Trends in Issuance: Underlying Factors and Implications

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- *In the past decade, trends in issuance have changed significantly, both in the period leading up to the financial crisis and subsequently.*
- *Prior to the crisis, there was a large increase in the issuance of riskier and more innovative forms of financing, and a high level of future issuance will likely be required to refinance this past issuance as it matures.*
- *In Canada, the increased use of innovative and riskier financing sources was less pronounced, and future refinancing needs are more in line with historical issuance levels.*

The increasing global issuance of innovative and riskier forms of financing, such as subprime-mortgage securitizations, contributed to the recent financial crisis. This crisis and the subsequent regulatory response will have implications for the future issuance of corporate bonds, corporate equities, and securitization.

Canada withstood the global crisis better than most other industrialized countries. This reflected a number of core economic strengths, most notably a well-capitalized financial sector and strong corporate balance sheets. This position, in addition to differences in issuance patterns leading up to the crisis, means that the repercussions for Canadian issuers are somewhat different from those being experienced by issuers in other countries.

The objective of this article is to provide an update on trends in issuance in Canada relative to those in other capital markets and, where possible, to assess the factors underlying these trends in the context of the financial crisis.[1] It also aims to analyze the impact of the financial crisis on Canadian corporate issuance, relative to historical issuance and to issuance patterns in other markets. To do so, it examines trends in capital markets in Canada and other regions over the past ten years, with a focus on three areas: the issuance of financial and non-financial corporate bonds, the issuance of financial and non-financial corporate equity, and securitization.[2]

1 Kennedy (2004) and Freedman and Engert (2003) have examined the state of Canada's capital markets, both historically and in comparison to those of other countries.

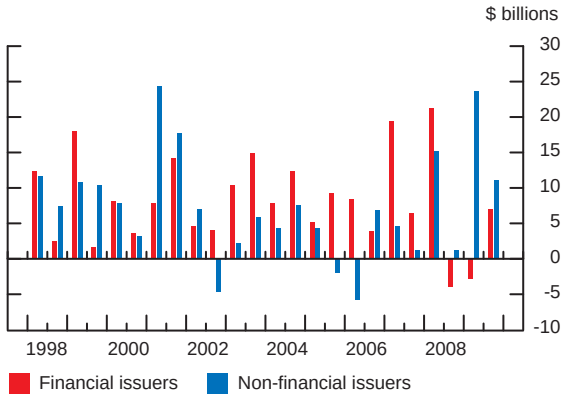
2 This article does not examine asset-backed commercial paper (ABCP) and money markets. For a discussion of the Canadian ABCP market, see Kamhi and Tuer (2007a, 2007b).

Debt Markets

Debt market composition

Roughly in line with economic growth, non-financial Canadian corporate issuers have consistently increased their bonds outstanding over the past decade, with annual net issuance positive for most of the period **(Chart 1)**. Nevertheless, there were notable differences in bond issuance. In 2001, in the first half of 2008, and throughout 2009, non-financial net bond issuance was larger than in the past. Some of this increase can be explained by a substitution from other sources of funding. For example, the increase in net corporate bond issuance in 2009 was more than offset by a reduction in short-term business credit. However, in the first half of 2008, short-term business credit increased. The increase in both short-term business credit and net bond issuance in this period could be explained by precautionary borrowing: as economic conditions started to deteriorate during these periods, corporations accessed credit markets as a safeguard against worsening credit conditions.

Chart 1: Net issuance of Canadian corporate bonds

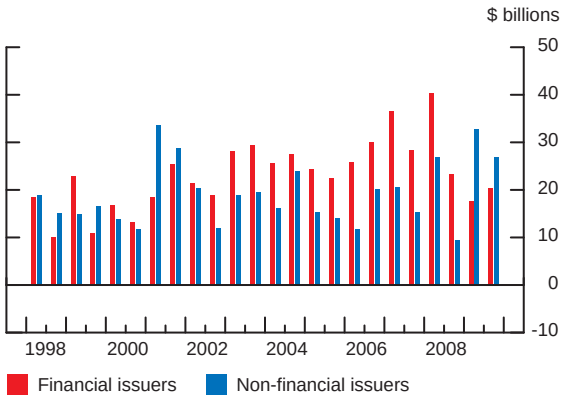


Source: Bank of Canada

Throughout the 1990s, the debt-to-equity ratio of Canadian non-financial corporations was well above that of the United Kingdom and the United States (Côté and Graham 2007). However, notwithstanding the net positive bond issuance of Canadian non-financial corporations over the past decade, the debt-to-equity ratio of non-financial corporations has declined since 2002 and, at the end of 2009, was below that of the United Kingdom and the United States (Bank of Canada 2010).

