

RESEARCH REPORT



Applicability Potential of Foreign Housing Finance Mechanisms in Canada



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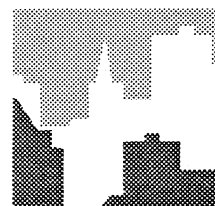
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**THE APPLICABILITY
POTENTIAL OF FOREIGN
HOUSING FINANCE
MECHANISMS IN CANADA**

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The views expressed in this paper are those of the author and do not necessarily reflect those of Canada Mortgage and Housing Corporation.



ABSTRACT

This paper analyses the mechanism by which housing finance loans are made, covering in particular the two basic systems, financing by retail deposits and financing by the capital markets, and the role of government in the mortgage market. The paper suggests that of all industrialised countries Canada has a system which relies least on specialised institutions and is most integrated into the general financial markets. However, the extent of government presence in mortgage insurance, through CMHC, is noteworthy. It is suggested that, from the international perspective, the main policy issues in Canada are the mortgage instrument, the role of the government in facilitating innovations and the evolution of the secondary market.

EXECUTIVE SUMMARY

This paper begins with a theoretical analysis of the housing finance mechanism, explains the institutional mechanism, analyses the role of the government, analyses alternative mortgage instruments, examines success factors for housing finance systems, describes Canada's system in the international context, and raises issues for consideration.

Housing finance markets are huge, and this means that they cannot be ignored in the formulation of monetary policy, nor can they be ignored by large retail financial institutions. The nature of the housing finance loan is such that loans have to be repaid over a long period of time, but the loans themselves are relatively simple, hence there are no significant economies of scale.

The simplest housing finance mechanism is one which involves deposit taking institutions using part of their deposits to make loans for house purchase. The main problem with this system is that of transforming short term deposits into long term loans. The second principal mechanism is the mortgage bank system, by which funds are raised on the capital markets. This system

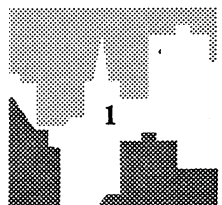
more commonly operates with fixed interest rate loans. Secondary mortgage markets are a refinement to a housing finance system, adding liquidity to the market and thereby improving its efficiency.

Mortgage markets throughout the world have become more competitive in recent years, and this has had major implications for the methods by which lenders obtain business.

All governments play some role in the housing finance market, but the role of government varies widely. Governments need to be regulators, particularly of deposit taking institutions, but beyond this there is little need for regulation of the mortgage market. Some governments adopt an interventionist stance, in particular through their control of central mortgage banks. Some governments also have a role in the provision of mortgage insurance. The mortgage market is indirectly affected by tax policy, in particular in relation to house purchase loans. A number of governments promote schemes to assist first time buyers in particular, generally by giving incentives to those who save for house purchase.

There is no single mortgage instrument which simultaneously is ideal for the consumer, does not cause problems for the government, does not impose costs on the government, and permits lending institutions to operate in a sound way. The experience of many countries is that fixed rate loans do not allow institutions to operate in a viable way, and also they lead to considerable inequities between borrowers, and tend to accentuate cyclical fluctuations in the housing market. While variable interest rates transfer the risk entirely to the borrower, it has been found that borrowers can accommodate the risk, given a sympathetic and realistic approach by lenders.

Government schemes which link savings with cheap house purchase loans look attractive in theory, but in practice they can provide only a small proportion of the funds which home buyers require, and also they



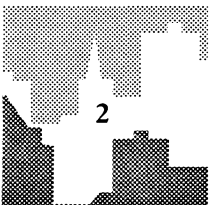
are based on an unsound principle in that new entrants are required continually in order to meet commitments to those already in the system.

The following factors can be listed as necessary for a successful housing finance system –

- (a) Land law and mortgage foreclosure procedures which ensure that lenders have the security of property which they can realise in the event of default.
- (b) A stable economic environment.
- (c) Use of the variable interest rate unless the general level of interest rates is stable.
- (d) A deregulated financial system.
- (e) A housing finance system that is fully integrated into financial markets.

Canada stands out as one of the countries with a relatively efficient and effective housing finance system. Of all industrialised countries its system is most integrated into the financial system and financial markets generally. However, the involvement of the government through CMHC in mortgage insurance does set Canada apart from other countries.

The main issues for consideration in Canada appear to be the mortgage instrument in the context of the elusive concept of affordability, the government role in mortgage innovations, and the government role in promoting the secondary mortgage market.



INTRODUCTION

The main distinguishing features of housing finance in Canada are the absence of any large specialist housing finance lenders and the relatively modest government role with the notable exception of mortgage insurance. This paper examines the Canadian system in the international context. The paper begins with a theoretical analysis of the housing finance mechanism, explains the institutional mechanism, analyses the role of the government, discusses alternative mortgage instruments, considers success factors for housing finance systems, describes Canada's system in the international context, and finally raises issues for consideration.

THE HOUSING FINANCE MECHANISM – THEORETICAL CONSIDERATIONS

Housing finance has a number of characteristics which set it apart from other financial markets.

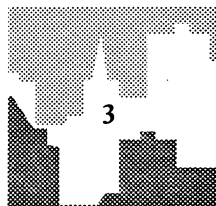
First, and perhaps most significant, is the huge size of housing finance markets, at least in the industrialised nations. In most Western countries, between 50% and 70% of homes are owner-occupied, and, typically, people buy houses costing about three times their income. It follows that they need to borrow substantial sums of money in order to be able to effect house purchase. In countries where there is no adequate housing finance mechanism, houses are still built, and people still acquire them, but the process becomes very protracted, with house building taking place over a period of some years. A sophisticated financial system itself creates its own demand for housing finance by facilitating the process by which people can acquire homes.

