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## Show Me the Money: Access to Finance for Small Borrowers in Canada

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**IMF Working Paper**

Western Hemisphere Department

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**Abstract**

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This paper examines access to business finance by Canadian small and medium-sized enterprises (SMEs) and to housing finance by Canadian households (particularly non-prime borrowers) against the background of a fairly concentrated and protected banking industry. It finds access broadly adequate for the former group. However, given the dominance of the large banks and their fairly low risk tolerance, financing of riskier projects is a challenge. Problems with venture capital, plausibly related to the prevalence of tax-advantaged labor-sponsored funds, exacerbate the situation for the most innovative SMEs. The paper also finds the market for housing finance to be highly advanced and sophisticated. However, non-prime mortgage financing is in its infancy in Canada, and further development of that sector (while avoiding the excesses that beset the U.S. market in the last few years) would be beneficial. More broadly, despite recent innovations, options available to Canadians for financing house purchases are still somewhat limited, with scarce availability of mortgage maturities beyond five years particularly surprising. Further advances in securitization could help progress in both of these areas.

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## I. INTRODUCTION

With five largest banks accounting for 85 percent of total bank assets, the Canadian banking system is highly concentrated. Moreover, the big five are sheltered from certain competitive pressures through the widely-held rule,<sup>2</sup> which precludes takeovers, and through a de facto prohibition on large bank mergers. On the other hand, a competitive fringe exists, in the form of smaller domestic banks, trust and mortgage loan companies, credit unions, foreign bank branches and subsidiaries, and other financial institutions.

In this light it is interesting to see how well the financial system performs the function of channeling funds to the most productive uses. In particular, one might wonder if the main banks, comfortable in their entrenched positions, would venture into areas where borrowers are small, costs of ascertaining their creditworthiness might be higher, and returns are more uncertain. We focus on two such areas: the financing of small and medium-size enterprises (SMEs) and mortgage lending to borrowers with weaker credit histories. We look at the development of these two markets in Canada and how well they are served by domestic banks in particular and by the financial system more generally.

We find that Canadian SMEs by and large have adequate access to credit. At the same time, there is room to improve the provision of complementary services to SMEs, such as record-keeping, account reconciliation, etc. High account manager turnover and other irritants result in dealing with finances being a major challenge for nearly a half of Canadian SMEs. Moreover, riskier ventures find it substantially more difficult to secure a bank loan, given the banks' reluctance to exceed a fairly low risk threshold, rationing out higher risks rather than charging higher interest. This is particularly important given the weakness of Canada's venture capital (VC) market, where riskier projects could find alternative financing.

Mortgage financing for individuals with insufficient documentation or tarnished credit histories is in its infancy in Canada. While this state of affairs may have saved Canada the excesses that had led to subprime market turmoil in the United States, it also curtails access to home ownership by certain groups of population, including self-employed and recent immigrants. With big banks showing little interest, the non-prime segment is the domain of specialized lenders. Better credit risk modeling techniques and advances in securitization have spurred growth in that segment in the last few years. Unfortunately, this fledgling market may suffer a setback as a fallout from the U.S. subprime crisis.

The broad conclusion that emerges is that Canada's financial system performs its intermediation function quite well, channeling funds from where they are available to where they are needed. However, riskier borrowers appear to find access to finance more difficult

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<sup>2</sup> The rule limits a single shareholder to no more than 20 percent of voting shares in a bank with equity exceeding C\$8 billion.

than in some other countries, given the banks' reluctance to price risk. Moreover, banks appear to believe that one of their roles in society is to guard borrowers from taking imprudent risks, not only by disclosing those risks but also by curtailing credit when they believe the risk is excessive. This attitude, conservative with respect to the banks' business and paternalistic with respect to borrowers, contributes to the stability of the financial system, but may result in some efficiency loss, bypassing dynamic firms and individuals and impairing economic innovation.

## II. SME FINANCING

### A. SME sector in Canada

Numbering over a million and employing 64 percent of Canadian payroll workers<sup>3</sup> (Industry Canada, 2007), SMEs<sup>4</sup> play a very important role in Canada. However, financing small enterprises may be a challenge.

Small loans do not always justify overhead costs for financial institutions. In addition, many SMEs are start-ups, with little or no credit history, and with few tangible assets to secure a loan (Industry Canada, 2005). A large proportion of SMEs offer untested ideas and innovative products whose commercial success is uncertain. As a result of these factors, SMEs across the world experience difficulties with access to finance, and government support for that sector is quite common.

Canadian SMEs experienced a particularly difficult period in the 1990s, when the sector took longer than the rest of the economy to recover from the 1991 recession, and when financing problems were perceived to be particularly acute. The government took a number of steps to help small businesses, including by replacing the *Small Business Loan Act* with the *Canada Small Business Financing Act* and redefining the mandate of the Business Development Bank of Canada. In addition, to examine the scope of the problem, the government launched in 1999 the SME Financing Data Initiative (SME FDI), with Industry Canada, Statistics Canada, and Finance Canada as principal partners. Thanks to this initiative, which surveys both SMEs and financial institutions, and a number of other domestic and international surveys, we have a good handle on the sources of SME financing and their satisfaction with credit supply.

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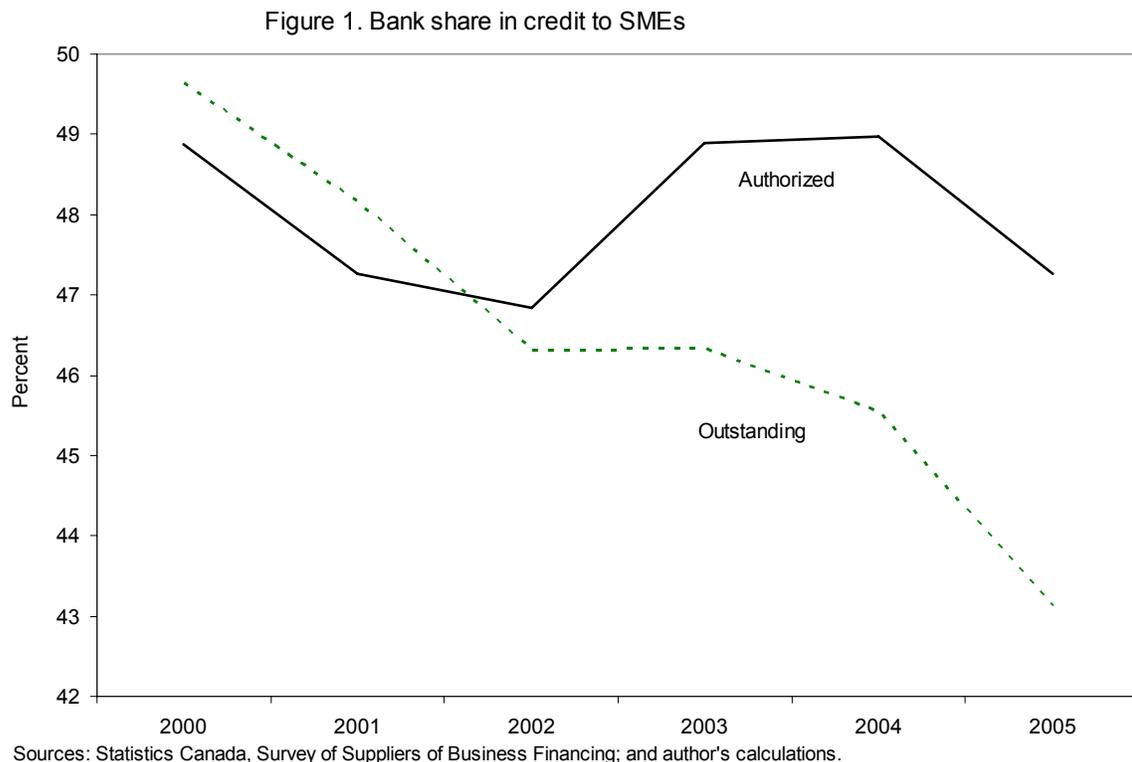
<sup>3</sup> A larger percentage than in the United States.

<sup>4</sup> SMEs are defined as businesses with fewer than 500 employees and with annual revenues less than C\$50 million, excluding unincorporated firms with less than C\$30,000 in revenues, non-profit organizations, government organizations, cooperatives, and financing and leasing companies.

## B. Sources of SME financing

The difficulties identified above help explain the fact that approximately two-thirds of the debt owed by Canadian SMEs comes from informal sources, such as loans from individuals and trade credit from suppliers (Industry Canada, 2006a). Leung and others (2008) point out that Canadian SMEs tend to rely more on loans from individuals and less on loans from financial institutions than their U.S. counterparts. One half of business owners consider the use of personal credit cards important or necessary for keeping their enterprises in operation. While this level of informality appears high, in the United States 47 percent of small business owners made some use of personal credit cards in 2003 (Mach and Wolken, 2006).

