THE ROLE OF MORTGAGE BANKING IN THE CANADIAN ECONOMY

by

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PREFACE

I would like to thank Mr. D.W. Knight, Supervisor, Economic Research Department, Central Mortgage and Housing Corporation, for arranging my work load in such a way as to give me a broad view of the mortgage markets of Canada and the United States. My thanks are also due to Mr. R.T. Adamson, Director of Economics and Statistics, and Chief Economist, Central Mortgage and Housing Corporation, whose direction and comments, whenever it has been my privilege to work under him on special assignments, have contributed greatly to deepen my understanding of the complex and specialised problems surrounding housing in general, and mortgage lending in particular. I am also indebted to Mr.O. Wayand of Central Mortgage and Housing Corporation, who, when I first started to work there, introduced me to the mortgage market terminology and acquainted me with the existing body of mortgage statistics. Many thanks to Mr. A. Goracz of Central Mortgage and Housing Corporation, who, in the course of numerous conversations has given me whatever understanding I have of the demographic factors in housing demand. My concept of the anatomy of the mortgage market has been greatly influenced by the work of Professor J.V. Poapst, University of Toronto, formerly Supervisor, Economic Research Department, Central Mortgage and Housing Corporation, who has left a rich oral tradition within the

Corporation. All of the views expressed in the thesis are, of course, my own, and should not be taken to represent in any way the views of any of the persons mentioned above, or of Central Mortgage and Housing Corporation.

I am very grateful to Professor J.C. Weldon for giving me on the spot assistance in the development of the thesis when my Director of Research, Professor Irving Brecher, was away in Pakistan during 1960, on a special Research Project. Finally I would like to express my thanks and sincere appreciation to Professor Irving Brecher, my Director of Research, who very generously continued to direct my research by mail from Karachi during 1960-1961, while he was there as Joint Director of the Institute of Development Economics, sponsored by the Ford Foundation and the Government of Pakistan, and for his constant encouragement and helpful suggestions after he returned to McGill.

CONTENTS

INTRODUCTION

This study is oriented around the belief that it is the role of mortgage banking to tap the flow of available savings for the purpose of providing an 'adequate' flow of mortgage funds. The 'adequacy' of the flow of mortgage funds is tested in this thesis by the following criteria: Do the mortgage lenders supply sufficient funds to finance a new residential construction programme of sufficient size to house the new families continually being formed? Do the mortgage lenders supply sufficient mortgage funds to maintain the position of mortgages in the capital market vis-a-vis other forms of long-term debt? Is the mortgage instrument sufficiently attractive to financial institutions to induce them to give mortgages an important place in their investment portfolios? The criteria whereby the mortgage market is judged are developed in Chapter I. It is pointed out there that new dwelling units completed in the Post World War II period exceeded net family formation in the same period, by a comfortable margin. Thus, on the basis of the first criterion, the mortgage market fulfilled its role well. Part of this success is, however, due to government intervention in the mortgage market. For this reason, Chapter VI is devoted to a discussion of the various levers through which government can influence the mortgage market. More emphasis is placed in this thesis on the other

two criteria, that is whether mortgages maintained their positions in the capital market, and whether mortgages remained attractive to the financial institutions as an investment outlet for their funds. These two questions are answered in the affirmative in Chapter II, on the basis of statistical data assembled for the purpose and presented in the Appendix for the years 1939-1959. For the sake of comparison, similar data are presented for the United States. The conclusion emerges that although the two criteria are met, the performance of the mortgage lenders in Canada did not match the performance of their United States counterparts. The statistical data had to be compiled from a diversity of sources and then moulded into the desired framework. The broad outlines of the capital market in terms of the competing uses of capital funds and the major financial institutions that dominate the capital market in both Canada and the United States should nevertheless emerge accurately from the assembled data. Chapter III examines the mortgage market in greater detail, with the aim of showing how that market fits into the rest of the capital market. Chapter III also tries to bring out clearly the differences in lending policies, with regard to mortgages, as between the major lending institutions. The detailed analysis of the mortgage market presented in Chapter III makes it possible to describe the flow of mortgage funds from lending institutions

in the form of a notational model. This is done in Chapter IV with the aim of showing clearly at which points monetary and fiscal policy impinge on the mortgage market. The impact of monetary policy alone, not associated with fiscal policy, is then considered in Chapter V.

Monetary and fiscal policy are not, however, the only forces impinging on the mortgage market. As was mentioned earlier government intervention in the mortgage market itself, also occurred in the Post-World War II period. The various levers through which government influences the mortgage market, are thus discussed in Chapter VI. Mortgage policy as a whole in the 1929-1959 period, both in Canada and the United States is then considered in Chapter VII. Then in Chapter VIII an attempt is made to discern possible future developments in the mortgage market, on the basis of the Canadian and the United States experience in the 1929-1959 period. It is pointed out there that future developments are likely to centre around the mortgage market's efforts to entice a wider band of financial institutions into becoming more active mortgage lenders. Pension funds would seem to be a good target from this point of view.

CHAPTER I

MORTGAGES AND THE ECONOMY

Before the role of mortgage banking in the Canadian economy is discussed, it is helpful to describe precisely what a mortgage is and delineate the points at which mortgage banking interlocks with the economy as a whole. A mortgage is a debt secured by a piece of real estate.(1) It follows that it is the function of mortgage banking to provide real estate credit, be it for a house, a store, a farm, a factory or an office building. Although no precise data exist in Canada on the composition of the total mortgage debt outstanding by type of real estate on which it is secured the available statistics indicate that the bulk of the mortgage debt, approximately 85%, is secured by residential real estate.(2)

(1) For a description of mortgage procedures see, R.H. Pease and M.V. Cherrington, Mortgage Banking (McGraw-Hill, 1953), Chapter 2, pages 15-45, also E.M. Fisher, Urban Real Estate Markets Characteristics and Financing (National Bureau of Economic Research, 1951), Chapter 2, pages 13-37. For Canadian procedures see H. Woodard, Canadian Mortgages (Collins, Don Mills, Ontario, 1959).

(2) This estimate of 85% is based on the gross approvals of lending institutions in the 1950-1959 period. In these ten years lending institutions approved mortgage loans for $8.2 billion, of which $7.0 billion, or 85%, were mortgages secured on residential real estate. It is here assumed that this is an accurate reflection of the breakdown of lending institutions' mortgage portfolio as between residential and non-residential mortgages. It is further assumed that the same distribution also holds true in the portfolios of individuals. The gross approvals data used to make the above estimate is taken from Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA, current issues).

In the United States where this breakdown is available, residential real estate mortgages accounts for 78% of total mortgage debt outstanding.(3) In discussing the relationship between mortgages and the economy the emphasis will therefore be placed on residential mortgages. Each point of contact between mortgages and the economy will be considered not only from the point of view of how it links mortgages with the economy, but also from the point of view as to whether that particular link can be utilized to frame a criterion whereby the performance of the mortgage market should be judged. In accepting or rejecting any of the possible criteria the basic approach will be to consider the mortgage market as a vehicle for channelling an "adequate" flow of private funds into the real estate market. The framing of the criteria will therefore also involve a view as to what should be considered an adequate flow of mortgage funds. Basically the approach taken here is that an adequate flow of funds must provide sufficient funds to finance a house-building programme of such magnitude as to lead to an improvement in housing conditions. Such an improvement will be deemed to have occurred if the number of dwelling units built exceeds the number of new families formed, plus an allowance for dwelling units withdrawn from the housing stock.

(3) Total mortgage debt outstanding in the United States at the end of 1959 was $191.0 billion, as shown in Appendix Table A-2. $148.0 billion of this debt was secured on residential real estate, House and Home Finance Agency, Annual Report, 1959 (Washington, 1960), page 322.

POINTS OF CONTACT WITH THE ECONOMY

In the process of providing real estate credit, the mortgage market can affect the economy in two important ways. First, it affects the allocation of resources devoted to the production of real estate, residential construction in particular. As residential construction is classified in the national accounts as an investment good, conditions in the mortgage market affect the volume and composition of the privately initiated investment programme in the country as measured by Business Gross Fixed Capital Formation in the national accounts. Conditions in the mortgage market thus affect the level of investment undertaken each year. The second important point of contact between the mortgage market and the economy as a whole is through the effect of the mortgage market on savings. Mortgage repayment is an important form in which individuals contract to save part of their income. Each amortized mortgage assumed by a new home-owner involves a long-term contract to repay the mortgage by monthly instalments. If these repayments are made out of current income, the mortgage contract is in effect a promise by the home-buyer to save a fixed amount each month. These savings are paid into the institution that originally made the mortgage loan and thus form part of the funds which that institution has available for re-investment. The home-owner who is repaying his mortgage by monthly instalments,

not only makes a contract to save a fixed sum each month. He also makes a contract to invest these savings by increasing his equity in his home each month. The mortgage contract thus not only involves the new home-owner in a long-term contract to save, but also determines that these savings should be invested by him in the form of increasing his equity in his home. This investment in the equity of his home is purchased by the home-owner from the institution that granted him the original mortgage loan. By providing that these contractual savings paid to lending institutions in the form of mortgage repayments are automatically re-invested by the borrower in his home as equity purchased from the lending institution in the form of a reduction in the mortgage indebtedness on his house, these repayments become available to the lending institution for further re-investment.

MORTGAGES AND INVESTMENT

One of the ways in which the mortgage market makes its impact on the economy, it was argued above, is by the way conditions in the mortgage market affects the volume of investment through its impact on the volume of residential construction.

The financing of residential construction is much more dependent on mortgage financing than the financing of plant and equipment is on the floating of corporate bonds. Thus, in the 1950-1959 period, the net increase in residential mort-

gages outstanding represented 54% of residential capital formation[4] while the net increase in corporate bonds outstanding represented only 14% of the nation's investment in plant and equipment. Even when account is taken of new stock issues the net increase in corporate bonds outstanding plus the net new issues of preferred and common stocks, represented only 23% of the nation's investment in plant and equipment.[5] Investment in residential construction is

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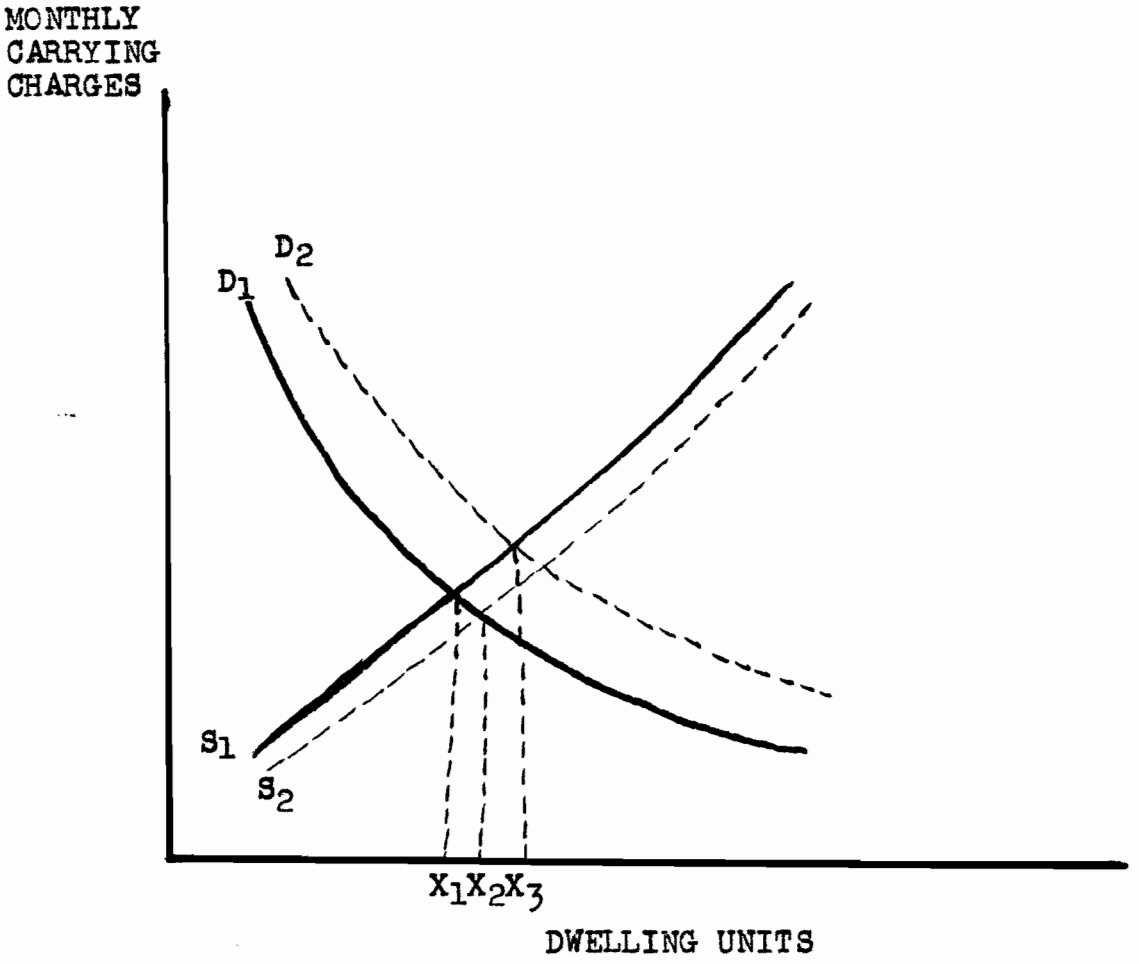
(4) Net increase in mortgage debt outstanding in the 1950-1959 period was $8.15 billion, as shown in Appendix Table A-1. It is then assumed that 85%, or $6.93 billion, of this debt was secured by residential mortgages, as calculated in note 3 above. The value of new residential construction in this same period, 1950-1959, was $12.9 billion as calculated by the Dominion Bureau of Statistics in National Accounts, Income and Expenditure, (OTTAWA, current issues).

(5) Net increase in corporate bonds outstanding was $4.76 billion in the 1950-1959 period as calculated in Appendix Table A-1. Net increase of preferred and common stocks in the same period was $3.19 billion. Data as published by the Bank of Canada, Statistical Summary-Financial Supplement, (OTTAWA, 1960). The value of investments in plant and equipment amounted to $32.93 billion in the 1950-1959 period, Dominion Bureau of Statistics, National Accounts, Income and Expenditure, (OTTAWA, current issues). It must be remembered in this connection, that these data refer to non-corporate as well as corporate investments in plant and equipment. The 14% ratio of corporate bonds to investments in plant and equipment thus understates to some extent the reliance of corporations on the bond market. However, data presented by L.M. Read, S.J. Handfield-Jones and F.W. Emmerson, The National Transaction Accounts for Canada, 1946-1954, published as an appendix to Wm. C. Hood, Financing of Economic Activity in Canada, (Royal Commission on Canada's Economic Prospects, OTTAWA, 1958), page 514, suggests that almost all of the investment in plant and equipment is undertaken by corporations.

thus much more dependent on the capital market than investment in plant and equipment which can draw on internally generated savings such as retained earnings and depreciation allowances.

Changes in the conditions on which mortgage funds are available affect both the demand and the supply side of the market for new residential construction, as illustrated in Diagram "A" below.

DIAGRAM "A"



The availability of mortgages affects demand through its effect on the interest rates charged on mortgages. Thus a reduction of 1/2%, say from 6½% to 6% on a 20-year fully amortized mortgage, would reduce the monthly carrying charges from $7.41 to $7.13 per $1,000 a reduction of 4%. It would also lead to somewhat lower costs of construction on a dwelling, thus leading to a lowering of the supply curve from S_1 to S_2. The decline in the cost of construction due to a decline in interest rates is very modest as it applies only to the period of construction, that is approximately half a year. On a $10,000 mortgage, a decline of 1% in interest rates would thus reduce cost of construction by only $50. Thus, lower interest rates could lead to a higher rate of house-building as shown in Diagram "A". The shift in units produced would be from X_1 to X_2.

The availability of mortgages affects the demand for housing, however, also in another perhaps more powerful way. Thus, better availability of mortgage funds may lead the mortgage lenders to give a bigger mortgage on each dwelling, so that whereas before they were willing to lend only, say $5,000 on a $10,000 dwelling, they might now be willing to lend $6,500 on a $10,000 dwelling, thereby cutting downpayments from $5,000 to $3,500.

An examination of the data relating to the liquid asset holdings of families shows that the percentage of

families that have liquid assets within the $5,000-$9,000 range is much lower (4.9%) than the percentage of householders that have liquid assets in the $2,000-$4,000 range (11.8%).(6) This increase in demand due to lower downpayment requirements is shown in Diagram "A" by an upward shift in the demand curve, to indicate that at each monthly rate, more people are now prepared to buy a home. The effect on output is shown by an increase in output to X_3. Indeed, so powerful is the effect of changes in the availability of mortgage funds that J.M. Guttentag(7) has argued that these changes are primarily responsible for the short cycle in residential construction.

The terms of lending in the mortgage market are only one amongst many factors affecting the demand for housing. More basic is the population factor. Thus, housing needs are usually discussed in terms of the growth in population and net family formation in particular. This factor is considered by experts as the most

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(6) Dominion Bureau of Statistics, Incomes, Liquid Assets and Indebtedness of Non-Farm Families in Canada, 1958, (OTTAWA, 1960), Table 16, page 37.

(7) " ... housing demand is extremely sensitive to changes in the supply of mortgage credit... It is this greater sensitivity of housing demand to changes in the supply of mortgage credit than to changes in the flow of current income and the considerable short-run volatility in the former, that underlie the counter-cyclical tendency of residential construction." J.M. Guttentag, "The Short Cycle in Residential Construction, 1946-1959", American Economic Review, (June, 1961), page 287.

important single demand factor in housing.(8) Other demand factors usually taken into account are the need to replace demolitions and allowance for vacancies, and an allowance for population movement from rural to urban areas. A further allowance is made for undoubling, that is families previously sharing accommodations deciding to maintain their own home (immigration is included in net family formation). Changes in incomes, of course, also affect the demand for housing.

In assessing whether the mortgage market has fulfilled its function of providing adequate funds for real estate, one of the criteria must thus be to see whether the house-building programme was at least sufficiently large to provide dwellings for all the new families that were formed, plus an allowance for dwellings that had to

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(8) This is the approach used by O.J. Firestone, Residential Real Estate in Canada, (TORONTO, 1951), pages 195-236. It is also the framework for the housing forecast by Central Mortgage and Housing Corporation, Housing and Urban Growth in Canada. (Brief submitted to the Royal Commission on Canada's Economic Prospects, OTTAWA, 1958). The same approach was also adopted by Mr. R.T. Adamson, Chief Economist, Central Mortgage and Housing Corporation, "The Weakness in our Housing Forecasts for 1955-1980". Habitat, (JAN.-FEB., 1959, Central Mortgage and Housing Corporation, OTTAWA).

be demolished.(9) Table 1 shows that this was not really generally the case in the post-war period until after 1954, when the new National Housing Act brought the chartered banks into the new residential mortgage market.

Canada, at the end of 1945, had a dwelling stock of 2,840,000 dwellings, while the number of families was 2,810,000. However, of the 2,840,000 dwellings 60,000 were vacant, so that only 2,780,000 were occupied. Also in addition to the 2,810,000 families there were 341,000 non-family households so that there were 3,151,000 groups requiring separate dwellings. This meant that 371,000 families were doubled up.(10)

Table 1 shows that the number of completions has exceeded net family formation plus an allowance for demolition so that in terms of sheer numbers, the housing standards of the country were improved and less families were required to double up.(11)

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(9) The estimate for demolition presented in the text for the 1945-1949 period are based on O.J. Firestone, op.cit., page 63. The estimates for 1950-1959 are based on the assumption adopted in the housing forecasts mentioned above in note 8. For the year 1959 Central Mortgage and Housing Corporation's estimate of demolitions can be inferred from the following published data. Total housing stock at the end of 1958 was 4,362,485. At the end of 1959 it was 4,502,156, see Central Mortgage and Housing Corporation, Canadian Housing Statistics, (OTTAWA, 4th quarter issues 1958 and 1959), Tables 14 and 15. The net increase in the housing stock was thus 139,671. Completion during 1959 were 145,671 and conversions added another 3,837 units to the housing stock. This implies that 9,837 dwelling units were demolished during 1959.

(10) O.J. Firestone, op. cit., page 284.

(11) An accurate estimate of the number of families doubled up can only be made from census data. Data published by the Dominion Bureau of Statistics in 1956 Population Census of Canada, (OTTAWA) list 286,000 families as not maintaining their own household, 85,000 less than the 371,000 doubled up families at the end of 1945.

TABLE 1: NET FAMILY FORMATION AND DWELLINGS COMPLETED
(Thousands of Units)

Year	Net Family Formation	Allowance for Demolitions	Total Basic Need	Completions
1945	59	9	68	49
1946	108	9	117	67
1947	72	9	81	79
1948	79	9	88	76
1949	74	9	83	88
1950	71	10	81	89
1951	93	10	103	81
1952	90	10	100	73
1953	91	10	101	97
1954	86	10	96	102
1955	74	10	84	128
1956	84	10	94	136
1957	103	10	113	117
1958	71	10	81	147
1959	67	10	77	146
1945-59	1,222	145	1,367	1,475

Source: O.J. Firestone, Residential Real Estate in Canada, (TORONTO, 1951) page 201, also Central Mortgage and Housing Corporation, Canadian Housing Statistics, (OTTAWA). No account is taken of dwelling units added by conversions. These amounted annually to about 4,000 units.

NEW RESIDENTIAL CONSTRUCTION AND GROSS NATIONAL EXPENDITURE

The house-building programme undertaken each year in response to the demand forces enumerated above represents a significant proportion of total economic activity in the country as measured by Gross National Expenditure. O.J. Firestone points out that this proportion will vary according to the stage of development at which the country finds itself.

> "The proportion of its resources which a nation devotes to housing will vary over time. A community which builds up a new settlement in an undeveloped area will

TABLE 2: NEW RESIDENTIAL CONSTRUCTION AND GROSS NATIONAL EXPENDITURE

Year	Gross National Expenditures (Billions of Dollars)	New Residential Construction (Billions of Dollars)	New Residential Construction as Percent of Gross National Expenditures. (%)
1939	5.6	.2	4%
1945	11.8	.3	3%
1946	11.9	.4	3%
1947	13.2	.5	4%
1948	15.1	.6	4%
1949	16.3	.8	5%
1950	18.0	.9	5%
1951	21.2	.9	4%
1952	24.0	.9	4%
1953	25.0	1.2	5%
1954	24.9	1.2	5%
1955	27.1	1.4	5%
1956	30.6	1.5	5%
1957	31.7	1.4	4%
1958	32.6	1.8	6%
1959	34.9	1.7	5%
1945-59	338.3	15.5	5%

Source: Dominion Bureau of Statistics, National Accounts, Income and Expenditure, (OTTAWA).

> in the first instance spend a significant proportion of its working time and resources in creating a minimum of shelter for protection against the element. Thereafter, additional effort on housing will be the result of keeping the housing stock in repair, increasing its size to take care of the growth of the community, and improving its quality to increase the amenities for the members of the community." (12)

The Canadian economy has during the post-war period devoted about 5% of its resources to residential construction. This is shown in Table 2 above.

(12) O.J. Firestone, op. cit., page 237.

The impact of a new dwelling on Gross National Expenditures does not cease during the year in which it is constructed but continues over the whole period during which the dwelling provides consumers with shelter. O.J. Firestone estimates this period at 75 years for non-farm dwellings.(13) This aspect of residential real estate, providing consumers with shelter over many years, is measured in the national accounts by the item 'shelter costs' and is included in 'Personal Expenditures on Consumer Goods and Services'.(14) During the period 1945-1959, shelter costs represented about 13% of consumers expenditures on goods and services, or 8% of Gross National Expenditures, that is almost twice as much as is accounted for by residential construction. This is shown in Table 3. The proportion of current income spent on shelter influences the amount of income remaining for other expenditures. It also affects the proportion of income that is available for saving. In this way the proportion of current income spent on shelter has an effect on the current pattern of production. L. Winnick stresses this point.(15)

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(13) O.J. Firestone, op. cit., page 46.

(14) A major proportion of shelter costs consists of imputed rents which it is assumed that homeowners pay to themselves.

(15) L. Winnick, "The Burden of Residential Mortgage Debt", Journal of Finance (May, 1956), pages 166-179.

TABLE 3: CONSUMERS EXPENDITURES, SHELTER COSTS, AND GROSS NATIONAL EXPENDITURES

Year	Personal Expenditures on Consumers' Goods and Services (Billions of Dollars)	Shelter Costs (Billions of Dollars)	Shelter Cost as Percent of Consumers' Expenditures (%)	Shelter Cost as Percent of Gross National Expenditures (%)
1939	4.0	.6	15%	11%
1945	7.0	.8	11%	7%
1946	8.0	.9	11%	8%
1947	9.1	1.0	11%	8%
1948	10.1	1.1	11%	7%
1949	10.9	1.2	11%	7%
1950	12.0	1.4	12%	8%
1951	13.5	1.6	12%	8%
1952	14.8	1.8	12%	8%
1953	15.6	2.0	13%	8%
1954	16.2	2.2	14%	9%
1955	17.4	2.5	14%	9%
1956	18.8	2.6	14%	8%
1957	20.0	2.9	15%	9%
1958	21.0	3.2	15%	10%
1959	22.5	3.5	16%	10%
1945-59	216.9	28.7	13%	8%

Source: Dominion Bureau of Statistics, National Accounts, Income and Expenditure, (OTTAWA).

Changes in current mortgage conditions have, however, very little impact on this calulation of shelter costs.[16] Apart from the fact that mortgage interest probably does not account for more than 20% of the total shelter costs

[16] For a description of the method used to compute shelter costs see Dominion Bureau of Statistics, National Accounts Income and Expenditure 1926-1956, (OTTAWA) page 145.

listed[17] there is the further fact that mortgage terms are not continuously re-negotiated. That is, the terms on the bulk of mortgages affecting the calculation of shelter costs, are a historical fact.

This point of contact between mortgages and the economy as a whole is therefore not used to formulate a criterion against which the performance of the mortgage market can be usefully measured.

NEW RESIDENTIAL CONSTRUCTION, BUSINESS GROSS FIXED CAPITAL FORMATION, AND GROSS NATIONAL EXPENDITURES

As was mentioned earlier, new residential construction is considered an investment good and as such forms part of 'Business Gross Fixed Capital Formation' in the national accounts of Canada. In the post-war period, new residential construction has accounted for about one-quarter of Business Gross Fixed Capital Formation.

The annual data since 1945 with 1939 inserted as a benchmark are presented in Table 4.

Fluctuations in investment to a large extent determine fluctuations in Gross National Expenditure. Keynesian doctrine also teaches us that the effect of these fluctuations in investment on Gross National Expenditure are

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(17) Estimated on the basis of $10 billion residential mortgages outstanding at an average interest rate of 5% per annum. This would give a total of $.5 billion paid per annum as interest on residential mortgages or about 1/7 of the $3.5 billion spent on shelter costs during 1959.

TABLE 4: NEW RESIDENTIAL CONSTRUCTION, BUSINESS GROSS FIXED CAPITAL FORMATION AND GROSS NATIONAL EXPENDITURES

Year	Business Gross Fixed Capital Formation (Billions of Dollars)	New Residential Construction as Percent of Business Gross Fixed Capital Formation (%)	Business Gross Fixed Capital Formation as Percent of Gross National Expenditures (%)
1939	.6	33%	11%
1945	1.0	30%	8%
1946	1.4	29%	12%
1947	3.1	24%	16%
1948	2.6	23%	17%
1949	3.0	27%	18%
1950	3.3	27%	18%
1951	4.0	23%	19%
1952	4.5	20%	19%
1953	5.0	24%	20%
1954	4.8	25%	19%
1955	5.2	27%	19%
1956	6.8	22%	22%
1957	7.3	19%	23%
1958	7.0	26%	21%
1959	6.9	25%	20%
1945-59	65.9	24%	19%

Source: Dominion Bureau of Statistics, National Accounts, Income and Expenditure, (OTTAWA).

magnified by the multiplier effect. On the basis of the data in Table 4, where investment is shown to fluctuate at around 20% of Gross National Expenditure, we can thus say roughly that his multiplier in Canada has a value of approximately 5. This would mean that an increase of $1 million in investment could result in an increase of $5 million in Gross National Expenditures. Table 4 shows further that new residential

construction represents about one-quarter of investment. It can thus be argued that changes in the volume of residential construction, as they form a part of changes in total investment, have a greater impact on Gross National Expenditure than is implied by the fact that residential construction represents on the average only 4% of Gross National Expenditure. It has therefore been argued that this lever-changing of availability and terms of mortgage credit-should be actively used to maintain or increase the level of Gross National Expenditure by inducing changes in the volume of new residential construction, thereby helping to maintain employment. As H. Woodard points out,(18) the first Dominion Housing Act, 1935, specified that the creation of employment opportunities was one of its aims. L. Grebler, who examines the theoretical possibilities of stimulating housing for employment purposes agrees that this is a worthwhile objective, but argues that it would be more practical to aim at stabilizing the construction industry as a whole, that is new residential construction, plus non-residential construction.(19) The non-residential construction component is, in fact, a larger proportion of investment than new resi-

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(18) H. Woodard, op. cit., page 9.

(19) "In many ways the total construction sector would seem to be a more sharply defined as well as a more useful unit to be considered in economic stabilization policies." L. Grebler, Housing Issues in Economic Stabilisation Policies, (National Bureau of Economic Research, N.Y., 1960) page 110.

dential construction, while the volume of non-residential mortgages is probably not more than about 15% of the annual mortgage flow.(20) This item is thus not influenced in any marked degree by variation in the availability of, or the terms of mortgage lending.

The mortgage marked by providing the mechanism whereby savings are channelled into investment in residential construction, thus influences the general level of economic activity in the country as measured by Gross National Expenditure. As has been suggested above, one way of measuring whether the mortgage market is performing well in this function of channelling savings into investment in residential construction is to consider whether the resulting house-building programme is at least large enough to accommodate the new families formed each year plus an allowance for dwelling units withdrawn from the housing stock through demolitions.

MORTGAGES IN THE SAVING-INVESTMENT PROCESS

The functions of the capital market as a whole in the savings-investment process have been summarized as follows by Wm. C. Hood;(21) conveying funds from economic units that spend less than their current income on goods and services to those that spend more, redirecting funds

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(20) See note 2 above.

(21) Wm. C. Hood, op. cit., page 13.

which seek reinvestment following repayment of outstanding obligations, providing liquidity for non-monetary financial assets and, generally eliciting and allocating funds for investment in financial assets. Wm. C. Hood's fifth function for the capital market (placed first in his presentation), namely to regulate the amount of money outstanding, is not considered here because the mortgage market has virtually no influence over the amount of money outstanding, although the mortgage market is of course affected by monetary policy (this is developed in Chapter V).

CONVEYING FUNDS FROM ECONOMIC UNITS THAT SPEND LESS THAN THEIR CURRENT INCOME ON GOODS AND SERVICES TO THOSE THAT SPEND MORE:

This function performed for the housing sector by the mortgage market is extremely important to the housing market. Although as was shown before, residential construction accounts for a relatively small fraction of Gross National Expenditure, it is a major transaction for the average home-buyer. As O.J. Firestone points, for an individual buying a home, it may easily represent the biggest single investment he will ever make.(22) Furthermore, as an average NHA home costs $14,500 while the average annual

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(22) O.J. Firestone, op. cit., page 237, see also, Central Mortgage and Housing Corporation, Housing and Urban Growth in Canada (OTTAWA), 1956, page 21.

income of home-buyers is $5,700,[23] it is quite clear that this is an area where the conveyance of funds to units that spend more than their current income is of fundamental importance.

One possible way of measuring whether the mortgage market is improving its performance in this respect is to see whether the average downpayment required to purchase a dwelling is declining as a proportion of income. For if this is the case, it would mean that the potential purchaser has to provide less of his own savings to purchase a dwelling and can rely to a greater extent on the savings of other units conveyed to him through the mortgage market. Downpayment requirements are, however, determined more by legislation than by changes in the availability of mortgage funds. Thus, the National Housing Act stipulates the proportion of the value of a new dwelling that can be supplied in the form of a mortgage. At present, the maximum loan amount for houses with more than three bedrooms is $14,900. The loan to value ratios are 95% of the first $12,000 and 70% of the remainder. In the conventional mortgage field, that is mortgages not covered by the NHA legislation, this ratio is limited by the regulations under which the institutional mortgage lenders operate. Thus, life,

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(23) The cost of an average NHA house at the end of 1959 as published by Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA).

trust and loan companies were not permitted to give a first mortgage in excess of 60% of the value of the real estate on which the mortgage is granted. This ratio was increased from 60% to 66 2/3% during 1961. As changes in the downpayment requirements are at present governed more by legislation than by economic forces in the mortgage market, a change in the ratio of downpayment for a dwelling to income of purchaser is not adopted here as one of the criteria whereby the performance of the mortgage market should be measured. The emphasis is thereby placed largely on purchases of new dwellings. It must be remembered, however, that in any given year about twice as many existing homes as new homes are purchased.(24)

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(24) O.J. Firestone, op. cit., page 141, suggests that " ... for every new unit built, about two and one-half existing dwellings (whether owner or tenant occupied) changed ownership." Estimates by the Federal Housing Administration in the United States show that during 1958 only 30% of the homes purchased were newly constructed homes. Housing and Home Finance Agency, Recommendation of Federal Agencies, (United States Senate, Committee on Banking and Currency Subcommittee on Housing, Study of Mortgage Credit, Washington, 1961), page 139, Appendix Table 1-D. While no such estimates exist for Canada, the annual data on real estate transfers, published by Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA), suggests that the proportions are similar here. This together with the quotation from O.J. Firestone form the basis for the statement in the text that about twice as many existing homes as new homes are purchased in any given year.

REDIRECT FUNDS WHICH SEEK REINVESTMENT FOLLOWING REPAYMENTS OF OUTSTANDING OBLIGATIONS:

The previous section emphasized that the conveying of savings from surplus to deficit units is of vital importance to the housing industry. The borrower, buying a home with the aid of savings accummulated by other units, utilizes the mortgage market to borrow, in a sense, against his future income stream. By the adoption of the amortized mortgage, that is a mortgage where the repayments are spread in an orderly fashion in the form of monthly capital repayments over the term of the loan, borrowers are enabled to repay their loans through their monthly savings. At the same time, these savings are made available to new purchasers. As will be shown in Chapter III, these repayments form an important source of funds for new mortgage loans. Thus, out of a total of $17.05 billion new mortgage loans made in the years 1953-1959, $10.44 billion, or 61% were provided by mortgage repayments. These $10.44 billion mortgage repayments (almost all of it made by individuals rather than corporations) represented 25% of Business Gross Fixed Capital Formation in the 1953-1959 period, as measured by the Dominion Bureau of Statistics in the national accounts. Innovations in the methods of mortgage repayments, particularly the adoption of the fully amortized mortgages, have con-

tributed greatly to both the willingness of the lender to make mortgage loans (mortgages became a safer investment[25] and the willingness of purchasers to assume a mortgage (the fear of a large mortgage payment possibly becoming due in a period of monetary stringency was greatly reduced). By generating a continuous stream of mortgage repayments, the mortgage market, in a sense, provides itself with internally generated funds available to the mortgage lenders for further reinvestment. There is, however, no obligation on the part of the mortgage lenders to reinvest these funds automatically in the mortgage market. The financial institutions are, of course, perfectly free to invest these funds in other types of financial instruments should the yield structure in the capital market be such as to make non-mortgage investments more attractive. The mortgage repayments accruing to financial institutions will therefore be allocated by them to new investment on the same basis as the funds accruing to them from other sources. This will be discussed further below where the process whereby financial institutions allocate their funds as between different forms of investment, is considered. Changes in repayment practices will be further commented upon in Chapter VII where mortgage policy is discussed in detail.

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(25) " ... fully amortized home loans were better risks in terms of preclosure experience than other mortgages." J.E. Morton, Urban Mortgage Lending, (Princeton University Press, 1956) page 102.

PROVIDE LIQUIDITY FOR NON-MONETARY FINANCIAL ASSETS:

This liquidity is achieved by a shifting of ownership of outstanding liabilities.(26) An active market in outstanding mortgages would be necessary to fulfill this function really well. There is at present no such market, although steps have recently been taken to create one.(27) The importance of liquidity lies in the fact that as a result of this liquidity, the market for that particular security is likely to be wider in the sense that more purchasers will be found for a particular security if they know that they can sell it readily, should they need funds unexpectedly. Furthermore, each purchaser will be willing to invest a larger proportion of his total assets in a security if it is readily saleable. The existence of an active secondary mortgage market would not only make it easier for each individual mortgage lender to invest a greater proportion of his assets in mortgages, it might

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(26) The concept of shiftability of assets and its contribution to liquidity was stressed by R.S. Sayers, Modern Banking (Oxford University Press, 1951), page 225.

(27) Wm. C. Hood, op. cit., page 445, points out that provision was made for trading in NHA mortgages in the National Housing Act, 1954. However, recently Central Mortgage and Housing Corporation, by the direction of the government, has sold NHA mortgages by tender in an effort to stimulate this market. Central Mortgage and Housing Corporation, Annual Report to the Minister of Public Works for the Year 1961 (OTTAWA), page 12.

also encourage financial institutions not previously active in the mortgage market to undertake mortgage lending. Wm. C. Hood attaches great significance to the existence of an active secondary mortgage market and expresses the hope that activity in the secondary mortgage market will increase. The development of secondary mortgage market activity both in Canada and in the United States is therefore commented upon in detail in Chapter VII.

Mortgages sold by the financial institutions in a secondary mortgage market can also help to supplement the flow of funds which these institutions have available for further investment. As will be shown in Chapter IV, sales in the secondary mortgage market have not been substantial up to now. Whether these funds will in fact be reinvested in the mortgage market will of course depend on the other investment opportunities open to the financial institution.

GENERALLY TO ELICIT AND ALLOCATE FUNDS FOR INVESTMENT IN FINANCIAL ASSETS:

As it is one of the functions of the capital market as a whole to elicit and allocate funds for investment in financial assets, so it is the function of the mortgage market to elicit and allocate funds for mortgages. This, indeed, will be one of the criteria adopted here to measure the performance of the mortgage market. The problem is how to make this criterion operational in the sense of

devising a measure that will show whether the flow of funds elicited from the savings pool and allocated to the mortgage market is adequate.

The basic criterion to measure the adequacy of the mortgage flow, it is here suggested, should be the ability to generate enough mortgage money to finance a house-building programme that is at least as large in terms of dwelling units as the number of new families that are being formed, plus an allowance for demolitions. This was discussed at the beginning of the chapter. This is also basically the point of view adopted in the United States by the Subcommittee on Housing, of the United States Senate in its 'Study of Mortgage Credit', where the adequacy of mortgage credit was studied in relation to the number of dwelling units needed to keep up with the growth in the number of families, etc. As will be seen from the data presented in subsequent chapters, this criterion was only met in Canada with the help of direct funds channelled into the mortgage market by the Federal Government. For this reason, it is here suggested that additional criteria are needed to measure the performance of the mortgage market. It is therefore suggested here that the performance of the mortgage market should be considered in relation to the capital market as a whole. This will be done in two ways. First, by considering whether the proportion of mortgages in the net flow of funds through

the capital market is maintained. If this is the case, than it can be argued that the mortgage component has at least succeeded as well as the whole capital market in drawing funds to itself out of the savings stream.(28) The second criterion adopted here to judge the performance of the mortgage market in relation to the capital market as a whole is to see whether the major financial institutions continue to increase the proportion of assets invested in mortgages.(29) This will indicate that even though the mortgage flow forthcoming from private sources is being supplemented with government funds, at least the private sector is also increasing the flow of mortgage funds by diverting a larger proportion of its own resources to mortgage lending. This assumes that yields on mortgage investments were attractive enough vis-a-vis yields on competing financial instruments available to the mortgage lenders as an outlet for their investment funds. In Chapter V it is shown that this was in fact so.

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(28) S.B. Klaman used this concept in discussing the adequacy of the mortgage flow of funds in the United States. See S.B. Klaman, "The Availability of Residential Mortgage Credit", included in United States Senate, Committee on Banking and Currency, Subcommittee on Housing, Study of Mortgage Credit (Washington, 1958), page 200.

(29) This approach is basic to the projection of the flow of mortgage funds in the United States made by S.B. Klaman, op. cit., pages 202-208.

SUMMARY

To sum up, it is here argued that the role of mortgage banking is to finance the real estate sector of the economy. As about 85% of the mortgage debt outstanding is secured on residential real estate, this is the sector emphasized in the present study. The mortgage market makes its major impact on the economy through its effect on the volume of new residential construction. New residential construction, which typically accounts for 5% of Gross National Expenditures, represents about one-quarter of private investment in Canada, and is thus a major component of a strategic part of the economy. In considering whether the mortgage market has performed well in providing funds for residential real estate, the forthcoming mortgage flow is considered in relation to the house-building programme which it helps to finance. A minimum requirement, it is here suggested, is the financing of a house-building programme producing at least enough dwelling units to house the new families formed, plus an allowance for demolished worn-out dwellings.

The terms on which mortgage credit is available influences both the supply and demand side of the housing market and thereby the volume of new residential construction. Although this offers an opportunity to manipulate terms of lending with a view to influencing the volume of new residential construction in a counter-cyclical fashion,

this is here not considered as one of the functions of the mortgage market as such.

The second point at which the mortgage market impinges on the economy as a whole is through its effect on savings. It is through the mortgage market that a purchaser of a dwelling - be it newly constructed or existing for several years - taps the accumulated savings stream to supplement his own savings, which in the case of a purchaser of a new NHA single-family dwelling, averages about one-fifth of the price of the dwelling. The same criterion developed above, namely a house-building programme large enough to take care of new family formation plus an allowance for demolitions, is an adequate measure of the mortgage market's ability to make accumulated savings available to potential purchasers. However, as the mortgage market was not able to meet the above test without substantial direct funds from the Federal Government, additional criteria are here suggested to measure whether the mortgage market performed at least as well as other sectors of the capital market. These criteria are first, whether the mortgage component is maintaining its position in the capital market. This is measured in terms of mortgages as a percentage of total capital market instruments outstanding. This way of looking at the mortgage market has the additional advantage of fitting in with the 'sources and

uses of funds' approach as developed in the United States.[30]

The second criterion suggested here is to see whether the mortgage lenders are diverting an increasing proportion of their resources to mortgage lending. This fits in with Wm. C. Hood's thesis[31] that one way of measuring whether the capital market is operating smoothly is to consider whether major lenders in that market are prepared to alter the composition of their portfolios in response to changing yield differentials. The ability to generate an orderly stream of repayments and to provide facilities for secondary mortgage activity are also considered desirable features of a well organized mortgage market. As an additional yardstick the performance of the Canadian mortgage market is also compared with its United States counterpart.

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(30) J.J.D'Leary, "Post-War Trends in the Sources and Uses of Funds 1947-1957", included in United States Senate, Committee of Banking and Currency, Subcommittee on Housing, Study of Mortgage Credit (Washington, 1958), pages 209-234.

(31) Wm. C. Hood, op. cit., pages 379-384.

CHAPTER II

MORTGAGES AND THE CAPITAL MARKET - 1939-1959

In the previous chapter, following Wm. C. Hood's definitions, it was pointed out that one of the major functions of the capital market was to convey funds from economic units that spend less than their current income on goods and services to those that spend more. The economic units that spend more than their current income must either go into debt to obtain the funds they need, or sell some of their assets. In this chapter, it is intended to consider only the funds raised via mortgages, federal government bonds, provincial bonds, municipal bonds and corporate bonds. J.G. Gurley and E.S. Shaw[1] refer to these instruments as primary debt. They include, however, common shares as well as short-term consumer debt in their primary debt series. Shares are left out of the discussion here because they do not bear a fixed rate of interest and, therefore, are not considered as a close substitute for mortgages in the portfolios of the mortgage lenders. They do, however, compete with mortgages in the portfolios of individuals. For this reason they will be considered briefly in the latter part of the chapter when the 1954-1959 period is discussed.

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[1] J.G. Gurley and E.S. Shaw, "The Growth of Debt and Money in the U.S.A., 1800-1950; A suggested interpretation", Review of Economics and Statistics (August 1957), page 257, footnote to Table 4.

Short-term consumer debt instruments are not considered here because mortgages are here considered as part of the long-term debt outstanding only. These securities will here be considered as constituting the demand side of the capital market. In the J.J. O'Leary 'Sources and Uses' terminology they constitute the use of funds.(2)

On the supply or "sources" of funds side will be the institutions that purchase the above securities. The institutions described here are the life insurance companies, the loan companies, the trust companies, and the chartered banks. These institutions, with the exception of the chartered banks, are usually referred to as "financial intermediaries" because they obtain funds from savers and make them available to investors. They are, therefore, intermediaries through whom the savings of surplus units are transferred to deficit units, but do not themselves do any saving. The inclusion of the chartered banks as one of the financial intermediaries is controversial as chartered banks can, through the creation of deposits (if they have excess reserves), make funds available to investors without a prior act of saving on the part of anyone in particular.

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(2) J.J. O'Leary, "Post-War trends in sources and uses of capital 1947-1957", Proceedings of United States Savings and Loan League (Chicago, 1958). See also R. Reyerson, Investment Outlook (Bankers Trust Company, New York, annual issues).

J.M. Culbertson[3], in particular, challenges the inclusion of banks as financial intermediaries, the course advocated by J.G. Gurley and E.S. Shaw.[4] J.M. Culbertson insists that the money creating function makes chartered banks unique and they should not, therefore, be considered a financial intermediary. For the purpose of the present discussion, it is more useful to adopt partly the J.G. Gurley and E.S. Shaw position and consider chartered banks together with the other major financial institutions, for they are one of the important purchasers of all the securities listed above as forming the demand side of the capital market. The banks' ability to create money does, however, single them out for special treatment. They will here be considered as the major channel through which the influence of monetary policy is transmitted to the capital market as a whole.[5]

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(3) J.M. Culbertson, "Intermediaries and Monetary Theory, A Criticism of the Gurley-Shaw Theory", American Economic Review (March, 1958), pages 119-132.

(4) J.G. Gurley and E.S. Shaw, "Reply", American Economic Review (March, 1958), pages 132-139.

(5) This is approximately the procedure adopted by Wm. C. Hood in Financing of Economic Activity in Canada (Royal Commission on Canada's Economic Prospects, OTTAWA, 1958), Chapter 8, pages 387-428.

THE DEMAND FOR CAPITAL MARKET FUNDS

J.G. Gurley and E.S. Shaw imply that the issue of primary debt can be usefully considered in relation to the investment programme of the sector issuing the debt.(6) This is in fact the procedure followed by the United States' Housing and Home Finance Agency in it's projections of the demand for capital market funds in the 1960's.(7) The demand side of the capital market in terms of the net increase of the amount of long-term debt outstanding will here also be considered in relation to the investment programme of the sector originating the debt.

CORPORATE BONDS

The data on net changes in the amount of corporate bonds outstanding illustrate quite clearly that corporations are not necessarily dependent on the issuing of corporate bonds to finance their investment programme. As Table 5 shows, the amount of debt outstanding actually declined

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(6) "Growth in primary debt. Primary debt (securities) is issued by spending units to finance current deficits. The aggregate of deficits in the community appears to depend on the level of gross national product, on the ratio of saving or investment to gross national product, and on the division of labour between savers and investors". J.G. Gurley and E.S. Shaw, "The Growth of debt and money in the U.S.A., 1800-1950; A suggested interpretation", Review of Economics and Statistics (August, 1957), page 253.

(7) Housing and Home Finance Agency, "Mortgage Credit, 1961-1970", Report submitted to subcommittee on Housing, United States Senate, and included in Study of Mortgage Credit - Recommendations of Federal Agencies (Washington, March, 1961), page 78, Table 10.

TABLE 5: NET CHANGE IN CORPORATE BONDS OUTSTANDING AND PRIVATE INVESTMENT ON PLANT AND MACHINERY, 1939-1945

Year	Net Change in Corporate Bonds Outstanding (Billions of Dollars)	Investment in Plant and Machinery (Billions of Dollars	Bonds as Percent of Investment (%)
1939-45	-.33	3.91	-8%
1946	.0	.93	0%
1947	.0	1.44	0%
1948	.12	1.77	7%
1949	.20	1.96	10%
1950	.17	2.04	8%
1951	.35	2.33	15%
1952	.28	2.89	10%
1953	.37	3.12	12%
1954	.40	2.74	15%
1955	.41	3.19	10%
1956	.93	4.26	22%
1957	1,03	4.67	22%
1958	.67	3.87	17%
1959	.15	3.82	3%
1946-59	5.08	39.03	11%

Source: Net change in corporate bonds outstanding. Calculated from data in Appendix Table A1. Investment in Plant and Machinery as published by Dominion Bureau of Statistics, National Accounts, Income and Expenditure (OTTAWA).

during the war period 1939-1945, although substantial investments in plant and machinery were undertaken during the war years.

J.M. Guttentag[8] makes the additional point that the demand for funds from corporation is not likely to be dis-

(8) J.M. Guttentag, "The Short Cycle in Residential Construction, 1946-1959", American Economic Review (June, 1961), page 292.

TABLE 6: NET CHANGES IN MORTGAGE DEBT OUTSTANDING AND NEW RESIDENTIAL CONSTRUCTION, 1935-1959

Year	Net Change in Mortgage Debt Outstanding (Billions of Dollars)	Investment in Residential Construction (Billions of Dollars)	Mortgages as Percent of Investment in Residential Construction (%)
1939-45	-.30	1.58	-19%
1946	.17	.41	41%
1947	.27	.54	50%
1948	.35	.67	52%
1949	.43	.78	55%
1950	.55	.85	65%
1951	.51	.91	56%
1952	.48	.83	58%
1953	.63	1.08	58%
1954-59	5.98	9.19	65%
1946-59	9.37	15.26	61%

Source: Net change in mortgage debt outstanding calculated from Appendix Table A-1. Investment in New Residential Construction as published by Dominion Bureau of Statistics, National Accounts, Income and Expenditure (OTTAWA).

couraged even by sharp increases in interest rates. This is shown in Canada by the sharp increase of $1.03 billion in corporate bonds outstanding during 1957, despite an increase in average corporate bond yields from 5.90% at the end of 1956 to 6.96% at the end of 1957.

MORTGAGES

As was pointed out in the previous chapter, new residential construction is much more dependent on external

financing in the form of mortgages than corporate investment is on corporate bond financing. The data on net changes in mortgages outstanding presented in Table 6 illustrates this point once more.

The data do not bring out clearly that the demand for mortgage funds is much more influenced by changes in interest rates than is the demand for corporate funds in the form of corporate bonds. J.M. Guttentag[9] and J.J. O'Leary[10] show that in the United States the trend in mortgage financing and corporate bond financing have moved in the opposite direction. This they ascribe to the fact that in the competition for funds in the capital market corporate bonds have been able to compete more affectively through the willingness of corporations to pay high interest rates for the funds they wanted. Wm. C. Hood makes the additional point that taxation policy which permits the interest payments to be charged as a cost have also contributed to this trend of making the issue of corporate bonds relatively interest-rate inelastic.[11]

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(9) J.M. Guttentag, ibid., Chapter 4, page 293.

(10) J.J. O'Leary, Study of Mortgage Credit-Hearings, (Subcommittee of the Committee on Banking and Currency, United States Senate, Washington, 1959), Chapter 5, page 258.

(11) "However as we shall argue below, an increase in tax rates in and of itself creates a permanent advantage of bond financing", Wm. C. Hood, op. cit., page 253.

Home-buyers, who pay the bulk of the mortgage interest payments, do not have this privilege. Also, as S.B. Klaman[12] points out, institutional factors in the mortgage market lead to many forms of non-price rationing of mortgage funds, on the part of the institutional lenders, such as varying the downpayment requirements, and more severe screening of the credit standing of the borrower, etc.

These trends are not brought out clearly by the data on net changes in mortgage debt outstanding. It is therefore more useful to analyze the mortgage data in terms of mortgage commitments, that is the commitment or promise on the part of a lender to make a certain mortgage loan. This is done in Chapter III.

PROVINCIAL AND MUNICIPAL BONDS

Bond financing by provincial and municipal governments, especially bond financing by municipalities, are also considered to be relatively sensitive to interest rate changes although Wm. C. Hood points out that in the case of the smaller municipalities, other factors are even more important.[13]

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(12) S.B. Klaman, The Post-war Residential Mortgage Market (Princeton, 1961), page 77.

(13) Small municipalities find it difficult to market their debentures, also the smallness of the issues makes marketing and underwriting cost of the issues more expensive. Wm. C. Hood, op. cit., pages 447-450.

TABLE 7: NET CHANGES IN PROVINCIAL AND MUNICIPAL BONDS OUTSTANDING AND INVESTMENTS BY PROVINCES AND MUNICIPALITIES, 1939-1959

Year	Net Change in Provincial and Municipal Bonds Outstanding (Billions of Dollars)	Investment by Provinces and Municipalities (Billions of Dollars)	Net Change in Debt as Percent of Investments (%)
1939-45	-.28	.79	-35%
1946	.06	.28	21%
1947	.21	.39	64%
1948	.21	.54	39%
1949	.42	.64	66%
1950	.30	.68	44%
1951	.55	.75	73%
1952	.52	.99	53%
1953	.60	1.06	57%
1954	.55	1.11	50%
1955	.48	1.19	40%
1956	.76	1.51	50%
1957	.87	1.77	49%
1958	.92	1.87	49%
1959	.79	1.92	41%
1946-59	7.24	14.70	49%

Source: Net change in provincial and municipal bonds outstanding calculated from data in Appendix Table A-1. Investment by provinces and municipalities published by the Dept. of Trade and Commerce, Private and Public Investment in Canada (OTTAWA).

The variations in the amount of provincial and municiap bonds outstanding are thus similar to those shown by the mortgage data.

The amount of bonds outstanding declined during the war years when relatively little social capital building took

place and increased rapidly after the war as the network of schools, hospitals and roads, etc., were greatly extended. Unlike the mortgage market, no commitment data are available in the provincial and municipal bond financing series, but the impact of interest rates on the volume of bond financing can be measured with reference to the changes in the amount of bonds outstanding. The decline in provincial and municipal bond financing as well as corporate bonds financing in response to rising interest rates, is particularly noticeable during 1959. Many of these borrowers sought to escape from the high interest rates in Canada by borrowing heavily abroad, particularly in the United States.

FEDERAL GOVERNMENT BONDS

The net changes in the amount of federal government bonds outstanding are only remotely connected with the investment programme undertaken by the federal government. These changes are rather an expression of the federal government's overall fiscal policy(14) designed to achieve a high level of employment at relatively stable prices. These objectives will determine whether the government will budget for a surplus or deficit and whether government

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(14) See for instance, Housing and Home Finance Agency, op. cit., pages 83-86.

TABLE 8: NET CHANGE IN FEDERAL GOVERNMENT BONDS OUTSTANDING AND INVESTMENT BY FEDERAL GOVERNMENT, 1939-1959

Year	Net Change in Federal Government Debt Outstanding (Billions of Dollars)	Investment by Federal Government (Billions of Dollars	Net Change in Debt as Percent of Investments (%)
1939-45	13.04	2.36	553%
1946	-.17	.14	-121%
1947	-.60	.16	-375%
1948	-.23	.26	- 88%
1949	-.66	.30	-217%
1950	.07	.31	22%
1951	-.56	.47	-119%
1952	-.14	.60	- 23%
1953	.45	.57	79%
1954	-.17	.48	- 35%
1955	.53	.47	113%
1956	-.77	.68	-113%
1957	-.06	.85	- 7%
1958	1.25	.89	140%
1959	.72	.86	84%
1946-59	-.34	7.04	-5%

Source: Net change in Federal Government debt outstanding. Calculated from data in Appendix Table A-1. Investment by Federal Government as published by the Dept. of Trade and Commerce, Private and Public Investment in Canada (OTTAWA).

expenditures will be paid for by taxation or borrowing. Furthermore, as J.M. Guttentag[15] points out, the federal

(15) "The government's credit demands are interest-rate inelastic in the extreme and not to be put off by non-interest rate credit rationing". J.M. Guttentag, op. cit. page 293.

government's needs for funds will not be restrained by rises in interest rates. Nevertheless, for the sake of symetry, the data on net changes in federal government bonds outstanding are here presented together with the data on investments undertaken by the federal government.

THE SUPPLY OF CAPITAL MARKET FUNDS

The supply of capital market funds will be discussed here mainly in terms of the major financial institutions that purchase the capital market securities listed above, where the demand side of the market was discussed.

LIFE INSURANCE COMPANIES

Apart from the chartered banks, the life insurance companies are the most important of the financial institutions in the Canadian capital market, as measured by total assets. The investment policies of those companies, and the forces affecting their rate of growth are discussed in detail by Wm. C. Hood.(16) He points out that the service sold by life companies to consumers is protection against both dying (an insurance contract) and living (an annuity contract). The buying of this protection now constitutes one of the most important forms in which individuals save. This can be seen from Table 9 where the asset growth of life companies is contrasted with personal savings as calculated in the national accounts. It is shown there that on the basis of this admittedly rough measurement about one-third of personal savings flows into life companies.(17) The Bank of Canada

(16) Wm. C. Hood, op. cit., pages 331-367.

(17) Wm. C. Hood, op. cit., page 341, uses a more refined method of calculating savings flowing into life companies. He estimates those savings at 26% of total consumer savings in the years 1946-1954.

TABLE 9: ASSET GROWTH OF LIFE COMPANIES AND PERSONAL SAVINGS, 1947-1959

Year	Asset Growth of Life Companies (Billions of Dollars)	Personal Savings (Billions of Dollars)	Percent of Savings (%)
1947	.21	.49	43%
1948	.20	.99	20%
1949	.25	.93	27%
1950	.24	.67	36%
1951	.16	1.33	12%
1952	.29	1.29	22%
1953	.39	1.31	30%
1954	.33	.81	41%
1955	.50	.85	59%
1956	.40	1.32	30%
1957	.50	1.14	44%
1958	.49	1.61	30%
1959	.46	1.75	26%
1947-59	4.42	14.49	30%

Source: Asset growth of life companies, Central Mortgage and Housing Corporation, Canadian Housing Statistics, (OTTAWA). Personal savings as published by the Dominion Bureau of Statistics, National Accounts; Income and Expenditure, (OTTAWA).

publishes asset data and investment data for 12 life companies who do about 80% of the life companies business and these data show that about four-fifths of the resources accruing to the life companies are reinvested in the capital market.[18] As Wm. C. Hood points out, the composition of their assets changes from time to time in response to changes

(18) Bank of Canada, Statistical Summary (OTTAWA, current issues).

in yields of the different types of bonds.(19) In recent years the emphasis has shifted more and more towards mortgages. (See Table A-13 in Appendix). Thus, while at the end of 1939 mortgages represented only 18% of life companies' assets, this ratio had risen to 42% at the end of 1959.

LOAN COMPANIES

Wm. C. Hood, although he mentions loan and finance companies(20) does not go into the details of their operations. Also, he discusses one of the major loan companies, Investors' Syndicate, as one of the companies specializing in common stock investments, although he recognizes that the institution in question is an active mortgage lender.(21) This company is here considered as one of the major loan or mortgage companies, following the convention adopted by the Bank of Canada in its monthly 'Statistical Summary'.(22) As Wm. C. Hood mentions, loan companies raise most of their funds by attracting deposits and selling debentures to the

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(19) "There can be little doubt that life insurance companies are sensitive to relative yields of a variety of financial assets and to changes in these relative yields", Wm. C. Hood, op. cit., page 351.

(20) Wm. C. Hood, ibid., page 351.

(21) Wm. C. Hood, ibid., page 323.

(22) Bank of Canada, Statistical Summary (OTTAWA, May, 1961), page 298.

TABLE 10: ASSET GROWTH OF LOAN COMPANIES AND PERSONAL SAVINGS, 1947-1959

Year	Personal Savings (Billions of Dollars	Asset Growth of Loan Companies (Billions of Dollars	Percent of Savings (%)
1947	.49	.04	8%
1948	.99	.01	1%
1949	.93	.05	5%
1950	.67	.01	1%
1951	1.33	.01	1%
1952	1.29	.01	1%
1953	1.31	.04	3%
1954	.81	.07	9%
1955	.85	.06	7%
1956	1.32	.04	3%
1957	1.14	.05	4%
1958	1.61	.06	4%
1959	1.75	.07	4%
1947-59	14.49	.52	4%

Source: Asset Growth of Loan Companies, Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA). Personal Savings, Dominion Bureau of Statistics, National Accounts, Income and Expenditure (OTTAWA).

public. The rates of interest paid on these deposits are generally higher than those paid by the chartered banks on their savings deposits.(23)

As can be seen from Table 10 above, these companies, in terms of the annual funds which they invest in the

(23) At the end of 1959, chartered banks paid 2.75% interest on their savings deposits while Trust companies paid 3.75% interest on savings deposited with them. Interest rates paid by loan companies are comparable to the rates paid by Trust companies. Bank of Canada, Annual Report to the Minister of Finance for the Year 1959 (OTTAWA), page 69.

capital market, are much less important than the life companies. Thus, the annual increase in assets of these companies represents only about 4% of personal savings compared to the 30% represented by life companies' savings.

The Bank of Canada publishes annual asset data on 7 Mortgage Loan Companies representing in terms of assets about 90% of all loan companies assets. These data show that about 90% of the net annual increase in loan company assets are invested in capital market instruments.(24) Their investments are very definitely oriented towards mortgages. Thus, at the end of 1959, 75% of the loan companies' assets were invested in mortgages, compared to 65% at the end of 1939. (Appendix Table 13-A).

TRUST COMPANIES

In discussing the trust companies, Wm. C. Hood says,

> "The business of a trust company is so varied and the purposes for which funds under administration are being held are so diversified that it is difficult if not impossible to generalize about conventional practices of trust companies as they impinge on the capital market." (25)

He also points out that the assets distribution of the trust companies portfolio are available only for their company and guarantee fund, (the data used here) while no portfolio distribution data are available for the estate trust agency

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(24) Bank of Canada, Statistical Summary - Financial Supplement, 1959 (OTTAWA), page 88.

(25) Wm. C. Hood, op. cit., page 318.

TABLE 11: ASSET GROWTH OF TRUST COMPANIES AND PERSONAL SAVINGS, 1947-1959

Year	Personal Savings (Billions of Dollars)	Asset Growth of Trust Companies (Billions of Dollars)	Percent of Personal Savings (%)
1947	.49	.01	2%
1948	.99	.02	2%
1949	.93	.05	5%
1950	.67	.03	4%
1951	1.33	.03	2%
1952	1.29	.02	2%
1953	1.31	.00	0
1954	.81	.15	19%
1955	.85	.09	11%
1956	1.32	.03	2%
1957	1.14	.03	3%
1958	1.61	.18	11%
1959	1.75	.11	6%
1947-59	14.49	.75	5%

Source: Asset growth of trust companies; Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA). Personal Savings: Dominion Bureau of Statistics National Accounts: Income and Expenditure (OTTAWA).

funds administered by these companies. These totalled $6.9 billion at the end of 1959 and are a much larger investment pool than the company and guarantee funds, which totalled $1.06 billion at the end of 1959 and for which the portfolio distribution is available. Wm. C. Hood's judgment is that the asset composition of these trust funds is changed in response to changing yield differentials.

Table 11 shows that funds accruing to trust companies annually represented about 5% of personal savings. The data on seventeen of these trust companies further show that about 80% of these funds were invested in the capital market instruments under consideration here.(26) At the end of 1959, trust companies as a whole, had about 39% of their assets invested in mortgages, the same percentage as at the end of 1939.

Like the loan companies, the trust companies obtain their funds by deposits from the public and by the sale of investment certificates. It would seem, however, that whereas about 30% of the trust companies' liabilities are represented by deposits, and about 55% by investment certificates, loan companies get only about 15% of their funds in the form of deposits, and another 70% of their funds by debentures. This may explain why the ratio of mortgages to total assets is lower for trust companies than for loan companies.

CHARTERED BANKS

In discussing the chartered banks, it must be pointed out that the major liabilities of the chartered banks - their demand and savings deposits - form the bulk of the money supply in the country. The other liability item of

(26) Bank of Canada, Statistical Summary - Financial Supplement, 1959 (OTTAWA), page 88.

any consequence in the chartered banks' balance sheet - their share capital-represents only about 5% of their total liabilities, or assets.(27)

Changes in money supply will thus be reflected quite closely in changes in the total liabilities (or assets) of the chartered banks. It is not intended here to go into the details of how the Bank of Canada exercises its control over the total liabilities or assets of the chartered banks, by controlling their cash assets through open-market operations in government securities.(28) It is merely taken for granted in this presentation that the Bank of Canada does in fact more or less determine the size of the chartered banks' assets. The Bank of Canada does not, however, determine the portfolio distribution of these assets, apart from stipulating that 8% must be kept in cash (notes and deposits at Bank of Canada) and that an additional 7% must be invested in liquid assets (cash, Bank of Canada deposits, day-to-day loans to investment dealers, and treasury bills). It is here argued that the monetary policy of the Bank of Canada is transmitted to the capital market through the portfolio changes that the chartered banks are induced to undertake. This

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(27) Wm. C. Hood, op. cit., page 390.

(28) For a description of Canadian central bank techniques see E.P. Neufeld, Bank of Canada Operations, 1935-1954 (TORONTO, 1955).

TABLE 12: ASSET GROWTH AND CHANGES IN SELECTED INVESTMENTS OF CHARTERED BANKS, 1947-1959

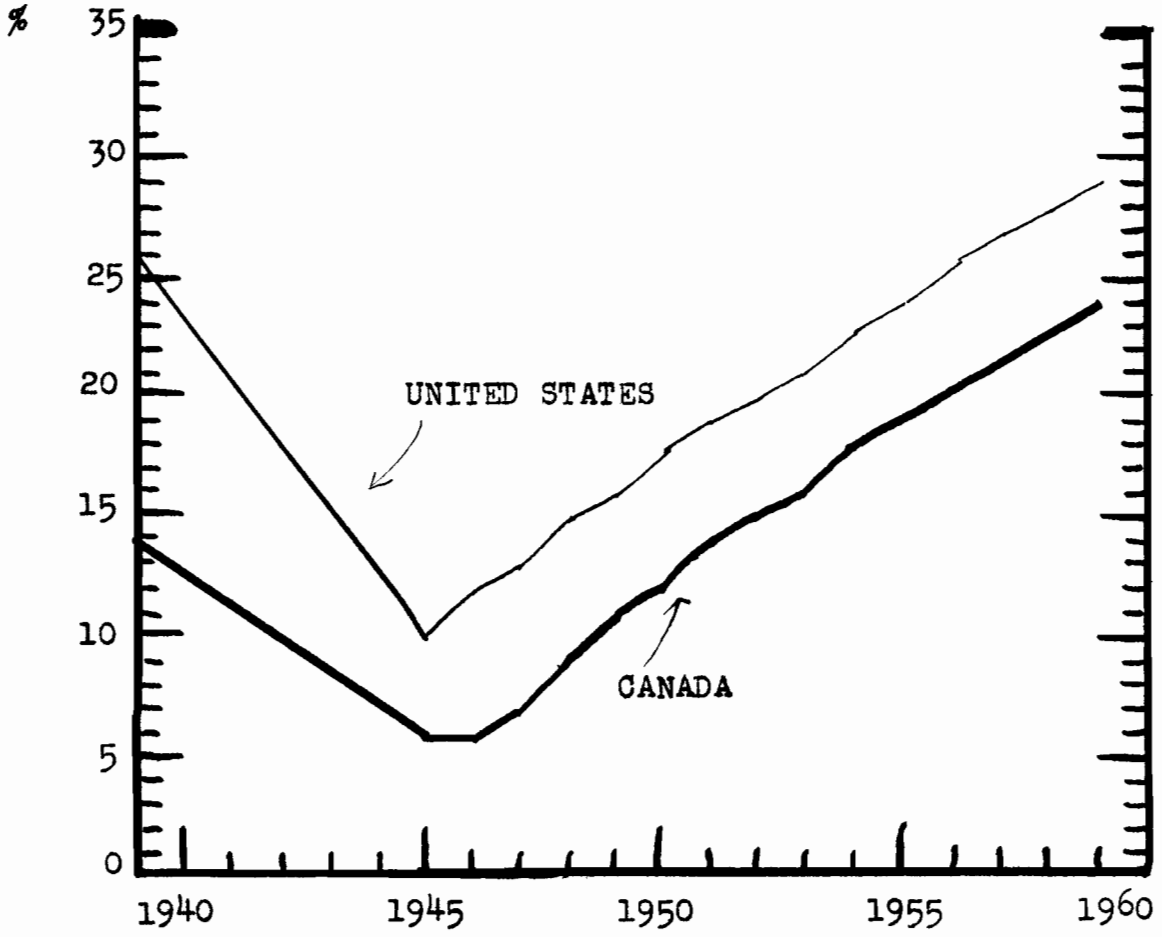
Year	Net Changes in Assets of Chartered Banks (Billions of Dollars)	Total Capital Market Investments (Billions of Dollars)	Government Securities (Billions of Dollars)	Bank Loans (Billions of Dollars)
1947	.19	-.37	-.58	.48
1948	.64	.38	.31	.19
1949	.21	.10	.15	.12
1950	.75	--	.07	.50
1951	-.03	-.42	-.33	.23
1952	.64	-.02	.04	.35
1953	.47	-.08	-.03	.59
1954	.71	.65	.55	-.01
1955	1.25	.20	-.25	.79
1956	.41	-.51	-.64	.47
1957	.36	.32	.22	.05
1958	1.34	1.28	.87	--
1959	-.30	-.64	-.71	.73
1947-59	6.64	.89	-.33	4.49

Source: Bank of Canada, Statistical Summary - Financial Supplement, 1959, page 19.

is illustrated in Table 12 above, where the asset growth of the chartered banks (determined by the Bank of Canada) is contrasted with the capital market investments of the chartered banks (determined mainly by capital market conditions in which the chartered banks play a large role).

Table 12 above brings out clearly that the relationship of the chartered banks to the capital market is quite different from the relationship of the other financial intermediaries to the capital market. On the one hand the

CHART 1. MORTGAGES AS % OF TOTAL LONG-TERM OUTSTANDING DEBT IN THE UNITED STATES AND CANADA, 1939-1959



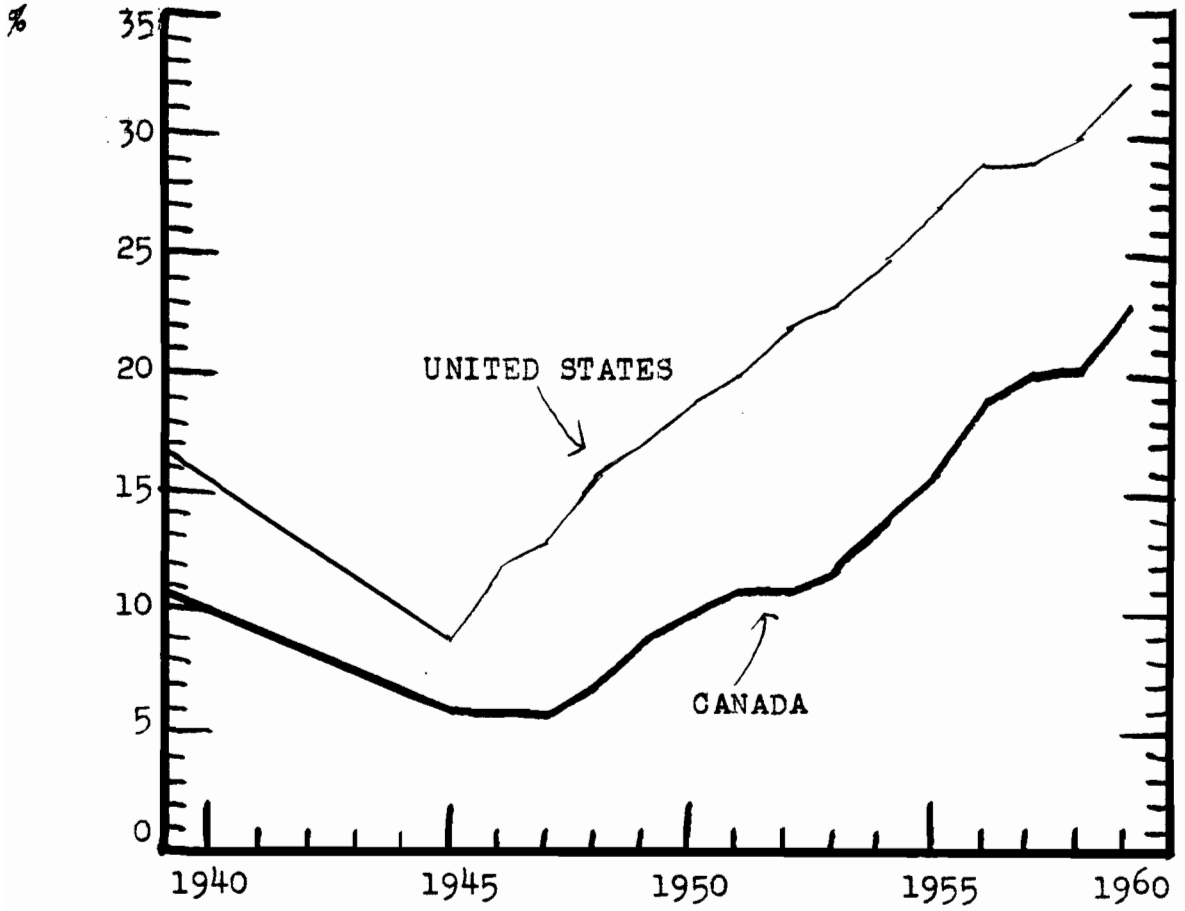
Source: Appendix Table A-10. Data relating to the years 1940-1944 estimated by interpolation. Data relating to the years 1955-1958 estimated by interpolation for Canada only.

annual net change in bank assets is much more volatile, governed as it is by monetary policy rather than the flow of savings. Also, the investment policies of the chartered banks are quite different. Whereas the other financial intermediaries invest a relatively constant proportion of their asset growth in capital market instruments, the chartered banks treat their capital market investments almost as a residual. Their main concern is to make loans while their capital market investments take second place. The major variations as shown by Table 12, occur in their government securities portfolio, which are run down when the demand for bank loans cannot be met by the growth in assets.

THE CANADIAN AND UNITED STATES CAPITAL MARKETS - 1939-1959; A COMPARISON

The foregoing sketch of the Canadian capital market sets the stage for a Canada-United States comparison. In making this comparison the mortgage component of the capital market will be emphasized to some extent. This is done so as to show that the mortgage market has met two of the criteria stipulated in Chapter I, namely that the mortgage component has become larger in the capital market in the 1939-1959 period (as shown in Chart 1), and that the mortgage lenders have devoted an ever increasing proportion of their resources to mortgage lending (as shown in Chart 2).

CHART 2. MORTGAGES AS % OF FINANCIAL INSTITUTIONS ASSETS IN THE UNITED STATES AND CANADA, 1939-1959



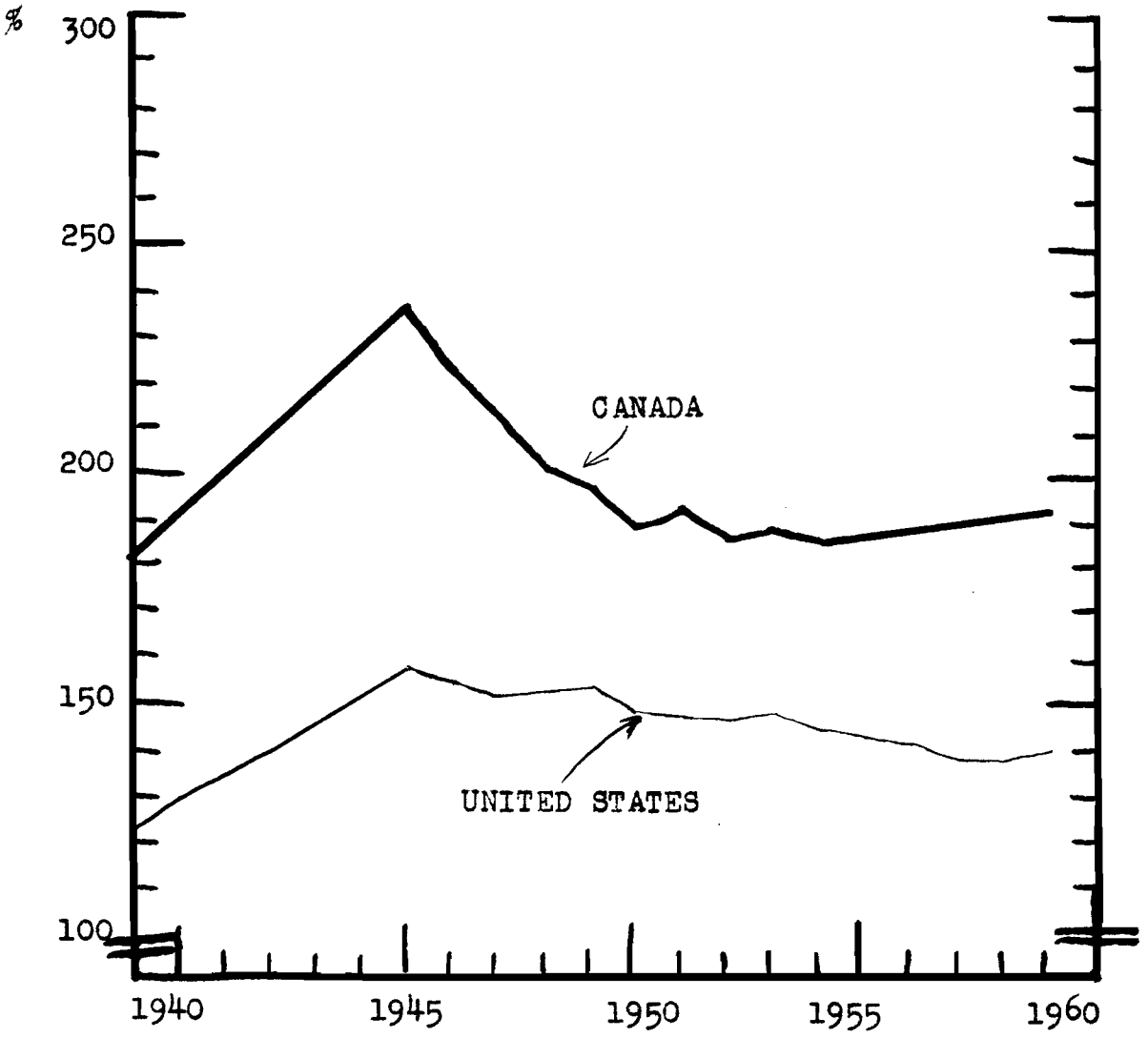
Source: Appendix Table A-10. Data relating to the years 1940-1944 estimated by interpolation.

The comparison of the Canadian and United States capital markets presented below was influenced strongly by the particular capital market point of view adopted in this thesis. Before continuing, it may be worthwhile to restate that point of view.

It is here argued that the broad outlines and changes in the capital market can best be described by observing changes in the major categories of debt whereby the deficit sectors of the economy obtain funds, together with changes in the asset growth of the major financial intermediaries.

The growth of debt can be taken as a measure of the growth of the capital market itself, while shifts in the composition of the outstanding debt will reveal which sectors of the economy are growing faster than the economy as a whole. The growth in assets of the major financial institutions can be taken as a rough measure of the flow of funds available to absorb the capital market debt. Changes in the importance of the various institutions will also show whether these funds are made available from savings or monetary expansion. J.G. Gurley and E.S. Shaw's concept of "direct" or "indirect" finance is also accepted. According to this concept, changes in the amount of debt that has to be absorbed outside the financial institutions (direct finance) will be correlated positively with changes in the

CHART 3. LONG-TERM DEBT AS % OF ASSETS OF FINANCIAL INSTITUTIONS IN THE UNITED STATES AND CANADA, 1939-1959



Source: Appendix Table A-9. Data relating to the years 1940-1944 estimated by interpolation. Data relating to the years 1955-1958 estimated by interpolation for Canada only.

interest rate structure.[29] Thus, if more of the debt has to be absorbed outside the financial institutions, interest rates will tend to rise and vice-versa. It is therefore useful to consider the amount of capital market debt outstanding in relation to the assets of the major financial institutions (as shown in Chart 3). As was shown above, all these institutions, except the chartered banks, invest a relatively constant proportion of their assets in capital market instruments. This then is the rationale governing the format within which the Canadian and the United States capital markets are compared. The period under consideration, 1939-1959, is split into three sub-periods, namely, 1939-1945 - the war years; 1945-1953 - the post-war years but pre-1954 NHA Act and, 1954-1959 - the post NHA Act period.

Then in conformity with the special point of view adopted in this presentation the changes occuring in the capital market during each of these periods will be commented on from the point of view of changes in the size

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(29) J.G. Gurley and E.S. Shaw, "Financial Intermediaries and the Savings-Investment Process", Journal of Finance (May, 1956), pages 257-276. This concept is criticized by J.M. Culbertson, op. cit., page 129. The financial data in Canada throughout most of the fifties support the J.G. Gurley and E.S. Shaw point of view, as they show that on the average long-term interest rates increased as the proportion of debt held outside the major financial institutions increased, and vice-versa. Therefore, the J.G. Gurley and E.S. Shaw concepts of "direct finance" and "indirect finance" ratios, are operationally useful. It is basically the concept underlying R. Reyerson's outlook for interest rates, as given annually to the meetings of the Finance Association of America, and subsequently published in the Journal of Finance.

of the capital market, changes in the composition of the capital market in terms of the structure of the debt outstanding and changes in the importance of the major financial institutions in terms of their assets. Finally, changes in the ability of the financial institutions to absorb the capital market debt will be considered.

The period as a whole presents a record of rapid growth in the capital market, both from the point of view of the amount of debt outstanding and the growth of assets of the major financial institutions. Some of the factors influencing the growth were discussed earlier in this chapter. The relevant capital market statistics are presented systematically in the Appendix tables. All the data used in the following comparison of the Canadian and United States capital markets together with the sources on which they are based can be found in that Appendix.

1939-1945: THE WAR YEARS

THE SIZE OF THE MARKET:

The size of the market for long-term funds increased rapidly in both Canada and the United States. As measured by the amount of federal, provincial, municipal and corporate bonds and mortgages outstanding, the increase in Canada was from $11.25 billion at the end of 1939 to $23.38 billion at the end of 1945, an increase of 108%. In the

United States, during the same period, the increase was from $137.9 billion to $364.8 billion, an increase of 164%. Long-term debt thus increased at a more rapid rate in the United States than in Canada during the War Years.

COMPOSITION OF THE MARKET:

A glance at the changes in the composition of the market reveals that the more rapid growth of long-term debt in the United States as compared to Canada, was due to the more rapid increase in federal government debt in the United States. Thus, the United States federal debt increased seven-fold between the end of 1939 and the end of 1945, from $41.9 billion to $278.7 billion. In Canada, the federal government debt increased only fourfold during the same period, from $4.44 billion to $17.48 billion. This sharp increase in federal government debt in both countries reflects the enormous increase in war expenditures, financed by the federal treasury in large part through borrowing.

All other forms of long-term debt declined in both absolute and relative terms. As a result, the proportion of federal bonds to total debt outstanding rose in Canada from 39% at the end of 1939 to 75% at the end of 1945. In the United States, the increase during the same period was from 30% to 76%. To facilitate the absorbtion of the huge increase in federal debt resort was had to monetary expan-

sion. As a result, bank assets grew at a faster rate than the assets of the other financial intermediaries. Thus, in Canada, the ratio of chartered banks' assets to total assets of financial institutions rose from 58% at the end of 1939 to 65% at the end of 1945. In the United States, as a result of the more rapid increase in the federal debt, this tendency was even more pronounced. There, the proportion of commercial bank assets to total assets of financial institutions increased from 58% at the end of 1939 to 69% at the end of 1945.

ABILITY OF THE FINANCIAL INSTITUTIONS TO ABSORB THE DEBT:

One way of measuring the ability of the financial institutions to absorb the increase in debt is to compare total debt outstanding with total assets of financial institutions. On this basis, the debt outstanding grew much faster than the assets of the financial institutions that hold the bulk of this debt. In Canada, the ratio of debt outstanding to assets of financial institutions rose from 182% at the end of 1939 to 237% at the end of 1945. In the United States, this ratio rose during the same period from 123% to 158%. This comparison reveals that during the whole period, the financial institutions in the United States were able to acquire a larger proportion of the outstanding debt, than their Canadian counterparts.

1946-1953: THE POST-WAR, PRE-1954 NATIONAL HOUSING ACT PERIOD:

The conversion from a war-time economy to a peace-time economy naturally left its mark also on the capital market statistics.

THE SIZE OF THE MARKET:

Total debt outstanding increased at a much more moderate rate in the post-war period as compared to the war years, owing to the decline ih the federal government debt during the period. In Canada, the increase in total debt was from $23.38 billion at the end of 1945 to $29.33 billion at the end of 1953, an increase of 25% during the 8 years, compared to an increase of 108% in the previous 6 years. The same trends are evident also in the United States, where total debt outstanding increased from $364.8 billion to $477.8 billion from 1945 to 1953, an increase of 31% during the 8 years, compared to an increase of 164% in the previous 6 years.

COMPOSITION OF THE MARKET:

The return to a peace-time economy was reflected also in the changing structure of the outstanding debt. While the federal government debt declined, other types of long-term debt increased to help finance roads, hospitals, etc., at the provincial and municipal government level, and

industrial plants and machinery as well as housing in the private sector. As a result of these tendencies, the proportion of federal government bonds to total long-term debt outstanding declined from 75% at the end of 1945 to 53% at the end of 1953. The biggest increase was in mortgage debt outstanding. Thus, while mortgage debt represented only 6% of total long-term debt outstanding at the end of 1945, it rose to 16% at the end of 1953, higher than the pre-war ratio of 14%. These developments in Canada were similar to the trend in the United States during the same period. There, the ratio of federal government bonds to total long-term debt outstanding declined from 76% at the end of 1945 to 58% at the end of 1953. The proportion of mortgage debt to total debt outstanding increased from 10% to 21% during the same period, but remains below the 26% attained at the end of 1939. This decline in the federal government debt made rapid monetary expansion unnecessary. As a result, chartered bank assets increased less rapidly than assets of the other financial institutions during the period. Thus, in Canada the ratio of chartered bank assets to total assets of financial institutions declined from 65% to 63% between 1945 and 1953. In the United States the decline in this ratio was even more rapid, from 69% to 59%. The United States data also brings out the remarkable increase in the assets of the savings and loan associations. Their assets represented

only 4% of the assets of the major financial institutions at the end of 1945. This ratio had risen to 8% at the end of 1953. In dollar terms, their assets increased three-fold, from $8.7 billion at the end of 1945 to $26.7 billion at the end of 1953.

ABILITY OF THE FINANCIAL INSTITUTIONS TO ABSORB THE DEBT:

In Canada, the ratio of long-term debt to assets of the major lending institutions declined from 237% to 189% from 1945 to 1953. This ratio thus returned almost to the 1939 level of 182%. According to this measure, therefore, the assets of the lending institutions grew more rapidly than the amount of debt outstanding. The same is true also for the United States, where this ratio declined from 158% at the end of 1945 to 147% at the end of 1953, but still remained much higher than the 123% ratio at the end of 1939. The ratio of long-term debt to assets of lending institutions is emphasized here because of the belief that year to year changes in this ratio are positively correlated with long-term interest rate movements as explained earlier in this chapter.

1954-1959: THE POST-1954 NATIONAL HOUSING ACT PERIOD

THE SIZE OF THE MARKET:

The increase in the size of the market in Canada during this period was from $29.33 billion at the end of 1953 to $44.87 billion, an increase of 54%. The increase in long-term debt outstanding in the six years comprising the second half of the post-war period was thus more rapid than the increase of 25% recorded in the first 8 years of the post-war period. All sectors of long-term debt, public as well as private, increased during the period. This increase in Canadian long-term debt was much more rapid than the increase of 35% that took place in the United States during the same 1954-1959 period, only slightly higher, in turn than the increase that had taken place there in the first 8 post-war years. In absolute terms, the increase in the United States long-term debt outstanding was from $477.8 billion at the end of 1953 to $646.4 billion at the end of 1959. During this same period $2.5 billion common and preferred shares were issued in Canada and $19.6 billion in the United States.(30) Corporations raised $3.6 billion in the form of corporate bonds in Canada in the 1954-

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(30) See United States Federal Reserve Board of Governors, United States Federal Reserve Bulletin (Washington, Oct., 1961), page 1218. Data on Net Change in Outstanding Corporate Securities, also Bank of Canada, Statistical Summary - Financial Supplement, 1959 (OTTAWA, 1960), page 83.

1959 period, and $33.5 billion in the United States. Corporate financing in the capital market in Canada was thus roughly in the ratio of 40%, stocks versus 60% bonds. In the United States this ratio was about 36% in the form of stocks and 64% in the form of bonds. The data are, however, not precise enough to state that the pattern of corporate financing differed greatly between the two countries. In terms of the increase in total debt outstanding the new preferred and common stocks issued in Canada in the 1954-1959 period represented 16% of the $15.54 billion increase in long-term debt outstanding. In the United States, common and preferred shares issued in the 1954-1959 period represented 12% of the increase in outstanding long-term debt. This suggests that equity financing was proportionately more important in the Canadian capital market in the 1953-1959 period than in the United States.

COMPOSITION OF THE MARKET:

The structural changes in the long-term debt that were noted in the previous period continued in the same direction. Thus, federal government bonds declined still further as a percentage of the long-term debt outstanding, from 53% at the end of 1953, to 38% at the end of 1959. Again, it is the mortgage component that showed the greatest increase. Thus at the end of 1959, mortgages outstanding at $10.70 billion had increased by $5.98 billion since

the new National Housing Act came into force during 1954. Thus, the mortgage component represented 24% of the long-term debt outstanding at the end of 1959, compared to 16% at the end of 1953. These shifts once more mirrored the fact that in peace-time the emphasis continued to shift to the private sector of the economy.

These trends are evident also in the United States data. Federal bonds declined there as a proportion of total long-term debt outstanding, from 58% at the end of 1953 to 45% at the end of 1959. This again was a reflection of the increase in long-term debt in the private sector of the economy, particularly mortgages. Thus, mortgages outstanding in the United States increased from $101.3 billion at the end of 1953 to 191.0 billion at the end of 1959. This was a rise of 90%, less than the 127% increase in Canada during the same period. In terms of their importance in the United States capital market, mortgages outstanding increased from 21% at the end of 1953 to 29% at the end of 1959. Mortgages thus still represent a larger component in the United States capital market, than in the Canadian capital market. But the gap was closed considerably during the 1954-1959 period.

The decline in the importance of federal government debt in the capital market is again paralleled by a decline in the importance of chartered banks, in terms of the proportion of their assets to total assets of the major

lending institutions. Thus, while chartered banks assets represented 63% of total assets of the financial institutions at the end of 1953, their proportion had dropped to 58% at the end of 1959.

These trends are again similar to those in the United States where bank assets, as a proportion of the assets of financial institutions, declined from 59% at the end of 1953 to 53% at the end of 1959. The savings and loan associations continued their remarkable growth during the period. This is shown by the fact that their assets as a proportion of the assets of all financial institutions increased from 8% at the end of 1953 to 14% at the end of 1959.

ABILITY OF THE FINANCIAL INSTITUTIONS TO ABSORB THE DEBT:

On the basis of the ratio of long-term debt to assets of financial institutions the ability of the financial institutions to absorb the long-term debt declined in Canada from the end of 1953 to the end of 1959, as long-term debt increased faster than the assets of the financial institutions, this ratio increased during the period from 189% at the end of 1953 to 192% at the end of 1959. This means quite simply that more of the long-term debt had to be absorbed outside the financial institutions. This is contrary to the trend in the United States, where the ability of the financial institutions to absorb long-term

debt, as a percentage of the assets of financial institutions continued to decline from 147% at the end of 1953 to 140% at the end of 1959. Thus in the United States, the rapid growth in the assets of savings and loan associations more than compensated for the slow growth in commercial bank assets while in Canada the effects of the slower growth of chartered banks assets was not offset by a more rapid growth in the assets of the other financial institutions.

STRUCTURAL CHANGES IN THE CAPITAL MARKET, 1939-1959

The changes in the capital market were discussed above in terms of the changes induced by war-time conditions in the 1939-1945 period. The changes that occurred in the post-war period, and the problems involved in switching back to a peace-time footing were then considered in two separate stages. It seems appropriate now to consider whether any structural changes have emerged in the capital market during the 20 years here under review.

SIZE OF THE CAPITAL MARKET:

In terms of long-term debt outstanding in the capital market, there has, of course, been a tremendous expansion. The size of the capital market in Canada measured in this way increased from $11.25 billion at the end of 1939 to $44.87 billion at the end of 1959. It thus almost

quadrupled in size. This is, however, not really such an outstanding feat if we bear in mind that Gross National Products in Canada increased from $5.64 billion to $34.59 billion in the same period, a sixfold increase. Nor is the increase in the size of the market as great as the expansion of the capital market in the United States. There the volume of long-term fixed interest debt outstanding increased from $137.9 billion to $646.4 billion, almost a fivefold increas, thereby more or less keeping pace with the general expansion of the economy as measured by the more than fivefold increase in Gross National Product, from $91.1 billion at the end of 1939 to $487 billion at the end of 1959. The absolute size of the market does not, however, tell us anything about structural changes in the market. For this, we must turn to the composition of the market in terms of the predominant institutions and the structure of the outstanding debt.

COMPOSITION OF THE MARKET:

On the whole, it can be said that in Canada, as far as the composition of the long-term debt is concerned, federal government bonds outstanding maintained their position in the capital market, while all other forms of long-term debt declined in importance, compared to mortgages. Thus, federal government bonds outstanding represented 39% of the long-term debt at the end of 1939 and 38% at the end

of 1959. The mortgage component rose, however, from 14% of the outstanding debt at the end of 1939, to 24% at the end of 1959. The other forms of long-term debt distinguished in this study declined proportionately in importance within the capital market. Provincial bonds declined from 16% to 14%, municipal bonds from 10% to 8%, and corporate bonds from 20% to 16%.

The situation in the United States did not quite parallel developments in the Canadian capital market in the period 1939-1959. The mortgage component increased in importance there too from 26% of the total long-term debt outstanding at the end of 1939 to 29% at the end of 1959. The mortgage component thus still remains more important in the United States capital market than its counterpart in the Canadian market. This development was, however, completely overshadowed by the enormous increase in the federal government bond component in the United States capital market, compared to the slight decline in its importance in Canada. Thus, the federal government securities component increased from 30% at the end of 1939 to 45% at the end of 1959. The other types of long-term debt showed a corresponding decline. This was particularly noticeable in the corporate bond component which declined from 29% at the end of 1939 to 16% at the end of 1959. It is, however, possible that the division of responsibilities as between the federal government and the local governments is different between

the two countries, and therefore, in order to get a better comparison between the two countries one should combine the whole government sector. Even if this is done, the trend remains unchanged, with the government bond sector declining from 55% at the end of 1939, to 52% at the end of 1959 in Canada and increasing from 45% to 55% in the United States. The magnitude of the change is, however, much dampened by such a combination. On the whole, the available data show that in both countries, the flow of mortgage funds has been of sufficient magnitude to permit mortgages to increase their total share in the capital market.

The changes in the composition of long-term debt show only one-half of the picture. To complete the capital market picture, the focus must now be shifted to the major financial institutions that buy most of the long-term debt. In this respect also, there are differences between developments in Canada and in the United States. In Canada, the structure on the supply side of the capital market remained substantially unchanged from the end of 1939 to the end of 1959. Thus, chartered banks assets represented 58% of total assets of the major financial institutions at the end of 1939 and at the end of 1959. The assets of life companies, as a proportion of assets of the major financial institutions, also changed very little. This ratio declined slightly from 34% at the end of 1939 to 33% at the end of 1959. The importance of loan companies remained un-

changed at 4%, while trust companies increased slightly in importance from 4% at the end of 1939 to 5% at the end of 1959.

The situation is, however, different in the United States. There, both the commercial banks and the mutual savings banks lost ground to the savings and loan associations. Thus while the savings and loan associations' component increased from 5% at the end of 1939 to 14% at the end of 1959, the commercial bank component declined from 58% to 53% and the mutual savings bank component declined from 11% to 8%. Life companies almost held their own, as their assets, which at the end of 1939 represented 26% of the assets of the major financial institution, still represented 25% of total assets at the end of 1939.

ABILITY OF THE FINANCIAL INSTITUTIONS TO ABSORB THE DEBT:

In this respect the developments in Canada are the same as those in the United States. If the ratio of long-term debt outstanding as a proportion of the assets of financial institutions is accepted as a good measure of these institutions' ability to absorb the long-term debt, then we must argue that his ability weakened in both Canada and in the United States. Thus, long-term debt outstanding in Canada represented 182% of the financial institutions assets at the end of 1939. This ratio rose to 192% at the end of 1959. As the major lending institution did not

significantly increase the proportion of long-term debt in their portfolios a greater proportion of the long-term debt had to be absorbed outside the financial institutions at the end of 1959, as compared to 1939. Incidentally, it is worth remembering here that long-term debt held by foreigners is included in the holdings outside the orbit of the financial institutions here considered. The United States shows the same trend. Their long-term debt outstanding as a proportion of the assets of the major financial institutions also increased from 123% at the end of 1939 to 140% at the end of 1959. Again, there must have been a more than proportionate increase in the long-term debt held outside the major financial institutions.

To sum up, it can be said that in both countries the mortgage component increased in importance, both in the capital market as a whole, and in the place that mortgages occupy in the portfolios of the financial institutions. This occurred despite the fact that the assets of these financial institutions did not grow as fast as the long-term debt outstanding in the capital market. We are thus forced to the conclusion that in both Canada and the United States a smaller proportion of the funds ultimately invested in fixed capital market instruments flowed through the major financial institution in 1959 as compared to 1939. In other words the role of the major financial institutions declined as transmitters of savings from surplus

to deficit units. R.W. Goldsmith has shown, however, that financial intermediaries as a whole are accummulating a steadily increasing proportion of the "intangible" wealth in the United States. This must mean that the financial institutions not described in this chapter because they are not presently very active in mortgage lending, e.g. personal trust funds (estate trust and agency funds in Canada), pension funds and the Central banks of both Canada and the United States (holders of substantial amounts of federal government bonds) have grown faster in terms of assets than the major financial institutions considered here.(31) This will be shown to have occurred in Canada in Chapter III where the mortgage lending undertaken outside the major financial institutions by the "residual sector" is considered. In contrast to their declining importance in the non-mortgage sector of the capital market the role of the major financial institutions has increased steadily in the mortgage sector of the capital market. These institutions have become increasingly more specialized in mortgage lending. In Canada the proportion of mortgage debt held by the major financial institutions increased from 40% in 1939 to 48% at the end

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(31) R.W. Goldsmith, Financial Intermediaries in the American Economy Since 1900 (Princeton, 1958), Table 13, page 85, and Table 95, page 319.

of 1959. In the United States this proportion increased from 52% to 76% in the same period.

The increased importance of mortgages in the capital market may well reflect the fact that investment in real estate is more dependent on the capital market than are other forms of investment. This was illustrated in the previous chapter. Thus investments in plant and machinery can be financed to a greater degree out of retained earnings etc., while investments by municipalities, provinces and the federal government can be financed to a greater degree out of taxes. The reliance of investment in real estate on the capital market has been further increased by the continual easing of credit terms which has led to lower downpayment requirements and increased reliance on mortgage financing. The easing of credit term will be discussed in Chapters VI and VII. The increased reliance of real estate investment on mortgage financing plus the attractiveness of mortgage investment in terms of comparative yields - to be discussed in Chapter V - have led the major financial institutions, to divert a growing proportion of their assets to mortgage investments.

CHAPTER III

THE ANATOMY OF THE MORTGAGE MARKET, 1953-1959

GROSS CAPITAL MARKET FLOWS

The previous chapter revealed that mortgage loans outstanding had by the end of 1959, reached approximately $10.7 billion, or about 24% of total long-term debt outstanding in Canada. In the United States, the volume of mortgage debt outstanding, $191 billion at the end of 1959, had at 29%, reached an even greater proportion of total long-term debt outstanding. In both countries, the volume of mortgage debt outstanding is second in importance only to the volume of federal government securities outstanding in the capital market. Despite its quantitative importance, this part of the capital market has been sadly neglected as a systematic field of study.

In this chapter an attempt is made to present the capital market data for the years 1953-1959, in such a way as to bring out clearly how the mortgage component fits into the rest of the capital market. We see, from Table A-13 in the Appendix, that the major financial institutions as a whole have invested 23% of their assets in mortgages. The emphasis on mortgage lending differs widely, however, among the various lending institutions. Thus chartered banks, comparative newcomers to the mort-

gage lending field, and restricted only to NHA mortgages, have only 7% of their assets invested in mortgages, while at the other extreme, loan companies have 75% of their assets invested in mortgages. This is not really surprising for chartered banks consider it their major function to lend short-term funds to business, rather than to make long-term investments (except for investments in long-term government bonds), while loan companies specialize in the making of mortgage loans.

The situation as a whole is not very different from prevailing conditions in the United States. There, the major financial institutions as a whole have invested about 32% of their assets in mortgages, substantially higher than 23% overall investment into mortgages by financial institutions in Canada. The range among the various institutions in the United States varies from 12% for commercial banks to 84% for savings and loan associations, as shown in Table A-4 in the Appendix.

The data presented so far have been in terms of total assets and total volume of various categories of debt outstanding. From these totals, net changes from year to year can be calculated. The net data, however, do not measure fully the importance of each type of debt in the capital market. Gross flows are more representative for this purpose and these are, therefore, the data chosen for presen-

TABLE 13: GROSS CAPITAL MARKET ISSUES, 1953-1959

Year	Federal Gov't. Bonds *	Provincial Bonds	Municipal Bonds	Corporate Bonds	Mortgages	Total	Mortgages as % of Total
	(B i l l i o n s			of D o l l a r s)			
1953	2.03	.39	.29	.54	1.43	4.68	31%
1954	3.40	.50	.37	.71	1.85	6.83	27%
1955	1.37	.37	.34	.70	2.44	5.22	47%
1956	1.53	.64	.36	1.04	2.83	6.40	44%
1957	2.60	.77	.41	1.21	2.30	7.29	32%
1958	9.20	.73	.50	.95	2.89	14.27	20%
1959	2.89	.88	.47	.44	3.31	7.99	41%
1953-59	23.02	4.28	2.74	5.59	17.05	52.68	32%

* Treasury bills are excluded.

Source: Federal, Provincial, Municipal and Corporate bonds: Bank of Canada, Statistical Summary - Financial Supplement (OTTAWA, various issues).

Mortgages: Total mortgage recordings as per Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA, 1st quarter and annual issues).

tation in this Chapter.(1)

The reason for emphasizing the gross flow of funds through the capital market in this chapter is the fact that

(1) S.B. Klaman emphasizes the importance of gross flowsof funds, "The advantage of gross over net financial flows for analysis of market developments in clear. By distinguishing between credit extension and repayments, gross figures permit a more complete analysis and understanding of the response of various market participants to shifting forces at work in capital markets." S.B. Klaman, The Post-War Residential Mortgage Market (Princeton, 1961), Preface page xxviii.

TABLE 14: REPAYMENTS OF OUTSTANDING ISSUES IN CAPITAL MARKET, 1953-1959

Year	Federal Gov't. Bonds*	Provincial Bonds	Municipal Bonds	Corporate Bonds	Mortgages	Total	Mortgages as % of Total
	(Billions of Dollars)						
1953	1.58	.12	.10	.16	.80	2.76	29%
1954	3.70	.20	.11	.26	.92	5.19	18%
1955	1.03	.16	.12	.38	**	**	**
1956	2.14	.10	.13	.24	**	**	**
1957	2.72	.22	.15	.24	**	**	**
1958	7.82	.11	.16	.30	**	**	**
1959	2.75	.32	.17	.28	**	**	**
1953-59	21.74	1.23	.94	1.86	10.44	36.21	29%

* Treasury bills are excluded.

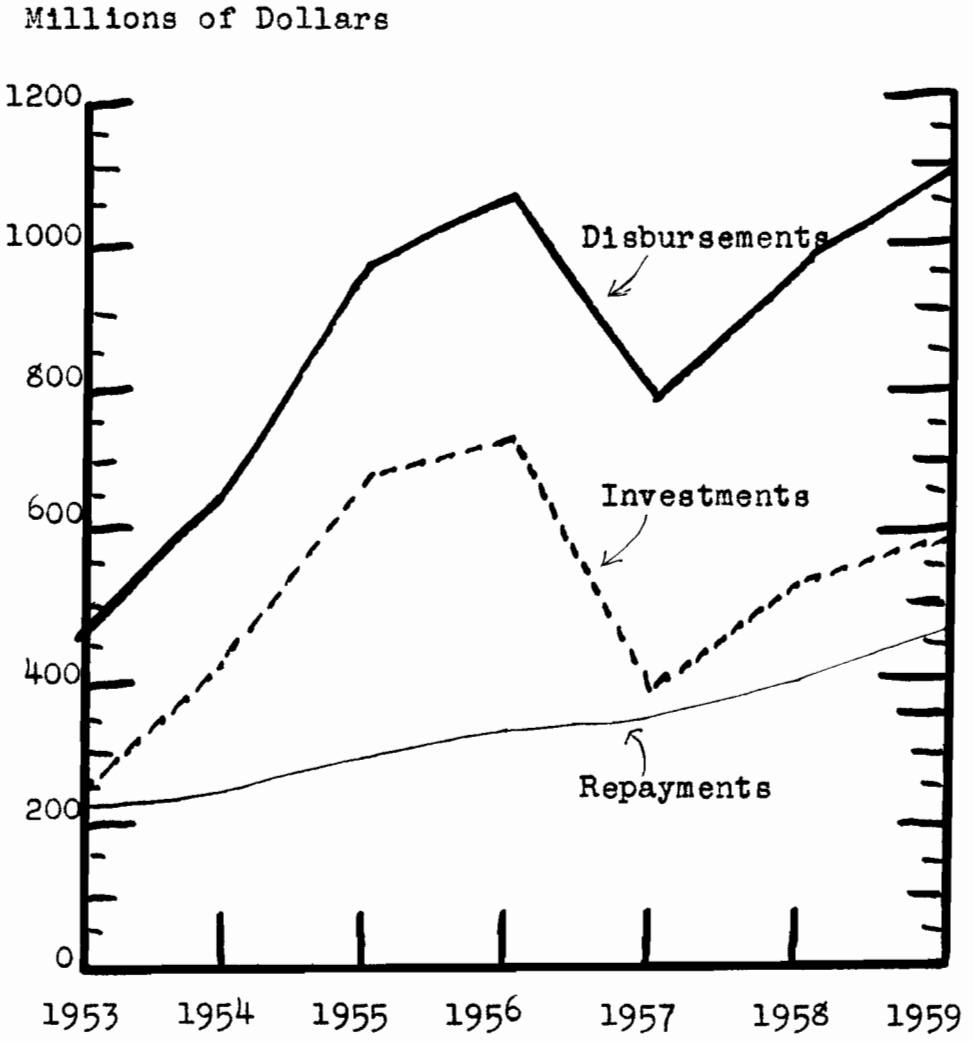
** Not available.

Source: Federal, Provincial, Municipal and Corporate bonds: Bank of Canada, Statistical Summary - Financial Supplement (OTTAWA, various issues).

Mortgages: Gross New Issues from Table 13, minus net capital market flows from Table 15.

the allocation of funds in the capital market amongst the various different forms of long-term debt is made in terms of gross flows. This follows from the fact that repayments on the various categories of long-term debt shown in Table 14 above, do not have to be reinvested in the same form of debt but become available for investment in the whole range of long-term in-

CHART 4: FINANCIAL INSTITUTIONS' MORTGAGE DISBURSEMENTS, INVESTMENTS AND REPAYMENTS, 1953-1959



Source: Table 18 and Appendix Table A-11.

vestments available to lending institutions.(2)

As the emphasis in this study is on the flow of mortgage funds, only the relationship between gross and net mortgage flows will here be examined in detail. Chart 4 illustrates this point with data relating to the financial institutions.

A simple formula describes this relationship, namely: net increase in mortgage portfolio = gross loans (disbursements), minus mortgage repayments.(3)

This formula is only an approximation, however, as it does not take into account sales in the secondary mortgage market, or end of year write-ups and write-downs in the balance sheet figures of the lenders. These write-ups and write-downs are due to accrued interest adjustments for amortization and other valuation adjustments, lenders incorporating all such changes into their mortgage portfolio. These adjustments are, however, of minor nature and will be largely ignored here for the sake of clarity and simplicity in exposition.

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(2) " ... redirecting funds which seek reinvestment following repayment of outstanding obligations." is listed as one of the functions of the capital market by W.C. Hood, Financing of Economic Activity in Canada (Royal Commission on Canada's Economic Prospects, OTTAWA, 1958), page 13.

(3) For a more detailed description of this relationship see Central Mortgage and Housing Corporation, Economic Research Bulletin No. 77 (OTTAWA, October, 1960).

TABLE 15: NET CAPITAL MARKET ISSUES, 1953-1959

Year	Federal Gov't. Bonds *	Provincial Bonds	Municipal Bonds	Corporate Bonds	Mortgages	Total	Mortgages as % of Total
	(Billions of Dollars)						
1953	.45	.27	.19	.38	.63	1.92	33%
1954	-.30	.30	.26	.45	.93	1.64	57%
1955	.34	.21	.24	.32	**	**	**
1956	-.61	.54	.23	.80	**	**	**
1957	-.12	.55	.26	.97	**	**	**
1958	1.38	.62	.34	.65	**	**	**
1959	.14	.56	.30	.16	**	**	**
1953-59	1.28	3.05	1.80	3.73	6.61	16.47	40%

* Treasury bills are excluded.

** Not available.

Source: Calculated from the data presented in Tables 13 and 14.

Before continuing to explore the mortgage data further, it must be pointed out that the mortgage component of the capital market differs from the rest of the capital market, in that lending institution must plan their disbursements on mortgage account well in advance of their disbursements on their other investments. Before they start their projects, builders require a 'commitment' from the lending institutions that they will grant a mortgage on the structure when it is finished. These 'commitments' precede the actual

disbursement of the mortgage by a considerable time span.(4) