
Stress test	
Potential loss if counterparties with negative outlook or negative watch are downgraded one notch	37

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, 2018, the EFA had a 99.9-per-cent 1-year Credit VaR of US$2,057 million, which implied that 99.9 per cent of the time, the value of the portfolio was not expected to decline by more than US$2.1 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 US$5,706 million as of March 31, 2018.

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 US$37 million.

Annex 6: 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 March 31, 2018

Statement of Financial Position *(unaudited)*

as at 31 March

(in millions of Canadian dollars)

	2018	2017
Financial assets		
Cash and cash equivalents (notes 2, 3)	1,275	14,213
Investments (note 2, 3)		
Marketable securities	93,605	82,277
Special drawing rights	10,550	10,178
Total investments	104,155	92,455
Total financial assets	105,430	106,668
Liabilities		
Due to the Consolidated Revenue Fund (note 4)	105,430	106,668

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

Paul Rochon
Deputy Minister
Department of Finance

Adelle Laniel, CPA, CA
Chief Financial Officer
Department of Finance

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

	2018	2017
Net revenue from investments		
Marketable securities		
Interest	1,107	1,098
Net gains on sale of marketable securities	88	1,002
Transaction costs and other	(2)	(2)
Interest on cash and cash equivalents	94	37
Interest on special drawing rights	66	15
Total net revenue from investments	1,353	2,150
Other		
Net foreign exchange (loss) gain	360	(153)
Net revenue for the year (note 2)	1,713	1,997

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

Notes to the Financial Statements

For the year ended 31 march 2018 *(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 objectives of the Account are to aid in the control and protection of the external value of the Canadian dollar and to provide a source of liquidity for the Government, if required. The Minister of Finance empowers the Account to acquire, borrow, sell or lend 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 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 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 and the Department of Finance. These costs have not been recognized in the Statements.

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

c) Financial assets

Cash and cash equivalents

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

Deposits held under repurchase agreements

Deposits held under repurchase agreements are measured at cost. The resulting revenue is included in net revenue from marketable securities. As of March 31, 2018 and March 31, 2017, 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 the year*.

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 *Interest* 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:

	2018	**2017**
US dollar	1.2884	1.3299
Euro	1.5853	1.4189
Japanese yen	0.0121	0.0120
British sterling	1.8076	1.6662
SDRs	1.8729	1.8045

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 gain (loss)* 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.

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 2018		31 March 2017	
	Carrying Amount	**Fair Value**	**Carrying Amount**	**Fair Value**
Cash and cash equivalents				
US dollar	878	878	11,819	11,819
Euro	114	114	2,188	2,188
Japanese Yen	143	143	8	8
British Sterling Pound	140	140	131	131
Short-term deposits	-	-	67	67
Total cash and cash equivalents	1,275	1,275	14,213	14,213
Investments				
Marketable securities				
US dollar	61,336	60,291	53,723	53,333
Euro	20,620	20,681	17,937	18,100
Japanese Yen	1,216	1,219	1,323	1,328
British Sterling Pound	10,433	10,646	9,294	9,751
Total marketable securities	93,605	92,837	82,277	82,512
SDRs	10,550	10,550	10,178	10,178
Total investments	104,155	103,387	92,455	92,690
Total financial assets	105,430	104,662	106,668	106,903

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.

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 March 31, 2018, there were no loaned securities in the EFA's investments ($nil at March 31, 2017).

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 March 26, 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 March 31, advances from the CRF were composed of the following currencies:

Currency composition of advances from the CRF
(in millions of Canadian dollars)

	2018	**2017**
US dollars	64,376	67,839
Euros	19,910	18,750
British Pound Sterling	10,453	9,385
Japanese yen	1,322	1,305
SDRs	6,433	6,198
Subtotal - foreign currencies	102,494	103,477
Canadian dollars	1,223	1,194
Net revenue	1,713	1,997
Total	105,430	106,668