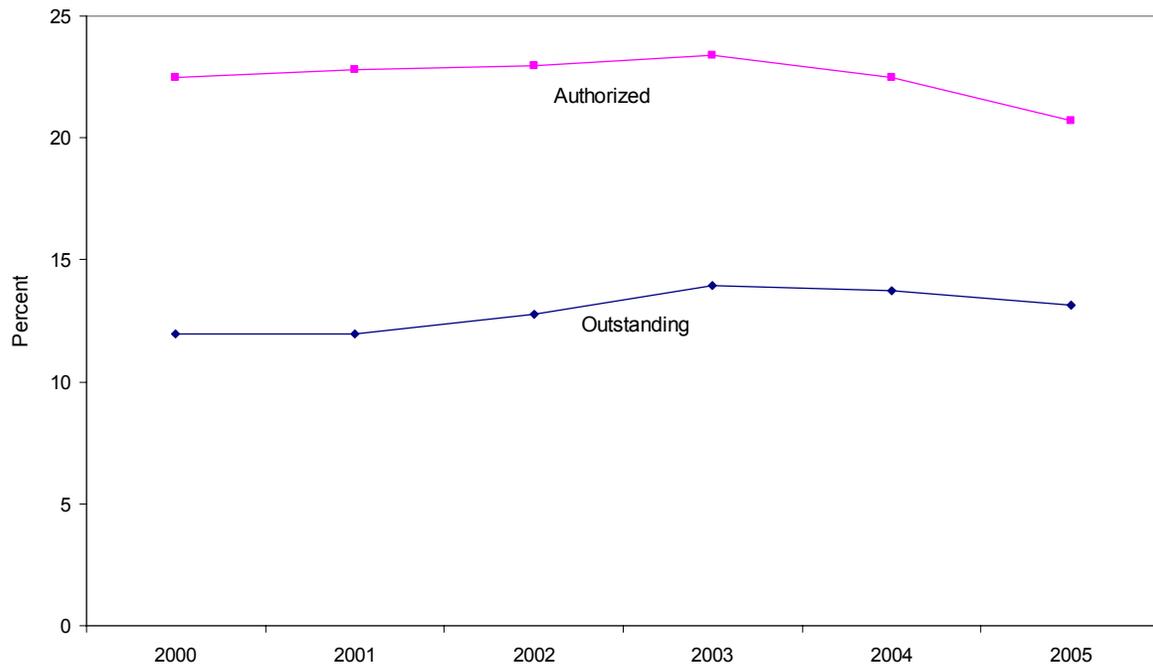
Among the formal credit providers, banks play a particularly important, although diminishing, role. In 2004, 18 percent of SMEs requested a loan from a financial institution, and the banks received 64 percent of these requests. While the share of domestic banks in authorized credit to SMEs from all financial institutions has remained just under 50 percent in the 2000s, the share of banks in SME credit outstanding has trended down, with more business going to credit unions and finance companies. (Figure 1).<sup>5</sup>



<sup>5</sup> These numbers are based on the annual Surveys of Suppliers of Business Financing, where loans with authorized amounts of less than C\$1 million are considered to be made to SMEs.

Moreover, since 2003, the share of SMEs in total business lending by Canadian banks has declined modestly (Figure 2).<sup>6</sup> This contrasts with U.S. experience, where the share of small business loans (under \$1 million) in total business lending rose from 34 percent in 2000 to 38 percent in 2004 (Ou, 2006). Moreover, the number of small business loans in the United States grew by 37 percent over that period—a substantially greater increase than a 20 percent rise in Canada. Ou attributes this surge to the emergence of a nationwide market for credit lines and credit cards, which has resulted in greater competition despite a consolidation in the U.S. banking industry. This process has started in Canada as well. It is now possible to obtain a small business loan by filling a simple on-line application, with an automated review process. Still, in 2004 only 4 percent of SMEs applying for a loan did so over the Internet, while 56 percent filled out an application while visiting their financial institution. SME finance remains very much a local, relationship business in Canada.

Figure 2. Credit to SMEs as a share of total business lending by domestic banks



Sources: Statistics Canada, Survey of Suppliers of Business Financing; and author's calculations.

### C. SME satisfaction in dealing with finances

In a 2007 poll (CFIB, 2007b), 47 percent of entrepreneurs reported dealing with finances as one of the major challenges of operating an SME—the second highest percentage after

<sup>6</sup> The share of SMEs in total bank lending has dropped even more, as the banks have moved toward more household lending.

finding new customers and markets.<sup>7</sup> This reflects a number of problems, of which access to and cost of credit may not be the most salient ones for an average SME.

SME owners are particularly concerned about high account manager turnover (CFIB and others, 2002). Some banks view the position of an SME account manager as a training ground. As a result, the SME owners have to spend considerable time educating ever-changing contact persons at the banks about their businesses, and they may not receive consistent treatment from different managers. In 2004 only 48 percent of SMEs had a designated account manager, and 43 percent had had more than one account manager in the last three years.<sup>8</sup> A recent study (CFIB, 2007c) has shown that having three or more account managers in a period of three years is positively correlated with the likelihood of having a loan application rejected.

The relationship between banks and SMEs is not limited to lending. Banks keep SME deposits and provide advice and other services. According to banking industry representatives, more could be done to serve SMEs in such areas as record keeping, account reconciliation, tax accounting, etc. A major multi-faceted comparative study of SMEs in Canada and the United States (CFIB and others, 2002) also suggests that Canadian financial institutions could provide more convenient access to services and enhance the level and quality of their advice. In a more recent survey (CFIB, 2007c), provision of information and advice on business succession planning—which is a big issue in Canada since a large proportion of SME owners intend to retire within the next ten years—received the lowest score among nine performance indicators.

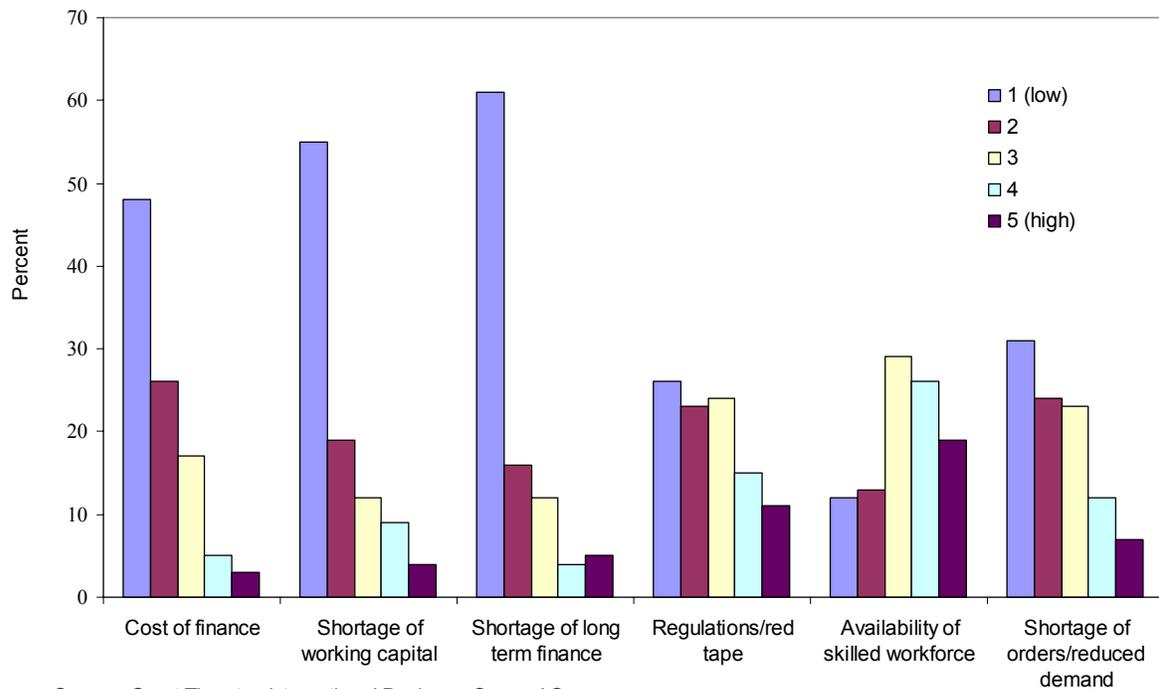
On the other hand, access to credit is not very high on the list of SME concerns. In the International Business Report by the consulting firm Grant Thornton, the cost of finance, the shortage of working capital, and the shortage of long-term finance feature much less prominently than other issues as constraints to SME's ability to expand or grow their business (Figure 3).

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<sup>7</sup> For three-quarters of SMEs, a chartered bank is the main financial institution they deal with, while for one-fifth a credit union plays this role.

<sup>8</sup> Three-quarters of the affected SMEs reported that the changeover was handled well.