The net issuance of bonds by Canadian financial institutions was also positive until the financial crisis, leading to an increase in financial bonds outstanding that outpaced economic growth as the amount of net bond issuance by financial issuers rose from 2002 to 2008. During the crisis, however (i.e., the second half of 2008 and the first half of 2009), conditions in global markets deteriorated, with yield spreads on Canadian investment-grade financial institutions widening out sharply from a pre-crisis level of about 50 basis points (bps) to a peak of around 400 bps.[3] In Canada, the introduction of the Insured Mortgage Purchase Program (IMPP) in October 2008, through which the government purchased a large amount of government-insured, mortgage-backed securities from the banks, alleviated banks' funding needs (Department of Finance 2008). As a result, net financial bond issuance turned negative, as the gross issuance of financial corporations fell **(Chart 2)**.[4]

Chart 2: Gross issuance of Canadian bonds



Source: Bank of Canada

Credit spreads on investment-grade financial institutions widened out even more sharply in the United States, reaching close to 900 bps at the peak of the crisis (Bank of America Merrill Lynch). In October 2008, to address worsening market conditions, the U.S. Federal Deposit Insurance Corporation (FDIC) announced the Debt Guarantee Program through which the FDIC guaranteed newly issued senior unsecured debt of insured depository institutions and most U.S. bank holding companies (FDIC 2008). This program was a vital source of funding for these institutions. Under the program, US$305 billion was issued—almost 40 per cent of average annual

3 Source: Bank of America Merrill Lynch.

4 At $69 billion, the amount of government-insured, mortgage-backed securities purchased through the IMPP more than offset the drop in financial issuance in the second half of 2008 and the first half of 2009 (Chart 2).

corporate (financial and non-financial) bond issuance from 2000 to 2007 and about half of the maximum amount of FDIC-guaranteed debt that could be issued by these entities.[5]

As a result of the elevated bond issuance by banks globally prior to the crisis, as well as a shortening of maturities on this bond issuance over the past five years, a sizable amount of bank bonds will be maturing between now and 2012 (Moody's 2010a). Thus, the concentrated need for issuance over this period could lead to heightened refinancing risks. This is less of a problem in Canada, since the amount of bonds from Canadian financial and non-financial issuers maturing over the next few years is roughly in line with issuance prior to the crisis (Bank of Canada 2010).

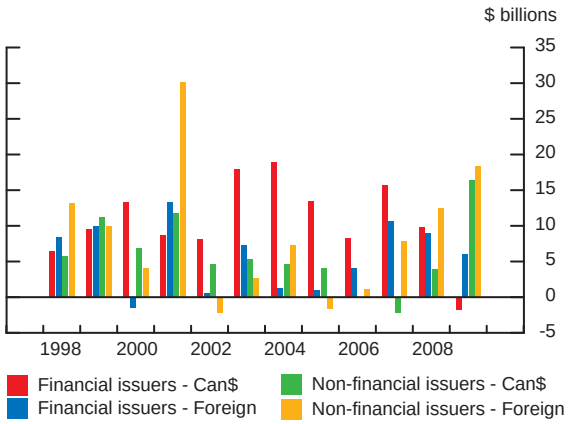
The currency composition of debt markets

Bonds are issued in foreign currency for various reasons. Some issuers choose to fund themselves in U.S. dollars as a natural hedge for U.S.-dollar cash flows. Other reasons to issue in the U.S. market include the ability to issue larger amounts of funds, given the greater market depth; the ability to issue bonds with a longer maturity (Freedman and Engert 2003; Anderson, Parker, and Spence 2003); as well as the reduced all-in cost of that funding (i.e., after the cash flows from the bond are converted back into Canadian dollars) relative to domestic sources.

From 2002 to 2006, the net issuance of foreign-currency bonds by Canadian financial and non-financial corporations was low, relative to domestic bond issuance over the same period and relative to foreign-currency bond issuance over the preceding period **(Chart 3)**. Since 2007, however, the net issuance of foreign-currency bonds by Canadian financial and non-financial corporations has increased relative to the period preceding the crisis.

In the wake of the financial crisis, covered bonds have become an attractive funding alternative for banks.

Chart 3: Net bond issuance by Canadian corporations
By currency



Note: Issues payable in foreign currencies have been converted into Canadian dollars at the average noon market rate for the month.
Source: Bank of Canada

In particular, Canadian banks began issuing covered bonds in late 2007, which, until 2010, were denominated in foreign currencies.[6] Three Canadian banks had issued covered bonds by the end of 2008, and midway through 2010, all five of the largest Canadian banks had issued covered bonds. The earlier issues were denominated in euros, since the market for euro covered bonds is the most developed, but more recently Canadian banks have also issued these bonds in Swiss francs, U.S. dollars, and Canadian dollars. In the wake of the financial crisis, covered bonds have become an attractive funding alternative for banks because they allow the diversification of their funding sources and investor base and can be cost-advantageous relative to the issuance of unsecured debt.

At $24 billion, the covered bonds issued by Canadian banks to date represent less than 1 per cent of their total assets. Since banking regulation allows banks to issue up to 4 per cent of their total assets in covered bonds (OSFI 2007), there is the potential for more covered bond issuance in the future. This trend is likely to continue, since the federal government announced in its March 2010 budget that it will introduce legislation on covered bonds in Canada, thus contributing to greater certainty about the structure and treatment of covered bonds. This, in turn, should help bolster investor confidence and possibly lead to a decline in the associated cost of funding.

5 This maximum amount was equal to 125 per cent of the face value of outstanding senior unsecured debt, as of 30 September 2008, that was scheduled to mature on or before 30 June 2009. For issuance under this program, refer to: http://www.fdic.gov/regulations/resources/tlgp/total_issuance03-10.html. Average annual bond issuance data is from the Securities Industry and Financial Markets Association (SIFMA).

