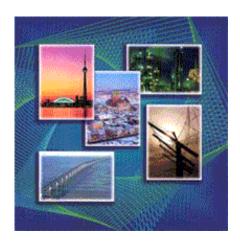
### **Canadian Economic Observer**

# The evolution of the global financial crisis and cross-border financial activity, 2007-2010

by E. Boulay





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- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- p preliminary
- r revised
- x suppressed to meet the confidentiality requirements of the Statistics Act
- E use with caution
- F too unreliable to be published
- \* significantly different from reference category (p < 0.05)

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#### **Background and context**

Cross-border financial transactions have been an important element of Canada's balance of payments statistics for a number of years, and a main factor in the evolution of Canada's international investment position. For many years, Canada was a net borrower from abroad to finance both the current account and government deficits. In addition, the established pattern from the post-war years until the mid-1990s was a net inflow of direct investment from abroad.

However, over most of the past two decades Canada has invested substantial funds abroad, especially from 1998 to 2008, reflecting its expanding current account surplus and the trend to substantially increased access to international financial markets – specifically, securities markets. A significant portion of these outflows was in the form of portfolio investment abroad in marketable securities. This development was underpinned by the substantial growth of institutional investors in Canada, largely pension funds seeking wider opportunities to invest.

This development was facilitated by legislative changes, as the ceiling on foreign investment allowed in pension funds and other tax-deferred retirement plans was raised a number of times beginning in 1990 and eliminated in 2005. As a result of the ensuing outflow of investment in securities, Canada's exposure to risk in foreign financial markets correspondingly increased, due to fluctuations in both the exchange rate and the price of securities.

The pace of financial innovation and globalization also ushered in new types and uses of financial instruments - in particular, the growth of investment in financial institutions' receivables <sup>2</sup> via asset-backed securities, where the risk associated with these instruments is passed on to investors. In the case of the recent financial turmoil, risk was diffused to investors around the world through the securitization process, which eventually proved important to the speed and severity with which the contagion in credit markets spread after August 2007.

Credit risk was less of a problem for Canadian investors as global credit conditions deteriorated, for two main reasons. First, Canadian asset-backed securities remained relatively sound investments;  $\frac{3}{2}$  and, second, Canadian portfolio investment abroad was concentrated in marketable corporate shares,  $\frac{4}{2}$  with relatively little exposure to what has been referred to as foreign "toxic assets", notably low quality mortgage-backed securities and the securities derived from them.

Nevertheless, international transactions in securities changed markedly beginning in mid-2007. In particular, Canadian institutional investors began to sell foreign securities, especially debt securities, and,

their appetite for foreign investments has not returned. On the other side of the ledger, non-residents began to invest heavily in Canadian securities beginning in 2009, especially government debt.

Globalization also led to a broader view of trade and investment, which encouraged a trend toward substantial Canadian direct investment abroad. While most increases in Canadian direct investment abroad in the last decade were in countries other than the US, close to half the holdings still resided in US affiliates at the end of 2009. However, this type of investment was curtailed in the face of global financial turmoil in 2007 and declining commodity prices late in 2008, and has not fully recovered.

The onset of unsettled global credit markets in August 2007, the marked deterioration of financial markets worldwide a year later and the ensuing injections of liquidity and stimulus by governments were clearly evident in the international accounts for Canada. This note underlines some of the salient developments during this period, especially from the perspective of Canada vis-à-vis the rest of the world. Data in this analysis are drawn from Canada's integrated system of national accounts, <sup>5</sup> in particular, the monthly issues of Canada's International Transaction in Securities, the quarterly Canada's Balance of International Payments, the quarterly Canada's International Investment Position and the annual Foreign Direct Investment Statistics.

#### The onset of the global credit crisis in mid-2007 and international financial flows

As concerns about global credit conditions came to the fore in the summer of 2007, Canadian cross-border investment flows also slowed. Especially pronounced was the response of Canadian institutional investors in reducing their exposure to foreign markets, especially investment in securities.

#### Canadian institutional investors react quickly

Canadian investors disposed of a record amount of foreign securities in August 2007, as global credit conditions deteriorated. This included reducing their holdings of foreign money market instruments by \$7.0 billion, in the context of sharply diminishing liquidity in the asset-backed finance sector. <sup>6</sup> This divestment was made up of \$1.6 billion of US corporate paper and \$6.3 billion of non-US corporate paper. The reduction in non-US securities was largely comprised of paper issued by European financial institutions, reflecting the inability of those issuers to roll over the instruments. The divestment continued in September of 2007. By the end of the third quarter of 2007, Canadian investors had disposed of \$10.4 billion of foreign short-term debt instruments, reducing these holdings by more than 50% in a single quarter.

The turmoil in credit markets also led to a sharp slowdown in the market for foreign bonds. In the second half of 2007, the market for maple bonds evaporated. Maple bonds are bonds issued in Canadian dollars by non-residents, and had developed rapidly in 2006 and 2007, offering an investment alternative to Canadians free of currency risk. The drying-up of this market shifted the risk of exchange rate movements back to Canadian investors.

The initial reaction by Canadian institutional investors to global credit concerns in the third quarter of 2007 was sustained over the next year, until the turmoil spread to most financial markets in September of 2008. In the first and second quarters of 2008, Canadian investors continued to shy away from foreign debt instruments in favour of equity. Most of the divestment arose from net sales of foreign paper and net retirements of maple bonds. However, by mid-2008, Canadians had added foreign shares to their portfolios for 21 consecutive quarters, with investment focussing on non-US shares in the second quarter.

By the third quarter of 2008, international transactions in securities reflected deteriorating conditions in global debt markets, and were likely further influenced by a falling exchange rate and declining short-term interest rates. As a result, Canadian investors purchased foreign securities at a much reduced pace compared with the previous three quarters, as the sell-off of foreign debt instruments extended to US Treasury bonds. Meanwhile, Canadian investment in foreign stocks remained robust, with large acquisitions of US stocks.

#### The response of non-resident investors was less pronounced

Non-resident investors responded to the onset of the turmoil in credit markets by adjusting their portfolios of Canadian securities less than their Canadian counterparts. <sup>7</sup> Foreign purchases of Canadian bonds increased steadily between July 2007 and June 2008. Mixed signals were observed in the investment in the Canadian stock market during the same period; non-residents divested Canadian shares in the second half of 2007, but returned to buy shares in the first half of 2008. Foreign investors shed Canadian corporate short-term paper in the third quarter of 2007 but this remained an isolated action that did not continue in subsequent quarters.

The trend to foreign investment in Canadian bonds was interrupted in the third quarter of 2008 by the net retirements of federal bonds, partly offset by higher purchases of federal Treasury bills. This activity, combined with large sales of Canadian shares by non-residents, resulted in non-resident investors selling Canadian securities for the first time in 2008. This preceded intensified foreign activity in the Canadian debt market in the fourth quarter.

#### Direct investment inflows decelerate

Foreign direct investment in Canada lost steam in the first three quarters of 2008 as foreign takeover activity slowed substantially compared to its record high in 2007. The global slowdown in mergers and acquisitions activity also had less of an impact on Canadian direct investors in 2008, as outward investment remained relatively robust during the period, with Canadian firms providing substantial funds to existing foreign subsidiaries at a time of rising turbulence in financial markets (mostly concentrated in the finance and insurance sector, mainly in the US).

### The global financial crisis, recession and international investment after September 2008

The turmoil in credit markets in 2007 was only a prelude to its escalation in September 2008. The crisis spread quickly following the failure of Lehman Brothers in September 2008 and a growing realization of the extent of institutions in distress. In less than a week it expanded from inter-bank lending to money market funds, and then to a freezing up of the global market for commercial paper. Paralyzed by fear of default or non-payment, liquidity quickly dried up in credit markets around the world.

There were several ramifications of the deterioration of the global financial crisis late in 2008. The spread between interest rates for government and corporate debt hit a record high, as investors shunned corporate debt and put a premium on the lower risk associated with sovereign debt. Global and Canadian stock markets lost substantial value. The Canadian dollar posted a record quarterly decline, as commodity prices fell sharply.

As a consequence, economic activity declined in most major countries, including Canada. A one-third drop in demand for Canadian exports was the largest contributing factor to Canada's recession, and the current account swung into its first deficit in a decade. The counterpart was a net inflow of funds in the Canadian capital and financial account.

#### Canadian investors shed foreign securities at an unprecedented rate

In the fourth quarter of 2008, Canadians repatriated substantial funds placed abroad to the perceived safe haven of Canada. In addition to the cumulative divestment of debt securities since mid-2007, fourth quarter sales included significant amounts of foreign equity, as stock markets slumped worldwide. This divestment reached \$21.1 billion in debt and equity instruments in the fourth quarter (mostly in October), following 29 years of uninterrupted net annual investment in foreign securities by Canadians.

The drop in stock markets would have further reduced the value of Canadian holdings of foreign equity securities. However, the exchange rate effect of a higher US dollar on Canadian foreign assets (largely denominated in foreign currencies) more than offset these losses.  $\frac{8}{2}$  As well, there was the substantial divestment of foreign securities by Canadian institutional investors in the fourth quarter of 2008.  $\frac{9}{2}$ 

With the repatriation by institutional investors of funds from abroad, and the simultaneous withdrawal of funds from Canadian stock markets,  $\frac{10}{}$  investors sought the safety of Canadian public debt. The federal government issued over \$50 billion of new debt in the fourth quarter of 2008 to meet this demand and to boost liquidity in the Canadian financial sector. Part of the proceeds of federal government issues of Treasury bills were deposited with the Bank of Canada, which in turn provided liquidity via loans to the Canadian banking system. The other portion of the proceeds was advanced to a federal government financial business enterprise, which used this to purchase \$25 billion of mortgage-backed securities, providing a further injection of liquidity into domestic financial institutions.

#### Non-residents reduce and adjust their portfolios of Canadian securities

Foreign investors in Canadian securities reduced their holdings in the fourth quarter of 2008, in particular bonds. This divestment of \$11.7 billion in Canadian bonds was attributable to net retirements of federal and private corporate bonds, as new issue activity slowed considerably.

At the same time, non-residents adjusted their portfolios significantly in favour of more liquid investments in the Canadian money market, mainly federal and federal enterprise issues, as the Canadian dollar depreciated and the differential on short-term rates between Canada and the US moved substantially in favour of investment in Canada. This activity also reflected the large supply of Canadian federal Treasury bills from the financing of liquidity measures in Canada.

#### Inward and outward direct investment also moderate

Canadian direct investment abroad slowed to \$14.4 billion in the fourth quarter of 2008. Takeover activity remained modest in the fourth quarter, with outflows mainly comprised of funds placed in existing foreign subsidiaries. Over 75% of the investment was directed to the US economy, and over 90% was placed in the energy and financial sectors. Despite the slowing in the fourth quarter, this capped a year of robust Canadian direct investment abroad.

Foreign direct investment in Canada remained lower than Canadian direct investment abroad in the fourth quarter. Inflows slowed to \$11.7 billion, as Canadian corporate earnings and equity values fell. Foreign direct investment was concentrated in the Canadian energy and metallic mineral sector. Direct investment into Canada in 2008 was less than half of the level reached in 2007, as acquisitions were down by more than \$60 billion.

#### The aftermath of global financial turbulence in 2009 and 2010

The current account deficit that emerged in the fourth quarter of 2008 has continued, despite improved economic conditions. The persistence of the current account deficit has coincided with significant inflows of foreign funds into the Canadian economy, especially foreign acquisitions of Canadian securities, which rebounded strongly in the first quarter of 2009.

#### Record non-resident purchases of Canadian securities, especially bonds

Purchases of Canadian securities totalled \$170.0 billion in the 18-month period starting in January 2009. Canadian debt securities accounted for \$136 billion of this total, with the investment focus shifting from short to long-term instruments from mid-2009. This increased activity actually began in the last two months of 2008, targeting more liquid investments. By mid-2009, foreign holdings of federal Treasury bills had hit levels last seen in 1996. Foreign acquisitions of Canadian bonds began to pick-up in the first quarter of 2009, and have remained substantial since that time.  $\frac{11}{2000}$ 

By mid-2010, non-resident investors added Canadian bonds to their portfolios for a sixth consecutive quarter, buying \$32.2 billion in the second quarter. On a monthly basis, this amounted to a further \$7.0 billion of Canadian bonds in their portfolios in June, following large acquisitions of \$10.0 billion in April and \$15.2 billion in May. June marked the 18th consecutive month of such investment activity, with foreign holdings of Canadian bonds up by nearly 20% during this period. Much of this activity was concentrated in federal bonds.

