# THE CANADIAN EXPERIENCE WITH MORTGAGE-BACKED SECURITIES: AN ASSESSMENT OF THE 1980s AND THE OUTLOOK FOR THE 1990s

by

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Submitted to the Center for Real Estate Development
at the Massachusetts Institute of Technology
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**ABSTRACT**

In contrast to its American neighbor, Canada's experience with mortgage-backed securities is very recent and stems from different policy goals. MBSs were introduced in the U.S. twenty years ago to avoid interruptions in the flow of funds. In contrast, Canada introduced MBSs to lengthen residential mortgage terms and to bring some order and stability to the residential mortgage market after experiencing debilitating mortgage rates of 20% and 22% in 1981-1982.

So far securitization has had no impact on lengthening mortgage terms. In fact, the Canada Mortgage and Housing Corporation is about to introduce shorter term MBSs because its original five-year product is lagging. In two instances however, securitization has proved that it can reduce the cost of funds to homeowners.

This thesis attempts to explain the relevance of the MBS market to lowering the cost of funds and to lengthening mortgage terms. This thesis also highlights the difficulties and the resistance encountered in trying to extend the MBS market.

The conclusion reached is that the MBS market has the potential to promote longer term mortgages and to lower the cost of funds and that the preponderance of banks in the mortgage market is a significant hurdle to longer mortgage terms and to the use of MBSs. In that respect the development of mortgage securitization in the 1990s hinges on the dynamism and on the assertiveness of Canadian mortgage loan and trust companies and of specialty niche players.

National Housing Act Mortgage-Backed Securities (NHA MBSs) do offer opportunities for lengthening mortgage terms provided that the CMHC shows leadership in pursuing that goal and provided that changes to the Canada Interest Act regarding prepayment penalties are enacted.

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**ACKNOWLEDGEMENTS**

Students at the Center for Real Estate Development were forewarned early on in the year to choose a thesis topic they really liked because they would have to live with it twenty-four hours a day for an entire summer. I enjoyed researching the topic of mortgage securitization and I enjoyed writing about it. This is due in large part to the consistently warm welcome with which my requests for interviews and information were greeted.

I am particularly indebted to Jim Cataldo of the Office of Thrift Supervision in Boston for his guidance and gentle nudges during my research, and I would like to thank Marc Louargand for suggesting that I work with Jim.

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## TABLE OF CONTENTS

Page

ABSTRACT. . . . . . . . . . . . . . . . . . . . . . . . . 2

ACKNOWLEDGEMENTS. . . . . . . . . . . . . . . . . . . . . 3

INTRODUCTION. . . . . . . . . . . . . . . . . . . . . . . 5

CHAPTER ONE

1.1 The Canadian Financial Landscape. . . . . . . . . . 13
1.2 Roll-over Mortgages in Canada . . . . . . . . . . . 17
1.3 Mortgages: a Definition . . . . . . . . . . . . . . 20

CHAPTER TWO

2.1 Aspects of Securitization . . . . . . . . . . . . . 24
2.2 The Canadian Experience with Securitization . . . 26
2.3 Investors' Reaction to NHA MBSs . . . . . . . . . . 29
2.4 Changes to the NHA MBS Program. . . . . . . . . . . 31

CHAPTER THREE

3.1 The Rigidity of the Short-Term Mortgage Market. . 34

CHAPTER FOUR

4.1 A Lower Cost of Funds . . . . . . . . . . . . . . . 38
4.2 Prospects for Longer Term Mortgages . . . . . . . . 40
4.3 The Outlook for Mortgage Securitization in Canada . . . . . . . . . . . . . . . . . . . 41

CONCLUSION. . . . . . . . . . . . . . . . . . . . . . . . 44

TELEPHONE INTERVIEWS. . . . . . . . . . . . . . . . . . . 47

REFERENCES. . . . . . . . . . . . . . . . . . . . . . . . 48

NEWSPAPER ARTICLES. . . . . . . . . . . . . . . . . . . . 50

# INTRODUCTION

In 1981 and 1982 Canadian homeowners were forced to renew their mortgages at double-digit interest rates of 20% to 22%. Because of the particular structure of the Canadian residential mortgage, better known as the "roll-over" mortgage, most Canadian homeowners renew their mortgages at least every five year if not more often. It follows that the 1981-1982 period was particularly painful because of the large number of owners who had to renew. In comparison, American homeowners were less affected by these rates because, at that time, mortgages in the U.S. tended to have twenty-five to thirty-year terms.

This unfortunate period resulted in increased defaults on loans and in a stalling of the construction industry. In an effort to avoid a repetition of this phenomenon and to correct somewhat the anomalies that this period had brought to light, the Canadian Government introduced three measures in its 1984 budget. The first one consisted of interest rate insurance where, by paying a fee of 1.5% of her mortgage principal, a homeowner would be protected against any rate increase of more than two percentage points over her current mortgage interest

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**<u>NOTE</u>: Unless otherwise specified in the text, all figures are in Canadian dollars. At the time of this writing the Canadian exchange rate for an American dollar was approximately 1.1556.**

rate at the time of renewal.[1]

The second measure was intended to instill some order regarding prepayment penalties that lenders could charge borrowers. The decline in mortgage rates from 20% or more in 1981-1982 to 13% in 1984 had spawned a hot debate over mortgage prepayment privileges. For obvious reasons borrowers wanted out of their high-rate loans and lenders balked at their demands. The law regarding prepayment was very murky. The federal government wanted to add a regulation into the Interest Act requiring prior disclosure by lenders of all mortgage terms and conditions, including prepayment privileges. Further, it suggested a maximum penalty for prepaying - the present value of the difference, over the rest of the mortgage term, between current market rates and rates at the time of the original contract. In other words, the lender would be fully compensated for lost income. The budget also recommended permitting mortgages with original terms of more than five years to be prepaid any time after five years with a maximum of three months interest penalty.[2]

Finally, the third measure was intended to pave the way for the introduction of mortgage-backed securities, a

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[1]The Mortgage Renewal Protection Plan (MRPP) has not been very successful. In the 1984-1990 period, fewer than one hundred applications were processed and, of these, only two claims have been presented thus far.