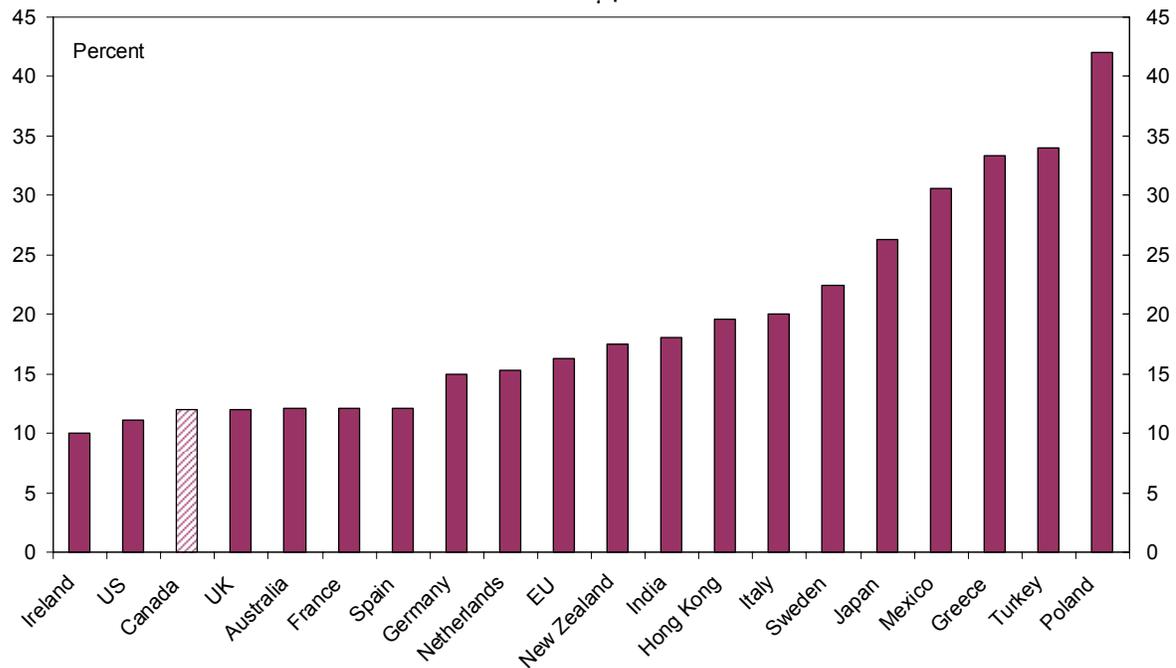
Figure 3. Constraints on SME growth, Canada, 2007



The percentage of firms reporting major constraints in these areas (4 or 5 on the scale of 5) is lower than in the bulk of OECD economies, although somewhat higher than in the United States (Figure 4).

These findings are consistent with the results of the 2002 Ipsos-Reid survey (reported in CFIB and others, 2002), where only 20 percent of Canadian firms (and 15 percent of U.S. firms) mentioned access to financing and cost of borrowing as barriers to growth. This percentage was considerably lower than for taxation, market environment, and human resource issues, and approximately on par with the two remaining broad categories—internal issues and regulation. In 2004, in a survey conducted by Statistics Canada, 20 percent of SMEs said that obtaining financing was an obstacle for their business—higher than 13 percent reported for management capacity, but lower than for any of the other categories, which included finding qualified labor, instability of consumer demand, insurance rates, government regulations, low profitability, and levels of taxation, all of which scored well above 30 percent.

Figure 4. Percentage of all respondents saying "cost of finance" is constraining their ability to grow, OECD



Source: Grant Thornton International Business Owners' Survey

Most SMEs that seek access to bank credit get it. According to Industry Canada data, close to 80 percent of SME loan applications are approved. The approval rate appears to be fairly high, although it is lower than what SME owners would want it to be and lower than in the United States (Leung and others, 2008). Of those SMEs that did not request financing in 2004, 91 percent indicated they did not need it. Less than 5 percent thought that their request would be turned down or that applying for financing would be too difficult, and only 3 percent believed that applying for financing would take too much time or that the cost of debt would be too high.

At the same time, the more innovative, and hence riskier SMEs have more difficulties obtaining loans. The authorization rates are close to 70 percent for the SMEs operating in knowledge-based industries and less than 60 percent for the enterprises that spend 20 percent or more of their revenue on R&D. This may reflect the uniform pricing policies of Canadian banks, where different clients, if an approval is granted, would receive a loan on essentially the same conditions regardless of the location, nature, and history of their business. This approach may leave somewhat riskier borrowers without access to credit rather than providing access at a higher price. Given the conservative lending practices of Canadian banks, the risk threshold is likely to be set rather low.

Consistent with the notion that finances broadly defined are a bigger issue for an average Canadian SME than access to credit per se, the level of satisfaction with the overall quality of service received from the main financial institution (57 percent) is lower than the level of

satisfaction with the credit supplier (62 percent). Confirming particular problems facing riskier, more innovative ventures, the level of satisfaction with their main financial institution is substantially lower in the knowledge-based industries (45 percent).

The latter finding suggests that the policy advice of the above-mentioned study (CFIB and others, 2002) is still relevant. The study recommended encouraging the development of a more robust market for subprime debt financing of higher risk firms; and increasing equity financing available to young, innovative firms, particularly through venture capital and angel investors.

#### **D. Venture capital**

Certain SMEs, such as firms with high growth potential and firms in knowledge-based industries, face particular challenges in raising loan financing (Industry Canada, 2003). The gestation period from an idea to a revenue-generating product may be quite long for such firms. Moreover, they lack sufficient tangible assets to secure bank loans or other forms of traditional financing. While in the long run successful firms may rely on retained earnings to make up for lack of debt financing (Baldwin and others, 2002), start-ups and young firms require risk financing, which could come from friends and family (love money), wealthy individuals (angel investors), or formal pools of risk finance (venture capital).

The amount of venture capital financing in Canada relative to the size of the economy is smaller than in United States, but is fairly high compared with most other countries (Global Entrepreneurship Monitor, 2005; OECD, 2006). However, a number of problems have been identified in that sector. The typical size of VC investment per company is much smaller in Canada than it is in the United States. In 2004-05, the average investment per firm equaled C\$2.5 million for domestic Canadian VC funds, with only 33 percent of investments exceeding C\$5 million (Industry Canada, 2006b). Corresponding numbers for foreign funds were C\$7.2 billion, which is still somewhat lower than the 2004 U.S. average US\$8.3 billion (Macdonald and Associates, 2005), and 80 percent.<sup>9</sup>

While part of the reason may be a heavier focus of the U.S. VC industry on later-stage firms, which may attract more capital, the disparity also holds for early stage investment, where since 2000 average capital infusion per company in Canada has typically been less than half of the U.S. amount (Macdonald and Associates, 2005). While allowing provision of funding to a larger number of companies, this approach may spread both financial and managerial resources too thinly. It should also be noted that until 2006 the amount of capital raised by

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<sup>9</sup> With reduction in labor-sponsored fund activity in Ontario (see below), the numbers for the domestic funds rose to C\$3.4 million and 40 percent, respectively, in 2006.

Canadian venture capital funds exceeded considerably the amount actually invested.<sup>10</sup> This slack indicates that venture funds have difficulty or little incentive to identify suitable investment targets and make their capital work. That interpretation is confirmed by their poor returns.

Some authors have related the underperformance of Canada's VC sector to the prevalence of the Labour-Sponsored Venture Capital Corporations (LSVCCs) (e.g., Cumming and others, 2007). LSVCCs, which must be sponsored by a labor union, attract money from individuals and invest it in privately held companies. Both the federal government and most provincial governments provide hefty tax credits to investors in LSVCCs.<sup>11</sup> In return, LSVCCs face restrictions on the size, nature, and location of their investments, and have a three-pronged mandate that includes maximizing employment, shareholder value, and economic development in their jurisdictions.

With their dispersed shareholding and triple mandate, the labor-sponsored funds may not feel the pressure to work closely with their clients and maximize return. As a result, as Cumming and MacIntosh (2007) demonstrate, the rates of return of LSVCCs over the period 1992–2005 were lower than on such a safe investment as the 30-day Treasury bill—and considerably lower than on many alternative Canadian investments or on U.S. VC funds.<sup>12</sup> Such outcomes indicate that LSVCCs are not very apt at picking good prospects for their investments, or help them achieve good results, or both. At the same time, the investors are not voting with their feet against poor returns, as they are compensated through tax incentives. LSVCCs are responsible for the bulk of the uninvested venture capital; they have a much larger number of investee companies per investment manager than private independent limited partnership VC funds (6.5 versus 2.5); and their ratio of management expenses to assets exceeds substantially that for all other types of mutual funds in Canada or the United States (Cumming, 2007).

Labor-sponsored funds account for approximately one half of VC capital under management (Cumming, 2007), even though their share of investment has been closer to one quarter in recent years (Thomson Financial, 2007), so their practices and performance affect the industry considerably. With their attractiveness to retail investors thanks to tax credits and their tendency to overpay the companies they invest in, stemming from their lack of concern

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<sup>10</sup> Since 2002, the amount of VC capital available for investment has been at least double the annual amount invested.

