Department of Finance Canada | Ministère des Finances Canada

Report on the Management of Canada's Official International Reserves

APRIL 1, 2012 – MARCH 31, 2013

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, 2012 to March 31, 2013 (the 2012–13 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, its composition and changes during the year, and strategic policy initiatives, as well as a statement of whether the strategic objectives established for the EFA have been met.

The accompanying financial statements, audited by the Auditor General of Canada, present the position of the EFA asset portfolio as at the end of the 2012–13 fiscal year.

Unless otherwise noted, in this report the official international reserves are reported in US dollars on a market-value basis. The 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, special drawing rights (SDRs), and a small holding of gold. SDRs are international reserve assets created by the International Monetary Fund (IMF) whose value is based on a basket of international currencies. The official international reserves also include Canada's reserve position at the IMF. This position, which represents Canada's investment in the activities of the IMF, fluctuates according to drawdowns by and repayments from the IMF.

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

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

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

Highlights

Level of the official international reserves: The market value of Canada's official international reserves increased to $70.2 billion as at March 31, 2013 from $69.4 billion as at March 31, 2012. The change comprised a $556-million increase in EFA assets and a $302-million increase in the reserve position in the IMF. The increase in EFA assets, which totalled $65.8 billion as at March 31, 2013, was consistent with the Government's commitment to maintain holdings of liquid foreign exchange reserves at or above 3 per cent of gross domestic product. EFA assets are held primarily in the debt securities of highly rated sovereigns, their explicitly supported borrowing entities, and supranational organizations.

Table 1
The EFA and Official International Reserves
market value in millions of dollars, settled basis

	March 31, 2013	March 31, 2012	Change
Securities	56,782	55,242	1,540
Deposits	331	790	-459
Total securities and deposits (liquid reserves)	57,113	56,032	1,081
Gold	165	181	-16
SDRs	8,534	9,043	-509
Total EFA	65,812	65,256	556
IMF reserve position	4,396	4,094	302
Total official international reserves	70,208	69,350	858

Note: Numbers may not add due to rounding.

EFA composition: As at March 31, 2013, the US-dollar share of EFA liquid investments was US$38.3 billion or 67 per cent, the euro share was equivalent to US$18.6 billion or 32.5 per cent, and the yen portion was equivalent to US$310 million or 0.5 per cent.

Investments in fixed-income securities of sovereigns and agencies made up 86.3 per cent of EFA liquid investments while 13.1 per cent was invested in securities issued by supranational agencies. Less than 1 per cent was held in cash.

As of March 31, 2013, 94.5 per cent of liquid reserve investments were rated AAA and 99 per cent were rated AA+ or better.

EFA funding sources: The foreign currency reserve assets held in the EFA and the foreign currency liabilities financing these assets are managed on a portfolio basis, and are matched closely in currency and duration, in order to limit the EFA's net exposure to currency and interest rate risk.

During 2012–13, EFA operations were financed primarily through cross-currency swaps of domestic obligations. Cross-currency swaps totalling $5.85 billion were transacted at an average cost of 3-month US$ LIBOR (London Interbank Offered Rate) less 35 basis points. This compared to an average rate of 3-month US$ LIBOR less 32 basis points for 2011–12.

The level of outstanding short-term US-dollar commercial paper issued under the Canada bills program was maintained around $2.0 billion over the period, at an average cost of funding of US$ LIBOR less 22 basis points.

Portfolio return: In 2012–13, the EFA earned an average positive spread (or net "coupon return") of 39 basis points, down from 45 basis points the previous year. This spread represents the difference between the yield to maturity on foreign currency fixed-income assets held in the EFA and the average cost of foreign currency liabilities used to fund the assets. The spread measures the underlying net return of the portfolio on the assumption that all the assets and liabilities are held to maturity.

Taking into account gains and losses on portfolio rebalancing and coupon flows, the EFA portfolio earned 80 basis points (or a gain of $351 million) in 2012–13, down from 102 basis points (or a gain of $451 million) the previous fiscal year.

Taking into account gains and losses from portfolio rebalancing, coupon 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 95 basis points in 2012–13. This is equivalent to an unrealized mark-to-market gain of $532 million. The positive total return was mainly caused by credit spread improvement, particularly in the euro portfolio. This compares to a total return of -62 basis points (or a loss of $293 million) the previous year.

Report on Operations in 2012–13

The following sections review market developments, new initiatives, portfolio performance and risk measures in 2012–13. The financial statements that appear at the end of this report are reported in Canadian dollars.

Market Developments

During 2012–13 interest rates remained low, credit spreads for many issuers narrowed, and the euro depreciated against the US dollar.

Interest Rates

Overall, changes in interest rates in 2012–13 resulted in an increase of $790 million in the market value of the reserves.

US-dollar-denominated holdings in the EFA are composed mainly of fixed-income securities issued by the US government, its agencies and supranational institutions. During 2012–13, short-term and longer-term interest rates in the United States remained at historically low levels, as the Federal Reserve kept its key policy rate at the lower bound and introduced a third round of quantitative easing. Over the year, the yield on US 3-month Treasury bills was unchanged while the yield on 10-year Treasury bonds fell by 36 basis points.

Euro-denominated holdings in the EFA are composed of fixed-income securities issued by European countries, their agencies, and supranational institutions. Actions taken by the European Central Bank (ECB) to address rising debt costs for peripheral European sovereigns, including the introduction of its Outright Monetary Transactions program, during the period had a significant impact on interest rates in the euro area. In Germany, for example, yields on 5- and 10-year government bonds fell 49 and 50 basis points respectively.

Credit Spreads

Credit spreads on fixed-income securities issued in US dollars were significantly tighter over the year compared to US Treasuries given accommodative monetary policies and search-for-yield considerations. Credit spreads of European sovereign periphery bonds narrowed considerably relative to German government bonds following ECB President Draghi's assurance in July 2012 that the ECB would "do whatever it takes to preserve the euro."

Exchange Rates

Overall, exchange rate changes versus the US dollar resulted in a decrease of $1.3 billion in the market value of the reserves. Given the asset-liability matching framework for managing reserves, however, the exchange rate translation of the value of reserves and liabilities issued to fund the reserves from US dollars to Canadian dollars, for reporting purposes in the *Public Accounts of Canada,* had a relatively minor impact on the Government's financial position.

During 2012–13, the euro depreciated by approximately 4 per cent against the US dollar. As 32 per cent of the liquid reserves were held in euro-denominated securities (as at March 31, 2013), changes in the value of the euro against the US dollar imparted some volatility to the reported monthly market value of the reserves.

During 2012–13, the yen fell 15 per cent against the US dollar. Changes in the yen/US-dollar exchange rate, while significant, had little impact on the market value of the official international reserves since only 0.6 per cent of the reserves were held in yen-denominated assets as at March 31, 2013.

Initiatives in 2012–13

During 2012–13, the Department of Finance and the Bank of Canada continued to work on projects to improve the management of the EFA and pursue initiatives endorsed by Group of Twenty (G-20) countries to improve financial stability. These projects and initiatives included reviewing and updating the EFA's decision-making framework for allocating assets within the portfolio, continuing the implementation of the Government's prudential liquidity plan that was first announced in Budget 2011, reducing reliance on external credit rating agencies, assessing the implications for the EFA of domestic and international efforts to reform the over-the-counter derivative market, and launching a gold coins sales program.

Asset Allocation Framework Review

In March 2012, Forethought Risk completed an evaluation of the governance framework and process that guides EFA portfolio management and instrument allocation decisions. This evaluation was conducted through the Treasury Evaluation Program, which periodically assesses treasury management policies and operational programs to ensure effectiveness and provide accountability. The evaluation concluded that the asset allocation framework achieved its expected outcomes and the key EFA objectives of liquidity, capital preservation and optimization of returns.

The report provided a number of specific recommendations aimed at strengthening the asset allocation framework by adding and refining operational processes concerning both portfolio management and group communications. The Department of Finance agreed or agreed in principle with all of the recommendations and, in collaboration with the Bank of Canada, has commenced work on implementing the recommendations in the following areas: formalizing the investment process, establishing the use of asset benchmarks, and enhancing risk and performance metrics.

The full evaluation, recommendations of the consultant, and the departmental response are available at www.fin.gc.ca/treas/evaluations/eaafefa-ecracfc-eng.asp.

Prudential Liquidity Plan Update

In Budget 2011, the Government announced that it would increase financial assets—cash deposits and foreign exchange reserves—in order to safeguard its ability to meet payment obligations in situations where normal access to funding markets may be disrupted or delayed. As part of this plan, the level of liquid foreign exchange reserves has increased by $10 billion, and will be maintained at a level at or above 3 per cent of gross domestic product going forward. In February 2013, the Government announced that all elements of the prudential liquidity plan were on track to be fully implemented by the summer of 2013, well in advance of the original target date of March 2014.