Foreign acquisitions of federal bonds increased to \$26.0 billion in 2009, after six years of reductions. Foreign investment in federal bonds to date in 2010 has already exceeded all of 2009. In the second quarter of 2010, there was unprecedented foreign purchases of federal government bonds of \$19.4 billion. The bulk of the activity in the quarter was accounted for by foreign acquisitions of new provincial bonds denominated in foreign currencies.

New federal government borrowings increased the supply of debt securities. The resulting higher debt burden did not dampen non-resident investor demand for federal bonds during this period of time, and the proportion of federal bonds held by non-residents by mid-2010 reached levels last seen in mid-2003.

Borrowing conditions for corporations also improved in 2009 and were a significant factor in the surge in foreign holdings of Canadian bonds. Foreign acquisitions of new Canadian corporate bonds were robust in all quarters of 2009, totalling \$41.6 billion. This activity has slowed in 2010.

Foreign investment in Canadian equities recovered steadily in 2009 after the drop of global stock markets in late 2008. Inflows of \$26.2 billion in Canadian stocks were almost equally split between new portfolio shares and secondary market acquisitions. Secondary market purchases reflected the solid performance of the banking sector and a significant rebound in commodity prices. Non-residents continued to add to their holdings of Canadian shares in the first half of 2010, with acquisitions resuming in the second quarter when stock prices retreated after four quarters of gains.

#### Canadians restrain investment abroad, focusing on equities

Canadian investors' appetite for foreign debt securities did not fully recover after mid-2007. There has been a modest return to foreign stock markets but, at the same time, investors have further reduced their exposure to foreign debt instruments.

Canadians acquired \$15.9 billion of foreign shares in 2009, twice the amount invested in 2008 and this trend continued in 2010 with acquisitions totalling \$11.0 billion in the first half of the year. Activity during this period was equally split between US and non-US stocks. Most of the investment in US shares took place when stock prices had weakened in the first half of 2009. Still, investment remained well below its average level between 2005 and 2007. Canadian investment in foreign stocks slowed at the end of 2009 when major stock markets hit their highs for the year, but recovered in the first half of 2010 (purchases of both US and non-US shares were strong).

Canadian investment in foreign equities of \$4.7 billion in the second quarter of 2010 was led by demand from Canadian pension plans, with over 60% in the American market. This was the largest such investment in the US since the first quarter of 2009, as US stock prices fell by 11.9% in the second quarter of 2010, the most pronounced decline since global stock markets experienced significant corrections in the fourth quarter of 2008. In June, the focus shifted from US to non-US foreign equities.

The continued reduction in Canadian holdings of foreign debt securities in 2009 and 2010 was attributable to the divestment of US government bonds and the continued shrinking of the maple bond market. In the first quarter of 2010, a reduction of \$2.3 billion in holdings of foreign bonds was largely retirements of maple bonds, the ninth straight quarterly decline for maple bonds. Canadian investors' sales of US government bonds were notable in periods when the yields on US government bonds dropped significantly.

Canadians sold a further \$2.7 billion from their holdings of foreign bonds in the second quarter of 2010, on sales of US government bonds, but this was partially offset by investment in non-US foreign bonds, mainly bonds issued by national governments from the European Union with high credit ratings mostly in June. June's investment in non-US foreign bonds amounted to the largest monthly acquisition since the outset of the global financial turmoil in the latter half of 2007, though well off the pace of activity set prior to mid-2007.

#### Direct investment flows only partly recover

Direct investment activities eased in 2009 as acquisitions slowed, especially for foreign acquisitions of Canadian firms, and corporate profits continued to decline. However, mergers and acquisitions activity rebounded somewhat in the second half of the year, both inward and outward, while profits also started to increase progressively. Finance and insurance firms led all the increased Canadian direct investment abroad in the second half of the year, while the resource sector in Canada mostly explained the increased foreign direct investment in the country. This pace of activity has continued in 2010, but remains below its record pace in 2007.