<sup>11</sup> Ontario is currently phasing out the tax incentives.

<sup>12</sup> The question of how the returns of LSVCCs compare with those of other Canadian venture funds is unsettled. Brander and others (2002) find a significantly negative coefficient on a dummy for the funds with preferential tax status in their regressions for VC returns. On the other hand, according to Duruflé (2006), there is no significant difference between various types of funds in Canada, with returns being poor across the board.

for the bottom line (Cumming and others, 2007), LSVCCs may undercut and crowd out other forms of VC funds. Interestingly, while VC investment dropped in Ontario in 2006, after the province announced the phasing-out of tax incentives for labor-sponsored funds, it picked up dramatically in 2007. The surge was driven to a large extent by foreign funds and propelled Ontario back to be the number one VC investment destination in Canada.

In addition, the development of alternative sources of venture capital was thwarted until recently by certain policies and regulations. In particular, prior to the early 1990s, banks and pension funds were effectively barred from participation in the VC market (CFIB and others, 2002), while foreign participation is still hampered by the withholding tax on foreign investment income<sup>13</sup> and more generally by Canada's tax environment.<sup>14</sup> The removal of these restrictions will stimulate institutional and foreign-sourced VC, but reallocation takes time. By some assessments, the United States is at least a decade ahead of Canada in terms of the development of its private venture capital marketplace.

Finally, risk capital may not be as attracted to Canadian SMEs as it might otherwise be because of the high cost of the expected exit strategy—an initial public offering (IPO). A segmented system of securities regulation creates one barrier. It has been estimated (Canadian Bankers Association, 2007) that the incremental cost of listing in an additional jurisdiction is approximately 7 percent, so listing in all 13 provinces and territories costs twice as much as listing in just one. Moreover, regulation-related expenses grow less than proportionately with the size of offering, so this burden is particularly significant for smaller companies.<sup>15</sup>

Another cost arises because of potential share underpricing by IPO underwriters. Industry Canada (2003) estimates that share underpricing varies from 9 percent to 30 percent for firms of different sizes, with the smallest firms being the most undervalued. This study posits that the lack of competition between brokerage houses, reflecting high concentration of the brokerage industry, with nearly all houses owned by large banks, is one of the main reasons for underpricing.

As a result of these factors, some potentially high-growth companies may fail to develop in Canada, with entrepreneurs having to abandon their ideas, or taking their ventures to the

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<sup>13</sup> An agreement has recently been reached on eliminating withholding taxes on cross-border interest payments between Canada and the United States.

<sup>14</sup> According to a global VC survey by Deloitte (2007), 40 percent of U.S. respondents and 28 percent of global respondents cite Canada's unfavorable tax environment as a key reason for not investing in Canada.

<sup>15</sup> For a C\$1 million offering, regulation-related expenses amount on average to 8 percent of the offering if listed in one jurisdiction and 16 percent if listed in thirteen. Corresponding figures for a C\$10 million offering are 2 percent and 4 percent, respectively.

United States. This could be one of the reasons for Canada's lagging productivity performance.

### **E. Government support for SMEs**

The federal government supports SMEs directly in a number of ways. For example, enterprises with annual income less than C\$400,000 face a lower rate of the corporate income tax.<sup>16</sup>

In the realm of financing, there are two major federal initiatives. First, under the Canada Small Business Financing Program, the government of Canada may guarantee 85 percent of a loan under C\$250,000 for eligible purposes.<sup>17</sup> In the fiscal year 2005-06, the program helped small and medium-sized businesses obtain 10,840 loans with the total value of C\$1.1 billion (Industry Canada, 2006c). Second, the Business Development Bank of Canada (BDC) offers financial services, consulting services, subordinate financing and venture capital to small and medium-sized enterprises. It has a particular focus on the emerging and exporting sectors of the economy. At the end of the fiscal year 2006-07, BDC's outstanding portfolio of financing and subordinated financing stood at C\$9.3 billion, and authorizations equaled C\$2.6 billion in that year, benefiting 27 thousand entrepreneurs (BDC, 2007). In addition, export-oriented SMEs enjoy support from Export Development Canada, which comes mainly in the form of credit insurance and guarantees. Finally, tax incentives for labor-sponsored VC funds were discussed at length in the previous section. The annual cost of the LSVCC tax credits is C\$150 million to the federal government (Finance Canada, 2007) and the same amount to provincial governments (Cumming and others, 2007), not counting RRSP allowances.

## **III. MORTGAGE MARKETS**

### **A. Overview of housing finance**

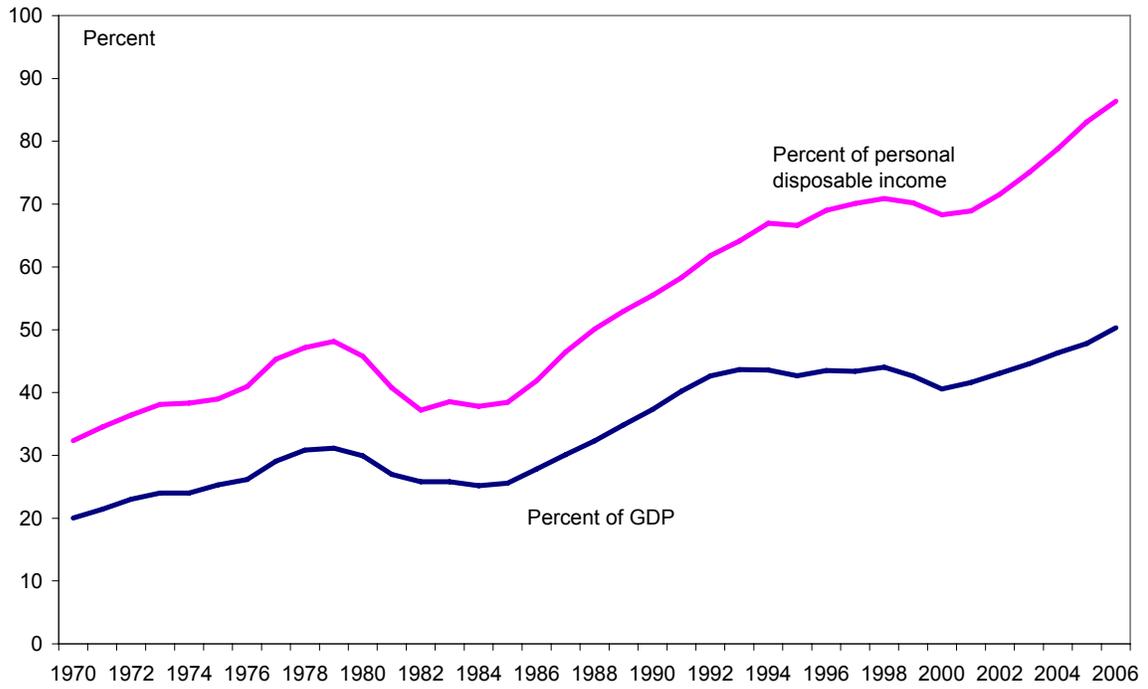
Canada has a vibrant mortgage market. Outstanding mortgages have been growing steadily as a fraction of GDP or personal disposable income (Figure 5), although these percentages do not come close to those observed in the United States, Australia, the United Kingdom, and a number of continental European countries (CGFS, 2006). A wide range of institutions are involved in mortgage lending (Figure 6), but by far the most important are chartered banks, which accounted for 58 percent of housing finance at the end of 2006. This group, in turn, is dominated by the big five Canadian banks. As with SMEs, one may wonder whether the banks provide access to housing finance to higher-risk individuals and whether they offer a sufficiently wide range of products.

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<sup>16</sup> As a drawback, this measure may be an disincentive for SMEs to grow above that limit.

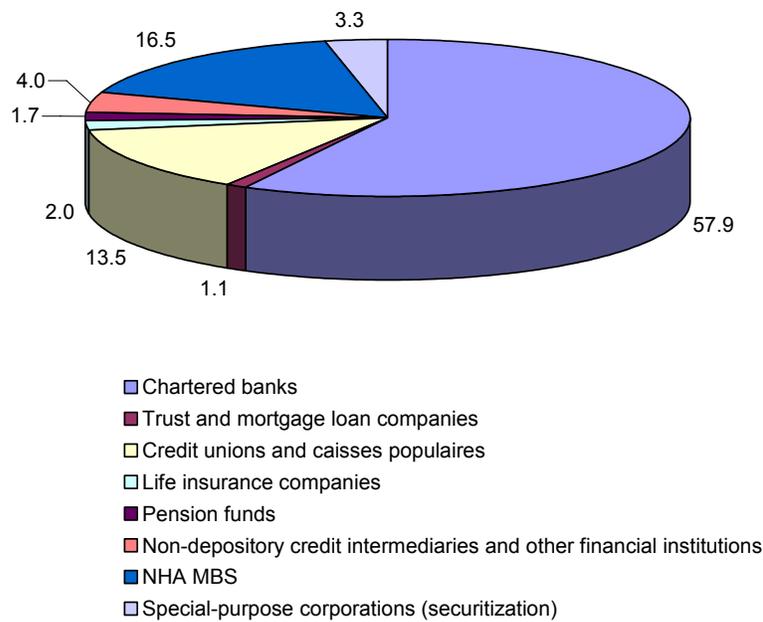
<sup>17</sup> These purposes include purchasing land, buildings or equipment, and improving buildings or equipment.