In all Western nations, with the notable exception of Italy, housing finance markets are huge in relation to national financial markets. Loans to finance house purchase are likely to account for more than two thirds of outstanding loans to individuals and typically over 30% of outstanding domestic credit.

The large size of housing finance markets has two major implications –

- (a) Housing finance can no longer be ignored in the formulation of policy about the role of financial institutions and monetary policy. In the past many countries have given preference to housing finance, either directly or through the institutions which have concentrated on housing finance, on the grounds that the acquisition of homes was an important policy objective, and, therefore, credit controls, or other restrictive policy instruments, should not apply to this sector. It is no longer possible to adopt this position given the size of housing finance markets.
- (b) Large domestic financial institutions cannot ignore the market. When people acquire a house, and therefore need a mortgage loan, they are likely also to need other financial services such as life insurance, property insurance and personal loans. If large retail financial institutions, particularly the big commercial banks, do not participate in the housing finance market they will not be making full use of their assets, and they will not, therefore, maximize their profitability. In those countries where the banks, traditionally, have played a modest role in housing finance that position has changed greatly over the last few years. The United Kingdom, France, West Germany and Italy are good examples in this respect.

The second major characteristic of the housing finance market is the particular nature of the loans. The loans have to be for long terms, because if the repayment period is short, then the resulting repayments are beyond the capacity of borrowers. A typical loan period is 20 to 25 years. However, it is very difficult to raise finance for 20 to 25 years, and thus institutions in the housing finance market generally have to engage in maturity transformation, that is transforming relatively short term deposits into longer term loans. The various ways in which this can be achieved are considered in detail in the following section.



A final characteristic of the housing finance market is that the product is relatively simple. It is not like, say, the financing of a major office building project, or a jumbo jet or an oil tanker. Where large sums of money are involved an individual contract is needed in each case, involving quite sophisticated financial mechanisms, and also high legal costs. Housing finance loans are simple and standardized, and there are few economies of scale. In addition, the security backing housing finance loans (residential property, often an insurance policy as well, and the income of the borrower) means that losses are minimal.

The special nature of the housing finance market means that there is no reason why the market should be dominated by large institutions, and in many countries there are hundreds of individual mortgage lenders, with small ones being able to compete on equal terms with large ones. This has been true of the United States, United Kingdom, France, West Germany, Spain and many other countries. Small savings and co-operative banks in particular are often, collectively, large mortgage lenders.

INSTITUTIONAL MECHANISMS

The key point in any housing finance system is the institutional mechanism by which loans for house purchase are financed. There are a number of different types of systems which are closely related with the institutions in a housing finance market.

It is, perhaps, helpful to start with a housing finance system that works without institutions, that is the direct mechanism. In most developing countries less than 10% of housing construction is financed with the assistance of formal loans. Much of the construction is carried out by individuals and their families, and even quite substantial houses can be built with no loan finance at all. For some, the construction of a house is a mechanism by which surplus cash can be

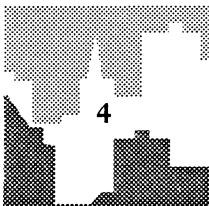
invested. Often the builder of the house will effectively be providing some of the finance by accepting payment over a period of years, and in the poorest countries informal credit unions can provide a great deal of the finance. However, all of these mechanisms are inefficient, and as the financial system of a country develops so the proportion of housing construction financed by the formal mechanisms will increase.

The simplest institutional housing finance mechanism is one which involves deposit taking institutions using part of their deposits to make loans for house purchase. This is the most common housing finance system, and the one predominantly in use in Canada. It is particularly appropriate for two reasons –

- (a) The total volume of deposits is many times the demand for house purchase loans.
- (b) The institutions which collect retail deposits, typically banks, savings banks, specialist housing finance institutions, such as building societies in the United Kingdom, and, trust companies, are retail institutions well placed to attract housing finance business.

The problem facing deposit taking institutions when making mortgage loans is that of maturity transformation. Deposits typically are held for short periods, with anything beyond three years being exceptional. The Canadian position, with five year term deposits being important, is exceptional. However, mortgage loans need to be made for 20 to 25 years, not three years or five years, and maturity transformation is therefore essential. There are a number of possible approaches to this –

- (a) Do not attempt to do it at all; that is, to finance long term fixed rate loans with short term variable rate deposits in the hope that the cost of deposits will never rise to an unsustainable position in relation to the yield on loans. This was the policy followed in the USA until the early 1980s with disastrous consequences.



- (b) Conduct all operations on a variable rate basis; that is change the rate of interest on outstanding mortgage loans as is required to meet any rise or fall in the cost of deposits. This system has been used effectively in the United Kingdom, Australia and a number of other countries. It ensures that the housing finance institutions will be healthy (unless the rise in the interest rates is such as to sharply increase bad debts), but it does transfer the interest rate risk on to borrowers who may be ill-equipped to meet it.
- (c) Fix an interest rate on loans for a limited period, then changing the rate in accordance with market conditions. This is the mechanism which, has been used in Canada since the early 1990's, and it worked relatively well while interest rates were comparatively stable, or increased only modestly over time. It did not work well when there were sharp variations in interest rates leading to considerable inequities between borrowers.
- (d) Lay-off the interest rate risk through a secondary mortgage market, in which case effectively deposits cease to be funding mortgage loans. The nature of secondary markets will be considered in more detail subsequently.