#### Net international position

Higher foreign investment in Canadian securities over the last 18 months increased our international liabilities, while an appreciating Canadian dollar over most of this period exerted downward pressure on Canada's international assets. These trends led to an increase in Canada's net international indebtedness.

#### Summary

The financial crisis had pronounced effects on Canada's economy and financial markets as well as Canadian and international institutional investors and lenders. Both economic and financial activity slowed after mid-2007 and then dropped sharply in the fall of 2008. Since then, GDP has advanced and there have been other signs of recovery; however, certain elements of financial activity have changed significantly in 2009 and 2010, particularly cross border transactions in securities.

The sudden, sharp and sustained reaction of the holdings of foreign securities of Canadian institutional investors starting in mid-2007 preceded the financial turmoil that erupted in the late summer and fall of 2008 (Chart 6). The seeming reluctance of these same investors to rebuild their holdings of foreign securities, especially debt instruments, may reflect perceived fragility in global financial markets, despite some stabilization of conditions on these markets over the last several months.

The re-establishment of large capital inflows to the Canadian economy recorded in 2009 and so far in 2010, mostly in the form of foreign investment in bonds, appears to reflect non-residents investors' perceptions of the relative strength of Canada's economic fundamentals and its sound financial situation in relation to other countries. At the same time, these inflows were a contributing factor to the rise in the Canadian dollar during most of the same period, as the bulk of non-residents investments in Canadian securities were in assets denominated in Canadian dollars. Most of this activity was in federal government bonds.







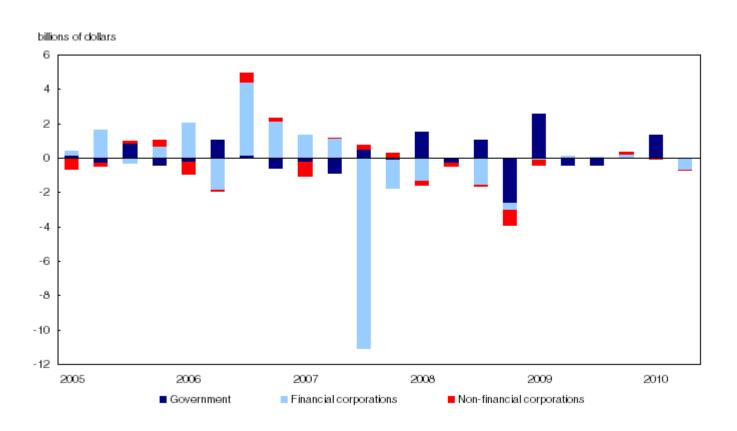
#### **Notes**

- 1. Chief, Balance of Payments Division (613-951-1872)
- 2. In particular, this was the case for mortgages and securities derived from them.
- 3. This was likely a reflection of relatively more prudent lending activities in Canada than in some other countries.
- 4. Canada, along with the U.S. and Australia, tended to have equity making up between 60-90% of foreign investments from 2001-2008. In contrast, other countries were less exposed to foreign equity markets, with Japan between 15% and 25% and the UK below 50% (Source: IMF Coordinated Portfolio Investment Survey).
- 5. Data from the quarterly Financial Flow Accounts, quarterly National Balance Sheet Accounts and quarterly Income and Expenditure Accounts (for GDP) are also referenced in this note.
- 6. The initial impact of concerns about exposure to US sub-prime mortgages was to freeze the market for asset-backed securities (ABS). Some of these securities were exposed to sub-prime mortgages, which were suddenly viewed as toxic by investors. The turmoil also affected Canadian financial markets. In Canada, after three years of steady growth, the market for asset-backed commercial paper (ABCP) shrank by almost \$10 billion in the fourth quarter of 2007, and continued to contract every quarter in 2008.
- 7. This note only takes into account cross-border flows as they relate to Canada. Therefore, only foreign investors' transactions in Canadian securities are considered.
- 8. The Canadian dollar depreciated against most major foreign currencies except the British pound. It depreciated 12.6% against the US dollar, 11.7% against the Euro, 25.4% against the Japanese Yen, but gained 6.4% against the British Pound.
- 9. Higher holdings of foreign securities increased exposure to changes in the exchange rate, as occurred during the commodity price boom after 2003 (when the dollar rose above parity with the US dollar) and its bust in the second half of 2008 (when the dollar quickly retreated to near US80 cents).
- 10. The TSX index fell 23.5% in the fourth quarter of 2008.
- 11. The supply of sovereign debt to support fiscal measures, not only in Canada but worldwide, increased significantly in 2009 and 2010.