6 See Gravelle and McGuinness (2008) for a discussion of the covered bond market. Covered bonds are marketable debt securities backed by a dedicated pool of collateral, typically residential mortgage loans.

The Canadian market had also become attractive to foreign issuers. By the end of 2007, the so-called Maple Bond market had developed and grown to $69 billion.[7] The development of this market can be attributed to a confluence of factors, including the elimination by the Canadian federal government of the Foreign Property Rule in 2005 (which had previously capped tax-shielded investments by Canadians in foreign assets), the reduction in Canadian government debt issuance, and attractive rates on Can$/US$ basis swaps that resulted in attractive financing rates for foreign issuers when the proceeds from the sale of Maple Bonds were converted back into the issuer's funding currency of choice. These last two factors also help to explain why net bond issuance by Canadian financial and non-financial corporations in the period just prior to the crisis was predominantly in Canadian dollars.

During and after the financial crisis, however, new issuance in the Maple Bond market was limited by several factors. First, there were concerns over the health of foreign financial issuers who made up a dominant segment of this market, since a number of former issuers, such as Bear Stearns and Lehman Brothers, collapsed during the crisis. Second, market liquidity dried up in most non-core markets worldwide, making Maple Bonds less attractive for investors.[8] There have recently been signs of a revival in this market, with several new issues of Maple Bonds in 2010.

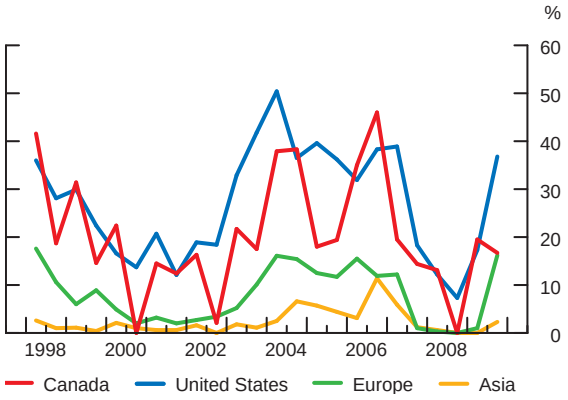
The high-yield bond market

Over the years, Canadian firms have benefited from their proximity and access to the large U.S. high-yield debt market: the issuance of high-yield securities by Canadian non-financial corporations (in all currencies), as a proportion of total bond issuance by Canadian non-financial corporations, is comparable to that of U.S. non-financial issuers and is much higher than that of both Asian and European non-financial issuers **(Chart 4)**.[9] Since most Canadian high-yield securities have historically been issued in the United States, high-yield bond issuance by Canadian corporations follows trends in the global issuance of high-yield bonds.

Leading up to the financial crisis, throughout 2006 and the first half of 2007, spreads on high-yield bonds narrowed substantially.[10] At the same time, the issuance of high-yield bonds by global issuers increased as firms used this opportunity to either refinance their current obligations at lower costs or to increase their leverage **(Chart 5)**. This was facilitated by strong investor demand for higher-yielding, and relatively simple to understand, fixed-income securities, given the low-interest-rate environment. A substantial fraction of this global high-yield issuance was by large firms that drastically increased their leverage via leveraged buyouts (LBOs).

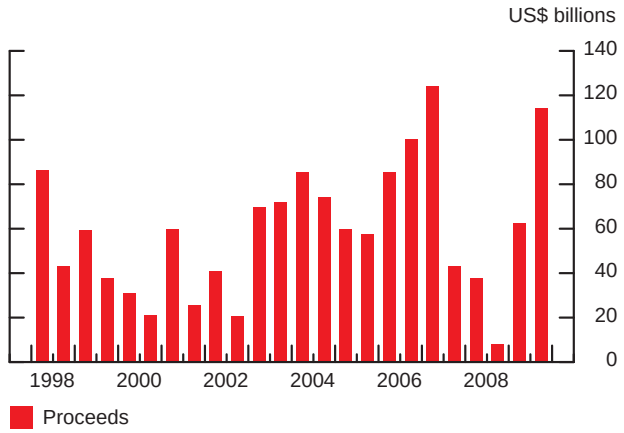
Chart 4: Issuance of high-yield bonds by Canadian issuers

As a proportion of total non-financial issuance



Source: Thomson Financial

Chart 5: Issuance of high-yield bonds by global issuers



Source: Thomson Financial

7 Maple Bonds are Canadian-dollar-denominated bonds issued in Canada by non-Canadian borrowers. See Hately (2006) for an in-depth discussion of the Maple Bond market.

8 Liquidity in the secondary market for Maple Bonds has been limited to date, so investors may have little choice but to hold the securities until maturity. This weak secondary market support is partially due to the limited number of underwriters typical of most Maple Bond issues.

9 The overall volume of high-yield issuance in Canada varies widely because the total issuance of Canadian high-yield debt is generally low and is concentrated in a few large names. Therefore, one large issue can cause the total volume of high-yield issuance in Canada to spike in a given quarter.

10 Spreads on U.S. high-yield credit (based on the Bank of America Merrill Lynch index) narrowed from over 400 bps at the end of 2003 to under 250 bps in the middle of 2007, before widening sharply to over 1800 bps by the end of 2008.