[2]The prior disclosure clause and the three months maximum prepayment penalty clause were enacted, the other was not.

financial instrument very much used by Americans to promote the flow of capital. Changes to the National Housing Act (NHA) would empower the Canada Mortgage Housing Corporation to give a "timely payment guarantee" on ten-year securities issued in the capital market by financial institutions and backed by pools of ten-year NHA-insured mortgages.

This thesis looks at what has happened since 1984 to the third measure: mortgage-backed securities. The stated intent of legislators when introducing MBSs was to lengthen current mortgage terms (which were five years maximum at that time) and to bring some order and stability to the residential market. Changes in government slowed down the adoption of legislation allowing CMHC to issue MBSs so that the first issue was securitized and offered to the market only in January of 1987. During the process of implementation the projected ten-year term was brought down to five years.

The topic of mortgage-backed securities should be of particular interest to anyone involved in the delivery of affordable housing in Canada because MBSs can potentially reduce the cost of funds. Experience suggests that in the housing delivery process there are six areas of intervention through which the cost of housing can be reduced:

1. **LAND**

   o Increasing building density on land and thus reducing

the price of a unit as demonstrated by BRIDGE, a San Francisco-based non-profit developer.

- o Entering into land leaseholds thus reducing the "up front cost" and "spreading" the financial effort over the period of ownership, a strategy used in Montreal by housing cooperatives.
- o Making better use of land by, for example, designing zero lot lines houses as Perini Development recently did in a Palm Beach housing project.

2. CONSTRUCTION METHODS

- o Applying industrialization methods like modular housing in order to save on construction time and financing.
- o Investing sweat equity or providing unfinished spaces.
- o Finding the right balance between building code requirements and risk.

3. TENURE

- o Redefining "established" concepts of homeownership (e.g., two single-parent families living under the same roof, small cottages in the backyard for elderly parents).

4. COST OF FUNDS

- o Lowering the cost of funds both in the construction phase and in the permanent financing.

5. **TYPE OF FINANCING**

- Designing and offering a variety of mortgage products that better reflect varying household needs.

6. **FISCAL POLICIES**

- Implementing fiscal policies lightening the burden of owning a house.

Having developed housing in inner city neighborhoods, the author has experienced first hand the difficulties and limitations of using strategies such as modular housing on fifty by one hundred foot in-fill lots or of obtaining zoning variances to increase building density. Alternative land strategies, innovative design and construction methods do offer opportunities for savings but are not as easily applicable in an urban context as they are in suburban settings. A lower cost of funds, on the other hand, applies anywhere and is probably the most effective way to improve affordability. For example, a drop of one hundred basis points (from 11% to 10%) on a $100,000 mortgage loan amortized over twenty-five years will result in savings of $857 per year. To obtain the same reduction through innovative land use and tenure or through innovative design and construction methods, one would have to come up with $7220 worth of savings or cuts. That is, a mortgage of $92,780 at 11% requires the same payments as a $100,000 mortgage at 10%.

A 1988 study sponsored by McKinsey and Company suggests

that the widespread use of mortgage-backed securities in the U.S. has significantly decreased the cost of funds:

> Asset-backed securitization can provide borrowers with cheaper sources of funds. This benefit is already evident in residential mortgages. Homebuyers are now paying approximately 100 basis points less in interest (versus U.S. Treasury Yields) on fixed-rate mortgages than they were a decade ago when mortgage securitization was much less pervasive.[3]

The Canada Mortgage and Housing Corporation reports that through the use of its Competitive Financing Renewal Program (CFRP) it has reduced the cost of funds for the social housing projects it subsidizes by approximately one hundred and fourteen basis points. Toronto-based FirstLine Trust which makes extensive use of mortgage securitization regularly posts interest rates that are seventy-five basis points below all its competitors for five-year mortgages.

These observations seem to suggest lower interest rates for mortgages issued through securitization. They also raise the following questions: if securitization does bring costs down, why is it not taking off more quickly and what are the prospects for homebuyers to see, sometime in the future, their cost of borrowing go down?

Another reason why mortgage securitization should be of interest to those concerned with affordable housing is its

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[3]Rosenthal J. and Ocampo J., An Introduction to Credit Securitization, John Wiley & Sons Inc, Toronto, 1988, 266 pp. p.12.

potential to lengthen lending terms. In Quebec, two-thirds of all bank accounts are registered with Les Caisses Populaires Desjardins. In July 1990 Les Caisses Populaires offered mostly one-year renewable mortgages to reflect and match the preponderance in its portfolio of one-year term deposits. The uncertainty associated with renewing a mortgage every year at an unknown and uncapped rate does not promote homeownership and affordability for obvious reasons. Most first-time homebuyers would prefer locking-in a longer term mortgage (with fixed payments for the next ten years) than going through the roller-coaster experience of yearly renewal and spending habits adjustments. Furthermore, one-year renewable mortgages imply that, when buying a house, most Canadians do not know how much the most important purchase of their life will end up costing them.

The lengthening of mortgage terms in Canada is a sensitive issue as indicated by the results of interviews conducted for this research. Although most of the people interviewed agreed on the relevance of longer term mortgages for first-time homebuyers, few agreed on its feasibility. Some say that the structure of credit and debt in Canada is short-term and that going against the grain is not a viable option. Others suggest that consumers' resistance to longer terms and the chartered banks' quasi monopoly of the mortgage market are both significant impediments to change.

For now it seems that proponents of short-term mortgages are winning since the CMHC should start issuing one-year and three-year mortgage-backed securities in the fall of 1990.

This thesis assesses the Canadian experience with mortgage-backed securities in the 1980s and discusses their outlook for the 1990s in the context of housing affordability.

The first chapter sets the stage by presenting a quick portrait of the financial landscape in Canada, identifying the players and their relative importance. This portrait is followed by a "primer" on roll-over mortgages. Chapter Two looks at aspects of securitization in general and at private and CMHC experiences with mortgage securitization. It then examines investors' reaction to mortgage-backed securities and looks at the changes that were enacted in the first three years of the program and at the changes that are being contemplated for the future. In the third chapter we look at the pros and cons of lengthening mortgage terms and at the forces at play when trying to lengthen them. Chapter Four builds on the matters discussed in Chapter Three and assesses the future of mortgage-backed securities in the context of cost of funds and of longer mortgage terms.

# CHAPTER ONE

## 1.1 THE CANADIAN FINANCIAL LANDSCAPE

Canada is a land of contradictions. Although it ranks second in land area its population of 26 million makes it one of the smallest countries in the world.

Canada comprises ten provinces and The Northwest Territory, a federal government protectorate. The population is located mainly in Ontario (approximately 9.5 million) and in Quebec (approximately 6.7 million) with British Columbia (approximately 3 million) being the next most populous province.

For most of its history Canada has been dominated by four financial. forces often referred to as the Four Pillars of the Canadian financial industry. They are chartered banks, life insurance companies, trust companies and investment dealers. These four original institutions have been joined over the years by others such as credit unions and mortgage and loan companies.

Table 1 provides an indication of the comparative asset size of Canadian financial institutions in 1986 and in 1990. It should, of course, be understood that the asset size does not fully reflect the importance of the role of institutions that provide services on a fee basis, such as investment dealers and insurance companies. However, it does provide a reasonable indication of comparative resources:

Table 1

**Assets of Canadian Financial Institutions**
($Billions)

| | 1986 First Quarter | 1989 Fourth Quarter |
|---|---|---|
| Chartered Banks | 296.4 | 390.0 |
| Trust Companies | 70.7 | 119.8 |
| Mortgage Loan Companies | 50.6 | 117.5 |
| Life Insurance Companies | 97.9 | 105.1 |
| Local Credit Unions | 45.0 | 65.8 |
| Investment Dealers | 15.3 | 16.2 |

---

Source: Financial Institutions, Financial Statistics, fourth quarter 1989, Statistics Canada, Catalogue 61-006, Vol 27, No 4.

As of February 1990, outstanding residential mortgages in Canada were estimated at $221 billion. Table 2 presents a breakdown of this amount among the main residential mortgage lenders. The eight "Schedule A" chartered banks own 43.4% of all residential mortgages in Canada. Interestingly enough the dominance of chartered banks is fairly recent. Until 1960 life insurance companies used to dominate the market with 49% of all residential mortgages. As we will see in section 1.2 this reversal of the situation is explained by changes in the legislation governing the banking and mortgage industry in the

last twenty years and by the larger branch network of banks as compared to other mortgage lenders.

Even more interesting is the fact that "Schedule A" chartered banks are limited by the Canada Banking Act to holding only ten percent of their assets in mortgages and, in compliance with this limitation, they usually report holding only 2.5% to 3.0%. But banks effectively hold much more than their 10% limit. Data in Tables 1 and 2 suggest that banks together hold close to twenty-three percent of their assets in mortgages. In order to do so each of them has set up a mortgage subsidiary to which it sells its mortgages as soon as they are originated thus creating a captive secondary market. An example is the CIBC Mortgage Corporation which is a fully-owned subsidiary of The Canadian Imperial Bank of Commerce.

**Table 2**

**Outstanding Residential Mortgages by Lending Institutions**
($Billions)

| | **February 1990** | **% of total** |
|---|---|---|
| Chartered Banks* | 91.6 | 43.4 |
| Trusts, Mortgage and Loans | 69.0 | 32.7 |
| Credit Unions | 32.0 e | 15.2 e |
| Life Insurance Companies | 13.6 e | 6.4 e |
| Others | 4.9 e | 2.3 e |
| **TOTAL** | 211.1 e | 100 |

e: estimated
*: Schedule "A" banks and their mortgage subsidiaries

Source: Bank of Canada Review, May 1990, Bank of Canada.

For a very long time the Four Pillars each had very specific functions and were kept off each other's field by the federal and provincial governments. However, internationalization and globalization of finance has forced deregulation on Canada's financial industry and since 1987 legislation has been enacted to basically put the Four Pillars on the same footing. In 1987 for example, banks were allowed to own investment dealers. Mortgage and loan companies had previously been allowed to do commercial lending in response to banks being allowed to do residential mortgage lending in 1967.

It is generally believed that deregulation will result in the domination of the industry across the country by integrated financial conglomerates providing a complete range of services across all product lines. Medium-sized corporations are expected to disappear, giving way to small entrepreneurial niche players in specialty functions. This will be discussed in further detail in the last section of this paper.

## 1.2 ROLL-OVER MORTGAGES IN CANADA

Until 1969 the structure of residential mortgages in Canada was very similar to the structure of American residential mortgages. They were usually taken out for a term of twenty-five years and amortized over the same period. That year an amendment to the Canada Interest Act allowed for the adoption by the market of mortgage renewals every five years. This allowed banks and trust companies to match their assets (their mortgages) against their liabilities (the five-year trust certificates which provided them with their source of loanable mortgage funds). As we will see this fundamental change in the length of the term was brought about by the tightening supply of capital for long-term investments observed in the mid-sixties and by some rigidities highlighted by the 1960s mortgage market.

Starting in 1963 Canada experienced an upswing in housing starts as the pace of economic activity quickened and as an

upturn in the number of immigrants added to the demand for housing. The upward momentum in house building was, however, cut short in 1965 and housing starts declined sharply from late in that year through 1967 because of two anomalies:

For one, the revision of the 1954 Bank Act had put a cap of 6% on interest rates Canadian chartered banks could charge their customers. All through the 1950s chartered banks had been active in the residential mortgage market; however, in 1959, when interest rates on NHA mortgages exceeded the 6% ceiling, banks were virtually excluded from mortgage lending.

The other anomaly resided in the fact that ceilings on NHA mortgages set by the CMHC were kept much lower than private residential mortgages. As yields on other forms of investments increased, investors tended to shy away from mortgage lending and money started to dwindle away.