Reducing Reliance on Credit Rating Agencies (CRAs)

The Financial Stability Board published *Principles for Reducing Reliance on CRA Ratings*, which were endorsed by the G-20 at their meeting in Korea in 2010. The principles require authorities to assess references to CRA ratings in standards and, wherever possible, remove them or replace them with suitable alternative standards of creditworthiness. The broad objective of these principles is to end the mechanistic and sole reliance on CRA credit opinions and encourage market participants and institutional investors to carry out their own credit assessments.

Against this background, a Credit Assessment Group (CAG) within the Financial Risk Office of the Bank of Canada has been set up to support a new joint Bank of Canada-Department of Finance Credit Ratings Committee (CRC) responsible for assessing the credit quality of trading and investment counterparties of the EFA. The CRC began meeting in 2012–13, focusing on sovereign counterparties, and will consider other EFA counterparties as the CAG expands its coverage.

An update of the Memorandum of Understanding on Treasury and Credit Risk Management between the Bank of Canada and the Department of Finance was updated to reflect this additional role for the Bank (www.fin.gc.ca/treas/Goveev/mou-trm-eng.asp).

Over-the-Counter Derivatives

The Government of Canada uses foreign exchange and cross-currency swaps for foreign reserves funding and currency hedging within the EFA. These transactions are executed through bilateral contracts under the International Swaps and Derivatives Association documentation with a range of counterparties and subject to collateral support arrangements. The Department of Finance and the Bank of Canada are continuing their efforts to analyze the expected costs and risks arising from evolving regulatory changes for the treatment of derivatives and their implications for the Government of Canada's swap program, including evolving international standards on marginning.

Gold Coins Sales Program

At the end of March 2013, the EFA held 103,100 ounces of gold in the form of approximately 231,500 King George V $5 and $10 gold coins dated 1912, 1913, or 1914, down from 109,000 ounces of gold and approximately 246,100 coins the previous year. On November 28, 2012, the Government of Canada made available to Canadians and collectors 30,000 high-quality King George V $5 and $10 dollar coins that were minted a century ago through the Royal Canadian Mint. The sale of these coins will result in a profit for the EFA over and above the intrinsic gold bullion value. The proceeds from the sales will be reinvested in highly liquid securities, consistent with the policy objectives of the EFA.

Further information about these coins is available at www.mint.ca.

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 a high standard of liquidity, preserve capital value and optimize return—were achieved. 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 acceptable limits. In addition, the net underlying return was positive (see Annex 4).

Term Structure of the Official International Reserves

Table 2 shows the distribution of investments in the official international reserves by currency and term to maturity as at March 31, 2013. US-dollar holdings, which made up slightly more than 70 per cent of the reserves, were divided amongst the less than 1 year, 1 to 5 year, and over 5 year maturity buckets. The euro holdings were more heavily weighted towards medium- and longer-term investments. Close to 90 per cent of euro investments had a maturity of greater than 1 year. Yen holdings remained minimal and relatively unchanged from the previous year.

Gold, special drawing right (SDR) holdings and the International Monetary Fund (IMF) reserve position, which have no terms to maturity, are translated into US dollars. The IMF reserve position is classified as an investment of indefinite term.

Table 2

Term Structure of the Official International Reserves as at March 31, 2013

market value in millions of dollars, settled basis

Term	Cash and term deposits	Government securities in domestic currency	Other securities	Gold	SDR holdings	Total EFA assets	IMF reserve position	Total official international reserves
US-dollar holdings								
Under 6 months	308	6,367	2,453	–	–	**9,128**	–	**9,128**
6 months to under 1 year	–	340	1,013	–	–	**1,353**	–	**1,353**
1 year to under 5 years	–	4,761	7,789	–	–	**12,550**	–	**12,550**
5 years and over	–	12,876	2,346	–	–	**15,222**	–	**15,222**
Indefinite term	–	–	–	165	8,534	**8,699**	4,396	**13,095**
Total US-dollar holdings	308	24,344	13,601	165	8,534	**46,952**	4,396	**51,348**
Euro holdings								
Under 6 months	16	1,188	56	–	–	**1,260**	–	**1,260**
6 months to under 1 year	–	543	207	–	–	**750**	–	**750**
1 year to under 5 years	–	5,322	1,891	–	–	**7,213**	–	**7,213**
5 years and over	–	8,410	916	–	–	**9,326**	–	**9,326**
Total euro holdings	16	15,463	3,070	0	0	**18,549**	0	**18,549**
Yen holdings								
Under 6 months	8	–	–	–	–	**8**	–	**8**
6 months to under 1 year	–	54	–	–	–	**54**	–	**54**
1 year to under 5 years	–	250	–	–	–	**250**	–	**250**
5 years and over	–	–	–	–	–	**–**	–	**–**
Total yen holdings	8	304	0	0	0	**312**	0	**312**
Total	331	40,111	16,671	165	8,534	**65,813**	4,396	**70,208**

Notes: The exchange rates prevailing on March 31, 2013 are used for the euro and yen assets. Numbers may not add due to rounding.

Liquidity and Preservation of Capital

In practice, the EFA's liquid reserves (which exclude gold and SDR holdings) are mainly invested in the debt of sovereigns and their explicitly supported borrowing entities (86.3 per cent as at March 31, 2013), as these securities enhance both liquidity and capital preservation (Table 3). The Liquidity Tier consists mainly of US Treasury securities and securities issued by other sovereigns that trade in liquid markets. A more detailed description of the changes in the level of the official international reserves is provided in Annex 3.

Table 3
Composition of EFA Liquid Reserves
market value in millions of dollars, settled basis

	March 31, 2013	March 31, 2012	Change
Sovereigns and agencies	49,288	46,161	3,127
Supranationals	7,495	9,381	-1,886
Private sector investments	0	0	0
Cash	331	490	-159

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

The largest portion of EFA liquid reserves is in US dollars because foreign currency needs are mostly in US dollars and, historically, foreign exchange market intervention has mainly consisted of transactions involving the US dollar. As at March 31, 2013, the US-dollar share of EFA liquid investments was US$38.3 billion or 67.0 per cent, the euro share was equivalent to US$18.6 billion or 32.5 per cent, and the yen portion was equivalent to US$310 million or 0.5 per cent (Table 4). By comparison, as at March 31, 2012, the US-dollar share was 63.2 per cent, the euro share was 36.2 per cent, and the yen share was 0.6 per cent.

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

	March 31, 2013	March 31, 2012	Change
US dollars	38,253	35,399	2,854
Euro	18,550	20,280	-1,730
Yen	310	353	-43

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

As specified in the *Statement of Investment Policy,* to help achieve the objective of preserving capital value, an issuing entity must have a credit rating of at least A-/A3/A (low) to be an eligible EFA investment. Counterparty limits are established based on a framework that incorporates external ratings from credit rating agencies. Compliance with counterparty limits is monitored on a real-time basis. The majority of EFA investments are in the AAA category, as indicated in Table 5.

As a result of the downgrade of several euro-area sovereigns, some securities held in the EFA are no longer rated at least A-. The Minister of Finance has agreed to provide an exception to continue to hold these securities in the EFA.

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

	March 31, 2013	March 31, 2012	Change
AAA	53,905	53,163	742
AA+	2,474	1,948	526
AA	90	0	90
AA-	311	352	-41
A	0	161	-161
A-	0	74	-74
Below A-	334	334	0

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

Portfolio Returns

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

Overview

Given the low interest rate environment and foreign exchange movements, the assets held in the EFA generated modestly lower net revenues in 2012–13 than in 2011–12 (C$1.40 billion versus C$1.67 billion). The cost of advances to the EFA, which represents the estimated economic cost to the Government of financing the EFA, also modestly declined (C$1.42 billion versus C$1.49 billion). In 2012–13, the cost of EFA advances was slightly higher than the net revenue earned on EFA assets, mainly due to the reinvestment of securities at lower yields and with higher credit quality.