While the wave of LBOs in the late 1980s was driven by the development of the high-yield market, the LBO wave in 2006 and 2007 was driven largely by another financial innovation: collateralized debt obligations (CDOs).[11] The advent of this source of financing facilitated access to a wider base of investors and, in an environment where investors were searching for yield, contributed to lower spreads and looser covenants. CDOs also allowed larger U.S. firms to undergo an LBO that might not have been possible otherwise (Shivdasani and Wang 2009). Of course, in hindsight, these loose financial conditions turned out to be a precursor to the financial crisis.

From the beginning of the credit crisis in mid-2007 through the end of 2008, the issuance of both high-yield debt and CDOs dropped drastically, and credit spreads on high-yield issues, proxied by the Bank of America Merrill Lynch U.S. high-yield index, widened significantly to over 1800 bps. Since it was no longer possible to securitize leveraged loans during the crisis, a substantial pipeline of leveraged loans unexpectedly remained on bank balance sheets.[12] LBOs virtually disappeared, and some previously announced LBOs either collapsed or were renegotiated amid the marked deterioration in credit conditions.

As market conditions improved in 2009, the issuance of high-yield debt resumed, especially in the United States, where it accounted for over 25 per cent of total corporate debt issuance in the second half of 2009 **(Chart 4)**. In the United States, over 78 per cent of high-yield issuance in 2009 refinanced existing debt or extended debt maturities (Moody's 2010b). Significant volumes of high-yield debt will need to be issued in the future simply to refinance existing debt: about US$200 billion of high-yield bonds and US$500 billion of leveraged loans are set to mature in the United States between 2012 and 2014 (Moody's 2010b). Of course, the ability to sustain this level of high-yield issuance is dependent on market conditions, including investors' capacity and appetite for risk, and deterioration of these conditions could spell trouble for high-yield debt issues.

In Canada, about US$26 billion of high-yield bonds and leveraged loans are set to mature between 2012 and 2014 (Moody's 2010c). While this is small relative to U.S. high-yield refinancing needs and manageable relative to the total amount of annual Canadian non-financial gross issuance (high-yield and investment-grade) of about US$30 billion **(Chart 1)**, the similar maturity structure to U.S. high-yield debt and reliance on that market may compound difficulties in refinancing.

There have been several high-yield transactions in Canada over the past year, pointing to a developing Canadian market for high-yield bonds.

Although historically most Canadian high-yield bonds have been issued in the large U.S. market,[13] there have been several high-yield transactions in Canada over the past year, pointing to a developing Canadian market for high-yield bonds. A number of factors are contributing to this development, including the low-interest-rate environment; attractive spreads on high-yield bonds relative to historical levels; as well as an increased appetite for high-yield bonds by Canadian investors, evidenced by the more than doubling of the assets of Canadian high-yield, fixed-income mutual funds from $4.4 billion at the end of 2008 to $9.5 billion at the end of 2009 (IFIC 2009). While most of these recent high-yield issues in the Canadian market have been small in size, the trend towards more high-yield issuance in Canada may persist, since income-trust conversions will also be looking to issue into the high-yield market.

Equity Markets

Although the financial crisis originated in the United States, it has had a profound effect on financial wealth around the world. Capitalization of global equity markets had doubled from US$30 trillion to just over US$60 trillion from the end of 2003 to the end of 2007, before these gains were completely erased over the course of 2008 and the first quarter of 2009 **(Chart 6)**.[14] Equity markets rebounded strongly through 2009 to recover about half of the decline experienced during the crisis. Nevertheless, the net loss of global wealth from the decline of US$15 trillion

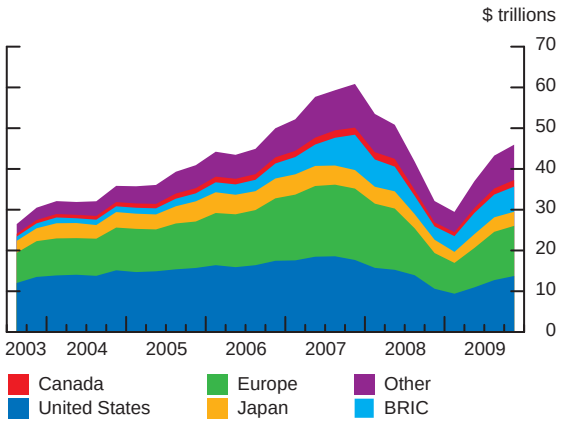
11 CDOs generally have bank loans (referred to as collateralized loan obligations or CLOs), bonds (referred to as collateralized bond obligations or CBOs), structured finance (e.g., ABS, MBS, other CDOs) or some mixture of the above as their collateral.

12 In June 2007, the pipeline of banks' leveraged loan and bond commitments was about US$400 billion but has since declined (CGFS 2008). Source: Lehman, S&P Leveraged Commentary and Data

13 For example, as of July 2010, 11 per cent of the Bank of America Merrill Lynch index of high-yield Canadian issuers was in Canadian dollars, with the remainder in U.S. dollars.