In addition to these two anomalies CMHC-sponsored studies tended to indicate that long-term funds would not be sufficient in Canada to fund the predicted explosive growth expected in housing for the 1970s and 1980s. The works of John V. Poapst on mortgages in Canada and on new financing mechanisms in the mortgage market published at the end of the 1960s were very influential in proving that point.

In response to these anomalies, the 1967 revision of the Bank Act removed the 6% ceiling on rates chartered banks could charge, allowing them to reenter the residential mortgage market. The companion provision, a 1969 amendment to the

Interest Act, allowing for five-year renewable mortgages was intended to permit a better flow of liquidity to the mortgage market by reducing the problem of unmatched assets and liabilities.

As Donald Lessard of M.I.T. noted in 1974, five years after the introduction of roll-over mortgages,

> The Canadian system for financing housing differs in a number of important respects from the U.S. system. Of greatest interest for this study is the absence of interest rate ceilings on deposits or mortgages and the fact that nearly all mortgages are of the "roll-over" variety with interest fixed for only a fraction of the total amortization period.
>
> These two differences, as we shall show, allow Canadian institutions to avoid the interruption in the supply of mortgage credit and the deterioration in reserve positions typical of U.S. institutions with their unmatched asset and liability structures and deposit rate ceilings. Further they have made mortgages attractive to institutional investors not specialized in housing finance.[4]

Interestingly, mortgage securitization was introduced in the U.S. around the same time shorter term mortgages were introduced in Canada. Mortgage-backed securities were developed as an instrument to help palliate the problems described by Donald Lessard and which were caused, among other reasons, by the fragmented nature of the American banking industry such as interstate banking regulations that do not allow banks to conduct business in more than three states. By

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[4]Lessard, Donald, Roll-Over Mortgages in Canada, Background Paper for Task IV (review of foreign experience) of MIT Alternative Mortgage Study, 1974, 27 pp, p.1)

developing mortgage-backed securities, Americans chose to keep long-term mortgages but enlarged the pool of investors through securitization. In contrast, Canadians enlarged the pool of investors by changing the mortgage instrument so that it would better match the nature of the available funds.

## 1.3 MORTGAGES: A DEFINITION

Kamal H. Sayegh writes[5] that the noun "mortgage" is derived from two French words: the adjective mort (dead) and the noun gage (pledge). He goes on to explain that the real estate pledge or the guarantee becomes extinct on payment or performance according to stipulated terms. A residential mortgage, as a form of credit, is a loan usually guaranteed by real estate property. A mortgage, as a document, tends to be a highly differentiated claim: it includes dates, names of borrower and lender, exact legal description of property, amount of debt and terms of prepayment among other items.

As illustrated in Table 3, the average size of a mortgage on new units in Canada was $88,487 in 1988 and $62,943 for existing units. It is estimated that, in 1988, 50% of all Canadian homeowners had a mortgage of some sort on their house.

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[5]Sayegh, Kamal H., Housing, A Canadian Perspective, ABCD Academy Book, Ottawa 1987.

Table 3

Average Size of Mortgages Broken Down by Lending Institutions
(Dollars)

| NEW UNITS | 1987 | 1988 |
|---|---|---|
| Banks | 84,365 | 92,586 |
| Trust Co. | 74,054 | 84,174 |
| Life Insurance Co. | 64,724 | 76,607 |
| Mortgage Loan Co. | 80,678 | 88,232 |
| TOTAL AVERAGE | 78,635 | 88,487 |
| **EXISTING UNITS** | **1987** | **1988** |
| Banks | 63,802 | 65,735 |
| Trust Co. | 53,435 | 65,854 |
| Life Insurance Co. | 31,212 | 35,369 |
| Mort. Loan Co. | 59,456 | 68,102 |
| TOTAL AVERAGE | 57,156 | 62,943 |

Source: CMHC Mortgage Market Trends, Canada Mortgage and Housing Corporation, Ottawa, July 1989.

As discussed previously, separating the mortgage term (the length of time for which the mortgage holds) from the amortization period (the length of time over which monthly payments are based) was the major innovation of roll-over mortgages. In Canada it is now possible to negotiate residential mortgages with terms of six months, one, two,

three or five years. The preferred term in 1989 was three years.

Amortization periods on the other hand vary from twenty-five to forty years, the standard period being twenty-five years. The longer the amortization period, the lower the payments because the borrower is able to repay the principal over a longer period of time. However, the longer the amortization period is, the higher the total amount of interest that has to be paid, because the borrower will use the principal for a longer period of time. At renewal, the amortization period is likely to be reduced by the number of years already amortized and the new payments will likely be based on the principal balance at time of renewal.

Loan to value ratios, that is the ratio of the loan amount (the principal) to the appraised lending value of the house being purchased, vary from 75% to 90%. Loans in excess of 75% are considered high-ratio loans. As required by The Canada Bank Act, high-ratio loans must be insured through CMHC NHA Insurance or through The Mortgage Insurance Corporation of Canada (MICC), a private mortgage insurance company.

The ratio of the monthly payments (principal, interest, taxes and fifty percent of condominium fees) to the borrower's monthly gross income (i.e. income before deducting income taxes) that lenders will accept varies between 25% and 32%. Lenders will generally not lend if the gross debt-service ratio exceeds 32% and if the total debt service ratio (i.e.

credit card, car loan, personal loan, etc) is greater than 42% because the CMHC will not insure such a loan. In the case of a married couple, income is now defined as including 100% of both spouses' earnings.

The contract rate of interest is usually calculated semi-annually in Canada as opposed to monthly in the U.S. A mortgage of 12% compounded semi-annually has an effective rate of 12.36% whereas the same nominal rate of 12% compounded monthly has an effective rate of 12.68%. Banks and life insurance companies usually calculate mortgages semi-annually, credit unions generally calculate mortgage interest monthly.