Table 6

Summary of Main Performance Indicators for the Official International Reserves

	April 1, 2012 to March 31, 2013	April 1, 2011 to March 31, 2012
1) Net revenue of the Exchange Fund Account (C$ millions)	1,401	1,672
2) Net return on assets measures		
Coupon return (basis points)	39	45
Carry (basis points)	-18	-1
Carry including net realized gains or losses (basis points)	80	102
Total return (basis points)	95	-62
3) Cost of advances to the EFA (C$ millions)	1,416	1,489
	As at March 31, 2013	**As at March 31, 2012**
4) Risk measures		
Market risk (99% 10-day VaR, US$ millions)	14	13
Credit risk (99.9% 365-day VaR, US$ millions)	2,014	2,343

Two carry performance measures are used for the portfolio: carry including only interest receipts and payments; and carry including interest receipts and payments as well as net realized gains and losses from the sale or purchase of assets. When net realized gains and losses are included in the carry measure, the carry improved from -18 basis points to 80 basis points. Furthermore, taking into account unrealized changes in the market value of assets and liabilities, the net value of the portfolio increased by 95 basis points. This compares to a decrease of 62 basis points in the market value of the portfolio in 2011–12, and mainly reflects a tightening in credit spreads of EFA assets versus underlying funding rates of interest.

The Market Value at Risk (Market VaR), which measures the loss arising from interest rate and exchange rate movements that will not be exceeded 99 per cent of the time if the EFA is held static over a 10 business-day period, was relatively unchanged from the prior fiscal year ($14 million versus $13 million). The VaR measure of potential losses due to credit exposure to issuers (Credit VaR) decreased as a result of tighter credit spreads associated with somewhat improved funding costs for European sovereign issuers.

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 $5.85 billion and $4.14 billion respectively. During 2012–13, foreign currency was raised through cross-currency swaps at an average cost of 3-month LIBOR less 35 basis points. This funding cost was relatively unchanged from rates obtained during the previous fiscal year, which averaged 3-month LIBOR less 32 basis points.

As at March 31, 2013, Government of Canada cross-currency swaps outstanding stood at US$41.4 billion (par value). Swaps of US dollars, euro and yen made up 69.2 per cent, 30.1 per cent and 0.7 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); a medium-term note issuance (Canada notes and euro medium-term notes); and a global bond program. The choice of direct issuance method depends on funding needs and market conditions. From April 1, 2012 to March 31, 2013, the level of outstanding Canada bills was unchanged at $2.0 billion (par value). Canada bills were issued, on average, at an all-in cost of LIBOR less 22 basis points, which was higher than the previous year's funding level (LIBOR less 27 basis points).

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

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

	March 31, 2013	March 31, 2012	Change
Swapped domestic issues	41,376	40,821	555
Global bonds	8,564	8,667	-103
Canada bills	2,001	2,001	0
Euro medium-term notes	0	0	0
Canada notes	0	0	0
Total	51,941	51,489	452

Note: Liabilities are stated at the exchange rates prevailing on March 31, 2013.

Further information on the management of foreign currency liabilities and the associated credit risks can be found in the *Debt Management Report* at www.fin.gc.ca/dtman/2011-2012/dmr-rgd12-eng.asp.

IMF Programs

The Government of Canada participates in two lending arrangements with the IMF outside of the quota system: the multilateral New Arrangements to Borrow (NAB) and General Arrangements to Borrow (GAB). Canada also participates in the Voluntary Standing Arrangement (VSA), which was put in place by the IMF to facilitate the purchase or sale of special drawing rights (SDRs) held by member countries. The objective of the VSA is to allow less developed countries to exchange SDRs for liquid currencies such as the US dollar. Under the VSA, Canada could be required to buy up to about $4.5 billion of SDRs from other IMF member countries. Amounts advanced under these arrangements are considered part of the official international reserves of Canada and directly impact the Government of Canada's consolidated financial statements.

Canada's participation in the expanded NAB became effective on March 11, 2011. The maximum lending by Canada to the IMF under the NAB is limited to SDR 7,624 million. As at March 31, 2013, the amount outstanding under the NAB was SDR 957 million. Canada continues to participate in the GAB, which was most recently renewed in November 2012. The maximum lending by Canada to the IMF under the GAB is limited to SDR 893 million. As at March 31, 2013, no lending had been provided by Canada to the IMF under the GAB.

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

1. Purpose of Policy

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

2. Purpose of EFA

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

3. Governance

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

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

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

4. No Inconsistent Business or Activity

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

5. Investment Objective

There are three investment objectives:

- *Maintain a high standard of liquidity:* Hold reserves in assets that mature or can be sold on very short notice with minimal market impact and therefore loss of value.
- *Preserve capital value:* Minimize risk of loss of market value by holding a diversified portfolio of high quality assets (in terms of credit rating and type of issuer), managing liquid assets and liabilities on a matched basis[1] (in terms of currency and duration), and using appropriate practices to mitigate risks.
- *Optimize return:* Achieve the highest possible level of return, while respecting the liquidity and capital preservation objectives.

6. Investment Policy

6.1 Eligible Asset Classes

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

6.2 Eligible Investment Ratings

Eligibility for investment in the EFA is based on external credit ratings. To be eligible for investment, an entity[4] must have a senior unsecured debt credit rating in the top seven categories from at least two of the four main rating agencies[5]: Moody's Investors Service, Standard & Poor's (S&P), Fitch Ratings and Dominion Bond Rating Service (DBRS). When credit ratings for an entity differ, the rating of the second highest rating agency will be used to assess eligibility[6], consistent with the Basel II approach.

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

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1 Liabilities, which fund EFA assets, are managed outside the EFA.

2 An agency is deemed to be explicit, if and only if, the government support is guaranteed by law.

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

4 Under exceptional circumstances, the credit rating of an entity's issuance may be used, at the discretion of the ALMC.

5 EFA ratings of sovereigns are based on the lower of domestic and foreign currency ratings.

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

Eligible Ratings

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

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

6.3 Credit Exposure Limits

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

6.3.1 Fixed Income Securities

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

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

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

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

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

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

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

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

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

Limits on supranationals—Aggregate limits

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

Limits on supranationals—Individual counterparty limits

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

6.3.2 Deposits and Other Short-Term Securities

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

Exposure limits by credit rating of private sector counterparties/issuers[7]—Total actual exposure

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

Exposure limits by credit rating of private sector counterparties/issuers[8]—Individual actual exposure

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

6.4 Structure of EFA Holdings

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

6.5 Eligible Currencies

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

[7] Exposure limits on deposits, commercial paper, and/or certificate of deposit will be determined at discretion of ALMC.

[8] Exposure limits on deposits, commercial paper, and/or certificate of deposit will be determined at discretion of ALMC.

6.6 Terms of Investments

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

Maximum Term to Maturity of EFA assets

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

6.7 Permitted Activities

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

6.8 Use of Derivatives

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

6.9 Securities Lending and Repurchase Agreements

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

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

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

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

6.10 Exceptions

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

7. Performance Assessment and Risk Management

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

8. Review

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

Annex 2: Overview of the Exchange Fund Account Management Framework

Objective

- The legislative objective of the EFA, specified in Part II of the *Currency Act,* is to aid in the control and protection of the external value of the Canadian dollar. Assets held in the EFA are managed to provide foreign currency liquidity to the Government and to promote orderly conditions for the Canadian dollar in the foreign exchange markets, if required.

Strategic Objectives

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

Overarching Funds Management Principles

- **Efficiency and effectiveness:** Policy development and operations should take into account, to the extent possible, leading practices of other comparable sovereigns. Regular evaluations should be conducted to ensure the efficiency and effectiveness of the governance framework and borrowing and investing programs.
- **Transparency and accountability:** Information on financial asset and liability management plans, activities and outcomes should be made publicly available in a timely manner. Borrowing costs, investment performance and material exposures to financial risk should be measured, monitored, controlled and regularly reported, as applicable.
- **Risk management:** Risk monitoring and oversight should be independent of financial asset and liability management operations.

Reserves Management Principles

- **Prudence:** The foreign reserves should be managed to limit exposure to financial risk through the matching of foreign-currency-denominated assets and liabilities, the adherence to prudent investment limits, and the diversification of instruments, currencies and maturities held.
- **Cost-effectiveness:** The reserves investment portfolio should be actively managed such that the net cost to the taxpayer, if any, is minimized.

Governance of the EFA

The *Currency Act*

The EFA is governed by the provisions of the *Currency Act,* which allows the Minister of Finance to acquire, borrow, sell or lend assets held in the EFA in accordance with the *Statement of Investment Policy*.

Statement of Investment Policy

The *Statement of Investment Policy* (SIP) sets out the policy governing the acquisition, management and divestiture of assets for the EFA and details the investment objectives, eligible asset classes and currencies, and risk exposure limits. The policy is designed to ensure prudent and effective management practices are followed in accordance with reserves management objectives and principles.

Governance Structure

Responsibility for the management of the EFA is shared between the Department of Finance and the Bank of Canada. The Bank of Canada, acting as fiscal agent for the Minister of Finance, executes transactions for the Account. The strategic planning and the operational management of the EFA are conducted jointly by the two organizations.