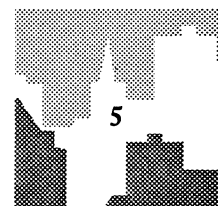
The second principal housing finance mechanism is the mortgage bank system, which uses double intermediation. Mortgage banks are not deposit taking institutions, and do not have significant networks of branch offices. They raise their funds on the wholesale markets, and obtain loan business through introductions, often from a related institution in their group. In some countries regulation has effectively required the mortgage bank system to be used, Italy, Sweden and Denmark being good examples. In all three countries deposit taking institutions have not been permitted to make long-term mortgage loans, hence specialised mortgage banks have developed which have obtained their business from the deposit taking institutions. The mortgage banks fund themselves by selling bonds to, or raising deposits or loans from, banks, savings

banks, life insurance companies and pension funds, hence the expression double intermediation system, with funds passing through the hands of two institutions rather than one between ultimate investor and ultimate borrower.

Most mortgage banks work with fixed interest rates on both sides of their balance sheets. This ensures that they do not suffer any interest rate mismatch. However, they are vulnerable in a period of falling interest rates if borrowers are able to redeem their loans, refinancing at a lower cost. This has recently caused problems for some of the mortgage institutions in France. Borrowers can be prevented from repaying their loans without heavy penalty, as is the case in Denmark. While this gives some protection to the lenders, it also puts a heavy burden on borrowers who might find themselves, for example, having to finance a loan at 22% while new borrowers can obtain a loan at a 10% rate. The result is likely to be substantial bad debts, as has recently been the case in Denmark.

It is possible for the mortgage bank system to work on the basis of variable interest rates. This has been done, for example, in Italy.

Secondary mortgage markets are a refinement to a housing finance system, rather than a different type. They are a refinancing mechanism which is of little relevance to the ultimate home buyer, although they may help the entire mechanism to work more efficiently, thereby reducing, if only marginally, the cost of mortgage funds. What a secondary market does is enable lenders to sell mortgage loans, either as they stand or in the form of securities. They can be used as a method of increasing the amount of money that can be lent, or they can be used as a method of laying-off an interest rate risk. In the United States, for example, where long-term fixed rate loans are still popular, thrift institutions, funded by short-term deposits, now rarely hold such loans in their mortgage portfolios, instead selling them into the secondary mortgage market where they can be held by institutions more suited to holding



such loans, such as insurance companies and pension funds.

In looking at secondary markets, it is important not to be blinded by the experience of the USA. The USA has an extremely sophisticated secondary mortgage market, but this has developed because of the inadequacies of the primary mortgage market. Effectively, the secondary mortgage market has been a means of overcoming deficiencies in the primary market which do not exist in Canada or other countries. More importantly, the American secondary market is a mechanism by which mortgages are transformed into government securities with the help of one public and two semi-government agencies.

Before leaving the institutional mechanisms it is necessary to touch briefly on the question of how mortgage lenders obtain business given that financial markets are now very competitive. Retail institutions, such as trust companies and banks, can of course obtain loans in the normal course of their business, but the problem they face is knowing which people are likely to want mortgage loans at any one time. Extensive advertising and mailshots may be necessary in order to keep the necessary name awareness. Real estate agents, and in some countries house builders, insurance agents and other intermediaries, are often well placed to channel mortgage business to particular lenders because they are in contact with people at the time when they need mortgage loans. Some lenders have responded to a more competitive market place by building up their own networks of real estate agents. For example, the largest real estate agency in Canada is partly owned by Royal Trustco. In the United Kingdom the estate agency market is now dominated by the large financial institutions, with Royal Insurance, Prudential Insurance Company, Lloyds Bank, Abbey National, and Halifax Building Society each having over 400 estate agency branches. Alternatively, some institutions have preferred to work on the basis of having applications referred to them for which they pay a fee. It is particularly

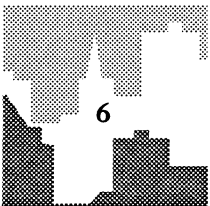
important for those mortgage lending institutions that have no retail network to have an adequate distribution mechanism for their mortgage loans. In fact, many of the mortgage banks which come into this category in particular, are part of larger financial groups which have retail operations. In Germany, for example, the mortgage banks are either part of the individual state savings bank systems, or they are owned by large commercial banks.

ROLE OF GOVERNMENT

All governments in Western countries play some role in the housing finance market. The extent of this role varies widely, and present differences result more from the historical development of systems rather than from any assessment of present needs. It is possible to define a number of different roles of government.

The one role that all governments must play is that of regulator. However, it is questionable whether housing finance markets need significant regulation. There is probably a need to have regulations governing the calculation of interest rates, so as to ensure that customers are able to compare like with like, and most countries have achieved this through requiring lenders to state a standard interest rate, generally described as an annual percentage rate of charge or APR.