In addition to the interest rate, fees will include professional services required to provide the lender with the information needed to issue a mortgage. Fees will be paid for appraisers, land surveyors, lawyer or notaries. At the time of renewal, if a borrower does not change lender, the renewal fee will be around $150 to $175.

The Canada Interest Act requires lenders to specify very clearly their prepayment terms and conditions. Any loan longer than five years carries a maximum prepayment penalty of three months interest. Penalties for shorter term mortgages are not legislated. Borrowers have a choice between opened or closed mortgages. The opened mortgages carry an interest rate premium because of the borrower's right to prepay without penalty.

## CHAPTER TWO

### 2.1 ASPECTS OF SECURITIZATION

A 1987 report prepared for the Economic Council of Canada[1] estimates that in recent years over one thousand new financial instruments have been designed in the United States and that many of these innovations have also been introduced to Canada. One of these products, securitization, is not as recent but has experienced very rapid development in the last twenty years in part due to the increasing use of computers which allow for daily pricing and trading.

Securitization is considered a "market broadening" instrument because it increases the liquidity and breadth of markets by opening up opportunities for new borrowers and by attracting investors who would otherwise not have access to these investments.

Simply put, securitization is the process of assembling loans (mortgage loans, credit card loans, etc.) in pools that issue share units to individual or corporate investors. In the process, the original issuer in effect "sells" his loans but usually retains administration of them. What makes securitized debt attractive for investors is that, in securitizing a loan, a guarantee of payment is usually

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[1] A Framework for Financial Regulation, A Research Report Prepared by The Economic Council of Canada 1987, Minister of Supply and Services Canada, Ottawa 1987, 132 pp.

attached to the investment units. The quality of the guarantee is reflected in the yield.

Securitization increases the velocity of funds and allows investors who have different investment objectives to meet and complement each other. Short-term investors lend money for a month or two, securitize their loan and sell them to long-term investors. These short-term lenders then go on to make other loans with their original capital and repeat the process.

The other attractive aspect of securitization is that borrowers usually benefit through lower interest rates because securitization improves the quality of their debt. In other words, securitization reduces the risks associated with mortgage lending which usually translates into lower borrowing costs.

The American securitization market is fairly well developed. In fact, more than 35% of all outstanding residential mortgages in the U.S. have been securitized through The Government National Mortgage Association (GNMA, Ginnie Mae), The Federal National Mortgage Association (FNMA, Fannie Mae), The Federal Home Loan Mortgage Corporation (FHLMC, Freddie Mac) or Farmers Home Administration. American financial institutions like General Electric and Citicorp have also played an important role in securitizing mortgages.

Credit card debt and car loans have also been securitized by, among others, Republic Bank Delaware and Bank of America.

Anthony Downs explains how beneficial mortgage securitization has been to the American residential market:

> Secondary mortgage markets involve the resale of mortgages by their originators or holders to other holders, often through specialized intermediaries. (...) Secondary Mortgage markets were created to perform six basic functions: to increase the total size of capital flows into housing, to reduce greatly the cyclical instability of those flows, to increase the overall efficiency of capital allocation, to decrease the real costs of housing finance to consumers, to increase homeownership and to help the federal government finance certain subsidized housing projects. They have effectively carried out all these functions except greatly reducing the instability of housing capital flows, which is probably impossible.[2]

**2.2 THE CANADIAN EXPERIENCE WITH SECURITIZATION**

In Canada the mortgage securitization market is far less developed. The more conservative nature of Canadians might explain why an innovative product like securitization is lagging. Two other reasons probably play a greater role. For one, as explained by Donald Lessard, Canadian financial institutions tend to be better capitalized than their American counterparts, thus lessening the need for securitization. The other reason has to do with the important fiscal, legal and accounting problems raised by securitization as explained by Louis Vachon of Beaubien Lévesque Geoffrion and by Paul Robillard of Fiducie Desjardins. Given Canada's complex laws,

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[2]Downs, Anthony, The Revolution in Real Estate Finance, The Brookings Institution, Washington D.C., 1985, 345pp, p.24).

the 1986 NHA provisions allowing securitization of five-year mortgages are in fact considered loopholes.

In spite of all these problems banks and trust companies have been working (some for more than five years) at establishing a structure that would enable them to securitize mortgages. Very few have succeeded so far. Financial institutions are nevertheless interested in securitization because of the advantages they could derive from it. Securitization is seen as a potential safety valve which could be used by these institutions as a way to raise capital without issuing more shares. Sales of mortgage-backed securities would also be a good way to improve returns if these sales were considered off balance sheet operations by the Superintendent of Financial Institutions. They would then offer infinite return on equity to shareholders because, if they were considered off balance sheet operations, financial institutions would not be required to maintain reserves of risk capital on these assets.

Finally, all things taken into account, the existing CMHC NHA MBS program applies only to a small fraction of all outstanding residential mortgages. In 1988, with the help of a small computer program, La Fiducie Desjardins (a mortgage subsidiary of Mouvement Desjardins) looked at how much of its $1.2 billion residential mortgage portfolio would qualify for securitization through the NHA MBS program. It turned out that only $8.2 million worth of mortgages would have

qualified, the others having either shorter terms or a low loan to value ratio that did not require NHA insurance. Criteria for the MBS program have since been relaxed but, according to Paul Robillard, not enough to make a substantial difference.

The delivery structure of CMHC NHA MBS is very similar to that of The Government National Mortgage Association (Ginnie Mae), so much so that the Canadian MBSs have been nicknamed Cannie Maes in reference to their American counterpart, Ginnie Maes. As of May 9 1990, 382 issues had been floated on the market for a total of $4.1 billion. This represents about two percent of all outstanding mortgages in Canada. All issues are modified pass-throughs guarantying payment to the investors whether or not payments have been made by the borrowers. Mortgages are assembled in one of the following pools:

Pool 964: Single family homeownership mortgages with prepayment clauses.

Pool 965: A mix of single family homeownership and multifamily mortgages with prepayment clauses, and social housing projects.

Pool 966: Multifamily buildings, with prepayment clauses.