The Funds Management Committee (FMC), composed of senior management from the Department of Finance and the Bank of Canada, oversees the management of the EFA and is a decision-making body within limits delegated by the Minister. The Committee advises the Minister on policy and strategy, oversees the implementation of approved policy and plans, reviews performance outcome reports and makes decisions related to the management of the reserves.

The FMC is supported by the Risk Committee (RC), whose mandate is to review and provide opinions on the risk implications of policy proposals and recommendations. The Financial Risk Office at the Bank of Canada provides analytical support to the RC and is responsible for monitoring and regularly reporting on the EFA's financial performance and its exposure to credit, liquidity, market and operational risks.

The FMC is also supported by the Asset-Liability Management Committee (ALMC). In its advisory role on the management of foreign reserves, the ALMC provides recommendations to the FMC on strategic and policy matters and changes to the limits and guidelines established by the Minister of Finance and the FMC. Within limits delegated by the FMC, the ALMC is also a decision-making body, whose decisions are executed by officials at the Bank of Canada and the Department of Finance.

For more information on the governance framework of the EFA, consult the document entitled *Funds Management Governance Framework* at www.fin.gc.ca/treas/Goveev/TMGF_1-eng.asp.

EFA Management Policy

Management of the EFA follows a set of policies that apply to investments, funding, asset-liability management, risk management and performance measurement.

Investment Policy

The policy governing the management of EFA assets, set out in the SIP, is designed to achieve the strategic objectives of maintaining a high standard of liquidity, preserving capital value and, subject to those objectives, maximizing return. To achieve these goals, the policy permits a range of investments, notably in US-dollar-, euro- and yen-denominated securities (bonds and bills) issued by sovereigns and their agencies, subnational governments or supranational organizations, including government-guaranteed securities. The policy also permits investment in cash deposits with financial institutions, US-dollar tri-party repurchase agreements (repos), commercial paper and certificates of deposit issued by private sector entities, gold and International Monetary Fund special drawing rights. Lastly, the SIP allows for securities-lending activities to generate incremental returns.

The investment policy splits investments for the EFA into two tiers: the Liquidity Tier and the Investment Tier. The Liquidity Tier serves to meet the core liquidity requirements in foreign currencies and consists of highly rated US-dollar-denominated assets, such as Treasuries, discount notes and overnight bank deposits. The Investment Tier consists of a diversified mix of high credit quality securities denominated in US dollars, euro and yen.

Swap Management Policy

The swap management policy sets out the framework used to manage the liability structure of the Government's marketable debt by governing the use, procurement and execution of swap agreements. The Government can use swaps to mitigate the risk and/or reduce the cost of borrowing by exchanging interest rate and/or principal payments in one currency for another currency and to change the interest payment characteristics, such as fixed versus floating rates, of borrowings. The policy outlines eligibility criteria for swap counterparties and actual and potential exposure levels to counterparties. A collateral management framework is used to mitigate risk arising from the changes in the mark-to-market value of swap contracts beyond pre-set exposure limits.

Risk Management Policy

The risk management policy of the EFA requires identifying, monitoring, mitigating, to the extent required, and the regular and timely reporting of treasury risk exposures. Treasury risk includes currency, interest rate, credit, liquidity, legal and operational risks related to the financing and investment of the foreign exchange reserves. For information on recent risk policy initiatives, see the section entitled "Initiatives in 2012–13."

For more information on the risk management policies that pertain to all of the Government's funds management operations, including foreign reserves, cash and debt management, consult the document entitled *Government of Canada Treasury Risk Management Framework* at www.collectionscanada.gc.ca/webarchives/20071115100942/www.fin.gc.ca/treas/frame/gctrmf06_e.html.

Asset-liability management policy: Foreign currency reserve assets held in the EFA and the foreign currency liabilities and swaps that finance those assets are managed on a portfolio basis, and are matched as closely as possible in currency and duration, so that the net exposure to currency and interest rate risks is limited.

Credit risk management policy: The Department of Finance and the Bank of Canada use a variety of tools to assess and manage credit risk, including an external credit ratings–based framework in which judgment is applied, diversification of credit exposures and the use of collateral frameworks.

Liquidity risk policy: Liquidity risk of EFA assets is low due to the high credit quality of eligible investments under the SIP. In addition, liquidity risk is minimized by limiting the portion of the reserve asset portfolio and foreign liabilities that is rolled over at any particular point in time. This ensures that the EFA would be able to meet commitments as they become due under various market conditions.

Legal and operational risks: Legal risk associated with agreements and contracts with external parties, including fiscal agents, mandataries and private sector borrowers and lenders, is managed by the Department of Finance. Operational risk is managed by the Bank of Canada and reported on a regular basis.

Performance Measurement Policy

The EFA's performance measurement policy provides a framework for measuring, analyzing and evaluating the financial performance of EFA investments and associated liabilities. The policy requires regular and timely reporting of the returns on EFA assets and the cost of associated liabilities to senior management within the Department of Finance and the Bank of Canada, the Minister of Finance and Parliament.

Performance measures: The principal performance measures are based on accounting information (investment revenues, coupon return and the net carry measure) while asset-liability matching performance is measured using market-based measures such as total return. Liability benchmarks, external indices and attribution analysis are also used to measure portfolio performance. These performance measures are reported on a monthly basis to management at the Department of Finance and the Bank of Canada. For more information on the performance measures, see Annex 4.

Legislative reporting: As required by the *Currency Act*, the Office of the Auditor General of Canada audits the financial statements of the EFA and reports to the Minister of Finance on a fiscal-year basis on the financial position of the Account and its revenues and cash flows for the year. The *Currency Act* also requires annual reporting to Parliament on whether the financial performance of the portfolio has resulted in the achievement of the EFA's objectives. The section entitled "Report on Operations in 2012–13" fulfils this requirement.

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

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

The level of the official international reserves changes over time due to a variety of factors. As shown in Table A3.1, over the 12-month reporting period the level of reserves increased by $858 million. The increase was due to reserves management operations ($1.69 billion) and return on investments ($2.02 billion), which was partially offset by foreign currency debt charges ($1.30 billion) and currency revaluation effects ($1.31 billion).

Table A3.1
Sources of Change in Canada's Official International Reserves Between March 31, 2012 and March 31, 2013
market value in millions of dollars

	Change
Official intervention	–
Net government operations	-240
Reserves management operations	1,692
Gains and losses on gold sales	2
Return on investments	2,015
Foreign currency debt charges	-1,303
Revaluation effects	-1,308
Other	–
Total change	858

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 market for the Canadian dollar might be considered if there were signs of a serious near-term market breakdown (e.g. extreme price volatility with both buyers and 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.[9]

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

Table A3.2
Official Intervention
millions of US dollars

	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11[1]	2011–12	2012–13
Purchases	–	–	–	–	–	-124	–	–
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).

Net Government Operations

The net purchase of foreign currencies for government foreign exchange requirements and for additions to reserves totalled -$240 million. These transactions offset the repayment of two IMF loans to the EFA.

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 $1.7 billion. Over the reporting period, funds raised through the issuance of bonds, foreign exchange (FX) swaps, cross-currency swaps and Canada bills, totalling $13.8 billion, exceeded debt maturities totalling $12.1 billion (including Canada bill maturities of $7.4 billion, FX swap maturities of $0.5 billion and cross-currency swap maturities of $4.1 billion).

Gains and Losses on Gold Sales

This factor reflects the gains or losses on sales of gold which are the difference between the proceeds of the sales and the market value of gold sold. Sales of gold coins resulted in a US$2 million gain on a market-value basis.

Return on Investments

Return on investments comprises interest earned on investments ($0.79 billion) and the increase in the market value of securities resulting from changes in interest rates ($1.23 billion). The overall effect on the official international reserves was a net increase of $2.02 billion.

Foreign Currency Debt Charges

Foreign currency debt charges reduced the level of the official international reserves by $1.30 billion. These expenses are charged to the Consolidated Revenue Fund but paid using foreign assets of the EFA.

Revaluation Effects

Revaluation effects resulting from movements in exchange rates and gold market rates reflect changes in the market value of the official international reserves. Revaluation effects decreased the official international reserves by $1.31 billion, primarily due to the depreciation of the euro versus the US dollar during the reporting period.

International Monetary Fund Reserve Position

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

Canada's reserve position at the IMF is an asset that is included as a component of the official international reserves but is not held in the EFA. As such, changes in Canada's reserve position that may result from advances, repayments or revaluations directly impact the Government of Canada's consolidated financial statements. During 2012–13, the reserve position increased modestly over the previous fiscal year.