Where a housing finance lender is a deposit taking institution then it is also necessary to make provision for the soundness of the institution, and this is normally done through central banks. Some countries, for historical reasons, have had different prudential mechanisms for their housing finance lenders. Where these have been managed competently, and in line with the provisions of the commercial banks, then they have worked well. In the United Kingdom, for example, building societies which provide well over half of mortgage finance are regulated by the Building Societies Commission, but the requirements of that regulation, in particular the overall capital requirements, are very similar to the requirements for banks. In countries where



specialist housing finance deposit taking institutions have been regulated entirely separately, the results have often been unfortunate. This is, of course, true in the United States where the final bill from the thrift debacle looks like being well over \$300 billion. A similar problem has occurred in Australia, where state regulation of building societies has led to most of the large building societies converting to banks, in order to be able to operate throughout the country, while the regulation of the building societies themselves has been sadly lacking, as has been shown recently with the collapse of the Farrow Group in Victoria.

However, there is no *prima facie* case for any regulation of the mortgage market beyond these two points. Britain is one country with no mechanism for regulating mortgage lending. Provided a mortgage lender does not take deposits, then it is not necessary for it even to register with any institution in the United Kingdom, let alone be authorised in order to make loans. Obviously, fair trading legislation and so on will apply to mortgage lending institutions in the same way as other institutions, but in Britain, at least, it has not been felt necessary to make special provision for mortgage loans, although this is currently being changed with a very peculiar provision in a Courts and Legal Services Bill dealing with the linking of services.

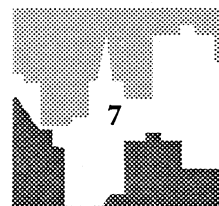
Government can go beyond its passive regulatory role, and adopt a more interventionist stance, and a number of governments in Western countries have done so. In some countries the government is a large lender. This is still the case in Norway where the State Housing Bank is the largest single housing finance institution. Government mortgage banks which also have a quasi-regulatory role play a significant part in the mortgage market in France through the *Crédit Foncier*, and in Spain through the Mortgage Bank of Spain. In some cases these roles are historic, while in others, including Canada, governments have set themselves up as lenders of last resort, which means that they have been making loans which no other lender is willing or able to take on. Generally, governments

have been disengaging from the mortgage market, given that there is no longer any persuasive rationale to continue.

Some governments also have a role in insuring mortgage loans. This has never been the case in the United Kingdom, and in most of the Western European countries the concept of mortgage insurance is unknown. In Australia the government promoted a separate corporation, The Housing Loan Insurance Corporation, to insure mortgage loans, and this contributed to the strong development of both the housing finance system in general, and the building societies in particular, in the 1960s and 1970s. In the United States, the government has played an extensive role in the mortgage insurance business through insuring loans that came within certain specified parameters, through the Federal Housing Administration and the Veterans Administration. The same has applied in Canada through the Canada Mortgage and Housing Corporation.

Governments also have an influence on the housing finance market through tax systems, and either deliberately or accidentally these can encourage or discourage lending for house purchase. The huge size of the mortgage market in the USA, for example, is partly driven by the fact that interest on mortgage loans is deductible from income for tax purposes. In the United Kingdom this is held to be a major reason for the growth in the housing finance market, thereby causing problems in respect of the overall level of credit in the economy. Generally, where interest is tax deductible this is accidental, and many governments, certainly that of the United Kingdom, would rather not have this system. However, changing the system is electorally difficult. In the United Kingdom tax relief has been limited by holding the ceiling for loans qualifying for tax relief at £30,000 while house prices have more than doubled. The impact of tax relief is therefore declining.

In other countries governments have sought positively to stimulate home ownership, generally by giving special incentives to those who save for a certain period of



time. In Canada the federal registered home ownership savings plan was such a scheme; it allowed individuals to contribute up to \$1,000 a year and to put in the scheme up to a life-time maximum of \$10,000 with the yearly contributions being tax deductible, and income on the investment not being taxed while it was retained in the plan. This was a fairly modest scheme and was discontinued in the mid-1980s.

The United Kingdom has recently had such a modest scheme. The Home Loan Scheme, introduced at the end of the 1970s, gave a modest interest free loan of £5,000 for five years and an equally modest cash grant (£600) where savings had been held in a registered account for two years. The Scheme was a failure, with take up being only about 1% of the level originally envisaged by the government. The only reason why the Scheme was not abolished until recently was the government fear that abolition would draw attention to its failure. However, the Scheme now has been safely abandoned.

Three countries, West Germany, Austria and France, have highly developed systems for contract savings for house purchase. The system has been most developed in West Germany through the Bausparkassen (the system in operation in Austria is very similar). Under the Bausparkassen system, people register to save a certain amount of money over a fixed period. They receive an interest rate that is a little below market interest rates. At the end of the savings period the borrower is entitled to a loan of an amount related to the amount saved, also at a below market interest rate. In Germany only Bausparkassen are entitled to offer Bausparkassen contracts. There are both public sector and private sector Bausparkassen; the public sector institutions are part of savings banks groups, while the private sector ones generally are connected with other financial institutions, and recently the big commercial banks have been increasing their interest in Bausparkassen.

In France a similar scheme, the épargne logement Scheme, is operated, but unlike in Germany all French banks are entitled to

participate. The market leader is the Crédit Agricole.

The effectiveness of such arrangements in reducing borrowers' repayments is considered subsequently.

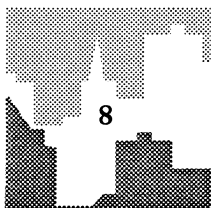
Finally, the government may have a role in encouraging securitisation where this is felt to be necessary. The American example has already been noted, but it is not a good model for other countries. The American Government continued to strengthen the secondary market to overcome the known deficiencies of the primary market, but there are some who now feel that it has merely built up a new set of problems, with the Government secondary market agencies having substantial contingent liabilities backed by only modest amounts of capital. The United Kingdom has a very small secondary mortgage market, developed largely by new centralised lenders that have come into the market over the past few years.