Pool 990: 100% social housing projects without prepayment rights.

MBSs are issued by the lending institutions and are guaranteed by the NHA MBS Center in Toronto. Central Guaranty Trust acts as Central Payor and as Transfer Agent for the securities. The biggest issuer of mortgage-backed securities so far has been Toronto-based FirstLine Trust with over $1.2 billion worth. In 1989 two brokerage houses controlled 87% of the market:

| | |
|---|---|
| Wood Gundy: | 57% |
| Scotia McLeod: | 30% |
| Burns Fry: | 4% |
| Richardson Greenshields: | 4% |
| Others: | 5% |

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Source: Marc Godboult, CMHC Market Analysis Centre, Ottawa, in a May 2 1990 interview.

In 1989 56.9% of all MBSs were issued in Ontario followed by British Columbia with 18.4%, The Western Provinces with 13.9%, Quebec with 6.4% and The Atlantic Provinces with 4.4%.

## 2.3 INVESTORS' REACTIONS TO NHA MORTGAGE-BACKED SECURITIES

MBSs were first marketed to private individual investors in $5,000 and $10,000 denominations. They were attractive because their yield was higher than five-year triple A-Canada bonds. Individual investors however quickly lost interest in them because they were not used to monthly payments, to the

remittance of capital that sometimes occurred and they found the paperwork messy and cumbersome. Ninety percent of NHA MBSs are now sold to corporate investors, mostly domestic, some in London and in the U.S. but relatively little in spite of the preferred tax treatment for foreign ownership.[3]

Pool 990 (100% social housing projects without prepayment clauses) has been very well received and in fact has been subject of increasing competition, which in turn has brought down the interest rates.[4] This is explained in part by the entrance of banks into a market that they had previously shunned (possibly because of the low potential for cross-selling other financial products to low-income clients). MBSs from Pool 990 have now become particularly attractive to banks in view of the 1992 regulations by the Bank for International Settlement (BIS) that will require banks to have higher capital reserves to cover their assets (an increase from 6% to 8%). Mortgages securitized by NHA MBS will not require capital reserves because, not only are they guaranteed by the MBS program, but in addition each underlying mortgage in Pool 990 is guaranteed by the Canadian Government.

NHA mortgage-backed securities trade on average sixty to eighty basis points above Canada Treasuries for Pool 990 and

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[3]NHA MBSs are exempt from withholding taxes which investors living outside Canada must normally pay on interest.

[4]According to CMHC estimates, the cost of funds to finance social housing projects is now, on average, one hundred and fourteen basis points below market rates.

seventy to ninety points above Canada Treasuries in the case of the other three pools. Lately banks have been pulling out of CMHC's Competitive Financing renewal Program (CFRP) citing too much competition and a zero profit margin. In that respect, the CFRP has been a resounding success!

**2.4 CHANGES TO THE NHA MBS PROGRAM**

Some very important changes to the NHA MBS program were made in the first three years of operations. The most important one was the introduction of portfolio insurance which basically allowed lenders to get part of their existing residential mortgages portfolio insured by NHA, after the fact, under the specific condition that these mortgages would then be securitized. This change was introduced to sustain the NHA MBS program when the demand for five-year mortgages started lagging in 1988 as a result of increased demand for shorter term mortgages and in response to comments from lenders that only a relatively small portion of their portfolio could be securitized.

Other changes were the introduction in 1988 of the social housing pool with no prepayment rights and the creation of the three other pools which basically allowed for better pricing because occurrences of prepayment could be more clearly predicted.

The most significant change now being considered is the issuance of shorter term mortgage-backed securities. In fact

the federal government has already cleared the path for their issuance by amending the National Housing Act in May 1990 and the CMHC management policy committee should approve the change before the end of the summer. Shorter term MBSs should appear on the market sometime in the fall of 1990.

According to John Thompson, the CMHC MBS Officer in Ottawa, shorter term mortgage-backed securities are being introduced for many reasons. For one, officials at CMHC would like to see the Canadian MBS market take off now that they have a better understanding of it. Since three-year terms are the most popular with Canadian homeowners it follows that these offer, for now, the greatest growth potential. In addition, given CMHC's national mandate, some concerns have been voiced over the fact that Quebec has not benefitted from the NHA MBS program because of homeowners' preference for even shorter terms. It is not clear however that Quebec homeowners will benefit from this change since the costs related to the issuance of one-year MBS are too high to make them competitive.

The goal of expanding the MBS market has led CMHC to ask the American Securities and Exchange Commission to forgo the existing "Shelf Life Regulations" that impose a delay of sixty days from their date of issuance before Canadian MBSs can be underwritten by American investment dealers. The intent of CMHC in having that rule repealed is to gain access to the

expertise of American investment dealers who have been working with MBSs for the last twenty years.

According to John Thompson, the Canadian MBSs should be of interest to American investors because of the current three hundred real basis points difference in mortgage rates between the two countries and because of the appeal of shorter term debt.

Other changes are also being considered by the CMHC, notably one that would reduce the paperwork that accompanies MBSs. For the moment each mortgage of a given pool is documented and the information is transmitted to the Central Payor and Transfer Agent (Central Guaranty Trust). Since all these loans already bear the NHA insurance it is believed that the paper trail could be shortened, allowing for reduced overall costs and processing time.

Finally, CMHC officials are looking at ways of reducing the program's requirements regarding the net worth of issuers. This would allow provincial housing agencies to securitize mortgages they already hold. Given the experience of Pool 990, it is hoped that this measure would allow provincial housing agencies to refinance their projects at a lower cost of funds.

# CHAPTER THREE

## 3.1 THE RIGIDITY OF THE SHORT-TERM MORTGAGE MARKET

As previously stated, Canadian homeowners in the 1980s have been locking in shorter and shorter terms. This trend is even more pronounced in Quebec where borrowers' preference is for one-year terms as evidenced by Fiducie Desjardins' mortgage portfolio which went from 40% - 45% of one-year terms in 1983 to 55% - 60% of one-year terms in 1989.