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

Table A3.3

Canada's Official International Reserves
Month-to-Month Changes

market value in millions of US dollars

Month-end	Securities	Deposits	Gold[1]	Special drawing rights[2]	Reserve position in the IMF[3]	Total	Total monthly change
2012							
March	55,242	790	181	9,043	4,094	69,350	-445
2012–13							
April	55,249	908	180	9,048	4,159	69,544	194
May	53,054	2,843	170	8,581	4,051	68,699	-845
June	52,795	478	174	8,623	4,148	66,218	-2,481
July	52,744	700	177	8,570	4,130	66,321	103
August	53,531	655	180	8,649	4,167	67,182	861
September	54,001	867	194	8,764	4,315	68,141	959
October	53,964	837	187	8,754	4,311	68,053	-88
November	54,423	606	188	8,722	4,283	68,222	169
December	54,379	864	181	8,754	4,368	68,546	324
January	55,103	337	179	8,779	4,492	68,890	344
February	55,774	390	166	8,629	4,399	69,358	468
March	56,782	331	165	8,534	4,396	70,208	850
Total	n/a	n/a	n/a	n/a	n/a	n/a	858

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

[1] Gold valuation is based on the London p.m. fix on the last business day of the reporting month.

[2] 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.

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

Table A3.4

Canada's Official International Reserves
Details of Month-to-Month Changes

market value in millions of US dollars

Month-end	Reserves management operations[1]	Gains and losses on gold sales	Return on investments[2]	Foreign currency debt charges	Revaluation effects	Net government operations[3]	Official intervention	Other transactions[4]	Total monthly change
2012									
March	-237	0	-42	-107	-57	-2	0	0	-445
2012–13									
April	-68	0	456	-65	-127	-2	0	0	194
May	427	0	706	-81	-1,659	-238	0	0	-845
June	-2,424	0	-218	-299	460	0	0	0	-2,481
July	175	0	603	-107	-568	0	0	0	103
August	384	0	58	-91	510	0	0	0	861
September	500	0	-3	-115	577	0	0	0	959
October	-153	0	-10	-57	132	0	0	0	-88
November	-23	0	267	-78	3	0	0	0	169
December	147	0	25	-97	250	0	0	-1	324
January	331	0	-435	-139	586	0	0	1	344
February	1,129	1	387	-66	-983	0	0	0	468
March	1,267	1	179	-108	-489	0	0	0	850
Total	1,692	2	2,015	-1,303	-1,308	-240	0	0	858

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

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

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

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

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

Annex 4: Detailed Portfolio Performance

Unless otherwise noted, in this report the official international reserves are reported in US dollars on a market-value 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 2012–13, income totalled C$1.40 billion compared to C$1.67 billion in 2011–12. The main categories of income are summarized in Table A4.1.

Table A4.1

Revenues of the Exchange Fund Account

millions of Canadian dollars

	April 1, 2012 to March 31, 2013	April 1, 2011 to March 31, 2012
Net revenue from investments		
Marketable securities	1,492	1,757
Cash and cash equivalents	1	1
Special drawing rights	8	31
Gains on sale of gold[1]	13	–
Total net revenue from investments	1,514	1,789
Other income		
Net foreign exchange loss	-113	-117
Net revenue	1,401	1,672

[1] The difference between the Canadian-dollar book value and the actual Canadian-dollar proceeds received (market value) from the sale of gold coin holdings.

2) Net Return on Assets

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

Carry

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

Table A4.2 provides an estimate of the carry for the EFA and its constituent currency portfolios. The carry for the 2012–13 fiscal year is estimated at -18.2 basis points, a 16.9-basis-point difference over 2011–12. The deterioration was mainly the result of the purchase of new assets with lower coupons to replace assets with higher coupons. As assets and liabilities with high coupons mature, they are being replaced with new lower-yielding instruments that do not provide the same positive carry of assets over liabilities as was experienced in the past.

Taking into account gains or losses on the sale of assets during 2012–13, the EFA incurred net gains of $246 million, or 59.3 basis points. These sales resulted in a realized gain of $401 million and a net loss in interest income of $155 million. The EFA realized $162 million in gains on US asset sales and $239 million in gains on euro asset sales.

Table A4.2

Carry of the Official International Reserves[1,2]

	April 1, 2012 to March 31, 2013					April 1, 2011 to March 31, 2012	
	Interest earned on assets (millions of US dollars)	Interest paid on liabilities (millions of US dollars)	Net interest earned on assets (millions of US dollars)	Carry (basis points)	Carry (including net realized gains) (basis points)	Carry (basis points)	Carry (including net realized gains) (basis points)
Euro portfolio	445.6	542.9	-97.3	32.4	10.3	-4.7	21.5
Yen portfolio	1.3	0.2	1.1	0.2	0.2	3.1	3.1
US$ portfolio	643.0	701.7	-58.7	26.6	69.0	0.3	77.3
Total carry[3]	1,089.9	1,244.8	-154.9	59.3	79.5	-1.3	101.9

1 The carry figures show the contribution of each currency portfolio to the overall carry.

2 Numbers may not add due to rounding.

3 Excludes gold holdings, and IMF reserve position and associated liabilities.

Total Return on a Market-Value Basis

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

Table A4.3 provides an estimate of the total return on a market-value basis for the EFA as a whole and its key portfolios compared to the corresponding liabilities. The total return was 95 basis points, or a gain of $532 million, in the fiscal year ending March 31, 2013, compared to -62 basis points, or a loss of $293 million, in the year ending March 31, 2012. This reflects net returns in US-dollar terms of 60 basis points for the US-dollar portfolio, 160 basis points for the euro portfolio and 84 basis points for the yen portfolio. The positive net total return was caused by credit spread improvement, particularly in the euro portfolio. These numbers include interest flows as well as all gains or losses earned over the period, regardless of whether they were realized or not.

Table A4.3
Total Return of the EFA Compared to Liability Benchmarks

	April 1, 2012 to March 31, 2013				April 1, 2011 to March 31, 2012
	US$ portfolio	Euro portfolio	Yen portfolio	Total EFA	Total EFA
EFA asset portfolio					
Return in original currency	2.99%	5.09%	0.47%	n/a	n/a
Return in US$ (A)	2.99%	1.00%	-11.62%	2.17%	5.18%
Liability benchmarks					
Return in original currency	2.39%	3.42%	-0.49%	n/a	n/a
Return in US$ (B)	2.39%	-0.60%	-12.46%	1.22%	5.80%
Return vs. liability benchmark in basis points (A – B) in US$	60	160	84	95	-62

Table A4.4 compares the total return of the EFA to a set of Merrill Lynch government securities indices.[10] This provides some insight into how the total return of the EFA compares to a portfolio invested solely in US Treasury and German government securities. While the indices have been combined and weighted to reflect the currency composition and duration of the EFA, they only provide a general indication of its performance because the EFA is invested in a broader range of high quality assets. In the fiscal year ending March 31, 2013, the EFA's total return was higher than the return on the external indices by 95 basis points. This was due to the US Treasury and German government securities in the external indices underperforming the more diversified holdings in the EFA as non-core holdings rebounded from their losses in the previous fiscal year. The EFA's total return was lower than the external indices by 63 basis points in the fiscal year ending March 31, 2012.

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

Table A4.4

Total Return of the EFA Compared to External Indices[1,2,3]
April 1, 2012 to March 31, 2013

	US$ portfolio	Euro portfolio	Yen portfolio	Total EFA
EFA asset portfolio				
Return in original currency (A)	2.99%	5.09%	0.47%	n/a
Return in US$	2.99%	1.00%	-0.49%	2.17%
External indices				
Return in original currency (B)	2.54%	4.00%	n/a	n/a
Return in US$	2.54%	-0.04%	n/a	1.22%
Return vs. external indices in basis points (A – B) in original currency[4]	45	109	n/a	95

1 Composite index for the US portfolio is constructed as weighted average of the following Merrill Lynch indices: US Treasury Bills (G0BA), US Treasuries 1-3yr (G1O2), US Treasuries 3-5yr (G2O2), US Treasuries 5-7yr (G3O2) and US Treasuries 7-10yr (G4O2). The weights for the composite index are updated on a monthly basis according to the holdings of the EFA US asset portfolio.

2 Composite index for the euro portfolio is constructed as weighted average of the following Merrill Lynch indices: German Govt Bills (G0DB), German Federal Govts 1-3yr (G1D0), German Federal Govts 3-5yr (G2D0), German Federal Govts 5-7yr (G3D0) and German Federal Govts 7-10yr (G4D0). The weights for the composite index are updated on a monthly basis according to the holdings of the EFA euro asset portfolio.

3 EFA liability returns for the yen portfolio were used in place of external indices for the purpose of determining the aggregate EFA comparison between assets and external indices.

4 Return versus external indices is expressed in original currency except for the total EFA, where both assets and index returns are converted to US dollars.

Performance Attribution of Total Return

Table A4.5 summarizes the attribution results for the EFA's US-dollar and euro portfolios for the fiscal year ending March 31, 2013. Total return is decomposed into four underlying return factors: coupon and amortization, changes in credit spreads, changes in interest rates and securities-lending activities. For 2012–13, the attribution results indicate that the coupon and amortization effect and credit spread effect contributed positively to portfolio returns, resulting in an overall positive total return for the portfolio.

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

The credit spread effect (the difference between the change in the market value of EFA assets and the foreign liabilities due to changes in the credit quality of EFA issuers and Canada) was the main driver of the positive total return in the EFA's portfolio. Credit spread tightening of EFA assets, notably in the euro portfolio, positively impacted asset values. Canada's relative cost of funding (measured by credit spreads) increased in the euro portfolio, causing a lower valuation of existing liabilities, resulting in a -83 basis point return due to the credit spread effect on euro liabilities. 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. Although total returns for both the US-dollar and euro asset portfolios were significantly affected by yield curve movements over the period, similar effects were observed in the corresponding liabilities. This demonstrates the benefit of the asset-liability management framework of the EFA over the reporting period.

As well, a component of the total return is generated through securities-lending activities. Any difference between the actual return and the sum of the above effects is the residual return, which reflects the fact that performance attribution approximately explains total return.

Table A4.5

Performance Attribution for the US-Dollar and Euro Portfolios Compared to Liability Benchmarks April 1, 2012 to March 31, 2013[1]

per cent

	US$ portfolio			Euro portfolio		
	Assets	Liabilities	Difference	Assets	Liabilities	Difference
Coupon effect	0.77	0.51	0.26	0.97	0.27	0.70
Yield curve effect	2.03	2.05	-0.02	3.72	3.98	-0.26
Credit spread effect	0.21	-0.13	0.34	0.39	-0.83	1.22
Securities-lending activities	0.00					
Residual return	-0.01	-0.04	0.03	0.01	-0.01	0.02
Return in original currency	2.99	2.39	0.60	5.09	3.42	1.67
Exchange rate effect				-4.08	-4.02	-0.06
Total return in US$	2.99	2.39	0.60	1.00	-0.60	1.60

1 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. The EFA is a stand-alone account of assets while foreign liabilities are paid out of the Consolidated Revenue Fund (CRF). EFA advances represent funds (liabilities) from the CRF in support of maintaining the EFA. The level of foreign currency advances, measured in Canadian dollars, varies with the flow of foreign currencies between the EFA and the CRF.

Actual foreign interest charges: The proceeds from foreign currency borrowings are remitted to the CRF and concurrently advanced to the EFA. Foreign debt interest and principal repayments are charged to the CRF but are paid using the foreign assets of the EFA, reducing the amount advanced to the EFA. Actual foreign interest paid is converted into Canadian currency for the purpose of determining this portion of the notional cost of advances; for 2012–13, this value was C$1,254 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 2012–13, a weighted cost of domestic and foreign funding (2.45 per cent) was used in calculating notional interest paid in Canadian dollars, resulting in a value of C$162 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 and the Bank of Canada.

Market Risk

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

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

In addition, some hypothetical scenario analyses that mimic market conditions during four previous extraordinary market events were regularly conducted: the tightening of monetary policy by the US Federal Reserve in 1994; the 1997 Asian financial crisis; the 1998 Russian debt default and Long-Term Capital Management (LTCM) collapse; and the 2001 US terrorist attacks. The scenario analyses showed that the EFA would generally perform well during such periods of market turbulence. The March 31, 2013 results were broadly in line with those reported for March 31, 2012. Scenario creation is a dynamic process. New scenarios continue to be considered and will be added when relevant and feasible.

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 and exchange rate changes. This is regularly reported for the entire EFA portfolio and on the net position between assets and liabilities. As of March 31, 2013, the EFA had a 99-per-cent 10-day VaR of $14 million, which implied that 99 per cent of the time, the value of the portfolio was not expected to decline by more than $14 million, on a net basis, over a 10-trading-day period.

It should also be noted that the Market VaR measure does not include either credit risk or the spread risks inherent in the cross-currency swap funding, and therefore underestimates the total risk of the EFA.

Table A4.6
Market Risk Measures
millions of dollars

	March 31, 2013		March 31, 2012	
	EFA	EFA assets less liabilities	EFA	EFA assets less liabilities
Single factor stress tests				
1% depreciation of euro/yen	-189	-1	-206	2
1% upward parallel shift in yield curve	-2,237	15	-2,328	43
Scenario analyses				
1994 Fed tightening	-5,506	100	-5,508	213
1997 Asian financial crisis	-753	183	-765	310
1998 Russian default/LTCM collapse	-586	328	-582	541
2001 terrorist attacks	1,804	172	1,938	222
99% 10-day VaR	762	14	1,043	13

Credit Risk

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

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

Table A4.7
Credit Risk Measures
millions of dollars

	March 31, 2013	March 31, 2012
Credit VaR and expected shortfall		
99.9% 365-day Credit VaR	2,014	2,343
Expected shortfall	4,188	3,834
Stress test		
Potential loss if counterparties with negative outlook or negative watch are downgraded one notch	192.3	622.0

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, under normal market conditions. As of March 31, 2013, the EFA had a 99.9-per-cent 1-year Credit VaR of $2.0 billion, which implied that 99.9 per cent of the time, the value of the portfolio was not expected to decline by more than $2.0 billion over a 1-year period due to credit events. The decrease in Credit VaR from the previous year reflects tighter credit spreads, which decrease the possible losses associated with downgrades and defaults. An associated measure, expected shortfall, computes the expected average loss in portfolio value during a 1-year period due to an extreme, unexpected credit event, whose possibility of happening (less than 0.1 per cent) was not captured by the Credit VaR statistic. The expected shortfall measure for the EFA was $4.2 billion as of March 31, 2013.

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 with a negative outlook being downgraded by one notch. The difference between this year and last is mainly attributed to changes in the level of credit spreads and the introduction of a new source for the credit spread data. As a result, the potential loss to the EFA under this hypothetical scenario has decreased compared to the previous fiscal year.

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

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

Bank of Canada

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

RBC Investor Services Trust and State Street Corporation

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

Annex 6: Glossary

basis point: One-hundredth of a percentage point (0.01 per cent).

Canada bill: Promissory note 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 JP Morgan Chase Bank in New York City. Primary distribution occurs through four dealers: CIBC World Markets, Credit Suisse First Boston LLC, Goldman, Sachs & Co. and RBC Dominion Securities Inc. Rates on Canada bills are posted daily for terms of one to six months. Canada bills are issued for foreign exchange reserve funding purposes only.

Canada note: Promissory note 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.

certificate of deposit: Promissory note issued by a bank. It is a time deposit that restricts holders from withdrawing funds on demand. Although it is still possible to withdraw the money, this action will often incur a penalty.

commercial paper: Senior level unsecured short-term debt that is a source of cost-effective short-term financing available to the largest and most creditworthy issuers relative to bank loans.

cross-currency swap: An agreement that exchanges one type of obligation for another involving different currencies and the exchange of the principal amounts and interest payments.

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

global bond: Syndicated, marketable debt instrument 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.

repurchase agreement (repo): Repos are transactions in which one party sells securities to another while agreeing to repurchase those same securities at a pre-specified price on a predetermined future date. These transactions are similar to secured loans where the lender receives securities as collateral for protection against default risk. The collateral is marked-to-market with appropriate haircuts to protect the Government from market risk in collateral values.

securities lending: A loan of a security from one counterparty to another, who must eventually return the same security as repayment. The loan is collateralized by other high quality securities. Securities lending allows a counterparty in possession of a particular security to earn enhanced returns on the security.

special drawing right (SDR): An international reserve asset created by the International Monetary Fund (IMF) in 1969 to supplement the existing official reserves of member countries. SDRs are allocated to member countries in proportion to their IMF quotas. The SDR also serves as the unit of account of the IMF and some other international organizations. Its value is based on a basket of international currencies.