Figure 5. Canada: residential mortgages outstanding



Sources: Statistics Canada; and Bank of Canada

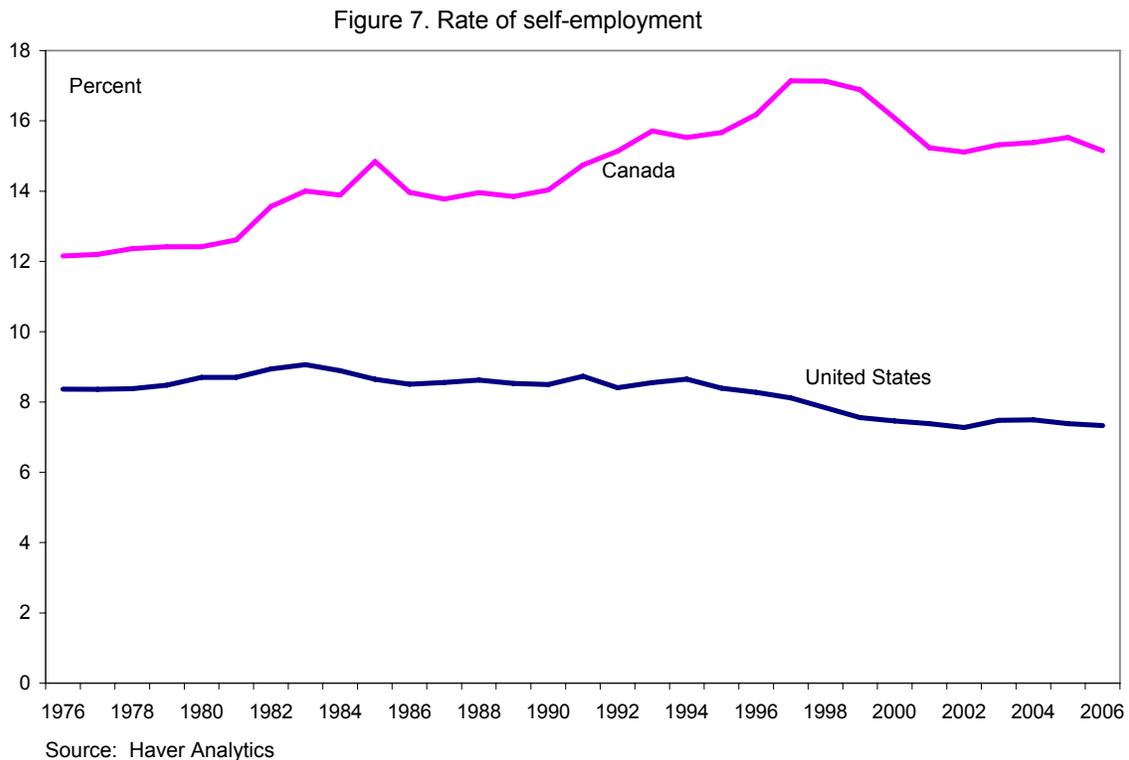
Figure 6. Percentage of residential mortgages outstanding, 2006



Source: Bank of Canada

## B. Non-prime segment

There would seem to be a clear potential market for non-prime mortgages in Canada. According to the 2001 Census, 18 percent of Canadians were born outside the country (Zietsma, 2007)—a proportion second only to that of Australia. The number for the United States was 12 percent in 2003 (U.S. Census Bureau, 2004), although given the extent of illegal immigration to the United States, this proportion may be underestimated. The rate of self-employment is also substantially higher in Canada than it is in the United States (Figure 7).

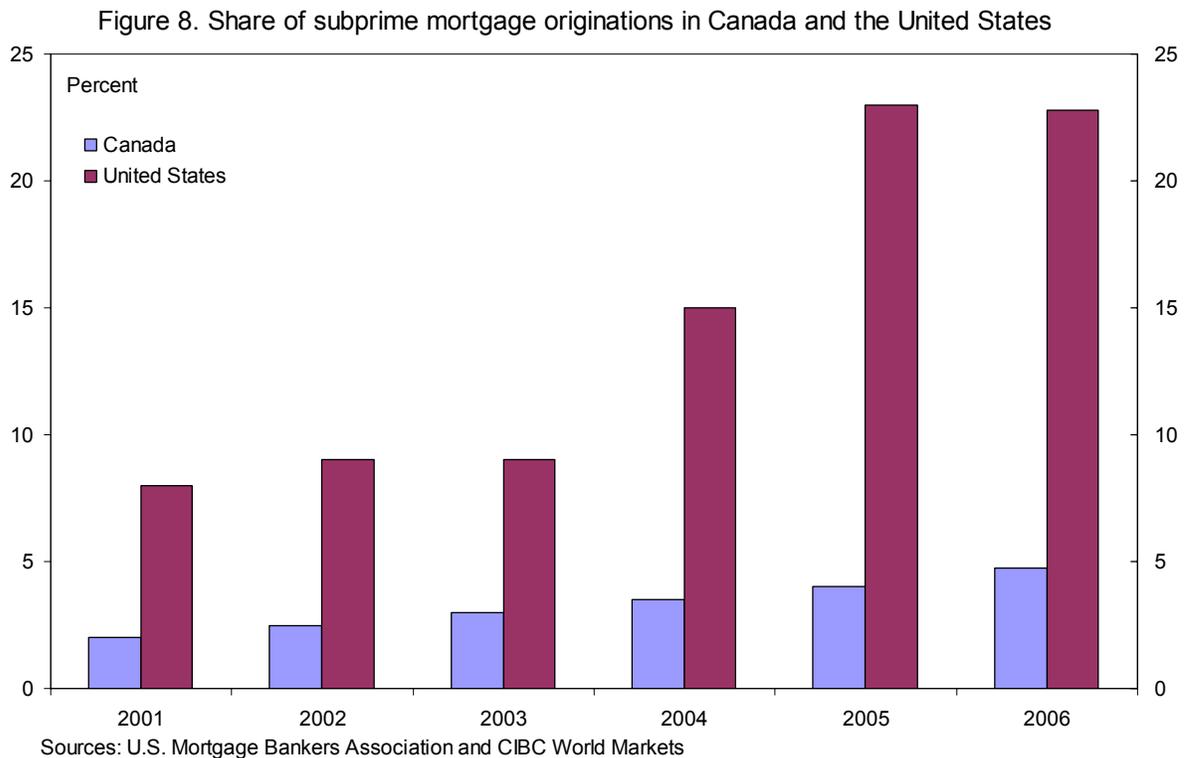


These characteristics underscore the importance of providing housing finance to population groups that may not have well-established credit histories or well-documented sources of income. In response to their needs, a non-prime mortgage market has developed in Canada, as in some other countries, most notably in the United States, where subprime mortgages accounted for 21 percent of originations and 15 percent of mortgages outstanding in 2006.<sup>18</sup>

The Canadian non-prime mortgage market is small by comparison, with about 5 percent of originations (Figure 8) and less than 3 percent of mortgage loans outstanding (Bank of

<sup>18</sup> Furthermore, the Alt-A segment amounted to another 25 percent of originations and 15 percent of outstanding mortgages.

Canada, 2007b). It is also smaller than the non-conforming markets in the United Kingdom,<sup>19</sup> although it has been growing at a similarly high rate. On the other hand, it is larger than Australia's non-conforming market,<sup>20</sup> and is far more developed than in most other countries. It should be noted, however, that in Canada the non-prime market extends very little beyond the “near prime” and Alt-A segments, so these loans are much less risky than typical subprime loans in Australia, United Kingdom and the United States (CGFS, 2006), which is reflected in the low level of delinquencies on Canadian non-prime loans (Bank of Canada, 2007b).



The small size of the Canadian non-prime mortgage market reflects the fact that large domestic banks, which dominate the financial system, have shown little interest in that segment. Non-prime loans are more risky. They are also more labor-intensive, both because more aggressive collection effort is required and because lending decisions are more

<sup>19</sup> Estimates of non-conforming, or “adverse-credit” mortgage lending in the United Kingdom vary from 6 to 10 percent of total originations in 2006. The Bank of England (2007) estimates the share of adverse credit mortgages to be about 3-4 percent of outstanding stock, but its definition, which includes only loans to borrowers with a history of significant debt arrears, appears to be more restrictive than that used in Canada.