The Government has no role in this market, and has made it clear that it intends not to have any role, for example, by insuring mortgage loans, or by giving any special incentive to institutions to hold mortgage backed securities. Accordingly, the market has developed entirely on a private basis, with mortgage insurance being provided by commercial institutions, and with the market functioning quite effectively, albeit in a relatively limited way.

The Canadian secondary market is somewhere between the British and the American markets. There clearly is an important Government role, in that CMHC guarantees timely repayment of principal and interest.

MORTGAGE INSTRUMENTS

The previous section touched on alternative mortgage instruments. It is now necessary to examine these in detail, as clearly this is one of the major policy interests in Canada at present. There have been calls for a mortgage instrument that is ideally suited to the borrower, that is a fixed low rate of interest. The experiences of other countries have been pointed to, albeit not always with a high degree of accuracy. The



same debate is being conducted in many other countries. The reality is that it is not possible to devise a mortgage instrument which achieves simultaneously a number of desirable policy objectives –

- (a) Certainty for the borrower, and preferably a low rate of interest in relation to market rates.
- (b) The financial soundness of mortgage lending institutions.
- (c) The efficient conduct of monetary policy and economic policy generally.
- (d) Minimal cost to public expenditure.

At first sight fixed rates of interest are attractive to the consumer. The consumer knows exactly what he will be paying, and can budget accordingly. However, fixed rates also have a number of disadvantages for the consumer. In an environment where interest rates are subject to considerable change, the consumer inevitably is gambling when he takes out a fixed rate loan. If he waited a bit longer he might be able to take advantage of a significantly lower rate. In practice where fixed rates have operated, there have been considerable inequities between people, depending on when they took out their mortgage loans. It may be argued that those with fixed interest rates can protect themselves by redeeming their loans in the event of interest rates falling. This has happened in many countries, notably France and the USA. The problem with this is that lending institutions can sensibly make fixed rate loans over, say, 25 years, only if they are matched by 25 year funds. If this is not the case then the lending institution breaks the classic banking rule by borrowing short and lending long. The disaster in the American thrift industry was initially precipitated by the thrifts being forced to lend long term at fixed rates, while funding their activities through short term deposits. As interest rates rose rapidly towards the end of the 1970s, so the total cost of the liabilities of the thrifts exceeded the income which could be earned on mortgage loans, thereby pushing many thrifts into insolvency.

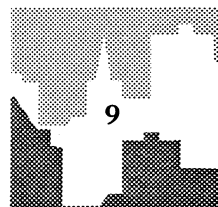
In order to protect the financial soundness of lending institutions, a fixed interest rate loan system can operate effectively only if borrowers are prevented from redeeming

their loans prematurely, unless they are prepared to compensate the lending institution for the effects of any change in interest rates since the loan was taken out. In Denmark, for example, where fixed rate loans are normally used, a lender can redeem a loan only by purchasing back the bonds which have financed the loan. In other words, if a loan was taken out when the rate of interest was 20%, and the current rate is 10%, then it will be necessary for the borrower to pay twice as much as he initially borrowed in order to redeem his loan.

Not surprisingly, in those countries where fixed rate loans apply, people are reluctant to borrow when interest rates are perceived to be high. This accentuates the effects of interest rate movements on the level of activity in the housing market. Casual observation suggests that the cyclical downturn in housing markets where fixed interest rates are common is greater than in countries where variable rates are normal. Econometric research in the USA has suggested that the fairly recent adoption of variable rate mortgages has led to house building being maintained at a significantly higher level than would otherwise have been the case with fixed interest rates.

Variable rates, at first sight, seem most unsatisfactory for the consumer, in that the cost of his mortgage could rise unpredictably and rapidly in a short period of time. For the lending institution, of course, they are ideal; any increase in the cost of funds can be met entirely by increasing the yield on loans. Also, borrowers can be permitted to pre-pay their loan at any time without penalty, because the lending institutions will not suffer any loss. This is a significant advantage of variable rate loans to the consumer.

The perceived disadvantage to the consumer is that his interest rate can rise to such an extent as to cause severe financial hardship, and, indeed, to threaten his ability to stay in his home. Variable rates have been used most effectively in the United Kingdom. Until the early 1970s the normal arrangement was that borrowers were given three months notice of any increase in rates. As interest rates became more volatile in the



1970s, so lenders reduced this period, such that at present the vast majority of mortgage loans are on a no notice arrangement; lenders can effect an increase in rates merely by taking a newspaper advertisement.

Interest rates have fluctuated markedly in the United Kingdom. Most recently, for example, in June 1988 a typical mortgage rate was 9.5%. By February 1990, the typical rate was 15.5%. Over this period some borrowers therefore faced increases in their repayments of perhaps 60% at a time when their income was increasing only modestly. Notwithstanding the advantages of the variable mortgage rate in terms of housing market activity, an increase in interest rates of this magnitude caused severe problems for the housing industry.