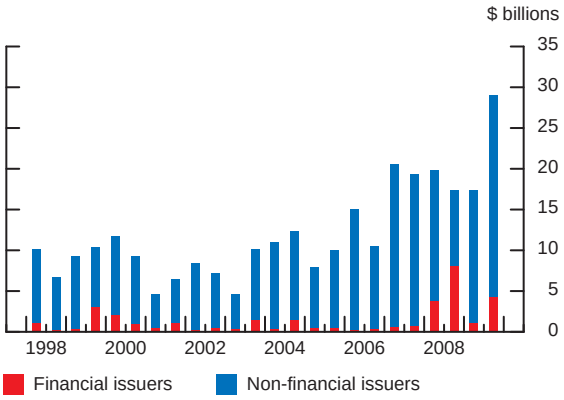
14 During the October 1987 stock market crash, 19 of 23 major stock markets declined by 20 per cent or more (Roll 1988).

Chart 6: Equity market capitalization



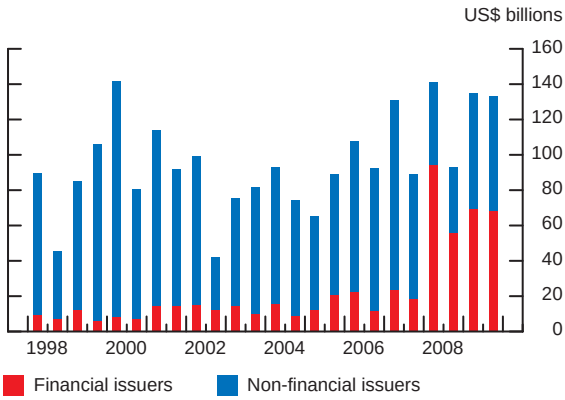
Source: Bloomberg

Chart 7: Canadian issuance of common equity



Source: Bank of Canada

Chart 8: U.S. issuance of equity



Source: Thomson Financial

in global equity market capitalization from the peak still represents about a quarter of global GDP. To put the magnitude of this US$30 trillion drop in wealth in perspective, it is more than ten times as large as the global writedowns by financial institutions during the crisis (estimated at US$2.3 trillion).

Canadian equity markets have experienced similar fluctuations in capitalization: it rose from US$1 trillion at the end of 2004 to US$1.75 trillion at the end of 2007, then fell to US$1 trillion at the end of 2008, before partly recovering to US$1.6 trillion at the end of 2009.[15] Over the same period, combined market capitalization in BRIC countries (Brazil, Russia, India, and China) followed a similar path but increased much more markedly, from US$1 trillion at the end of 2004 to US$6 trillion at the end of 2009, reflecting the growing importance of these emerging markets in the global economy and market place.

Equity issuance

The volume of equity raised by Canadian firms has increased over the past ten years: the total annual value of equity issued in 2007 was more than double its 2003 level **(Chart 7)**. While there was a temporary decline in equity issuance by Canadian firms during the worst of the financial crisis, this decline was much more muted than that observed in other markets, and the amount of equity issued was still above the levels seen from 1998 through 2006. However, some of the equity issuance since 2007 has been the result of income-trust conversions, which partially explains this more muted decline. Equity issuance by U.S. firms did not increase as dramatically as that of Canadian firms from 2003 to 2007 but, nonetheless, declined in the second half of 2008 **(Chart 8)**.

While total equity issuance was less affected during the crisis than issuance in other segments of capital markets, such as debt and securitized products, there has been a marked change in the distribution of issuance between financial and non-financial corporations since the onset of the crisis. In both Canada and the United States, the issuance of non-financial equity declined substantially during the poor market conditions (e.g., low market valuations) in the second half of 2008.[16] However, as market valuations rebounded

15 Pichette (2004) examines the relationship between consumer spending and wealth and finds that consumer spending responds to changes in housing wealth but responds very little to changes in equity wealth. She posits that the lower sensitivity to changes in equity wealth can be explained by the more transitory nature of equity-price changes and by the concentration of equity ownership among a small proportion of households.

16 Firms could also rely on internal sources of funds. Non-financial firms in both countries had steadily increased the proportion of assets held in cash since the 1990s (McVanel and Perevalov 2008; Bates, Kahle, and Stulz 2008).

from the lows reached in March 2009 and as the investors demanded higher returns—with higher risk—the issuance of Canadian and U.S. non-financial equity returned to pre-crisis levels.[17]

In contrast, global financial institutions have increased their equity issuance substantially to offset the effect of the large writedowns and losses experienced during the crisis and to build capital in anticipation of more stringent regulatory requirements. As of July 2010, financial institutions, mainly from Europe and the United States, had raised US$1.5 trillion in new private and public capital since mid-2007 to offset US$1.8 trillion in writedowns and losses.[18] Canadian institutions have had considerably fewer writedowns and losses (US$21 billion), have raised US$14 billion in private capital, and did not require any capital injection from the public sector. In 2008, financial equity issuance accounted for 32 per cent and 64 per cent of total equity issuance in Canada and the United States, respectively, compared with an average of 9 per cent and 26 per cent, from 1998 through 2006. A similar pattern was evident in Europe.

The future issuance of equity by financial corporations will depend on the amount of future writedowns and on the need to strengthen their capital positions. While the IMF estimates that approximately $550 billion of bank writedowns had not yet been realized by mid-2010 (IMF 2010b), it also suggests that most of this amount could be covered by earnings of the aggregate banking system (IMF 2010a). Also, banks may need to issue some equity to strengthen their capital position to meet the proposed revisions to capital requirements, which call for an improvement in the quality of the capital base of banks and higher minimum levels of capital (BCBS 2010). However, since banks can strengthen their capital position through retained earnings during the phase-in period for these revisions, there may be less need for the issuance of more common equity.