<sup>20</sup> According to the Reserve Bank of Australia (2005, 2007), non-conforming housing loans represent up to 4 percent of originations and around 1 percent of outstanding mortgages.

complicated and are not relegated easily to an automated underwriting program.<sup>21</sup> Reflecting their risk-averse attitude and comfortable margins in their core businesses,<sup>22</sup> the big banks have stayed away from that market.<sup>23</sup>

Some niche players are active in this market, but given the small size of the “competitive fringe” in the Canadian banking system, the scale of their operations is minor. These actors are heterogeneous and include federally-regulated trust companies, subsidiaries of U.S. companies, and some non-federally-regulated, but publicly traded entities. Some of these have a deposit base to fund mortgages, while others, following the U.S. practice, rely on securitization. Asset-backed commercial paper (ABCP) and, to a smaller extent, longer-term asset-backed securities have become the primary vehicle for securitizing uninsured mortgages.

Mortgage insurance is mandatory for mortgage loans provided by federally regulated financial institutions with the loan-to-value (LTV) ratio exceeding 80 percent.<sup>24</sup> Until very recently, mortgage insurance was not available to non-prime customers, which precluded them from getting a relatively high LTV loan from a domestic bank, even if a bank were willing to offer it. However, in the last couple of years mortgage insurance products have been introduced for customers who have experienced a credit setback and for the self-employed (Bank of Canada, 2006). This paves the way for large financial institutions to get involved in the non-prime market if they are interested, but the measures are too recent to have had a noticeable impact on the market yet.

With insurance, the judgment of the insurer on the creditworthiness of the borrower is largely substituted for the lender’s judgment, since it is the insurance company that assumes the risk. The Canadian Mortgage and Housing Corporation (CMHC—the largest, state-owned mortgage insurance company in Canada) has indicated that underwriting standards on interest-only, long-amortization, low-documentation, and high-LTV loans are quite strict. In particular, high-ratio mortgages are generally available only to prime borrowers. This avoids risk-layering, which got some U.S. lenders into trouble, but limits access to housing finance. In addition, the limit on LTV is 107 percent in Canada, compared with 125 percent in the United States and the United Kingdom (DBRS, 2007b).

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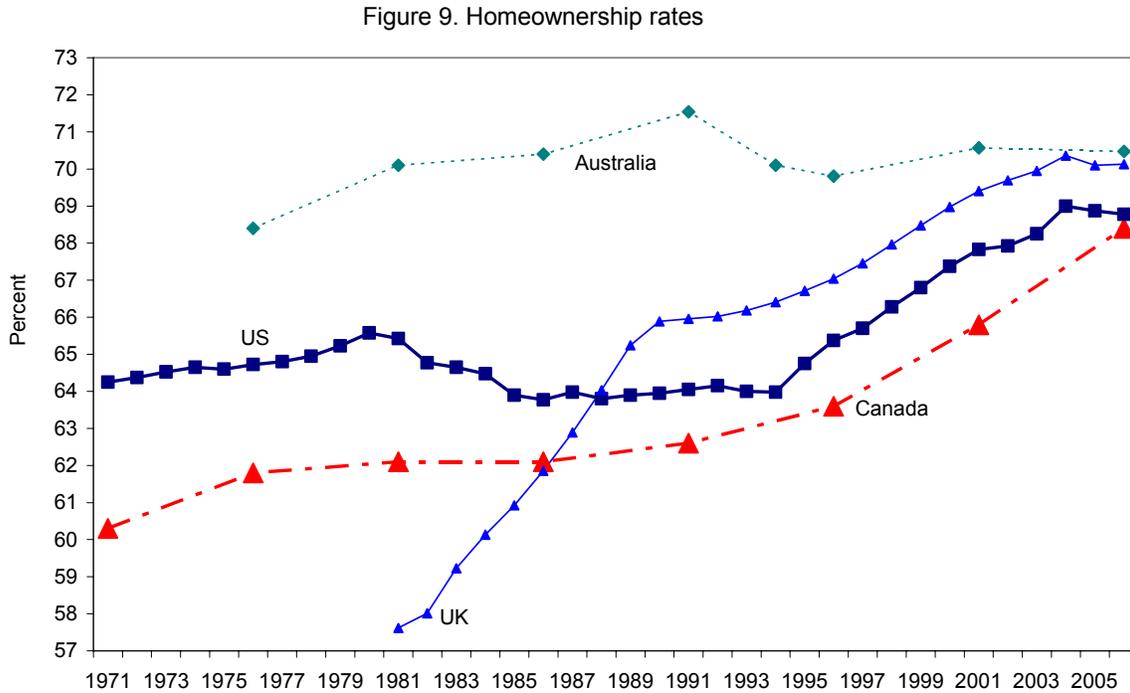
<sup>21</sup> Although that practice was used, and abused, in the United States.

<sup>22</sup> Unwillingness to incur a reputation risk, with involvement in non-prime mortgages requiring more aggressive collection efforts, potentially generating negative publicity, may also have played a role.

<sup>23</sup> While large U.S. banks typically do not offer subprime loans either, many of them are involved via subsidiaries.

<sup>24</sup> The threshold was 75 percent until April 20, 2007.

A question may arise whether the embryonic state of Canada's non-prime market is a major barrier to home ownership. The rate of homeownership is not much lower in Canada than it is in the United States, with its flourishing (until recently) non-prime market. Indeed, Canada's rate of homeownership has been climbing steadily, with its growth accelerating around 1991, and particularly over the last decade (Figure 9). The current rate of homeownership in Canada at 68.4 percent is just a whisker below that in the United States and a couple of percentage points lower than in Australia and the United Kingdom.



Sources: U.S. Census Bureau; Statistics Canada; U.K. Communities and Local Governments; Australian Bureau of Statistic.

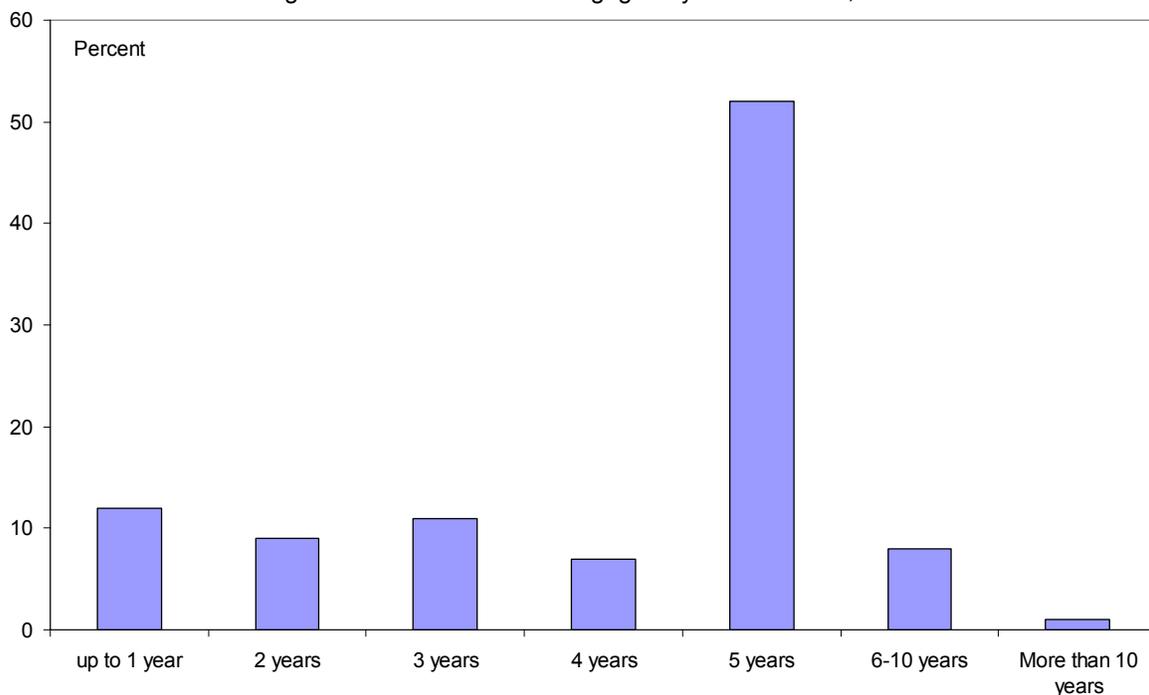
This point cannot be dismissed lightly, and it may present prima facie evidence that access to housing finance by marginal borrowers is unhindered in Canada. At the same time, it is worth mentioning that among 119 countries for which the International Union for Housing Finance has data, Canada has the 76<sup>th</sup>-highest rate of home ownership.<sup>25</sup> One would not want to equate this with Canada's ranking in terms of quality or accessibility of housing finance. While an exploration of international trends in homeownership is well beyond the scope of this paper, undoubtedly factors other than mortgage finance—such as history, culture, demographics, mobility, attitudes to home ownership, availability of social housing and many others—play an important role.

<sup>25</sup> The United States is in the 62<sup>nd</sup> place.