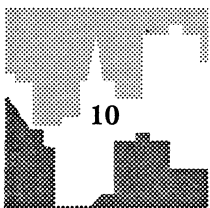
Having said this, in Britain the variable rate mortgage has been accommodated by the public with remarkably few problems. People accept that the mortgage rate can rise or fall, and do not believe that their lenders are exploiting them. Indeed, lenders cannot exploit their borrowers if there is a right to redeem without penalty at any time, and almost all lenders in the United Kingdom offer this. Arrears have increased significantly over the past year or so, as has the level of mortgage possessions, and while the increase in arrears can partly be attributed to the higher mortgage rate, the increase in possessions has largely been caused more directly by the related problem of the fall in property values and downturn in housing market activity.

There are various ways in which the effects of variable rates can be cushioned. One option is the Canadian roll over mortgage in use since the early 1970's. This certainly worked very well in the 1970s, but it has been proved not to work well in the 1980s, given much greater fluctuations in interest rates. It is, perhaps, significant in the United Kingdom that the inverse yield curve, which as applied over the past few years, has led many lenders to offer fixed rate loans for two or three years, and exceptionally for five years, at a rate significantly below the going variable rate. Lenders feel they can do this with funding arranged on a

match basis, given the relatively short time period for which they are committing themselves. Borrowers who take out such loans are subject generally to a considerable penalty if they redeem their loans early. The problem with this system, if it is used universally, is that there is a great deal of luck as to when a loan is rolled over, and this can cause considerable inequities where the fixed rate loan is the norm. However, in the United Kingdom, it is probably the case that many borrowers have taken out fixed rate loans because they consider that they are likely to be cheaper than variable rate loans for the next two or three years, and when the term of their fixed rate loan expires, they will roll over into a variable rate loan. They therefore have little downside risk.

Lenders cushion the effects of high interest rates in a number of ways. Most lenders in the United Kingdom now offer an annual review system by which mortgage repayments are changed only once a year, regardless of how many times the mortgage rate changes. This system works particularly well when there are a number of fluctuations in the mortgage rate during a year, some up and some down. However, it works much less well when there are, say, three increases in the mortgage rate in one year, because those three increases are implemented at the same time.

A recent innovation in Britain, which has some disturbing regulatory consequences, is for lenders to offer deferred interest loans. That is the rate at which the loan is repaid is divorced from the rate charged to the mortgage account. The rate charged to the account could be, say, 15%, but repayments could be based on a 10% table, with the interest not being paid being added to the loan, and therefore repayments increasing gradually over time. Such loans are ideal if interest rates are high for a short time and subsequently come down. However, if interest rates stay high, or worse still if they increase, then such loans pose considerable risks for the borrower, and also for the lender.



The contract savings scheme was noted in the previous section as an instrument designed to increase access to home ownership. It is now necessary to examine such schemes in more detail, in particular their ability to reduce costs faced by home buyers. The system is most developed in West Germany, through the Bausparkassen, and most home buyers in Germany have a Bausparkasse loan as part of their total package. A very similar arrangement operates through the Austrian Bausparkassen. France has a variation on this system, known as the épargne logement system, by which any banking institution can offer a special savings account.

The principle behind these schemes is a simple one; that is that young people save for house purchase, and in exchange for accepting a lower than market interest rate on their savings, they are able to obtain a guaranteed loan at a lower than market rate. Under the Bausparkasse system, for example, a rate of interest between 2.5% and 4.5% is paid on savings which have to be made for a period of five years; a loan is then available at between 4.5% and 6.5%. At first sight these schemes seem extremely attractive. However, closer examination illustrates a number of problems. The first is that the scheme can operate only if people are prepared to save a considerable amount of money before house purchase. In the case of West Germany, for example, the saver has to agree to a contract sum and he is eligible for a loan only when he has saved 40% of that sum. In other words the amount which he is lent, under the system, is little more than the amount that he has saved (a little thought will show that the system cannot work in any other way). Many home buyers simply are not able to wait that period of time before buying a house. In reality the Germany system does not quite work in that way, but, rather, people buy a house first, then they take out a Bausparkasse contract as a tax efficient method of repaying a loan.

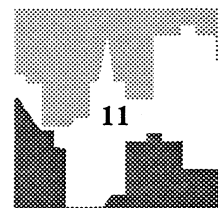
The system is also fundamentally unstable, in that a continuing supply of new

entrants is needed in order to meet the obligations to those already in the system. If, for example, the Bausparkasse system closed down, then still contracts would be maturing over a period of five years, but there would be no new entrants who would provide the funds to meet the loan obligations. This is perceived to be a particular problem in France, where the system operates somewhat differently than in Germany. In France, the financial institutions have to meet a considerable amount of the cost of the épargne logement system, and it is estimated that they have built up substantial liabilities by aggressively seeking a cheap source of deposits.

In neither France, Germany nor Austria are these contract systems capable of providing more than a fraction of the total amount which the home buyer needs, typically no more than 30%, and often less than that. The system, therefore, has to be operated in tandem with one of the other systems. In Germany, for example, the typical position is that a home buyer will take out a long term fixed interest loan from a mortgage bank, a short term variable rate loan from a savings bank, and at the same time will begin a Bausparkasse contract which, when it matures, will be used to pay off the savings bank loan.

There is no magic by which contract systems can lower the cost of funds to a house buyer over the life of a loan. To the extent to which he is paying a lower rate of interest than the market rate, then this can result only from his being willing to accept a lower rate of interest on his savings, or from a government premium or tax concession. It is, perhaps, significant in this context that no Western country has sought to introduce a contract system in recent years, and the system operates only in the three countries where it is well established.

Governments can, of course, directly subsidise mortgage loans. In the past some governments have directly subsidised mortgage interest rates, either for all borrowers or for those qualifying for loans because of their income. In such cases loans have often



be unmade through a central state body. The general tendency has been for such schemes to be run down.