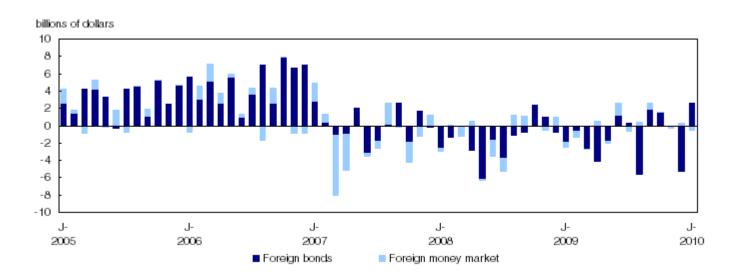
## **Chart 3.1 Canadian investment in foreign short term instruments**







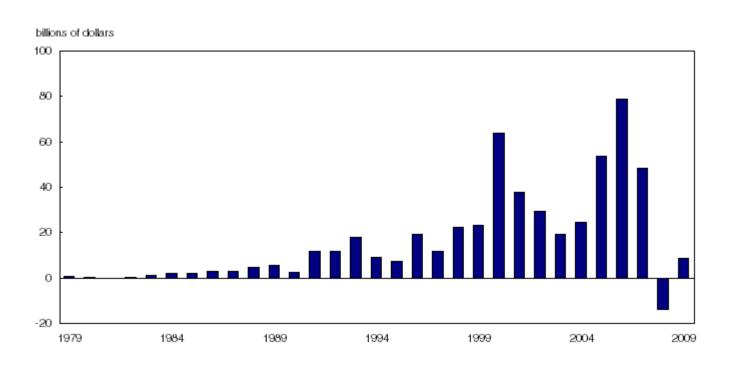
## **Chart 3.2 Canadian investment in foreign debt instruments**







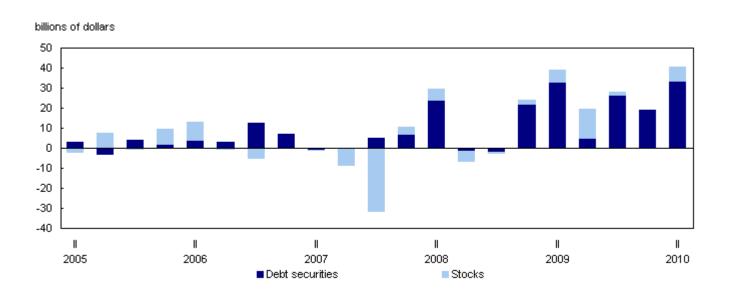
# **Chart 3.3 Canadian purchases of foreign securities**







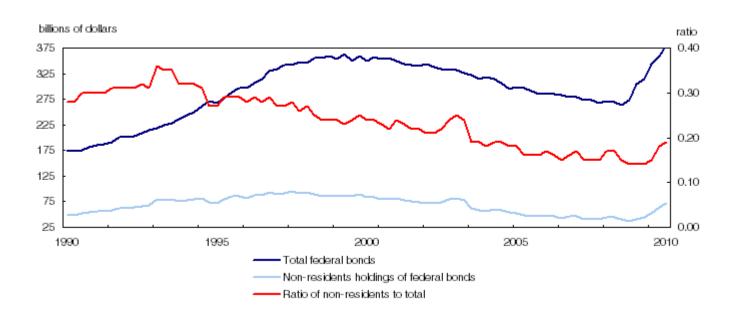
# **Chart 3.4 Foreign portfolio investment in Canada**







### Chart 3.5 Non-resident holdings of federal bonds







# **Chart 3.6 Canadian portfolio investment abroad**