### C. Choice of instruments

By far the most prevalent form of housing finance in Canada is a 5-year fixed rate mortgage with a 25-year amortization term<sup>26</sup> (Traclet, 2005; Figure 10). Starting in the early 2000s, partly in response to a decline in short-term interest rates relative to long rates, variable-rate mortgages and shorter-maturity mortgages have become popular. While in 1999 variable-rate mortgages accounted for less than 5 percent of all residential mortgages, by 2005 their share rose to about 30 percent.<sup>27</sup> For fixed-rate mortgages, amortization terms of up to 40 years have lately become available, prompted by recent decisions of the CMHC and Genworth Financial to offer insurance on such mortgages.

Figure 10. Distribution of mortgages by term. Canada, 2006



Source: Canadian Association of Accredited Mortgage Professionals.

In the United States, a range of affordability products with low introductory rates and flexible repayment terms have gained popularity this decade (Klyuev and Mills, 2006).<sup>28</sup> While their

<sup>26</sup> Constant monthly payments on a new mortgage are set up in such a way that they would allow the mortgage to be repaid in full, with interest, in 25 years. At the end of the 5-year term, the borrower makes a balloon payment for the principal outstanding or, more typically, renews the mortgage for another 5-year term.

<sup>27</sup> The share of variable-rate mortgages shrank to about one-quarter of the total market in 2006, as short-term rates rose.

<sup>28</sup> Some of these products, such as option ARMs, were originally conceived as “flexibility products” for people with high, but uneven income streams. However, the option of keeping initial payments low has largely turned them into “affordability products” in practice.

imprudent use may have helped fuel a housing bubble, they have given access to home ownership to millions of poor, minorities, recent immigrants, and other people for whom owning a house had been beyond reach. Canada has also seen the introduction of some of these products in the last couple of years (see Box 1), but the choice is not as broad, and the scale is rudimentary.<sup>29</sup> For example, interest-only mortgages are offered only to borrowers with high credit scores, and comprise a very small share of the market.

A peculiar feature of the Canadian mortgage market is the near absence of long-maturity mortgages. Only 6 percent of mortgages outstanding in June 2005 had maturities of 10 years or more (Tractlet, 2005), and those were mostly bunched at 10 years. This contrasts with the situation south of the border, where a 30-year fixed rate mortgage remains the most widespread product, although not as dominant as it used to be.

Several explanations have been put forward for this phenomenon. Some suggest cultural differences between Canadian and Americans. For historical reasons, Canadians are not used to long-maturity mortgages. Also, they are more averse to being loaded with debt, and therefore would prefer to take out a shorter-maturity loan and try to repay it as soon as possible. Lack of mortgage-interest deductibility also reduces incentives for indebtedness. However, what matters for the speed of repayment is the amortization term, not maturity. The latter is much longer than the former in Canada and only marginally shorter than what is typical for the United States. In addition, the eagerness to repay mortgage obligations as soon as possible does not seem consistent with the willingness to tolerate relatively high prepayment penalties.

Their existence has also been proposed as a reason for the borrowers' unwillingness to borrow at long maturity. However, given that prepayment penalties are capped by law at 3 months of interest on outstanding balance, the penalty would be the same for prepaying a 25-year-maturity mortgage as a 5-year-maturity one on the same amortization schedule. The difference arises only if the borrower wants to avoid the penalty altogether and chooses to wait until maturity before repaying the mortgage in full. However, the need to repay typically arises when the borrower has to move, and following most life events that drive a decision to move, waiting till the expiration even of a 5-year term is unlikely. In addition, the portability option that is increasingly available attenuates the concern about the need to prepay the existing mortgage when moving.

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<sup>29</sup> Interestingly, considerable amount of innovation occurred in the mortgage insurance market, where it may have been driven by the entry of new competitors.

### **Box 1. Recent mortgage innovation in Canada**

#### Entry of new private insurers

Until recently, the mortgage insurance market was split between the government-owned CMHC and one private company, Genworth Financial. Since the fall of 2006, two new private insurers have started operations. One more private insurer has recently received federal regulatory approval and is awaiting provincial licenses to start operations.

#### Expanding the pool of NHA-MBS-eligible mortgages

Adjustable-rate mortgages became eligible for NHA MBS and for CMB in 2005.

Mortgages insured by a second private insurer became eligible to be included in NHA MBS pools in 2007.

#### Broadening eligible sources of funds for minimum down payment

Since 2003 and 2004, respectively, Genworth Financial and CMHC have allowed the down payment to be borrowed, as opposed to coming from unencumbered funds. This has paved the way for some banks to offer zero down payment mortgages.

#### Insured mortgages for self-employed

CMHC introduced in 2007 a mortgage insurance product designed for self-employed people who have difficulty documenting their stated income; Genworth Financial has been offering a similar “Business for Self” product since early 2006.

#### Insurance for maturities over 25 years

CMHC and Genworth Financial announced an increase in the maximum amortization period allowed for insured mortgages to 30 and 35 years, respectively. Subsequently the limit has been moved to 40 years.

#### Interest only (IO) mortgages

This product is structured as a three- to five-year balloon in Canada and is offered only to borrowers with high credit scores. IO mortgages have been eligible for CMHC insurance since 2006.

#### Growing role of mortgage brokers

The percentage of Canadians relying on a mortgage broker has increased from 14 percent in 1999 to 26 percent in 2003 and nearly 30 percent in 2006 (which is still considerably lower than 70 percent in the United States).<sup>30</sup> The growth of this industry was spurred by its consolidation and by the entry of virtual banks (such as ING DIRECT), which may have a symbiotic relationship with brokers. Non-prime lenders operate mainly through brokers.

#### Home Equity Lines of Credit (HELOC)

While not a new product, HELOCs have grown in importance over the course of the 2000s (Bank of Canada, 2007a). Unlike in the United States, Canadian HELOCs are generally first-lien mortgages providing payment flexibility to prime borrowers.

#### Introduction of covered bonds

In June 2007, the Office of the Superintendent of Financial Institutions (OSFI) allowed financial institutions to issue covered bonds up to 4 percent of their total assets. The Royal Bank of Canada (Canada’s largest bank) is preparing the first issue, to be covered by a pool of its mortgage loans.

<sup>30</sup> Canadian mortgage brokers only link borrowers and lenders, but do not originate mortgages.

All in all, explanations relying on the lack of interest from the borrower appear shaky, although they cannot be dismissed completely. More credible are reasons for the banks' lack of interest, of which there are two. One is the unwillingness of the banks to be exposed to prepayment risk. The other is the lack of matching funding instruments. The big banks mostly keep the mortgages they originate on their balance sheets. The primary instruments used for financing residential mortgages are fixed-term deposits, such as Guaranteed Investment Certificates (GIC), whose maturity extends from one to five years. Securitizing mortgages could be an alternative way of funding. However, securitization is not as widespread in Canada as it is in the United States and some other countries (see below), and mostly applies to insured (i.e. relatively high LTV) mortgages, which constitute less than 50 percent of the market (DBRS, 2007a).

Proponents of consumer-centric explanations for the lack of long-maturity mortgages point out that such mortgages have been offered occasionally, and the popularity was very low. Skeptics counter that such mortgages were subject to very steep prepayment penalties, before the law set a cap, and featured substantially higher interest rates than 5-year mortgages.<sup>31</sup>

#### **D. Mortgage securitization**

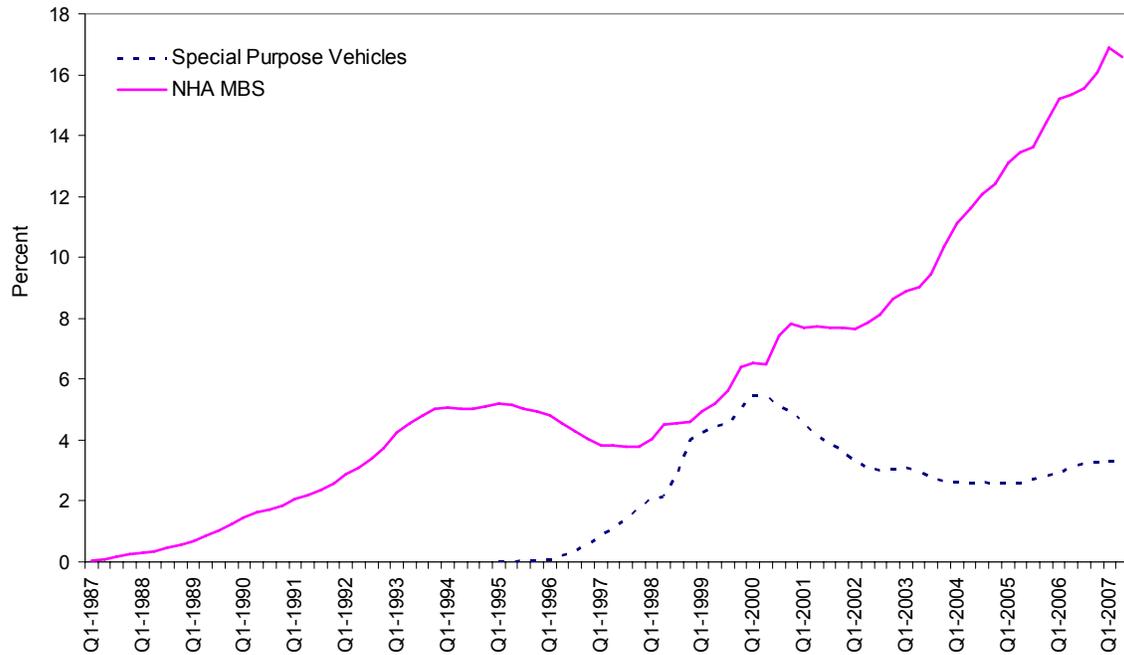
The paucity of non-prime and long-term mortgages may be related to the relatively small mortgage securitization market. Only about one fifth of outstanding mortgages are securitized. One often-cited reason that the securitization market is not better developed in Canada is that close to 50 percent of mortgages are fully insured. Since insured mortgages carry zero risk weight in regulatory capital calculations, this eliminates one reason to move them off balance sheet. However, paradoxically, close to 85 percent of mortgage-backed securities—so called NHA MBS (see Box 2)—are backed by insured mortgages, and that market has experienced vigorous growth (Figure 11).