In France, the government has had a scheme known as Prêts Aides Pour l'Accession à la Propriété (PAP). These loans are made available for principal residences and on new property only. The size of PAP loans is dependent on household income, the size of the house, and the area of France. The current mortgage rate is 6%. The number of PAP loans has fallen sharply in recent years, from over 130,000 in 1984 to no more than 50,000 in 1989. During 1990 the level of PAP loans is expected to decrease further as the government has reduced the budgetary allocation to the scheme.

A major feature of the housing finance system in Sweden has been that the state has given a guaranteed rate of interest with the borrower receiving a subsidy to cover the difference between this rate and the actual rate. The guaranteed rate is 4.8% for owner-occupied single family housing, the rate increasing by 0.5% a year until the market rate has reached. However, from time to time there are periodic cuts in the subsidy, such that the market rate has reached more quickly. The budgetary costs of this scheme is such that the government is taking steps to reduce it.

Before coming to a general conclusion on mortgage instruments, it is necessary to consider briefly the impact of the mortgage market on the economy as a whole. Given the size of mortgage markets, and the interdependence of economies and therefore the ineffectiveness of direct controls on financial institutions, the way the mortgage market operates is now very relevant to the overall conduct of economic policy. The interest rate weapon is the most effective, indeed arguably the only, weapon that governments have for controlling inflation and demand. Where mortgage interest rates are variable then an increase in interest rates immediately feeds through to a significant proportion of the population and it will affect their expenditure patterns. Where interest rates are fixed the impact is taken far more in the rather narrow new mortgage

market sector, and this may not be sufficient for the government to achieve its objectives. Indeed, in the United Kingdom the government seems a little concerned at the annual review systems operated by building societies, as these are felt to minimise the impact of interest rate increases which the government feels to be necessary.

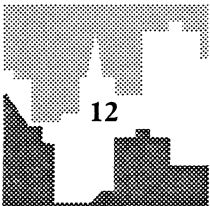
Finally, from the point of view of institutions, it is clear that fixed rates are compatible with the viability of lending institutions only if borrowers are not permitted to redeem without penalty, and this may well be unacceptable to consumers. If lenders are forced to make fixed rate loans funded by fixed rate financing, but where borrowers are able to redeem, then financial instability is inevitable. Governments can, of course, compensate for this, as indeed they can subsidise contract saving schemes, but generally governments in the Western world now see no justification for providing considerable financial assistance to people who, by any definition, are not among the poorest in the Community.

The variable interest rate with its major fault in times of rapidly rising rates, has the great merit of simplicity, and also it can be argued that it is the fairest system because it means that borrowers are not gambling when they take out their loans. Inasmuch as a general trend can be discerned throughout the Western world, it is for increasing use to be made of variable rate loans.

SUCCESS FACTORS

A brief study of national housing finance markets can lead on to suggest a number of factors that are necessary in order for a system to be judged successful, although, of course, in judging whether or not a system is successful must one first look at what the objectives are. Perhaps these objectives can be listed as –

- (a) A system which facilitates the purchase of housing by individuals.
- (b) A system which imposes no cost to the government.
- (c) A system which is competitive.
- (d) A system which allows institutions to operate in a viable manner.



Perhaps one can also add that now governments are not inclined to introduce any new policies which involve a substantial element, or indeed any element, of public expenditure.

Given these objectives one can list success factors as follows –

- (a) A sound land title system together with possession and foreclosure procedures that allow lenders to realise the security in the event of default. This is, perhaps, stating the obvious in Canada and in many other countries, but it might be noted that these are major problems in most developing countries and also in the Eastern European countries.
- (b) A stable economy, in particular relatively stable levels of inflation and interest rates.
- (c) Unless market interest rates are stable, use of the variable rate mortgage as the standard mortgage instrument, albeit with borrowers having options for fixed rate loans, but with penalties for early redemptions so as to prevent borrowers taking advantage of falling interest rates.
- (d) A deregulated market with government intervention being confined to the soundness of deposit taking institutions and consumer protection measures, in particular with respect to advertising of rates of interest.
- (e) A mortgage market totally integrated into the financial markets with no special housing finance system backed up by special privileges, either for housing finance as such or for institutions which operate in the housing finance market.
- (f) Strong competition between lenders, something which should follow naturally from the previous factors.
- (g) Compatibility of the mortgage market with overall economic and monetary policy.

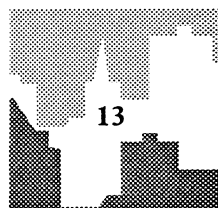
If, as a policy decision, government wishes to keep down the mortgage rate below a market level, then the stable interest rate problem becomes less important as a success factor. However, there are very few governments in the Western world that now feel that this luxury is available to them.

CANADA'S HOUSING FINANCE SYSTEM IN THE INTERNATIONAL CONTEXT

One can look at many industrialised countries and point to obvious failings with their housing finance systems, and to mechanisms which they could usefully borrow from abroad. For example, in Britain the high cost of mortgage interest tax relief is a major distortionary effect, although this is now being addressed. In France the disequilibrium in the *épargne logement* system is storing up problems for the future. In Italy the prohibition on banks making long term loans has resulted in an under-developed housing finance system. In America the regulatory regime has produced a financial disaster. In Denmark the inflexibility of the system, with everything being defined by regulation, has made the mortgage lending institutions very exposed, and each have recorded substantial losses in the recent past. Canada stands out as one of the countries with a relatively efficient and effective housing finance system.