Securitization

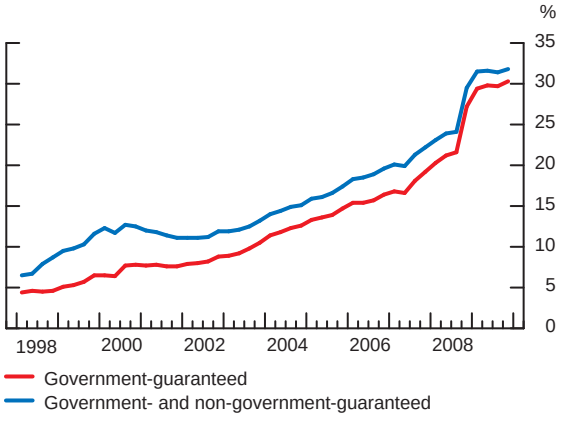
The securitization process converts pools of non-marketable assets, such as loans, mortgages, and credit card receivables, into marketable securities. Prior to the financial crisis, securitization had become an important source of credit in developed economies, particularly in the United States and, to a lesser extent, in Canada.[19] Nevertheless, there are differences between the U.S. and Canadian securitization markets in terms of relative size, breadth of development, and structure.

Residential mortgage-backed securities

In the years leading to the crisis, the securitization of mortgages became a more important source of credit, enabling Canadian banks to increase lending to households. This was particularly true for National Housing Act Mortgage Backed Securities (NHA MBS), which increased from about 5 per cent of outstanding residential mortgages in 1998 to almost 20 per cent in 2007 **(Chart 9)**.[20] This upward trend was at least partly due to changes in the NHA MBS program (e.g., the introduction of NHA MBS with more flexible features), the creation of the Canada Mortgage Bond (CMB) program in 2001, and increased investor demand for securitized products. The further increase in government-guaranteed MBS at the end of 2008 and in 2009 can be attributed to the government's IMPP, which brought the proportion of government-guaranteed MBS in Canadian mortgages to 30 per cent by the end of 2009.[21]

Non-government-guaranteed securitization in Canada was used more for subprime mortgages than for

Chart 9: Canadian RMBS outstanding
As a proportion of total amount of mortgages outstanding



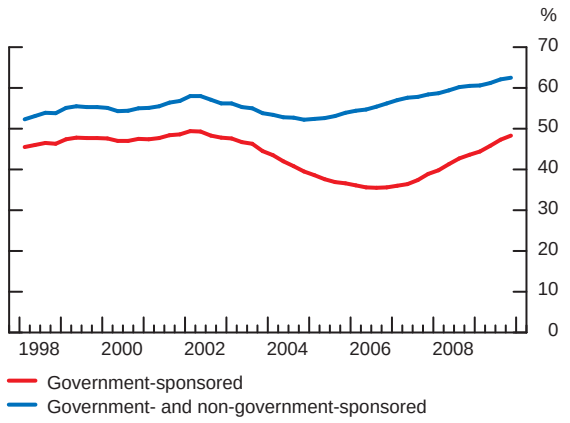
Source: Thomson Financial

17 Baker and Wurgler (2000) investigate the relation between market valuations and equity issuance.
18 Source: Bloomberg, 19 July 2010.
19 For a discussion of the economic benefits and potentially destabilizing effect of securitization, see Selody and Woodman (2009).
20 NHA MBS are backed by mortgages that benefit from an explicit government guarantee. The NHA MBS themselves also benefit from a government guarantee of timely payment of interest and principal.
21 The government announced that it would purchase up to Can$125 billion in NHA MBS. In total, Can$69 billion of NHA MBS were purchased under this program.

prime mortgages (Traclet 2010). Subprime-mortgage markets were much less developed in Canada than in the United States, reflecting the more conservative nature of Canadian investors and of Canadian mortgage-lending practices. Hence, the non-government-guaranteed segment of the market for residential mortgage-backed securities (RMBS) in Canada is small at less than 3 per cent of the total amount of residential mortgages outstanding at the end of 2007, and this proportion has since declined.

In the United States, the share of total RMBS (government-sponsored and non-government-sponsored) relative to total outstanding mortgages has increased slightly over time **(Chart 10)**. However, the breakdown between government-sponsored and non-government-sponsored MBS changed: from 2000 to 2006, the government-sponsored share declined by 10 per cent as the non-government-sponsored MBS share (backed by jumbo, Alt-A, and subprime mortgages) increased by a similar amount.

Chart 10: U.S. RMBS outstanding
As a proportion of total amount of mortgages outstanding



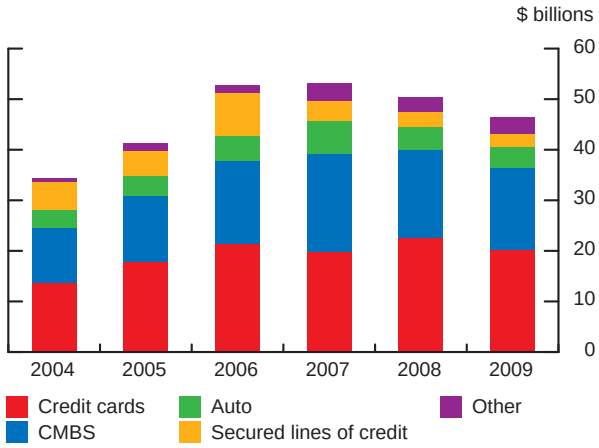
Source: Thomson Financial

The securitization of subprime mortgages reduced incentives for the monitoring and screening of borrowers and, over time, led to a strong deterioration in lending standards and, consequently, in the credit quality of the mortgages underlying non-government-guaranteed MBS.[22] Although securitization removed subprime-mortgage assets from bank balance sheets, banks sustained large losses because the risks related to those assets were not fully transferred away from the banks (Acharya and Richardson 2009). Amid these losses, the issuance of non-government-guaranteed MBS virtually disappeared in 2008, resulting in a decline in the absolute level of non-government-sponsored MBS as older issues matured.

Asset-backed securities

The market for term asset-backed securities (ABS) in Canada is relatively small, with just under $50 billion outstanding at the end of 2009 **(Chart 11)**. The two largest segments of this market are ABS backed by credit card receivables and commercial mortgage-backed securities (CMBS), which together account for about three-quarters of outstanding amounts. The third largest segment is ABS backed by auto loans and leases. As in other markets, ABS issuance was severely disrupted by the financial crisis, and yield spreads on ABS widened significantly.[23] To address these disruptions in the Canadian ABS market and to help consumers and businesses to finance the purchase of new vehicles and equipment, the federal government announced the Canadian Secured Credit Facility (CSCF) in its Economic Action Plan of January 2009. Administered by the Business Development Bank of Canada (BDC), the program could purchase up to $12 billion of newly issued ABS backed by vehicle and equipment loans and leases.[24]

Chart 11: Canadian term ABS outstanding
By asset type



Source: Dominion Bond Rating Service

22 See Paligorova (2009) for a discussion of agency problems in the securitization process. Ashcraft and Schuermann (2008) identify seven informational frictions in the process of subprime-mortgage securitization and discuss how these frictions can contribute to problems with mortgage securitization. Demyanyk and Van Hemert (2008) find evidence of deterioration in the quality of subprime-mortgage loans in the years leading up to the crisis.

23 For example, spreads on 3-year Schedule I bank credit card programs widened to over 350 bps, from about 50 bps prior to the crisis. Spreads on non-bank credit card programs widened even further. Source: RBC Capital Markets.

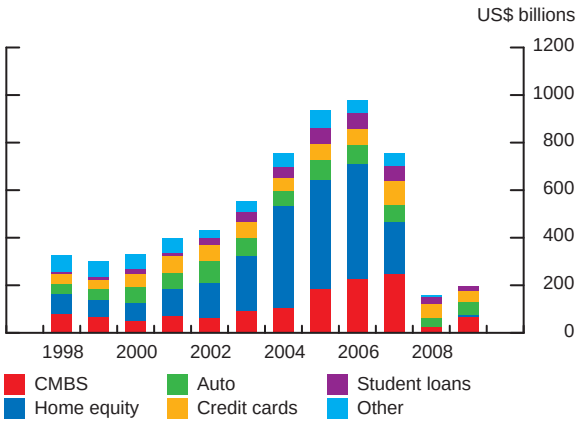
24 By the time the CSCF expired in March 2010, the BDC had purchased $3.7 billion of ABS (Halde 2010).

After the announcement of the CSCF, and helped by positive developments in other securitization markets (mainly the introduction of the Term Asset-Backed Securities Loan Facility by the U.S. Federal Reserve) and improvements in financial market conditions more generally, spreads on Canadian ABS tightened.[25] However, from the first quarter of 2008 to the first quarter of 2010, the ABS market shrank from $52 billion to $47 billion as maturities outpaced new issues **(Chart 11)**. Anecdotal evidence suggests that this was caused as much by a limited supply of assets to securitize, because of weak credit demand and the availability of cheaper funding alternatives, as by a lack of investor demand or an impaired market. However, there are signs that the Canadian securitization market has been recovering in 2010. Through the first three quarters of 2010, almost $8 billion of non-CSCF term ABS transactions were made in the Canadian market, compared with less than $6 billion throughout 2009.

A number of notable differences between Canadian and U.S. ABS markets contribute to explaining the stronger impact of the crisis on the U.S. securitization market.[26] First, the distribution of collateral types is significantly different, with home-equity loans representing a much larger—and growing—share of the U.S. market prior to the crisis **(Chart 12)**. Traditionally having second lien status, home equity lines of credit were used more heavily in the United States to cash out on increasing home values (Lucas, Goodman, and Fabozzi 2006). The issuance of ABS backed by home equity loans—the largest category of ABS issuance in the United States prior to the crisis—disappeared amid the correction in the U.S. housing market. Second, the fundamentals of the underlying collateral were healthier in Canada. For example, delinquency rates on CMBS remain below 1 per cent in Canada, whereas U.S. delinquency rates have risen above 8 per cent, owing to stress in the U.S. commercial real estate market (DBRS 2010). Delinquency rates on credit card ABS also remain much lower in Canada than in the United States.

With the onset of the global credit crunch in 2008, U.S. issuance of ABS slowed considerably to levels

Chart 12: U.S. ABS issuance
By asset type



Sources: SIFMA and Bloomberg

below those witnessed in the late 1990s. In October 2008, the issuance of term ABS came to a complete halt, as spreads on the traditional ABS asset classes exploded. This lack of issuance and the sharp increase in spreads prompted the Federal Reserve to announce a US$200 billion Term Asset-Backed Securities Loan Facility (TALF) on 25 November 2008, to "help market participants meet the credit needs of households and small businesses by supporting the issuance of asset-backed securities (ABS)."[27] The TALF offered non-recourse three- or five-year loans to investors, collateralized by certain types of ABS that were eligible for the program. Since the implementation of the TALF, ABS spreads have retreated, and issuance has resumed, although less strongly than before the crisis. Initially accounting for about half of non-mortgage ABS issuance, the TALF was no longer being used extensively when it expired in 2010 (Sack 2010).

The financial crisis will undoubtedly have a long-lasting effect on securitization markets.

The financial crisis will undoubtedly have a long-lasting effect on securitization markets, and future levels of issuance in these markets will depend on reducing the conflicts of interest in the securitization process, simplifying and standardizing securitization

25 For example, spreads on 3-year Schedule I bank credit card programs tightened to 75 bps towards the end of 2009. Source: RBC Capital Markets.

26 This article does not focus on issuance in short-term markets; however, it is important to mention that the crisis had a strong impact on the Canadian market for non-bank-sponsored ABCP. The majority of assets underlying the non-bank-sponsored ABCP conduits were CDOs. Trading in this market came to a halt in 2007, and the non-bank-sponsored ABCP was subsequently restructured into floating rate notes. The market for bank-sponsored ABCP, while more resilient, was also affected by the crisis, and the outstanding amount of ABCP has declined. For a discussion of the Canadian ABCP market, see Kamhi and Tuer (2007a, 2007b).

27 The TALF was tweaked several times, following the original announcement. See http://www.newyorkfed.org/markets/talf.html

structures, applying appropriate prudential regulation and accounting standards, and enhancing disclosure and transparency.[28] In addition, the elimination of certain withholding taxes on Canadian cross-border transactions on 1 January 2008 could help Canadian securitization markets by making it more economical to securitize a broader range of asset classes into the U.S. market (Kroft, McElheran, and Kelly 2008).

Conclusion

The period before the recent credit crunch was characterized by a dramatic increase in the issuance of several related debt-type asset classes, such as high-yield bonds, ABS, MBS, and CDOs. Despite double counting in these issuance figures (the assets underlying CDOs include high-yield bonds, leveraged loans, MBS, ABS, and even other CDOs), this trend led to increased leverage in the U.S. economy in what is often referred to as the shadow banking sector. Since the credit crunch, issuance in almost all of the asset classes that had experienced substantial growth has declined dramatically to levels not seen in the past ten years.

In Canada, the increase in securitization leading up to the crisis was less pronounced, but, nonetheless, ABS issuance was severely disrupted. Both Canada and the United States introduced programs to address these disruptions. Although the Canadian securitization market was dormant in the aftermath of the crisis, there have been signs of recovery in 2010.

New trends have emerged in the wake of the crisis that will likely continue. For instance, Canadian banks began issuing covered bonds as a diversified funding source and potentially lower-cost alternative to other forms of financing. Issues were originally denominated in euros, but Canadian banks have recently issued covered bonds denominated in U.S. and Canadian dollars. Moreover, the federal government's recent announcement that it will introduce legislation on covered bonds in Canada should also facilitate the continuance of covered bond issuance, given that the current outstanding covered bonds of Canadian banks are well below the 4 per cent of total bank assets allowed by banking regulation.

After coming to a halt at the peak of the crisis, global issuance of high-yield debt rebounded to levels higher than those before the crisis as issuers extended the maturities of their issues. There will be an ongoing need for a high level of global high-yield issuance over the next five years simply to refinance upcoming maturities. For Canadian issuers of high-yield bonds, the profile of upcoming maturities is more benign. Nonetheless, there may be increased issuance, owing to the potential for conversions from income trusts. There have recently been several Canadian-dollar, high-yield issues, and several factors suggest that the Canadian high-yield market will continue to develop.

Globally, financial corporations have increased their equity issuance to offset the losses and writedowns experienced since the crisis began and to build capital in anticipation of more stringent regulatory requirements. Canadian financial institutions experienced fewer losses and writedowns than those in other jurisdictions, however, and thus the rise in their equity issuance has been less marked.

Overall, Canadian corporate issuance has fared relatively well in the wake of the crisis, given that Canadian issuers were in a relatively stronger position and did not employ innovative and riskier forms of financing to the same extent as issuers from other countries. However, while these trends have become apparent in the recent aftermath of the crisis, other repercussions of the financial crisis on issuance will likely emerge over time.

28 See Hendry, Lavoie, and Wilkins (2010) and Selody and Woodman (2009). The Financial Stability Board is also looking at what actions could be taken to "encourage resumption of securitisation with genuine economic value" (FSB 2010).

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