A smaller portion is securitized through special purpose vehicles. This segment took off with remarkable gusto in the second half of the 1990s, ran into difficulties after the collapse of the financial bubble in the early 2000s, and had been recovering since 2005, with funding mostly channeled through asset-backed commercial paper. This source of funding, however, has been undermined recently by a turmoil in the Canadian, as well as global, ABCP market. Covered bond issuance may be an alternative way to proceed.

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<sup>31</sup> More recently, the posted rates on longer-maturity mortgages may not have been much higher than on shorter-maturity ones, but banks are much less willing to provide discounts on the former than on the latter.

Figure 11. Securitization as percentage of mortgages outstanding



Source: Bank of Canada

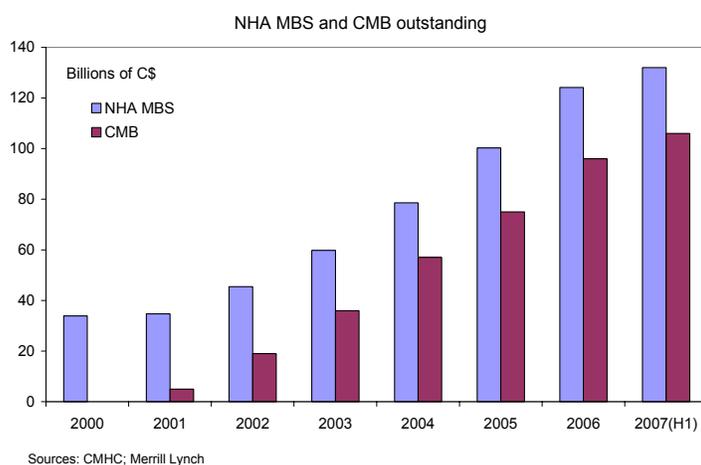
Another reason put forward for why Canadian banks do not securitize a larger share of mortgages is that mortgages in Canada tend to be of relatively short duration. Hence, they subject the bank to relatively little interest rate risk, and can be funded by matching instruments, such as GICs, on the liability side. This, however, appears to be an example of a chicken and egg problem, since the low level of securitization is in turn posited as a reason for the short tenor of Canadian mortgages. The lack of pressure on Canadian banks to offer long-maturity mortgages on attractive terms, which would prompt larger recourse to securitization, could potentially explain both sides of this issue.

### Box 2. National Housing Act mortgage-backed securities

Mortgage securitization in Canada takes predominantly the form of National Housing Act Mortgage-Backed Securities (NHA MBS). This program was launched by the CMHC in 1987 under the aegis of the amended National Housing Act aimed at improving housing and living conditions for Canadians. Under the program, conduits pool mortgages and issue pass-through MBS. Only insured loans can be pooled into NHA MBS, although the insurer does not have to be the CMHC. Hence, the issuer is protected against the borrowers' default. Moreover, the CMHC guarantees payments against the default of the issuer. Since the CMHC is a Crown Corporation, this is essentially the guarantee of the Government of Canada. With this multi-layered protection, NHA MBS are very safe.

However, because of prepayment risk, NHA MBS did not find a broad market when they were introduced.<sup>32</sup> To give a boost to MBS issuance and provide fresh funds for housing finance, the Canada Mortgage Bond (CMB) program was established in 2001. Under the program, NHA MBS are assembled in the Canada Housing Trust, which issues 5-year bonds backed by those MBS and by a CMHC guarantee.<sup>33</sup> The bulk of NHA MBS currently go into the trust. CMBs, which pay a slightly higher rate than Government of Canada securities, but are perceived as almost as safe, have proved popular with both domestic and foreign investors, and helped boost the size of the NHA MBS market from less than 2 percent of outstanding mortgages in 1990 to 17 percent in 2006.

There are about 30–40 approved issuers of NHA MBS, not all of whom are active. This number includes large and small domestic banks and foreign banks. The issuers have to satisfy certain standards, which, according to the CMHC, are prudent, but not onerous. Characteristically for the Canadian financial system, for those issuers that do satisfy the standards, all conditions are the same—the CMHC does not charge higher fees to riskier issuers.



<sup>32</sup> Until June 2005, only fixed-rate mortgages could be included in the NHA MBS pools.

<sup>33</sup> There has also been a limited number of floating rate note offerings.

#### IV. CONCLUSIONS

In summary, while it is hard to make a strong case that small borrowers as a whole suffer as a result of high degree of concentration of Canada's banking system and protected position of large financial institutions, riskier borrowers appear underserved.

As everywhere, small and medium-size enterprises experience certain difficulties in obtaining formal financing. However, these difficulties do not rank high on the SMEs' list of concerns, and do not appear particularly severe in international comparison. A number of government initiatives support SME growth, and political pressure, if not commercial interest, makes sure banks are responsive to the needs of SMEs. The bulk of loan applications from SMEs are approved, and financing is available not only from chartered banks, but also from credit unions and other financial institutions. At the same time, some problems have been identified in the relationships between SMEs and banks, such as high turnover of account managers and insufficient delivery of complementary services.

There remains an issue of financing riskier ventures. Canadian banks appear unwilling to price risk, instead rationing out borrowers whose riskiness exceeds their fairly low comfort level. Given the banks' attitude, venture capital would be a particularly important source of risk capital. Unfortunately, several problems beset the VC sector in Canada, possibly reflecting the dominance of labor-sponsored funds. As a result, the performance of the Canadian VC industry is quite poor, and its contribution to the development of the SME sector is inadequate. Since the most innovative ventures are often the most risky, insufficient risk finance has negative implications for productivity growth.

The mortgage market is quite well developed in Canada. Reflecting the regulatory emphasis on stability, the conservative lending practices of domestic banks, which are the most important players in this market, and their protected position, this market brings safe and comfortable returns to Canadian banks. The consumers are served well, as evidenced by high and growing rates of homeownership. At the same time, the choice of instruments available to borrowers is not as wide as elsewhere. The options have broadened substantially in the last few years, but the results of recent innovation are yet to be felt. The non-prime sector is small even compared with the pre-2004 U.S. market, when the excesses had not yet started to undermine the fundamentally sound idea, and there is certainly room to grow. It would be regrettable if this fledgling market suffered a setback as a result of a fallout from the ABCP crisis or from the U.S. subprime woes.

Returning to the theme that motivated this project, the protected and oligopolistic nature of the Canadian banking system does appear to impose certain costs on the economy. While financing is broadly adequate, Canadian SMEs could use improvement in bank-provided services, and financing of riskier ventures may be inadequate. Canadian households have a relatively small choice of instruments for mortgage finance, and they face prepayment penalties. Despite recent expansion, the options for self-employed home buyers or those with

impaired credit histories remain quite limited. On securitization, which could be an important source of housing finance (including by tapping the foreign market), particularly for longer-term and higher-risk mortgages, and might also broaden portfolio choices for domestic investors, Canada trails not only the United States, but also Australia, the United Kingdom, and a number of continental European countries. Many of these issues stem from the banks' risk aversion and their unwillingness to price risk.

On the upside, Canada's financial system boasts remarkable stability. In this respect, the Canadian policymakers face two questions. First, they should decide which position on the efficiency-stability tradeoff they want their country to occupy. Second, some of the issues do not necessarily involve a tradeoff between stability and efficiency. In certain areas, like non-prime mortgages, the tradeoff is obvious. In others, like the availability of longer maturity mortgages, it is not clear that constraining the borrower's choice enhances financial stability. Resolving such issues would make Canada's economy more efficient without compromising the renowned stability of its financial system.

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