This trend towards shorter term mortgages can be explained by many factors whose individual impact is, however, difficult to assess. These factors are either supply or demand driven.

On the demand side, it is argued that Canadians prefer short-term mortgages because they allow a homebuyer to repay his mortgage in part or in full at more frequent intervals without prepayment penalties. Contrary to American tax laws, mortgage interest in Canada cannot be deducted from income for tax purposes. It follows that Canadian homebuyers want to pay their debt or at least reduce it as fast as possible. In fact reducing one's mortgage is seen as much of an investment as making a deposit in a savings account. This attitude is enhanced by the fact that, under Canadian laws, one's main residence is exempted from capital gain tax at the time of resale. Hence the preference for shorter terms. It is estimated that Canadians, on average, repay their mortgages

after seven years and that 50% of homeowners do not have a mortgage, a 4% increase since 1982. In comparison, American homeowners repay their mortgage on average after eight or ten years and, of the total homeowners, 65% hold a mortgage.

Another factor explaining Canadians' preference for shorter term mortgages is the economic conditions of the late 1980s. Canadians believe that interest rates are kept artificially high by the Bank of Canada to keep inflation in check in southern Ontario and to attract foreigners to fund Canada's national deficit. Consequently homebuyers hesitate to lock-in rates long-term in the hope that they will go down. Finally, on the demand side, it has been suggested that, because of their cautious nature, Canadians prefer doing business with one of the eight chartered Canadian banks as opposed to smaller trust or mortgage companies. As we will see Canadian banks have mostly short-term liabilities and try to push for shorter mortgage terms in an effort to avoid mismatching assets and liabilities. Canadians' preference for banks is also enhanced by their vast network of branches and the convenience of one stop-shopping such as automatic mortgage payments from bank accounts.

Others see short-term mortgages as a function of supply. Ninety percent of residential mortgages are held by fourteen or so financial institutions and the structure of their liabilities is predominantly short term as evidenced in Table 4.

**Table 4**

**Distribution of Assets and Liabilities for an Aggregate of Fourteen Canadian Mortgage Lenders***
**1988-1989**

| TERMS | 1 year | 2 years | 3 years | 4 years | 5 years | Other |
|---|---|---|---|---|---|---|
| ASSETS | 33.8% | 18.4% | 20.3% | 15.3% | 10.9% | 1.3% |
| LIABILI-TIES | 53.4% | 15.2% | 13.3% | 6.9% | 9.9% | 1.3% |

*: The Royal Bank of Canada
Bank of Montreal
The Canadian Imperial Bank of Commerce
Toronto Dominion Bank
Banque Nationale du Canada
Bank of Nova Scotia
Banque La Laurentienne
Caisses Populaires Desjardins
Royal Trust
Montreal Trust
FirstLine Trust
Central Guaranty Trust
Canada Trust
Metropolitan Trust

Source: Office of the Superintendent of Financial Institutions, Ottawa.

To prove their point further they add that the borrowing pattern of the Canadian Government is also predominantly short term as illustrated by Table 5. The longest term available for Canadian Treasuries is only twenty years compared to thirty years for U.S. Treasuries.

In addition to all these factors, The Canada Deposit Insurance Corporation (FDIC's counterpart) does not insure individuals' deposits for terms longer than five years so that

deposit-taking institutions do not offer long-term saving instruments which could be used to fund longer term mortgages.

Finally, judging from our interviews, lenders generally feel that the Canada Interest Act provision capping prepayment penalties to three months interest for loans longer than five years does not sufficiently protect them against prepayment.

**TABLE 5**

**Status of the Federal Government's Borrowing in 1989**
(Bonds and Treasuries)

| TERM | PERCENTAGE |
|---|---|
| 1 year | 13.6% |
| 2 years | 5.7% |
| 3 years | 19.6% |
| 4 years | 5.4% |
| 5 years | 48.0% |
| More than 5 years | 2.0% |
| More than 15 years | 5.7% |

Source: Bank of Canada, Securities Department, Ottawa.

# CHAPTER FOUR

## 4.1 A LOWER COST OF FUNDS

As already explained, the intent of legislators when introducing MBSs in 1984 was twofold: to lengthen current mortgage terms and to bring some order and stability to the residential market. Interestingly, goals like lowering costs to the homebuyers or lowering costs to the federal government in funding social housing were absent when the MBS program was announced. It is only as the program was implemented that these added benefits were identified, probably as a result of the increasing amount of research conducted on the American experience with MBSs.

Mortgage-backed securities were the brainchild of Ken Armstrong who, while working for Merrill Lynch Canada, had been looking for ways to generate new business. Investment dealers were particularly influential in the introduction of MBSs in Canada, for that reason. Homebuilders associations like the Housing and Urban Development Association of Canada later came on board to convince the government but played only a peripheral role.

The reason why MBSs were marketed as five-year securities instead of ten-year securities, as originally planned, is that at the time of introduction interest rates were high and there were expectations that they would go down. People did not want to commit for ten years. Since then, ten-year and

twenty-year issues have been offered on the market but they represent only $150 million of the total $4.1 billion market.

Most researchers agree that the American experience with mortgage securitization has reduced the cost of housing.[1] However, the same thing cannot be said of the Canadian experience because it has not yet reached a critical mass. What can be said, however, is that securitization has reduced costs for borrowers where it has been used extensively to finance social housing projects and to finance FirstLine Trust's five-year mortgage products.

FirstLine's experience with securitization is noteworthy mostly because it is so different from all other mortgage lenders' experiences. FirstLine Trust relies almost exclusively on MBSs to fund its lending. In an interview, Edward Finch of Firstline said that although Firstline is set up like any other Canadian trust company it resembles much more a mortgage securities company. According to Ivan Wahl, president of FirstLine, ninety-five percent of all mortgages it originates are securitized. This situation reduces greatly the need for a large base of term deposits. In fact, FirstLine Trust's modest base of term deposits is only used to finance the warehousing of mortgage loans from the time they

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[1]Rosenthal and Ocampo, An Introduction to Credit Securitization, John Wiley & Sons Inc, Toronto, 1988, 266pp p.12.

are originated to the time they are pooled and issued as mortgage-backed securities.