Probably of all industrialised countries, Canada has a housing finance system which is most integrated into the financial system and financial markets generally. There is no large group of institutions which are predominantly housing finance institutions. The largest lenders are the chartered banks, followed by the trust companies and mortgage loan companies. Housing finance receives no special tax treatment, with Canada being one of the few countries not to allow tax deductibility of mortgage interest.

One problem stemming from this integration of housing finance into the financial markets generally, is the relative lack of protection given to borrowers when interest rates rise rapidly. In Britain tax relief takes care of part of the rise in interest payments when variable interest rates rise, although with a £30,000 ceiling the effect has lessened. The *épargne logement* and *Bausparkassen* systems of France, Germany and Austria give borrowers the certainty of having low fixed rates on part of their loan



packages. Where the state directly provides loans itself, then these can be at subsidised rates of interest, albeit at some cost to the state budget. In Canada the fluctuations in interest rates over the last few years have, indeed, produced very heavy burdens on some borrowers and considerable inequity between borrowers, but these are not very different from those that have applied, for example, in the United Kingdom.

There is discussion in Canada as to whether an insulated housing finance system would be more appropriate. To move in this direction would be to go directly against the trends that are evident in all other industrialised countries. In some cases countries have moved reluctantly towards the integration of housing finance into their general financial markets, and it has often happened more by accident than by design. The fact is that given the size of housing finance markets, and the inability to maintain barriers between markets and institutions, it is no longer possible to run a housing finance system independently of the main financial markets. A special housing finance circuit implies either massive budgetary cost by the government in order to keep interest rates to borrowers down, or, alternatively, the imposition of controls on other institutions or forcing them to make uneconomic loans. Such policies are not sustainable. If cheap loans for house purchase are available, then those loans will spill over into other sectors, and will lead to an artificially high demand for housing finance. For example, people able to repay loans will simply not do so if financial institutions are required to make low interest loans to individuals, then this will threaten their financial viability, or cause them to restructure their activities so as to circumvent any such requirement. Also, of course, to the extent that government is successful in keeping rates of interest below market levels, then an inevitable consequence is an artificial shortage.

Canada is also different from most other Western countries in having an agency, Canada Mortgage and Housing

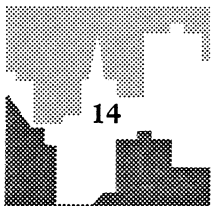
Corporation, which acts as an agent of the government in implementing certain policies and it also provides an excellent information service. CMHC has taken itself out of the mainstream mortgage lending business, but has rather tried to shape the development of the mortgage market in harmony with the evolution of financial institutions. Perhaps there is a link here with the absence of any specialised mortgage lenders. CMHC has as one of its roles being a leader in facilitating new financial mechanisms to stimulate the private housing market.

The insurance role of CMHC stands out as being very different from the pattern adopted by most countries. At first sight it is difficult to see why the Government should be involved in mortgage insurance in a country with such a highly developed insurance industry. Generally, the conclusion that one comes to is that Canada is ahead of most other Western industrialised countries in that housing finance is treated as being a component part of the wider financial system. The government, through the Canada Mortgage and Housing Corporation, plays a much less interventionist role in housing finance than do governments, or similar institutions, in other countries, with only its mortgage insurance function standing out as being an exception, for public policy reasons.

ISSUES FOR CONSIDERATION

It follows that it is difficult for outsiders to suggest to Canada mechanisms from abroad that it might usefully consider. All that can be raised are various issues for discussion following on from the previous analysis.

The mortgage instrument in Canada has evolved greatly over the past few years, and one wonders whether everything has now settled down. Roll-over mortgages were an excellent mechanism when interest rates were relatively stable, or when they rose only modestly and consistently over a peri-



od of years. They gave borrowers certainty that their payments would be fixed for a reasonable period of time. Also, while there might well be an increase in the repayments after renewal, these would certainly be no more than the increase in incomes. With the sharp variation in interest rates during the 1980s, these conditions were shown not to be true. Purely through chance, some borrowers found they were having to renew their loans at very substantially higher interest rates than others as interest rates rose sharply month by month. Lenders reacted by reducing renewal periods and variable interest rates on the British pattern were also developed. It is reasonable that borrowers should be given a choice between fixed and variable rates, but unreasonable to expect ordinary home buyers to be able to make a sensible choice between a 25 year

fixed rate loan, or even a renewable fixed rate loan, and a variable interest rate loan. The experience of other countries, Britain included, is that fixing an interest rate for more than three years at a time is likely to lead to considerable inequities between borrowers given volatile market interest rates.

The secondary market in Canada seems to have developed very well under the auspices of CMHC. Here the Government has added liquidity to the mortgage market and has, generally, contributed to the efficient operation of the market. The question is how far should Government involvement, in particular in the forms of guarantees, go in facilitating innovations. This is something that perhaps can be worked out only over a period of time, but it does need to be remembered that obligations once entered into are very difficult to get out of.

CONCLUSION

Canada certainly has a unique housing finance market. The absence of specialised institutions and of special government measures directed at the housing finance markets have produced a housing finance system fully integrated into the financial markets generally. Far from being a system that should cause the Government of Canada to look for alternatives, it is rather a system that other countries could usefully look at when considering how they can improve their systems, often riddled with inconsistent policies and unwise government interventions.

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