



# REPORT ON THE MANAGEMENT OF CANADA'S OFFICIAL INTERNATIONAL RESERVES

April 1, 2008 – March 31, 2009



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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, primarily related to the management of the Exchange Fund Account (EFA), from April 1, 2008 to March 31, 2009. Data are presented in US dollars, unless otherwise indicated.

On a market-value basis, the official international reserves stood at US\$43,524 million as of March 31, 2009 (Table 1). The EFA, which represents the largest component of the official international reserves, is an actively managed portfolio of liquid foreign currency securities and deposits. The EFA also includes assets that are not actively managed, including special drawing rights (SDRs) and a small holding of gold. SDRs are international reserve assets created by the International Monetary Fund (IMF) based on a basket of international currencies.

The official international reserves also include Canada's reserve position at the IMF, which is not actively managed. This position, which represents Canada's investment in the activities of the IMF, fluctuates according to drawdowns and repayments from the IMF.

The EFA is funded by liabilities of the Government of Canada denominated in, or converted to, foreign currencies. The interest and principal receipts and payments on EFA assets and foreign-denominated liabilities are matched as closely as possible in currency and timing to minimize the Government's exposure to foreign currency and interest rate risks. Accordingly, the EFA is managed on a portfolio basis, focusing on earning a return on assets slightly in excess of the cost of funding the EFA.

This report provides a comprehensive account of the framework within which the EFA is managed, its composition and changes during the year, and strategic policy initiatives. The accompanying financial statements, audited by the Auditor General of Canada, provide information on the position of the EFA asset portfolio as of the end of the 2008–09 fiscal year.

Table 1

### The EFA and Official International Reserves

	March 31, 2009	March 31, 2008	Change
	(market value in millions of US dollars)		
Securities	40,176	39,359	817
Deposits	734	1,866	-1,132
<b>Total securities and deposits</b> (liquid reserves)	40,910	41,225	-315
Gold	100	102	-2
SDRs	964	1,062	-98
<b>Total EFA</b>	41,974	42,389	-415
IMF reserve position	1,550	668	882
<b>Total official international reserves</b>	43,524	43,057	467



## Highlights

- ✓ **Impact of the global financial crisis:** Financial market conditions in 2008–09 continued to be marked by major disruptions to credit markets, resulting in a flight to quality on the part of many investors. Overall, the EFA assets net of liabilities benefited from this flight to quality. While the EFA contained a small proportion of investments in foreign private sector financial institutions—several of which were downgraded, taken over by other financial institutions or directly supported by foreign governments—counterparty credit risks were prudently managed and the EFA did not realize any credit losses from such investments.
- ✓ **Change in the level of the official international reserves:** The market value of the official international reserves increased to US\$43.5 billion as of March 31, 2009 from \$43.1 billion as of March 31, 2008. The change comprised a \$415-million decrease in EFA assets and a \$882 million increase in the IMF reserve position.
- ✓ **EFA funding sources:** Cross-currency swaps of domestic obligations and short-term US-dollar-denominated Canada bills were the sources of foreign currency funding for the EFA in 2008–09. US\$6.1 billion was raised using cross-currency swaps at an average cost of 3-month LIBOR (London Interbank Offered Rate for US dollars) less 58 basis points (i.e. 0.58 percentage points). Although the average funding cost of swaps was in line with that of the previous fiscal year, costs were volatile throughout the year with spreads to LIBOR ranging from -80 to +10 basis points. At the end of the fiscal year, the level of outstanding Canada bills stood at \$6 billion, up from \$1.4 billion the previous year. The average cost of funding through the Canada bills program was LIBOR less 134 basis points.
- ✓ **Portfolio return:** In 2008–09, the EFA earned an average positive spread of 31 basis points between the coupons on fixed-income assets and the foreign fixed-income liabilities used to fund the assets. This spread measures the underlying net return of the portfolio on the assumption that all the assets are held to maturity. The portfolio return was up from 22 basis points, revised upward from 21 basis points reported last year. Short-term lending of US Treasury securities held in the EFA contributed an additional return of 2 basis points during the year.

Taking into account changes in the market value of assets and liabilities due to interest rate changes, credit spreads and coupon flows, the EFA reported an unrealized mark-to-market or total return of 117 basis points, equivalent to US\$446 million. This compares to a negative mark-to-market return of 105 basis points (or a loss of \$394 million) the previous year. This spread measures the hypothetical net profit or loss on the portfolio if all assets were liquidated and the proceeds were used to pay down the liabilities at the assumed market rates used in the calculation.



From a pure cash flow perspective, taking into account only realized gains and losses, the carry of the portfolio was -1 basis point, down from +12 basis points the previous year. This change primarily reflected the sharp decline in yields on US Treasury securities during the financial crisis relative to funding levels for the EFA during the year.

- ✓ **Investment policy:** Eligible EFA investments were reviewed during the year and broadened to include sub-sovereign entities, most of which are rated AAA. This action was taken to provide a more diversified investment program within the universe of highly rated issuers.
- ✓ **Support for the IMF:** As part of Canada's commitment to the Group of Twenty (G20), Canada committed to provide the IMF with up to US\$10 billion of funds to provide timely and effective assistance to IMF member countries affected by the global financial crisis. The announcement of the commitment was made in June 2009, after the reporting period of this report.



## Overview of the Exchange Fund Account Management Framework

This section describes the EFA management framework, including the Account's objectives and principles and governance structure. It also summarizes policies governing investment and funding activities, risk management and performance measurement.

### Objectives and Principles

#### 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*

An updated *Statement of Investment Policy* (SIP) was approved by the Minister in April 2009. The 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 policies are designed to ensure prudent and effective management practices are followed in accordance with reserves management objectives and principles. The updated SIP is provided in Annex 1.



## 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), which provides recommendations to the FMC, in its advisory role, on strategic and policy matters affecting the management of foreign reserves, including changes to the limits and guidelines pertaining to the foreign reserves 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](http://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, sub-national 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 IMF 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 2008–09."

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.fin.gc.ca/treas/frame/gctrmf06e.pdf](http://www.fin.gc.ca/treas/frame/gctrmf06e.pdf).



**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 and by holding a high proportion of short-term investments. 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 the section entitled “Portfolio Performance.”

**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 2008–09” fulfils this requirement.



## Report on Operations in 2008–09

This section reviews operations related to the official international reserves, including the achievement of objectives, changes in the level of reserves, portfolio performance and risk measures. Unless otherwise noted, in this section 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 reported in Canadian dollars.

### Market Developments and Impact on the Portfolio During the Reporting Period

Movements in the euro and yen vis-à-vis the US dollar result in the currency revaluation of euro- and yen-denominated investments. Changes in interest rates affect the market value of investments by either increasing (when rates fall) or decreasing (when rates rise) the value of the investments held in the reserves. Over the period from March 31, 2008 to March 31, 2009, movements in interest rates increased the market value of the reserves by US\$1.0 billion, while changes in exchange rates decreased the market value of the reserves by \$3.1 billion.

#### The Impact of the Global Financial Crisis on the EFA

The global financial crisis that started in the second half of 2007–08 continued throughout 2008–09. Tension in the financial markets in the wake of the Lehman Brothers bankruptcy caused increased levels of risk aversion, resulting in credit spreads widening to an extraordinary degree. As the financial crisis worsened in the autumn of 2008, central banks cut their key rates to very low levels. Deteriorating confidence and fiscal conditions in the advanced economies spread quickly around the world as declining wealth and tighter credit conditions adversely affected the global economy. Aggressive economic stimulus packages were deployed by governments with the aim of decreasing volatility in the financial markets and restoring confidence.

**EFA funding:** The liquid fixed-rate assets held in the EFA increased in value due to the general decrease in interest rates. However, annual funding requirements needed to maintain the value of reserves at planned levels, measured in US dollars, were somewhat higher than planned due to the decline in the euro during the reporting period.

Throughout the turmoil, the EFA's asset-liability matching principle proved effective. There was some volatility in the asset-liability gap, as the market value of liabilities used to fund the EFA increased or decreased more than the market value of foreign currency assets held in the EFA. By the fall of 2008, liabilities at all terms to maturity were in the form of cross-currency swaps. The market value of liabilities funding the EFA were thus directly affected by movements in domestic swap spreads. Domestic swap spreads over the reporting period exhibited high volatility. However, throughout the reporting period, funding costs through the Canada bills program were very low compared to historical levels.

**Portfolio performance:** Despite the turbulent environment, the EFA continued to meet its objective of generating small positive net underlying returns for the Government. Similar to the previous fiscal year, the total return on EFA assets, which includes unrealized gains and losses due to changes in credit spreads, fell slightly short of external benchmarks based on US and German federal government issued securities. This result occurred as the EFA's diversified US-dollar and euro portfolios did not benefit as greatly from the flight to quality during the credit market turmoil as a portfolio composed solely of US Treasury and German government securities.

The Credit VaR (Value at Risk) of the portfolio, which measures the portfolio's exposure to possible credit events such as a default or downgrade, increased somewhat but remained within acceptable limits. The portfolio remained sufficiently diversified and protected from private sector credit exposure.