Exchange Fund Account Financial Statements

Year Ended 31 March 2013

Exchange Fund Account

Statement of responsibility

Responsibility for the financial statements of the Exchange Fund Account (the Account) and all other information presented in the Report on the Management of Canada's Official International Reserves rests with the Department of Finance. The operations of the Account are governed by the provisions of Part II of the *Currency Act*. The Bank of Canada administers the Account, as fiscal agent for the Government of Canada.

The financial statements were prepared in accordance with the accounting policies set out in Note 2 to the financial statements, which are consistent with those used by the Government of Canada, and do not result in any significant differences from Canadian public sector accounting standards. These policies were applied on a basis consistent with that of the preceding year. The information included in these financial statements is based on the best estimates and judgement of the Department of Finance and the Bank of Canada, with due consideration given to materiality.

The Department of Finance establishes policies for the Account's transactions and investments. It also ensures that the Account's activities comply with the statutory authority of the *Currency Act*.

The Bank of Canada maintains appropriate financial systems and related internal controls to provide reasonable assurance that financial information is reliable, assets are safeguarded and transactions are properly authorized in accordance with the *Currency Act*. The system of internal control is supported by an internal audit department, whose functions include reviewing internal controls, including accounting and financial controls and their application. The Bank reports to the Department of Finance on the financial position of the Account and on the results of its operations.

The Auditor General of Canada conducts an independent audit of the financial statements of the Account and reports the results of the audit to the Minister of Finance.

The Report on the Management of Canada's Official International Reserves is tabled in Parliament along with the financial statements, which are also part of the Public Accounts of Canada, and are referred to the Standing Committee on Public Accounts, which reports to Parliament on the results of its examination together with any recommendations it may have with respect to the financial statements and accompanying audit opinion.

Mark Carney
Governor
Bank of Canada

Michael Horgan
Deputy Minister
Department of Finance

Sheila Vokey, CPA, CA
Chief Accountant and Chief Financial Officer
Bank of Canada

Ottawa, Canada
27 May 2013

Auditor General of Canada
Vérificateur général du Canada

INDEPENDENT AUDITOR'S REPORT

To the Minister of Finance

Report on the Financial Statements

I have audited the accompanying financial statements of the Exchange Fund Account, which comprise the statement of financial position as at 31 March 2013, and the statement of operations and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Opinion

In my opinion, the financial statements present fairly, in all material respects, the financial position of the Exchange Fund Account as at 31 March 2013, and the results of its operations and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Report on Other Legal and Regulatory Requirements

In my opinion, the transactions of the Exchange Fund Account that have come to my notice during my audit of the financial statements have, in all significant respects, been in accordance with Part II of the *Currency Act*.

Nancy Y. Cheng, FCA
Assistant Auditor General
for the Auditor General of Canada

27 May 2013
Ottawa, Canada

Exchange Fund Account

Statement of Financial Position
As at 31 March

(in millions of Canadian dollars)

	2013	2012
FINANCIAL ASSETS		
Cash and cash equivalents (note 3, 8)	**337**	788
Investments		
Marketable securities (note 4, 8)	**54,368**	52,326
Special drawing rights (note 5, 8)	**8,671**	9,020
Gold (note 6,8)	**6**	6
Total investments	**63,045**	61,352
Total financial assets	**63,382**	62,140
LIABILITIES		
Due to the Consolidated Revenue Fund (note 7)	**63,382**	62,140
Commitments (note 9)		

Approved by:

Mark Carney
Governor
Bank of Canada

Michael Horgan
Deputy Minister
Department of Finance

Sheila Vokey, CPA, CA
Chief Accountant and Chief Financial Officer
Bank of Canada

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

Exchange Fund Account

Statement of Operations
For the Year Ended 31 March

(in millions of Canadian dollars)

	2013	2012
Net revenue from investments		
Marketable securities		
Interest	**1,091**	1,245
Gains on sale of marketable securities	**404**	513
Transaction costs and other	**(3)**	(1)
Cash and cash equivalents	**1**	1
Special drawing rights	**8**	31
Gains of sale of gold	**13**	-
Total net revenue from investments	**1,514**	1,789
Other		
Net foreign exchange loss	**(113)**	(117)
Net revenue for the year (note 1, 7)	**1,401**	1,672

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

Exchange Fund Account

Statement of Cash Flows
For the Year Ended 31 March

(in millions of Canadian dollars)

	2013	2012
Cash flows from operating activities		
Interest received		
Marketable securities	**1,271**	1,366
Other	**1**	1
Purchase of marketable securities	**(45,772)**	(48,197)
Proceeds from the sale or maturity of marketable securities	**44,162**	41,054
Purchase of foreign currencies	**270**	448
Sale of foreign currencies	**(2,045)**	(1,845)
Net cash used in operating activities	**(2,113)**	(7,173)
Cash flows from financing activities		
Increase in advances from the Consolidated Revenue Fund	**13,861**	19,628
Repayment of advances to the Consolidated Revenue Fund	**(12,231)**	(12,000)
Net cash provided by financing activities	**1,630**	7,628
Effects of exchange rate changes on cash and cash equivalents	**32**	19
(Decrease) increase in cash and cash equivalents	**(451)**	474
Cash and cash equivalents, beginning of year	**788**	314
Cash and cash equivalents, end of year (note 3)	**337**	788

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

Exchange Fund Account

Notes to the financial statements
For the year ended 31 March 2013

1. Authority and Objective

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 majority of Canada's official international reserves reside inside the Account. The Account represents approximately 93 per cent (94 per cent at 31 March 2012) of Canada's official reserves. The remainder of the official reserves reside in the foreign currency accounts of the Minister of Finance.

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

Assets held in the Account are managed to provide foreign-currency liquidity to the government and to promote orderly conditions for the Canadian dollar in the 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 the 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.

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. The presentation and results of the Account using these accounting policies do not result in any significant differences from Canadian public sector accounting standards.

a) Revenue recognition

Revenue from investments is recorded net of transactions costs on an accrual basis and includes interest earned, amortization of premiums and discounts using the straight line method, gains or losses on sales of securities and on sales of gold, and revenues from securities lending activities. Interest is accrued on short-term deposits, deposits held under repurchase agreements, marketable securities, and Special Drawing Rights.

b) Expense recognition

The Account's administrative, custodial, and fiscal agency services are provided and paid for by the Bank of Canada and Department of Finance. These costs are not significant in relation to the asset portfolio and have not been recognized in the financial statements.

In addition, the notional cost of the funding of the Account's assets and advanced by the CRF is not recognized in the financial statements.

c) Financial assets

Cash and cash equivalents

Cash and cash equivalents consists of cash and short-term deposits. Short-term deposits are recorded at cost and are generally held to maturity. The resulting revenue is included in revenues from cash and cash equivalents.

Deposits held under repurchase agreements

Deposits held under repurchase agreements are recorded at cost. The resulting revenue is included in revenues from marketable securities. At the reporting date, the Account did not hold deposits held under repurchase agreement.

Marketable securities

Purchases and sales of securities are recorded at the settlement dates. Marketable securities are recorded 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. The securities loaned under the securities lending program continue to be accounted for as investment assets.

Short-term deposits, Deposits held under repurchase agreements and Marketable securities are written down to their recoverable amount in the event of an other than temporary impairment in the fair value. Write-downs to reflect other than temporary impairment are included in *Net revenue from investments* in the *Statement of Operations*.

Special Drawing Rights

SDR's are initially recorded at cost and are subsequently translated into Canadian dollars at market exchange rates.

Gold

Gold is carried in the Account at a value of 35 SDRs per fine ounce, which approximates cost and conforms to the value used in the *Public Accounts of Canada*.

d) Translation of foreign currencies and Special Drawing Rights

Assets and advances denominated in foreign currencies and special drawing rights (SDRs) are translated into Canadian dollar equivalents at rates prevailing on the balance sheet date, which were as follows:

Translation of foreign currencies and Special Drawing Rights into Canadian dollar equivalents

	2013	2012
US dollars	**1.0160**	0.9975
Euros	**1.3024**	1.3304
Japanese yen	**0.0108**	0.0120
SDRs	**1.5220**	1.5452

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

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

e) Use of estimates and measurement uncertainty

The preparation of the financial statements of the Account requires management to make estimates and assumptions, based on information available as of the date of the financial statements. The most significant use of estimates is in the disclosure of the fair value of assets (note 8d) and disclosure of the notional cost of advances (note 7).

3. Cash and cash equivalents

At 31 March, cash and cash equivalents consisted of the following:

Cash and cash equivalents

(in millions of Canadian dollars)

	2013 Carrying value	2012 Carrying value
Cash		
US dollars	**313**	319
Euros	**16**	163
Japanese yen	**8**	7
Total cash	**337**	489
Short-term deposits	**–**	299
Total - Cash and cash equivalents	**337**	788

Short-term deposits are money market transactions where the Account invests funds with designated counterparties.

4. Marketable Securities

Marketable securities include treasury notes, treasury bills, bonds and money market instruments.

Marketable securities

(in millions of Canadian dollars, unless otherwise stated)

Term to maturity	31 March 2013 Under 6 months		31 March 2013 6 months to under 1 year		31 March 2013 1 year to under 5 years		31 March 2013 5 years and over				
	Amortized cost	Yield	Amortized cost	Yield	Amortized cost	Yield	Amortized cost	Yield	31 March 2013 Total Accrued Interest	31 March 2013 Carrying value	31 March 2012 Carrying value
US dollar											
Sovereign	7,662	0.16%	377	0.16%	5,821	0.99%	11,785	2.88%	105	**25,750**	20,397
Supra National	359	1.33%	366	3.07%	4,120	2.48%	699	3.25%	44	**5,588**	6,241
Agencies and other	934	0.24%	586	1.99%	2,311	2.84%	1,397	3.71%	33	**5,261**	6,396
Total US dollar	**8,955**		**1,329**		**12,252**		**13,881**		**182**	**36,599**	**33,034**
Euro											
Sovereign	1,157	0.55%	413	1.86%	4,485	2.38%	7,104	2.67%	265	**13,424**	13,587
Supra National	55	3.50%	167	0.18%	855	2.69%	511	2.81%	38	**1,626**	2,318
Agencies and other	20	1.40%	165	3.96%	1,420	3.41%	768	3.18%	39	**2,412**	3,045
Total Euro	**1,232**		**745**		**6,760**		**8,383**		**342**	**17,462**	**18,950**
Japanese yen											
Sovereign	-	-	54	0.81%	252	0.30%	-	-	1	**307**	342
Total Japanese yen	-		54		252		-		**1**	**307**	342
Total marketable securities	**10,187**		**2,128**		**19,264**		**22,264**		**525**	**54,368**	**52,326**

The yield in the above table represents the weighted average yield to maturity based on the par value at the end of the fiscal year for the respective securities.

At 31 March 2013, the net unamortized premium on marketable securities amounted to $466 million ($435 million at 31 March 2012).

Under the securities lending program, the Account has agency agreements with two major financial institutions. Loans of securities are affected on behalf of the Account by these agents who guarantee the loans and obtain collateral of equal or greater value from their approved counterparties in these transactions. At 31 March 2013, US$1,288 million (par value) US Treasury Bills (US$1,807 million (par value) at 31 March 2012) and US$300 million (par value) Treasury Notes (nil at 31 March 2012), were being used in the securities lending program with financial institutions.

5. Special Drawing Rights

The special drawing right (SDR) is an international reserve asset created by the International Monetary Fund (IMF) in 1969 to supplement the existing official reserves of member countries. SDRs are allocated to member countries in proportion to their IMF quotas. The SDR serves as the unit of account of the IMF and its value is based on a basket of key international currencies.

6. Gold

In November 2012, the Account entered into an agreement with the Royal Canadian Mint for the distribution and selling of 30,000 George V 1912-1914 coins (13,120.4 ounces of fine gold). The sales process will run until December 2013. At 31 March 2013, 14,626 coins (5,921.0 ounces of fine gold) have been sold. Proceeds from the sale of gold are received and remitted to the Consolidated Revenue Fund by the Department of Finance.

7. 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 under the terms and conditions prescribed by the Minister of Finance. Pursuant to Section 19 of the *Currency Act*, these advances are limited to $100 billion by order of the Minister of Finance in September of 2009.

The CRF advances the proceeds of Government of Canada's borrowings in foreign currencies and allocations of SDRs by the IMF to the Account. Subsequent repayments of foreign currency debt are made using the assets of the Account and result in reductions in the level of foreign currency advances from the CRF. Interest payable by the Government of Canada on borrowings in foreign currencies and charges on allocations of SDRs to Canada are charged directly to 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 cause reductions in the level of outstanding Canadian-dollar advances, and can result in overall net deposits of Canadian dollars by the Account with the CRF.

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

Currency composition of advances from the CRF

(in millions of Canadian dollars)

	2013	2012
US dollars	**40,189**	36,472
Euros	**16,456**	18,186
Japanese yen	**306**	341
SDR's	**6,999**	7,106
Subtotal – foreign currencies	**63,950**	62,105
Canadian dollars	**(1,969)**	(1,637)
Net revenue	**1,401**	1,672
Total	**63,382**	62,140

For the year ended 31 March 2013, the notional cost of the funding of the Account's assets and advanced by the CRF to the Account is $1,416 million ($1,489 million for the year ended 31 March 2012). The notional cost of advanced funds is comprised of the actual interest costs on foreign denominated debt and cross currency swaps for foreign currency advances, and an imputed interest cost calculated using the average funding rate of outstanding Government of Canada market debt, applicable to the net of Canadian dollar and SDR currency advances.

8. Financial Instruments

The role of the Account as principal repository of Canada's official international reserves determines the nature of its assets and of its operations, as well as its use of financial instruments.

a) Credit risk

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

To ensure that the Account's asset portfolio is prudently diversified with respect to credit risk, the *Statement of Investment Policy* prescribed by the Minister of Finance specifies limits on holdings by class of issuer (sovereign, agency, supranational, corporation or commercial financial institution), by any one issuer or counterparty, and by type of instruments. The *Statement of Investment Policy* also specifies the treatment of holdings that do not meet eligibility criteria or limits due to exceptional circumstances such as ratings downgrades.

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

As stipulated in the *Currency Act*, the Minister 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.

b) 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.

c) 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.

d) Fair value of financial assets

Financial assets

(in millions of Canadian dollars)

	31 March 2013		31 March 2012	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Cash and cash equivalents	**337**	**337**	788	788
Investments				
Marketable securities				
US dollar	**36,599**	**38,553**	33,034	34,692
Euro	**17,462**	**18,830**	18,950	20,067
Japanese Yen	**307**	**308**	342	345
Total marketable securities	**54,368**	**57,691**	52,326	55,104
SDRs	**8,671**	**8,671**	9,020	9,020
Gold	**6**	**167**	6	181
Total investments	**63,045**	**66,529**	61,352	64,305
Total financial assets	**63,382**	**66,866**	62,140	65,093

The estimated fair value of cash and cash equivalents is deemed equal to their carrying value given their short term to maturity.

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, no marketable securities have been written down to reflect other than temporary impairments in the fair value.

The SDR serves as the unit of account for the IMF and its value is based on a 'basket' of four major currencies, the Euro, US dollar, Pound sterling and Japanese yen. As SDRs are translated into Canadian dollar equivalents at rates prevailing at the balance sheet date, the carrying value approximates fair value on the reporting date.

The estimated fair value of gold is based on London fixing of $1,623.82 at 31 March 2013 ($1,658.34 at 31 March 2012) per fine ounce.

The fair value of marketable securities and SDRs continuously fluctuates as a result of changes in market conditions, including interest rates, foreign exchange rates and market prices. As discussed in notes 8(a) and 8(b), credit and market risks of marketable securities are managed in accordance with the Account's *Statement of Investment Policy* and the asset-liability management policy. These risk management practices mitigate the risk of fair value fluctuations of marketable securities.

9. Commitments

a) Foreign currency swaps

Foreign currency swaps are agreements that exchange one type of obligation for another involving different currencies and the exchange of the principal amounts and interest payments. The Account may enter into short-term foreign currency swap arrangements with the Bank of Canada to assist the Bank in its cash-management operations. There were no drawings under this facility during the year ended 31 March 2013 (no drawing during the year ended 31 March 2012), and there were no commitments outstanding at 31 March 2013 (no commitments outstanding at 31 March 2012).

b) Foreign currency contracts

A foreign currency contract is a commitment to purchase or sell a foreign currency at the spot rate, requiring settlement within two days. In the normal course of operations, the Account enters into foreign currency contracts. At 31 March 2013, the Account had no contracts to sell foreign currency (nil at 31 March 2012) and no unrealized gains (losses) were recorded in net revenue at 31 March 2013 (nil at 31 March 2012).

c) Investment contracts

In the normal course of operations, the Account enters into investment contracts. The following table presents the fair value of investment contracts with contractual amounts outstanding at 31 March.

Investment contracts

(in millions of Canadian dollars)

	2013		2012	
	Contractual Value	Fair Value	Contractual Value	Fair Value
Marketable securities				
Euro				
Purchases	–	–	191	193
Sales	–	–	192	196

10. Comparative figures

Certain of the 2012 comparative figures have been reclassified to conform to the current year's presentation.