FirstLine Trust has experienced phenomenal growth in the last three years. In 1987 it had originated $130 million worth of mortgages and by July 1990 that figure had grown to $1.6 billion. As opposed to banks and other trust companies, FirstLine does not have branches. It only has mortgage processing centers in Toronto, Ottawa, Calgary and Vancouver. It relies on the existing network of Canadian mortgage brokers (six hundred or so) to access the homebuyer market.

### 4.2 PROSPECTS FOR LONGER TERM MORTGAGES

Given the chartered banks' position in the mortgage market, prospects for widespread marketing of longer term mortgages appear dim for now. In the last fifteen years banks have done a very good job at convincing Canadians to adopt short mortgage terms and, in matching so closely their assets and liabilities, banks have completely shifted their interest risk to the consumers. Having achieved this "ideal" position, it is very unlikely that in the future they would push for longer terms thus mismatching their assets and liabilities. This is of course enhanced by CDIC's limit on five-year deposits which precludes banks from offering longer term saving-instruments like term deposits and on the three months maximum prepayment penalty for loans longer than five years imposed by the Canada Interest Act.

In comparison to other investment options like commercial lending, real estate lending or third world debt, residential mortgages remain very attractive and very profitable for banks. It follows that banks are very unlikely to change a winning formula unless they start losing a significant market share.

At the moment, competition between banks for residential mortgages is not over rates or length of terms but much more over service and convenience like pre-approved lending, telephone hotlines or extended banking hours. Canadian banks are basically an oligopoly and the impetus for lower costs or longer mortgage terms will not come from them.

### 4.3 THE OUTLOOK FOR MORTGAGE SECURITIZATION IN CANADA

The outlook for growth of the securitization market is very promising but it will obviously occur without the help of banks who, unless they need to reduce their risk-based capital requirements, will not participate. According to Norman Howey, The Canadian Imperial Bank of Commerce through its Mortgage Corporation securitizes NHA mortgages only to keep up to date and to maintain its proficiency at it.

For now 80% of the issues are originated by loan and trust companies. The future of securitization rests in their hands and will depend on their dynamism. In that respect CMHC is looking for ways to enlarge the number of approved lenders and their use of securitization.

The few investment dealers that issue mortgage-backed securities are obviously interested in seeing the MBS market grow and they have been very successful so far in convincing CMHC officials that three-year NHA MBSs would be attractive to investors. The issuance of NHA MBSs by American investment dealers, when the SEC agrees, should not only increase volume but also the range of products.

In the same train of thought, the coming of age of fixed-asset securities in the last decade should be beneficial to the growth of the NHA MBS market. For a long time fixed-asset securities existed in the shadow of stocks. However, in recent years, a lot of product engineering has occurred in the world of securities. A better understanding of fixed-asset products can only influence positively NHA MBSs.

If the future for NHA MBSs looks promising it is not obvious that their development will be to the homebuyers' advantage. In the last year a significant increase in finders' fees paid to mortgage brokers has been observed in the Toronto region where the MBS market is the most active. Finders' fees have gone up from .5% to 1.4%. In addition, when three-year mortgage-backed securities are introduced, the costs of issuing MBSs will have to be amortized over a shorter period of time thus decreasing the potential margin for lowering cost of funds to homebuyers. At this point in time the only sure winners for the proposed three-year MBS product

seem to be investment dealers who, by issuing shorter term instruments, are increasing their rate of repeat business.

## CONCLUSION

As suggested in Chapter Four, the expansion of the MBS market is clearly linked to the dynamism and assertiveness of mortgage loan and trust companies. In that respect, the increasing preponderance in the mortgage market of Canadian banks with their vast network of branches (1,600 or so for CIBC alone), their aggressive cross-selling of financial products, and their need to match their assets and their retail funding, will probably be the major obstacle to mortgage securitization.

Another obstacle will come from consumers' loyalty to banks. Anecdotal evidence of this is provided by Firstline Trust's difficulties at convincing homebuyers that its lower rates on longer terms are legitimate. Some wary borrowers, reports John Sawyer, have phoned the CMHC to inquire about Firstline Trust's solvency and to voice their disbelief over the lower rates offered.

Most of the industry people interviewed agreed that NHA mortgage-backed securities have not been adequately marketed to the Canadian public. When interviewed about the original intent of MBSs, i.e. lengthening mortgage terms, most industry people voiced skepticism over the possibility of achieving this goal in Canada. Their main objection was that Canada has a much shorter term debt structure than the U.S. and that borrowers, lenders and investors are used to it. Most of them

nevertheless acknowledged the need for longer term mortgages to protect first-time homebuyers.

American homebuyers have a choice between Adjustable Rate Mortgages (ARMs), fifteen-year mortgages and thirty-year mortgages. Fifteen- and thirty-year mortgages offer stability of payments while increases in ARMs are capped at two percent at time of renewal and at six percent over the entire life of the mortgage. In contrast Canadians have very few options and very little interest rate protection when choosing a mortgage.

CMHC's 1984 goal of lengthening residential mortgage terms has obviously fallen by the wayside. The Canada Mortgage and Housing Corporation must promote the concept of longer term mortgages and must educate first-time homebuyers in that sense. It must also recommend amending the three months interest maximum penalty clause of the Canada Interest Act to encourage lenders in providing longer term mortgages. The American experience with mortgage-backed securities has proved that it can be very beneficial to homebuyers by reducing the cost of funds. In Canada, the Competitive Financing Renewal Program and FirstLine Trust have shown that mortgage securitization creates more competition, introduces new players in the market and generally lowers the cost of funds. NHA Mortgage-backed securities are a potentially powerful tool for altering the Canadian mortgage market of the 1990s. The reentrance on the playing field of long term investors like life insurance companies combined with a strong education

program could bring the diversity of options that is absent from the Canadian housing market at the moment.

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