## Interest Rates

US interest rates decreased over the year as the US Federal Reserve cut policy rates by 275 basis points in response to the credit market turmoil and strong demand for risk-free assets, which led to lower government yields across all maturities. During 2008–09, the yield on US 3-month Treasury bills fell by 111 basis points while the yield on 5-year Treasury bonds decreased by 78 basis points (Chart 1). In mid-August, amid extreme market volatility and rising risk aversion, investor demand for US Treasury securities rose significantly. In December, rates on US 3-month Treasury bills were pushed into negative territory, as investors continued to gravitate towards the safety of US government debt while key policy rates approached zero. The changes in US interest rates had the effect of increasing the US-dollar-reported market value of US-denominated fixed-income securities held in the EFA.

The euro-denominated holdings in the EFA are mainly composed of bonds. The yield on European sovereign 5-year securities declined by 137 basis points while the yield on 10-year securities decreased by 91 basis points (Chart 2). However, the positive impact of the decline in European interest rates on EFA holdings of euro-denominated securities was offset by a larger negative exchange rate effect.

## Exchange Rates

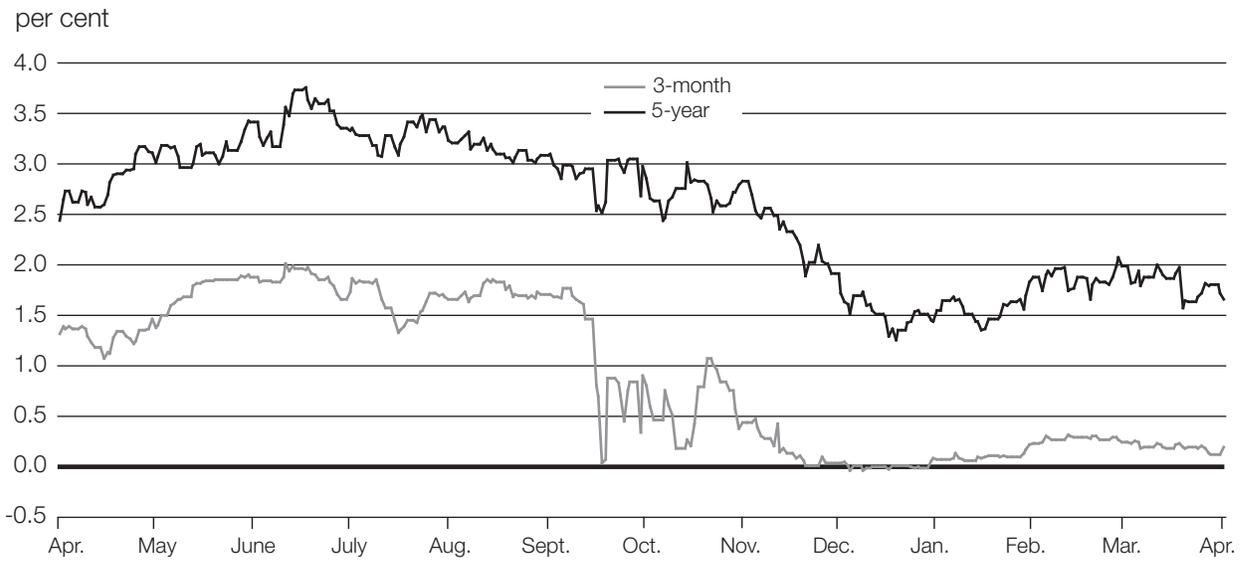
The US dollar appreciated against most major currencies in 2008–09, including the euro. As roughly 43 per cent of the official international reserves were held in euro-denominated securities (as at March 31, 2009), the decline in the euro led to a decline in the market value of the reserves, when reported in US dollars. From March 31, 2008 to March 31, 2009, the euro depreciated 10.0 per cent against the US dollar. The highest level of the US dollar/euro exchange rate during the period was 1.5991 on April 22, 2008, while the lowest level was 1.2453 on November 20, 2008 (Chart 3).

The level of the official international reserves was less exposed to changes in the yen/US-dollar exchange rate (Chart 4) since only 0.2 per cent of the reserves were held in yen-denominated assets (as at March 31, 2009). Overall, the yen appreciated by 1.0 per cent against the US dollar during the reporting period. The lowest level of the yen/US dollar exchange rate (i.e., the highest value of the yen) during the period was 87.24 on December 17, 2008, and the highest level was 110.53 on August 15, 2008.

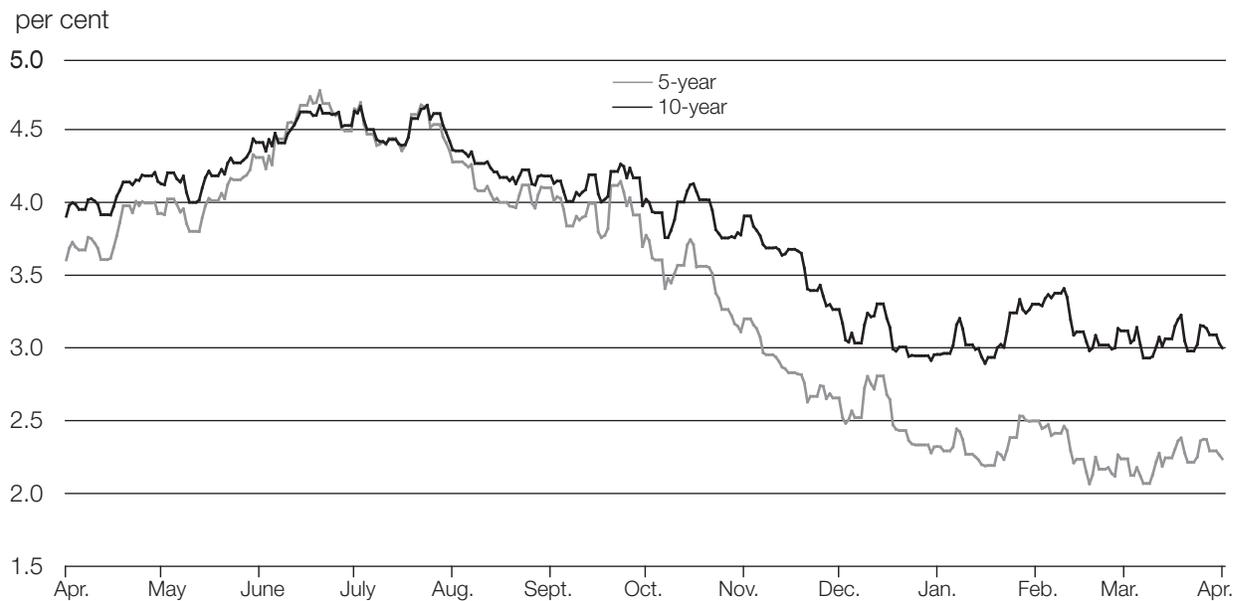
Given the asset-liability matching framework, some funding adjustments were made during the year due to the depreciation of euro-denominated assets in the portfolio. The depreciation of the euro had a relatively modest impact on the Government's financial position.



**Chart 1**  
**Evolution of US 3-Month and 5-Year Treasury Yields**  
**From March 31, 2008 to March 31, 2009**



**Chart 2**  
**Evolution of Euro 5-Year and 10-Year Sovereign Yields**  
**From March 31, 2008 to March 31, 2009**

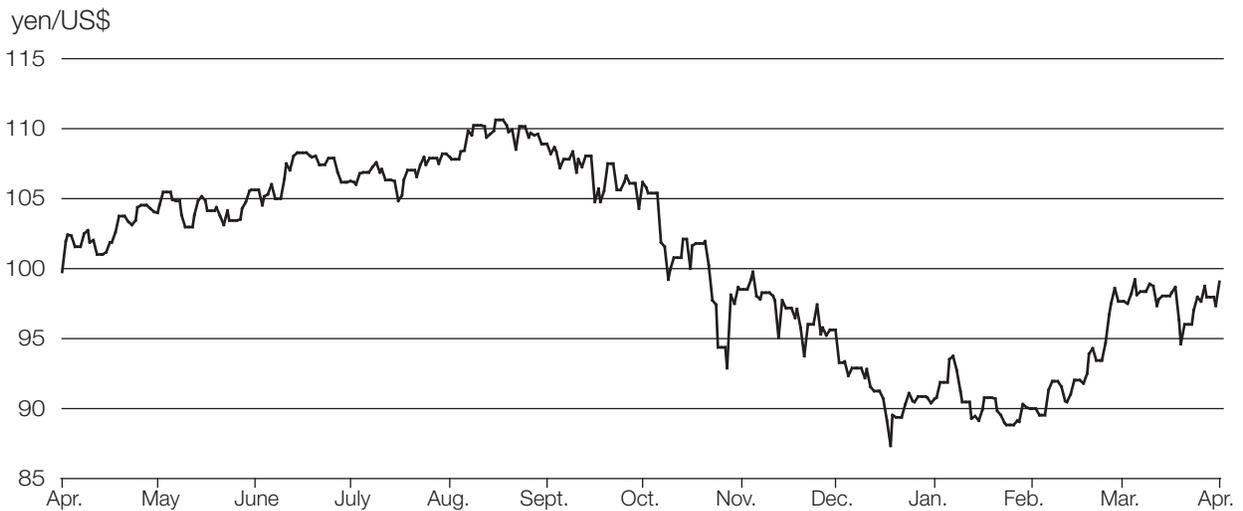




**Chart 3**  
**Evolution of the Euro From March 31, 2008 to March 31, 2009**



**Chart 4**  
**Evolution of the Yen From March 31, 2008 to March 31, 2009**





## Initiatives in 2008–09

During 2008–09, a review of the EFA's investment policies was undertaken with the objective of broadening the list of high quality investment counterparties. Canada participated with other G20 countries in supporting an IMF proposal to bolster IMF resources and to provide assistance to member countries that have been negatively affected by the financial crisis.

### Managing Short-Term Investment, Lending and Repo Programs

A review of the EFA's short-term investments in commercial paper and certificates of deposit was undertaken to mitigate the risk of loss due to credit issues. Portfolio managers used discretion to curtail new investments with counterparties under financial pressure. Similarly, short-term investment positions with counterparties at risk of downgrade were permitted to roll off. Activity in the EFA's securities-lending program and tri-party repo program was managed down, as liquidity in these programs dried up in the autumn of 2008 following the bankruptcy of Lehman Brothers.

### Broadening Eligible Counterparties

**Government-guaranteed securities:** During the financial crisis, many sovereigns acted to provide temporary guarantee facilities to support the borrowing activities of their regulated financial institutions in domestic and international markets. As a result, many private sector financial institutions issued fixed-income securities with an explicit sovereign backing. These securities represent the same credit exposure already permitted to directly guaranteed agencies in the EFA. Counterparty exposures to financial institutions were maintained at low levels and diversified so as to limit risks of large exposures to single counterparties.

In the SIP (see Annex 1), the government-guaranteed securities were classified in a sub-category under the existing explicit guaranteed asset class. An aggregate limit of 20 per cent of the reserves target level was introduced for this asset class, with exposures to individual issuers tiered down from 1 per cent of the reserves target level by rating of the sovereign guarantor. The SIP was also amended to permit EFA investment in government-guaranteed securities that are rated below AAA.

**Sub-sovereigns:** Sub-sovereigns are levels of government within a sovereign territory that are hierarchically below the sovereign. The SIP was amended to permit investment in the senior unsecured fixed-income obligations of sub-sovereign governments. A review was undertaken to assess the creditworthiness of a large number of sub-sovereign borrowers. The SIP was also amended to permit EFA investment in sub-sovereign and government-supported entities that are rated below AAA.

**Supranational organizations:** The SIP was also amended to permit EFA investment in supranational organizations that are rated below AAA.



## Support for the IMF

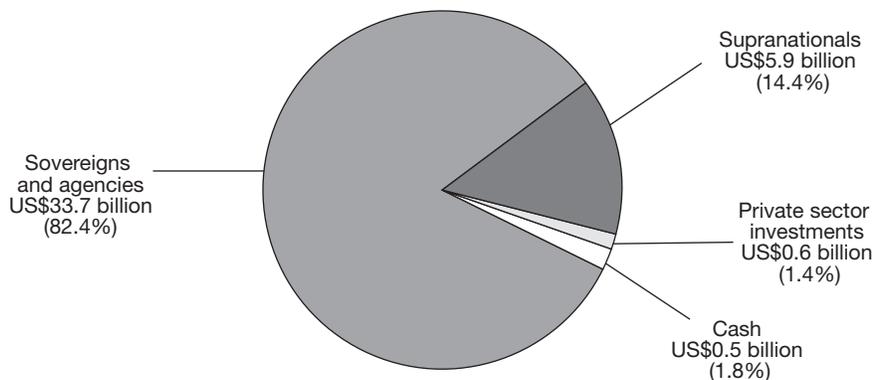
As part of the efforts of G20 countries to combat the financial crisis, Canada committed to provide further support to the IMF and other international financial institutions to help emerging and developing countries. The Government of Canada and the IMF signed a bilateral borrowing agreement providing up to US\$10 billion of additional temporary resources for member countries requiring balance of payment assistance during the crisis.

## Performance Versus Strategic Objectives

The *Currency Act* stipulates that this report provide a statement of whether the strategic objectives have been met during the review period. The three objectives, which are to maintain a high standard of liquidity, preserve capital value and optimize return, were achieved. The target 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 (see the section entitled "Risk Measures"). In addition, the underlying coupon return measure was positive (see the section entitled "Portfolio Performance").

In practice, the EFA's liquid reserves (which exclude gold and SDR holdings) are mainly invested in sovereign and government-sponsored entity securities (over 82 per cent as at March 31, 2009), as these securities enhance both liquidity and capital preservation (Chart 5).<sup>1</sup> The share of deposits and repos with private sector entities is small because they offer lower liquidity than other investment options. The Liquidity Tier mainly consists of US Treasury securities, reflecting their high market liquidity.

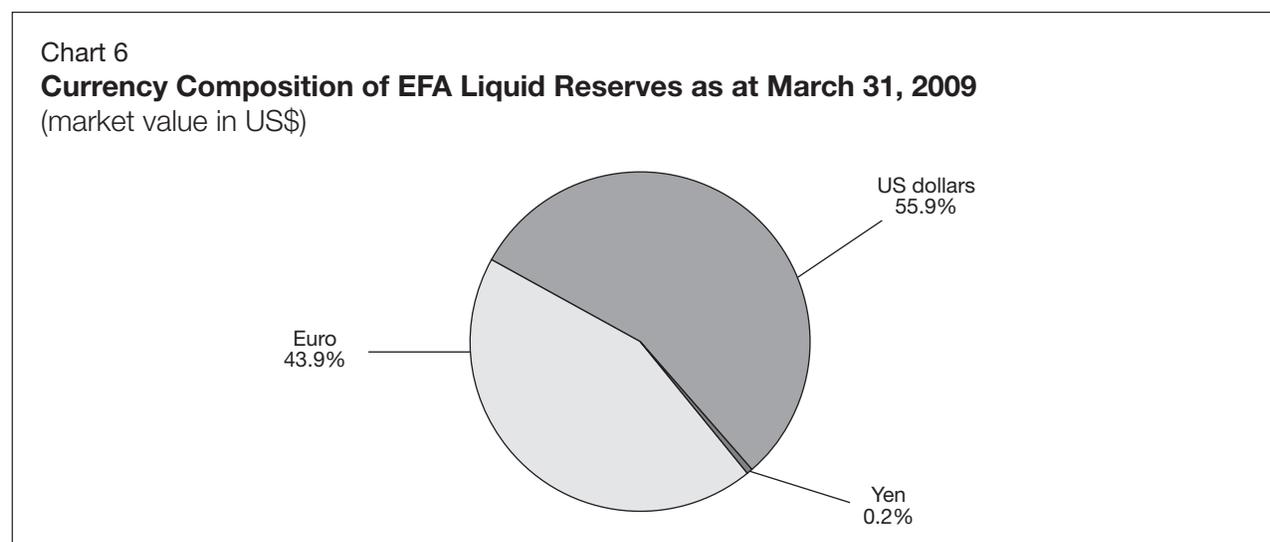
Chart 5  
**Composition of EFA Liquid Reserves as at March 31, 2009**  
(market value)



<sup>1</sup> Excludes gold and SDR holdings.



The ongoing practice has been to hold a significant portion of the reserves in US dollars because foreign currency needs are mostly in US dollars and, historically, foreign exchange intervention has mainly consisted of transactions involving the US dollar. This past year has seen the depreciation of the euro against the US dollar, resulting in a modest increase in the share of US-dollar holdings. As well, maturities were refinanced primarily in US dollars. As at March 31, 2009, the US-dollar share of the EFA liquid investments was US\$22.9 billion or 55.9 per cent, the euro share was equivalent to US\$18.0 billion or 43.9 per cent, and the yen portion was equivalent to US\$0.839 billion or 0.2 per cent (Chart 6).<sup>2</sup> By comparison, the US-dollar share was 45.9 per cent and the euro share was 52.7 per cent as at March 31, 2008.



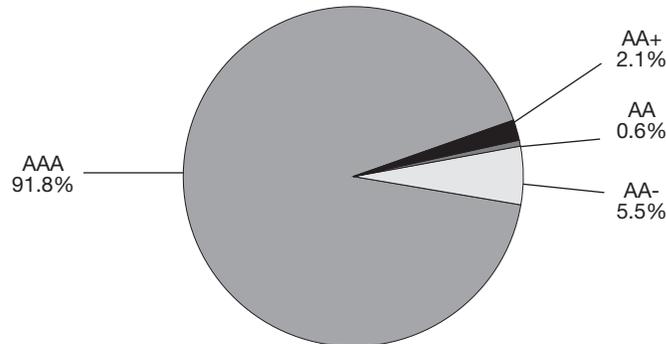
To help achieve the objective of preserving capital value, an entity must have a credit rating of at least A-/A3 to be eligible for investment in the EFA, as specified in the SIP. Counterparty limits are established based on a framework that incorporates external ratings from credit rating agencies, and compliance with counterparty limits is monitored on a real-time basis. The majority of EFA investments are in the AAA category, as indicated in Chart 7.<sup>3</sup>

<sup>2</sup> Excludes gold and SDR holdings.

<sup>3</sup> Excludes gold and SDR holdings.



Chart 7  
**Credit Composition of EFA Liquid Reserves as at March 31, 2009**  
(settled basis)



### **Composition of the Official International Reserves as at March 31, 2009**

Table 2 shows the distribution of investments in the official international reserves by currency and term to maturity as at March 31, 2009. US-dollar holdings, which made up slightly more than half of the reserves, were relatively concentrated in short-term (i.e. under six months) maturities, as they are held for liquidity purposes. The euro holdings were more heavily weighted towards medium- and longer-term investments. Over 79 per cent of euro investments had a maturity of greater than 1 year. All yen holdings had a maturity of under 6 months. The proportion of US-dollar holdings increased and the proportion of euro holdings decreased compared to March 31, 2008 due to the depreciation of the euro and refinancing of maturities in US dollars.

In Table 2, gold, SDR holdings and the IMF reserve position, which have no terms to maturity, are translated into US dollars. The IMF reserve position is classified as an investment of indefinite term.



## **IMF Reserve Position**

The IMF is an international organization that is structured as a financial cooperative owned by its member nations. Its objective is to promote international monetary cooperation and exchange rate stability and to help foster economic growth. One of the functions of the IMF is to provide financial assistance to countries experiencing temporary balance of payment difficulties. The IMF also promotes economic growth and poverty reduction by providing loans to countries in need at favourable rates.

Each country (including Canada) that joins the IMF is assigned a quota that represents the maximum amount of resources that a country is obliged to provide to the IMF, upon request. As well, the IMF typically has on deposit with each respective 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 IMF reserve position is an asset that is included as a component of the official international reserves. As such, changes in Canada's IMF reserve position that may result from advances, repayments or revaluations directly impact the Government of Canada's financial statements. However, because the IMF reserve position is not actively managed by the Department of Finance or the Bank of Canada, it is not included in the EFA and is instead represented within the wider category of official international reserves.


 22 Table 2  
**Term Structure of the Official International Reserves as at March 31, 2009**

Term	Cash and term deposits	Government securities			Gold	SDR holdings	Total EFA assets	IMF reserve position	Total official international reserves
		in domestic currency	Other securities						
(market value in millions of US dollars)									
<b>US-dollar holdings</b>									
Under 6 months	434	2,697	7,673	-	-	10,804	-	10,804	
6 to 12 months	-	-	805	-	-	805	-	805	
1 to 5 years	-	-	2,928	-	-	2,928	-	2,928	
Over 5 years	-	1,920	6,414	-	-	8,334	-	8,334	
Indefinite term	-	-	-	100	964	1,064	1,550	2,614	
Total US-dollar holdings	434	4,617	17,820	100	964	23,935	1,550	25,485	
<b>Euro holdings</b>									
Under 6 months	216	2,559	-	-	-	2,775	-	2,775	
6 to 12 months	-	722	303	-	-	1,025	-	1,025	
1 to 5 years	-	4,203	2,338	-	-	6,541	-	6,541	
Over 5 years	-	5,455	2,159	-	-	7,614	-	7,614	
Total euro holdings	216	12,939	4,800	0	0	17,955	0	17,955	
<b>Yen holdings</b>									
Under 6 months	84	-	-	-	-	84	-	84	
6 to 12 months	-	-	-	-	-	-	-	-	
1 to 5 years	-	-	-	-	-	-	-	-	
Over 5 years	-	-	-	-	-	-	-	-	
Total yen holdings	84	-	0	0	0	84	0	84	
<b>Total</b>	734	17,556	22,620	100	964	41,974	1,550	43,524	

Note: The exchange rates prevailing on March 31, 2009 are used for the euro and yen assets.



## Changes in the Level of the Official International Reserves

The level of the official international reserves changes over time due to a variety of factors. As shown in Table 3, over the 12-month reporting period the level of the reserves increased by US\$467 million. The increase was due to return on investments (\$2.25 billion) and reserves management operations (\$2.99 billion), which were partially offset by foreign currency debt charges (\$1.64 billion) and revaluation effects (\$3.14 billion).

Table 3

### Sources of Change in Canada's Official International Reserves Between March 31, 2008 and March 31, 2009

	Change (market value in millions of US dollars)
Official intervention	-
Net government operations	-
Reserves management operations	2,992
Gains and losses on gold	-
Return on investments	2,252
Foreign currency debt charges	-1,637
Revaluation effects	-3,140
Other	-
<b>Total change</b>	<b>467</b>

### Official Intervention

Official intervention involves buying or selling foreign exchange currencies in exchange for Canadian dollars, and would therefore affect the level of the official international reserves. Intervention in the Canadian-dollar foreign exchange market has not occurred since 1998 (see Annex 2).

### Net Government Operations

Net purchases of foreign currencies for government foreign exchange requirements will affect the official international reserves. There were no net government operations during the reporting period.

### Reserves Management Operations

Matched debt issues and maturities and purchases and sales of foreign currency assets affect the level of the EFA. Over the reporting period, funds raised through the issuance of cross-currency swaps and Canada bills, totalling US\$26.3 billion, were more than the debt maturities (\$23.6 billion in total, including Canada bill maturities totalling \$15.6 billion and cross-currency swap maturities of \$2.4 billion). The new issuances combined with the increase in value due to the depreciation of the euro resulted in a net increase in the level of official international reserves.



## **Gains and Losses on Gold**

This factor reflects the difference between the value of gold holdings at the beginning and the end of the reporting period due to gold sales and a change in the market value of gold. There were no gold transactions during the period, with the last of the Government's gold bullion holdings having been sold in December 2003.

## **Return on Investments**

Return on investments comprises interest earned on investments (US\$1.24 billion) and the increase in the market value of securities resulting from changes in interest rates (\$1.01 billion). The overall effect on the official international reserves was a net increase of \$2.25 billion.

## **Foreign Currency Debt Charges**

Foreign currency debt charges reduced the level of the official international reserves by US\$1.64 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 reflect changes in the market value of the official international reserves. Revaluation effects decreased the official international reserves by US\$3.14 billion, primarily due to the depreciation of the euro versus the US dollar.

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

## **EFA Financing**

As previously noted, EFA assets are managed against a portfolio of dedicated liabilities. The liabilities are Government of Canada foreign currency borrowings from a variety of sources (Table 4).

Funding requirements are primarily met through an ongoing program of cross-currency swaps of domestic obligations. Total cross-currency swap issuance and maturities during the reporting period were US\$6.1 billion and \$2.4 billion, respectively. In recent years, swaps have been particularly cost-effective compared to other sources of foreign currency funds. Although the average funding cost of swaps was in line with the cost during the previous fiscal year, costs were volatile throughout the year with spreads to LIBOR ranging from -80 to +10 basis points. Between September and February, the use of swaps as a source of funds was minimal. During 2008–09, foreign currency was raised through cross-currency swaps at 3-month LIBOR less 58 basis points on average. This funding cost compares favourably with rates obtained during the previous fiscal year, which averaged 3-month LIBOR less 56 basis points.

In addition to cross-currency swaps of domestic obligations, the EFA can be funded through a short-term US-dollar paper program (Canada bills), medium-term note issuance in various markets (Canada notes and euro medium-term notes [EMTNs]) and international bond issues (global bonds), the use of which depends on funding needs and market conditions. From March 31, 2008 to March 31, 2009, the level of outstanding Canada bills increased by US\$4.6 billion. Canada bills were issued, on average, at an all-in cost of LIBOR less 134 basis points, which was lower than funding levels of prior years. There was no new issuance of Canada notes, EMTNs or global bonds during the period.



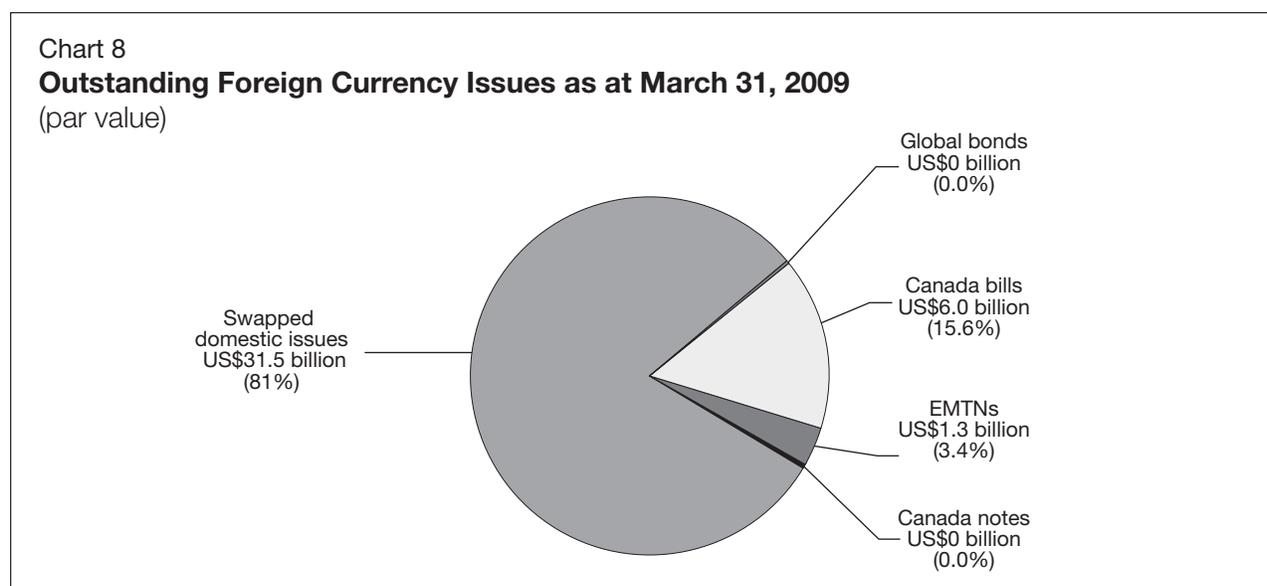
The changes shown in Table 4 reflect not only issuance and maturities, but also changes in the exchange rates of the euro and yen versus the US dollar (as the foreign currency issues are reported in US dollars). Outstanding foreign currency issues are shown in Chart 8.

Table 4

**Outstanding Foreign Currency Issues**

	March 31, 2009	March 31, 2008	Change
	(par value in millions of US dollars)		
Swapped domestic issues	31,450	30,503	947
Global bonds	0	5,729	-5,729
Canada bills	6,046	1,445	4,601
EMTNs	1,328	1,579	-251
Canada notes	0	502	-502
<b>Total</b>	<b>38,824</b>	<b>39,758</b>	<b>-934</b>

Note: Liabilities are stated at the exchange rates prevailing on March 31, 2009.



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/2007-2008/dmr08-eng.asp](http://www.fin.gc.ca/dtman/2007-2008/dmr08-eng.asp).



## Portfolio Performance

The EFA is a financial asset portfolio within Canada's Public Accounts. For risk management purposes and to provide transparency on the economic return or cost to the Government of maintaining the Account, several performance indicators are measured and tracked on a regular basis and reported to management at the Department of Finance and the Bank of Canada.

This section of the report provides detailed, technical information on indicators used to measure performance in four areas: 1) revenues; 2) asset-liability matching; 3) cost of advances to the EFA; and 4) market and credit risk measures. A brief overview is provided below to highlight the main performance indicators.

### Overview

The assets held in the EFA generated higher revenues in 2008–09 than in 2007–08 as coupons received on both US-dollar and euro-denominated fixed-income securities were higher.

The spread between the coupons on fixed-income reserve assets and the foreign fixed-income liabilities used to fund the assets continued to remain positive in 2008–09. The spread measures the underlying return of the portfolio if the assets are held to maturity. Over the year, the portfolio generated a positive spread or coupon return of 31 basis points, up from 22 basis points the previous fiscal year.

The estimated economic cost to the Government of maintaining the EFA, the cost of advances to the EFA, was lower than the net revenue earned in 2008–09.

Table 5

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

	April 1, 2008 to March 31, 2009	April 1, 2007 to March 31, 2008
1) Net revenue of the Exchange Fund Account (C\$ millions)	1,853	1,828
2) Asset-liability performance		
Coupon return (basis points)	31	22
Asset-liability matching indicators		
Carry (basis points)	-30	-4
Carry including net realized gains or losses (basis points)	-1	12
Total return (basis points)	117	-105
3) Cost of advances to the EFA (C\$ millions)	1,630	1,792
	<b>As at March 31, 2009</b>	<b>As at March 31, 2008</b>
4) Risk measures		
Market risk (99% 10-day VaR, US\$ millions)	11	3
Credit risk (99% 365-day VaR, US\$ millions)	1,245	810



The difference between the actual cash flows of interest receipts and payments—the carry of the portfolio—was -30 basis points, as maturing high-coupon assets were replaced with maturing low-coupon assets in the current low interest rate environment. The carry, taking into account net realized gains or losses from the sale or purchase of assets, was slightly negative at -1 basis points. The difference between the two carry measures resulted from gains realized from selling and repurchasing assets. Taking into account the change in the market value of assets and liabilities, the overall portfolio's total return rose by 117 basis points, as Canada's foreign liabilities depreciated more slowly than the value of the assets held in the EFA due to a flight to quality.

The Value at Risk (VaR) measure of potential losses to the EFA portfolio arising from market movements in interest and exchange rates increased somewhat during the financial crisis but continued to remain very low as a result of the asset-liability matching of the foreign reserves. The VaR measure of potential losses due to the credit exposure to counterparties (Credit VaR) increased slightly as a result of wider credit spreads associated with the market turmoil.

## 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 2008–09, income totalled C\$1.85 billion compared to C\$1.83 billion in 2007–08. The main categories of income are summarized in Table 6.

Table 6

### Revenues of the Exchange Fund Account

	April 1, 2008 to March 31, 2009	April 1, 2007 to March 31, 2008
	(millions of Canadian dollars)	
<b>Investment income</b>		
Marketable securities	1,661	1,622
Cash and short-term deposits	24	72
Deposits held under repurchase agreements	8	89
Special drawing rights	22	38
Total investment income	1,715	1,821
<b>Other income</b>		
Foreign exchange gains or losses	138	7
<b>Total income</b>	1,853	1,828



The EFA's securities-lending program enhances the income earned on the portfolio by lending out US Treasury securities that are highly sought after in the market. Income from securities lending, included in investment income from marketable securities in Table 6, totalled C\$5.2 million during 2008–09 compared to C\$8.6 million in 2007–08.

## **2) Asset-Liability Matching**

The asset-liability performance 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. The second measure of asset-liability performance is called “total return.” It represents the net return generated by the EFA by including the cash flows as depicted in the carry measure (i.e. interest streams and realized gains or losses), as well as the changes in the market values of the assets and liabilities over the reporting period. By including the market 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. In this way, the total return measure depicts the market or fair value of the EFA.

### **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. A principal reason for using this measure of performance is that it depicts the effect of the EFA's net revenue on the financial results.

Table 7 provides an estimate of the carry for the EFA and its constituent currency portfolios. The carry for the 2008–09 fiscal year is estimated at -30 basis points, a 26-basis-point decline over 2007–08. The decline was mainly caused by a narrowing of the difference between interest earned and paid as older liabilities with high coupons matured.

Taking into account gains or losses on the sale of assets during 2008-09, the EFA incurred a net loss of US\$1 million, or -1 basis points. These sales resulted in a net realized gain of US\$114 million, which was offset by the loss of interest income of \$115 million. The EFA realized \$110 million in gains on US asset sales and \$4 million in gains on euro asset sales. Realized losses in the euro portfolio over the whole year were offset by realized gains in the US portfolio in the second part of the year as interest rates generally decreased.



Table 7

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

	April 1, 2007 to March 31, 2008		April 1, 2008 to March 31, 2009				
	Carry	Carry (including net realized gains)	Interest earned on assets	Interest paid on liabilities	Net interest earned on assets	Carry	Carry (including net realized gains)
	(basis points)		(millions of US dollars)			(basis points)	
Euro portfolio	-14.3	-22.4	726.6	842.9	-116.3	-29.4	-27.9
Yen portfolio	-0.1	-0.1	9.2	9.8	-0.6	-0.2	-0.2
US\$ portfolio	10.6	34.1	671.6	669.4	2.2	-0.1	27.0
<b>Total carry<sup>2</sup></b>	<b>-3.7</b>	<b>11.6</b>	<b>1,407.4</b>	<b>1,522.1</b>	<b>-114.7</b>	<b>-29.7</b>	<b>-1.1</b>

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

<sup>2</sup> 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. For instance, 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. The total return of the assets is also compared to an external liability 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 into key sources of return through a technique called "performance attribution." This 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 8 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 net total return was 117 basis points, or a gain of US\$446 million, in the fiscal year ending March 31, 2009, compared to -105 basis points, or a loss of \$394 million, in the year ending March 31, 2008. This reflects net returns in US-dollar terms of 181 basis points for the US-dollar portfolio, 45 basis points for the euro portfolio and -17 basis points for the yen 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 8  
**Total Return of the EFA Compared to Liability Benchmarks**

	April 1, 2007 to March 31, 2008	April 1, 2008 to March 31, 2009			Total EFA
	Total EFA	US\$ portfolio	Euro portfolio	Yen portfolio	
<b>EFA asset portfolio</b>					
Return in original currency	n/a	4.46%	8.09%	0.47%	n/a
Return in US\$ (A)	<b>15.71%</b>	4.46%	-9.05%	1.16%	<b>-1.76%</b>
<b>Liability benchmarks</b>					
Return in original currency	n/a	2.64%	7.55%	0.64%	n/a
Return in US\$ (B)	<b>16.76%</b>	2.64%	-9.51%	1.34%	<b>-2.93%</b>
<b>Return vs. liability benchmark in basis points (A – B) in US\$</b>					
	<b>-105</b>	181	45	-17	<b>117</b>

Table 9 compares the total return of the EFA to a set of Merrill Lynch government securities indices.<sup>4</sup> This provides some insight into how the total return of the EFA compares to a portfolio invested solely in US Treasury and German government securities. While the indices have been combined and weighted to reflect the currency composition and duration of the EFA, they only provide a general indication of its performance because the EFA is invested in a broader range of high quality assets. In the fiscal year ending March 31, 2009, the EFA's total return fell short of the external indices by 66 basis points, compared to 30 basis points in the fiscal year ending March 31, 2008. The EFA's underperformance this fiscal year was due to the greater flight to quality for German- and US-issued securities in the indices compared to that for the diversified securities held in the EFA.

<sup>4</sup> Merrill Lynch, used with permission. "MERRILL LYNCH IS LICENSING THE MERRILL LYNCH INDICES "AS IS," MAKES NO WARRANTIES REGARDING SAME, DOES NOT GUARANTEE THE QUALITY, ACCURACY AND/OR COMPLETENESS OF THE MERRILL LYNCH INDICES OR ANY DATA INCLUDED THEREIN OR DERIVED THEREFROM, AND ASSUMES NO LIABILITY IN CONNECTION WITH THEIR USE."



Table 9

**Total Return of the EFA Compared to External Indices<sup>1,2</sup>**  
**April 1, 2008 to March 31, 2009**

	US\$ portfolio	Euro portfolio	Yen portfolio
<b>EFA asset portfolio</b>			
Return in original currency (A)	4.46%	8.09%	0.47%
Return in US\$	4.46%	-9.05%	1.16%
<b>External indices</b>			
Return in original currency (B)	4.96%	9.08%	n/a
Return in US\$ <sup>3</sup>	4.96%	-8.22%	n/a
<b>Return vs. external indices in</b>			
<b>basis points (A – B) in original currency</b>	-51	-99	n/a

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

<sup>2</sup> Composite index for the euro portfolio is constructed as weighted average of the following 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.

<sup>3</sup> 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 10 summarizes the attribution results for the EFA's US-dollar and euro portfolios for the fiscal year ending March 31, 2009. Of the key sources of return, the coupon effect (what would have been earned had interest rates remained unchanged over the period) was the main driver of the positive total return in the EFA's euro portfolio. The credit spread effect (the change in the market value of EFA assets and foreign liabilities due to credit quality) was the main source of return in the US-dollar portfolio.

Although total returns for both the US-dollar and euro portfolio were significantly affected by interest rate 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. The turmoil in the credit markets led to a larger than normal impact from changes in credit spreads, as Government of Canada liabilities benefited more from the flight to quality than the assets held in the US-dollar portfolio and, to a much lesser extent, the euro portfolio. The US-dollar portfolio also earned small positive returns from securities-lending activities over the period.

The coupon effect generally represents the underlying return of the portfolio if matched assets and liabilities are held to maturity. This is because the EFA's assets generate more interest income than what is required to pay for the EFA's liabilities. Moreover, the coupon effect represents the positive return generated by portfolio managers through their investment and issuance decisions.

The yield curve effect (the impact of changes in the general level of interest rates) demonstrates the extent to which the EFA's assets and liabilities are matched in terms of their sensitivity to changes in interest rates. The spread effect (returns due to movements in interest rate spreads) illustrates how the EFA's assets and liabilities respond to changing interest rate spreads.



Typically, movements in interest rate spreads will differ for assets according to their credit quality, captured by the credit spread effect. The asset-liability matching framework does not hedge the credit spread effect as investment assets and Government of Canada liabilities are of different credit quality.

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 is the unexplained portion of total return. By using these key sources of return, a clearer picture emerges as to the drivers of the EFA's annual total return.

Table 10

**Performance Attribution for the US-Dollar and Euro Portfolios  
Compared to Liability Benchmarks  
April 1, 2008 to March 31, 2009**

	US\$ portfolio		Euro portfolio	
	Assets	Liabilities	Assets	Liabilities
	(per cent)			
Coupon effect	2.61	2.35	3.95	3.54
Yield curve effect	4.29	4.13	6.40	6.33
Credit spread effect	-2.49	-3.78	-2.23	-2.30
Securities-lending activities	0.02			
Residual return	0.03	-0.06	-0.03	-0.02
Return in original currency	4.46	2.64	8.09	7.55
<b>Return in US\$</b>	4.46	2.64	-9.05	-9.50

### 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 level of foreign currency advances, measured in Canadian dollars, varies with the flow of foreign currencies between the EFA and the Consolidated Revenue Fund (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 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 2008–09, this value was C\$1,590 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 utilized to approximate the notional interest charge on the portion of advances from the CRF related to those assets. For 2008–09, a weighted cost of domestic funding (3.21 per cent) was utilized in calculating notional interest paid in Canadian dollars, resulting in a value of C\$40 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. The Minister of Finance receives an annual report on treasury risk management that is prepared in collaboration with the Bank of Canada's Financial Risk Office.

#### Market Risk

Market risk stems from the movement in market prices due to changes in interest rates and exchange rates, and from the functioning of financial markets, including the risk of illiquidity of certain markets and instruments.

Several industry-standard measures of market risk exposure were employed: scenario analysis, stress testing and VaR (Table 11). VaR is a statistical measure for estimating potential losses to the EFA portfolio arising from severe market movements such as changes in interest and exchange rates, while stress testing and scenario analysis are used to evaluate the portfolio's performance under extraordinary circumstances in the market.

Stress tests were 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.

Table 11

#### Market Risk Measures

	March 31, 2009		March 31, 2008	
	EFA	EFA assets less liabilities	EFA	EFA assets less liabilities
	(millions of US dollars)			
<b>Single factor stress tests</b>				
1% depreciation of euro/yen	-180	0	-223	1
1% upward parallel shift in yield curve	-1,334	-14	-1,212	9
<b>Scenario tests</b>				
1994 Fed tightening	-3,569	-7	-3,420	139
1997 Asian financial crisis	-887	70	-1,168	73
1998 Russian default/LTCM collapse	-1,131	115	-1,649	82
2001 terrorist attacks	1,273	47	1,368	-10
<b>99% 10-day VaR</b>	1,324	11	678	3



In addition, some hypothetical scenario stress tests 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 four stress tests showed that the EFA would generally perform well during such periods of market turbulence. The results were similar to those reported for March 31, 2008, and show that on a net basis, the EFA was continuously well positioned to benefit from flight-to-quality effects. 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 expected 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, 2009, the EFA had a 99-per-cent 10-day VaR of US\$11 million, which implied that 99 per cent of the time, the value of the portfolio was not expected to decline by more than \$11 million, on a net basis, over a 10-trading-day period.

### Credit Risk

Credit risk includes the risk that the counterparty in a financial instrument will not meet their obligations to pay and/or that the value of the instrument will change as a result of the counterparty's perceived default risk changing.

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. 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 limits. Along with liquidity and legal risks, credit risk is also controlled through strict guidelines. 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 12).

Table 12

#### Credit Risk Measures

	March 31, 2009	March 31, 2008
	(millions of US dollars)	
<b>Credit VaR and expected shortfall</b>		
99.9% 365-day Credit VaR	1,245	810
Expected shortfall	2,046	1,719
<b>Stress test</b>		
Potential loss if counterparties with negative outlook or negative watch are downgraded one notch	6	1



The Credit VaR model provides an estimate of the maximum expected loss in portfolio value within a year as a result of a credit event, such as a counterparty downgrade or default, under normal market conditions. As of March 31, 2009, the EFA had a 99.9-per-cent 1-year Credit VaR of US\$1.2 billion, which implied that 99.9 per cent of the time, the value of the portfolio was not expected to decline by more than \$1.2 billion over a 1-year period due to credit events. An associated measure, expected shortfall, computes the expected average loss in portfolio value during the same 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 \$2.0 billion as of March 31, 2009. The increase in Credit VaR from the previous year reflects wider credit spreads, which increase the possible losses associated with downgrades and defaults.

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. Due to the financial crisis, several counterparties of the EFA have been downgraded and a number remain on negative outlook. As a result, the potential loss to the EFA under this hypothetical scenario has increased compared to the previous fiscal year.





## Annex 1: Statement of Investment Policy

### 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 *Treasury Management Governance Framework* document (available at [http://www.fin.gc.ca/treas/Goveev/TMGF03\\_-eng.asp](http://www.fin.gc.ca/treas/Goveev/TMGF03_-eng.asp)).

### 4. No Inconsistent Business or Activity

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

### 5. Investment Objective

There are three investment objectives:

- **Maintain a high standard of liquidity:** Hold reserves in assets that mature or can be sold on very short notice with minimal market impact and therefore loss of value.



- **Preserve capital value:** Minimize risk of loss of market value by holding a diversified portfolio of high quality assets (in terms of credit rating and type of issuer), managing liquid assets and liabilities on a matched basis<sup>1</sup> (in terms of currency and duration), and using appropriate practices to mitigate risks.
- **Optimize return:** Achieve the highest possible level of return, while respecting the liquidity and capital preservation objectives.

## 6. Investment Policy

### 6.1 Eligible Asset Classes

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

### 6.2 Eligible Investment Ratings

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

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

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<sup>1</sup> Liabilities, which fund EFA assets, are managed outside the EFA.

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

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

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

<sup>5</sup> EFA ratings of sovereigns are based on the lower of domestic and foreign currency ratings.

<sup>6</sup> 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-).



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)

Issuer type	Aggregate limits (% of reserves target level)	Individual counterparty limits (% of reserves target level)
"AAA"	Unlimited	20 (Excluded from above would be direct domestic currency obligations of US, France, Germany and Netherlands)
"AA-" to "AA+"	25	10
"A+"	2	1.67
"A"	(to be included in	0.83
"A-"	the above 25% limit)	0.33



### Limits on Government Supported Entities (senior unsecured obligations) and sub-sovereigns

Issuer type	Aggregate limits (% of reserves target level)	Individual counterparty limits (% of reserves target level)
"AAA"	25 (10% sub-	3
"AA-" to "AA+"	sovereign limit)	1.5
"A+"	2	0.3
"A"	(to be included in	0.2
"A-"	the above 25% limit)	0.1

### Limits on supranationals

Issuer type	Aggregate limits (% of reserves target level)	Individual counterparty limits (% of reserves target level)
"AAA"	25	10.0
"AA-" to "AA+"		5.0
"A+"	2	1.0
"A"	(to be included in	0.5
"A-"	the above 25% limit)	0.2
Bank for International Settlements	10	–

### 6.3.2 Deposits and Other Short-Term Securities

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



### Exposure limits by credit rating of private sector counterparties/issuers<sup>7</sup>

Issuer type	Aggregate limits (% of reserves target level)	Individual counterparty limits (% of reserves target level)
"AAA"		1.00
"AA+"	25	0.67
"AA"		0.50
"AA-"		0.33
"A+"	2	0.17
"A"	(to be included in the 25%	0.08
"A-"	aggregate limit)	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.

<sup>7</sup> 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.

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 (% of the reserves target level)

Individual Counterparty Limits	EFA Credit Rating		
	"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, provided that timely efforts are made to divest the EFA of those assets or otherwise bring any such exceptional holdings into compliance.

## **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 3: Canada's Official International Reserves Month-to-Month Changes

Month-end	Securities	Deposits	Gold <sup>1</sup>	Special drawing rights <sup>2</sup>	Reserve position in the IMF <sup>3</sup>	Total	Total monthly change	Reserves management operations <sup>4</sup>	Gains and losses on gold sales	Return on investments <sup>5</sup>	Foreign currency debt charges	Revaluation effects	Net government operations <sup>6</sup>	Official intervention	Other transactions <sup>7</sup>
(market value in millions of US dollars)															
<b>2008</b>															
March	39,359	1,866	102	1,062	668	43,057	3,748	-604	0	2,502	-1,660	3,510	0	0	0
<b>2008-09</b>															
April	38,746	3,058	94	1,044	659	43,602	545	1,170	0	-238	-100	-287	0	0	0
May	37,697	3,985	97	1,042	767	43,588	-14	389	0	-228	-91	-84	0	0	0
June	37,754	4,177	101	1,050	773	43,855	267	648	0	-45	-598	262	0	0	0
July	39,522	1,233	100	1,042	762	42,659	-1,196	-1,157	0	366	-194	-211	0	0	0
August	40,002	753	91	1,010	738	42,594	-65	840	0	302	-35	-1,172	0	0	0
September	40,091	1,026	96	1,002	765	42,980	386	986	0	211	-84	-727	0	0	0
October	38,698	936	80	957	731	41,402	-1,578	9	0	199	-142	-1,644	0	0	0
November	38,382	920	89	962	1,212	41,565	163	-683	0	972	-102	-24	0	0	0
December	40,584	953	95	991	1,249	43,872	2,307	128	0	641	-159	1,698	0	0	-1
January	39,561	798	100	960	1,310	42,729	-1,143	695	0	-274	-23	-1,542	0	0	1
February	40,119	736	104	946	1,288	43,193	464	678	0	52	-19	-247	0	0	0
March	40,176	734	100	964	1,550	43,524	331	-711	0	294	-90	838	0	0	0
<b>Total<sup>8</sup></b>	n/a	n/a	n/a	n/a	n/a	n/a	467	2,992	0	2,252	-1,637	-3,140	0	0	0

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

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

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

<sup>4</sup> Net change in securities and deposits resulting from foreign currency funding activities of the Government. (Issuance of foreign currency liabilities used to acquire assets increases reserves, while maturities decrease reserves).

<sup>5</sup> Return on investments comprises interest earned on investments and changes in the market value of securities resulting from changes in interest rates.

<sup>6</sup> Net government operations are the net purchases of foreign currency for government foreign exchange requirements and for additions to reserves.

<sup>7</sup> Related to the securities assumed by the Government of Canada following the privatization of Petro-Canada in July 1991 and the subsequent dissolution of Petro-Canada Limited in 2001.

<sup>8</sup> Numbers are from the Official International Reserves press release.



## **Annex 4: 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 Dexia Investor Services and State Street Corporation**

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 5: 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. At present the aggregate principal amount outstanding issued under the program is limited to US\$10.0 billion. 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 the Bank of New York. The notes are offered by the Government through four dealers: Credit Suisse First Boston LLC, Goldman, Sachs & Co., Harris Nesbitt Corporation and Scotia Capital (USA) Inc. 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 either by dealers in the dealer group, or by dealers who are not in the dealer group but who are acting as the Government's agent for the particular transaction (called reverse inquiry). EMTNs are sold on a bought-deal basis (i.e. the dealer purchasing EMTNs is responsible for the sale of the notes) and on an intermittent basis. The arranger for the EMTN program is Morgan Stanley. The maturities of EMTNs are not fixed, and can range from short- to long-term. The EMTN program further diversifies the sources of cost-effective funding for the foreign exchange reserves. 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.



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**repo; repurchase agreement:** 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 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  
31 MARCH 2009





## Exchange Fund Account

### Management Responsibility for the Financial Statements

Responsibility for the financial statements of the Exchange Fund Account (the Account) and all other information presented in this Annual Report rests with the Department of Finance. The operation of the Account is 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 generally accepted accounting principles for the public sector. These policies were applied on a basis consistent with that of the preceding year.

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 her audit to the Minister of Finance.

The Annual Report of the Account 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

**Rob Wright**  
Deputy Minister  
Department of Finance

**Sheila Vokey, CA**  
Chief Accountant  
Bank of Canada

Ottawa, Canada  
3 July 2009



Auditor General of Canada  
Vérificatrice générale du Canada

## Auditor's Report

To the Minister of Finance

I have audited the statement of financial position of the Exchange Fund Account as at 31 March 2009 and the statements of operations and cash flows for the year then ended. These financial statements are the responsibility of the Account's management. 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 plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the financial position of the Account as at 31 March 2009 and the results of its operations and cash flows for the year then ended in accordance with the accounting policies set out in Note 2 to the financial statements, which conform with Canadian generally accepted accounting principles.

Further, in my opinion, the transactions of the 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

Ottawa, Canada  
3 July 2009



## Exchange Fund Account

### Statement of Financial Position

As at 31 March

	2009	2008
	(millions of Canadian dollars)	
<b>Financial assets</b>		
Cash and accounts receivable		
Cash and short-term deposits (note 3)	926	1,570
Accrued interest receivable (note 7)	698	641
	1,624	2,211
Investments		
Deposits held under repurchase agreements (note 4)	–	339
Marketable securities (note 5)	48,348	39,262
Special drawing rights (note 6)	1,215	1,085
Gold	7	7
	49,570	40,693
	<b>51,194</b>	<b>42,904</b>
<b>Liabilities</b>		
Due to the Consolidated Revenue Fund (note 8)	<b>51,194</b>	<b>42,904</b>

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

Approved:

**Mark Carney**  
Governor  
Bank of Canada

**Rob Wright**  
Deputy Minister  
Department of Finance

**Sheila Vokey, CA**  
Chief Accountant  
Bank of Canada



## Exchange Fund Account

### Statement of Operations For the year ended 31 March

	2009	2008
	(millions of Canadian dollars)	
<b>Net revenue from investments</b>		
Marketable securities	1,661	1,622
Cash and short term deposits	24	72
Special drawing rights	22	38
Deposits held under repurchase agreements	8	89
	<u>1,715</u>	<u>1,821</u>
<b>Other revenue</b>		
Net foreign exchange gain	138	7
<b>Net revenue for the year</b>	<u><b>1,853</b></u>	<u><b>1,828</b></u>

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



## Exchange Fund Account

### Statement of Cash Flows For the year ended 31 March

	2009	2008
	(millions of Canadian dollars)	
<b>Cash flows from operating activities</b>		
Revenue from investments received		
Marketable securities	1,334	1,177
Short term deposits	18	59
Deposits held under repurchase agreements	9	97
Other	11	14
Purchase of marketable securities	(70,206)	(57,949)
Proceeds from the sale or maturity of marketable securities	67,185	56,614
Increase in foreign currency position	137	275
Decrease in foreign currency position	(3,005)	(1,843)
<b>Cash used in operating activities</b>	<b>(4,517)</b>	<b>(1,556)</b>
<b>Cash flows from financing activities</b>		
Increase in advances from the CRF	30,894	15,415
Repayment of advances to the CRF	(27,535)	(15,888)
<b>Cash (used in) provided by financing activities</b>	<b>3,359</b>	<b>(473)</b>
Effects of exchange rate changes on cash and cash equivalents	175	(527)
<b>Decrease in cash and cash equivalents</b>	<b>(983)</b>	<b>(2,556)</b>
<b>Cash and cash equivalents</b>		
Balance, beginning of year	1,909	4,465
Balance, end of year	<b>926</b>	<b>1,909</b>
<b>Represented by</b>		
Cash and short term deposits	926	1,570
Deposits held under repurchase agreements	–	339
	<b>926</b>	<b>1,909</b>

(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 2009

(Amounts in the notes to the financial statements are in millions of Canadian dollars, unless otherwise stated.)

#### 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 96 per cent (98 per cent at 31 March 2008) 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 were 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 generally accepted accounting principles for the public sector.

##### a) Revenue recognition

Revenue from investments is recorded 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 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 recognized in the financial statements.

In addition, the notional cost specifically identified as related to the funding of the Account's assets and advanced by the CRF are not recognized in the financial statements.

## c) Financial assets

### *Short-term deposits*

Short-term deposits are recorded at cost and are generally held to maturity.

### *Deposits held under repurchase agreements*

Deposits held under repurchase agreements are recorded at cost.

### *Marketable securities*

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

Short-term deposits, Deposits held under repurchase agreement 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*

SDRs are recorded at fiscal year-end market value.

### *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 SDRs are translated into Canadian dollar equivalents at rates prevailing on the balance sheet dates, which were as follows:

	2009	2008
US dollars	1.2613	1.0265
Euros	1.6755	1.6205
Japanese yen	0.0127	0.0103
SDRs	1.8857	1.6881



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 category *Other revenue* 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 and disclosure of the notional cost of advances.

### 3. Cash and Short-term Deposits

	2009	2008
	Carrying Value	Carrying Value
Cash		
US dollars	548	214
Euros	272	244
Japanese yen	106	86
Short-term deposits		
US dollars	–	1,026
	<b>926</b>	<b>1,570</b>

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

There were no short-term deposits at 31 March 2009. At 31 March 2008, the weighted-average yield to maturity on short-term deposits was 3.30% and the term to maturity was less than 3 months.

### 4. Deposits Held Under Repurchase Agreements

Deposits held under repurchase agreements are money market transactions where the Account invests funds on a secured basis with designated counterparties at prevailing market rates based on tri-party reverse repurchase agreements. The collateral on these transactions is held by a tri-party custodian.

Deposits held under repurchase agreements are denominated in US dollars. There were no deposits held under repurchase agreements at 31 March 2009. At 31 March 2008, the weighted-average yield to maturity on deposits held under repurchase agreements was 3.16% and the term to maturity was less than 3 months. The fair value of collateral held on these transactions was \$346 million.



## 5. Marketable Securities

## Term to maturity

	2009										2008	
	Under 6 months		6 months to 1 year		1 to 5 years		Over 5 years		Total		Total	
	Carrying value	Yield	Carrying value	Yield	Carrying value	Yield	Carrying value	Yield	Carrying value	Yield	Carrying value	
<b>US dollar</b>												
Corporation	126	0.73%	-	-	-	-	-	-	-	-	126	77
Commercial Banks	568	0.51%	-	-	-	-	-	-	-	-	568	948
Sovereign	6,171	0.62%	-	-	124	3.57%	2,455	4.02%	8,750	8,750	8,750	5,062
Supra National	718	0.59%	25	4.82%	836	4.44%	2,994	4.64%	4,573	4,573	4,573	3,205
Agencies and other	5,490	0.92%	985	1.27%	2,485	4.27%	4,215	4.63%	13,175	13,175	13,175	7,829
	<b>13,073</b>		<b>1,010</b>		<b>3,445</b>		<b>9,664</b>		<b>27,192</b>		<b>17,121</b>	
<b>Euro</b>												
Sovereign	2,577	2.38%	301	3.66%	3,520	3.48%	5,659	4.02%	12,057	12,057	12,057	11,326
Supra National	-	-	242	4.96%	856	4.32%	1,255	4.17%	2,353	2,353	2,353	2,550
Agencies and other	586	3.52%	715	3.80%	3,414	4.05%	2,031	4.06%	6,746	6,746	6,746	7,750
	<b>3,163</b>		<b>1,258</b>		<b>7,790</b>		<b>8,945</b>		<b>21,156</b>		<b>21,626</b>	
<b>Japanese yen</b>												
Sovereign	-	-	-	-	-	-	-	-	-	-	-	515
	-		-		-		-		-		-	515
<b>Total marketable securities</b>	<b>16,236</b>		<b>2,268</b>		<b>11,235</b>		<b>18,609</b>		<b>48,348</b>		<b>39,262</b>	

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



At 31 March 2009, the net unamortized premium on marketable securities amounted to \$356 million (\$6 million net unamortized premium at 31 March 2008). Sales of marketable securities during the year resulted in a net gain of \$135 million (net gain of \$60 million at 31 March 2008) and is included in *Net revenue from Marketable Securities* on the *Statement of Operations*.

Under the securities lending program, the Account has agency agreements with two major financial institutions. Loans of securities are effected on behalf of the Account by these agents who guarantee the loans and obtain collateral of equal or greater value from their approved counterparties in these transactions. At 31 March 2009, a portion of the Account's holdings of US government securities, consisting of US\$255 million (par value) in Treasury Bills (US\$2,182 million (par value) at 31 March 2008) and US\$698 million (par value) in Treasury Notes (US\$713 million (par value) at 31 March 2008), was being used in securities lending program with financial institutions.

## 6. Special Drawing Rights

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

## 7. Accrued Interest Receivable

	2009	2008
Cash and short-term deposits	–	5
Deposits held under repurchase agreements	–	2
Marketable securities		
US Dollar	212	160
Euro	485	469
SDR's	1	5
	<b>698</b>	<b>641</b>

The fair value of accrued interest is deemed equal to carrying value given the short term to maturity.

## 8. 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. These advances are limited to \$60 billion by order of the Minister of Finance dated 30 December 2005.

The CRF advances the proceeds 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 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:

	2009	2008
US dollars	29,167	18,904
Euros	21,128	21,489
Japanese yen	102	598
SDR's	(1,150)	(1,030)
Subtotal – foreign currencies	49,247	39,961
Canadian dollars	94	1,115
Net revenue	1,853	1,828
<b>Total Due to Consolidated Revenue Fund</b>	<b>51,194</b>	<b>42,904</b>

For the year ended 31 March 2009, the notional cost specifically identified as related to the funding of the Account's assets and advanced by the CRF to the Account is \$1,630 million (\$1,792 million for the year ended 31 March 2008). 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.

## 9. 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 fail 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) and type of instrument. There are also limits on exposure to any one issuer or counterparty.

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 either 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) Interest rate and foreign currency 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. Foreign 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.

Interest rate and foreign 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.

### c) Fair value of financial instruments

	2009		2008	
	Carrying Value and Accrued Interest	Fair value	Carrying Value and Accrued Interest	Fair value
Investments				
Cash and short-term deposits	926	926	1,575	1,575
Deposits held under repurchase agreements	–	–	341	341
Marketable securities				
US dollar	27,404	28,299	17,281	17,811
Euro	21,641	22,375	22,095	22,070
Japanese Yen	–	–	515	522
	49,971	51,600	41,807	42,319
SDRs	1,216	1,216	1,090	1,090
Gold	7	126	7	104
	<b>51,194</b>	<b>52,942</b>	<b>42,904</b>	<b>43,513</b>

The estimated fair value of cash, short-term deposits and deposits held under repurchase agreements is deemed equal to their carrying value given their short term to maturity. SDRs are translated into Canadian dollar equivalents at rates prevailing on the balance sheet dates.

Estimated fair values of marketable securities are based on quoted market prices. 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.



Subsequent to 31 March 2009, the fair value of marketable securities continued to fluctuate as a result of changes in market conditions. As discussed in notes 9(a) and 9(b), interest rate and credit risks 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.

The estimated fair value of gold is based on London fixing of \$1,155.98 at 31 March 2009 (\$958.24 at 31 March 2008) per fine ounce.

## 10. 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 years ended 31 March 2009 or 31 March 2008, and there were no commitments outstanding at 31 March 2009.

### 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 2009, the Account was under contract to sell \$8 million (\$15 million at 31 March 2008) of foreign currency. Unrealized gains (losses) on foreign currency contracts are calculated using the 31 March 2009 exchange rates. As of that date, there were no unrealized net gains (losses) included in net revenue (nil at 31 March 2008). Outstanding foreign currency contracts were settled by 1 April 2009.

### 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 2009. There were no outstanding investment contracts at 31 March 2009.

	2009		2008	
	Contractual Value	Fair value	Contractual Value	Fair value
Marketable securities				
US Dollars				
Purchases	–	–	(22)	(22)
Sales	–	–	22	22
Euro				
Purchases	–	–	(495)	(494)
Sales	–	–	499	498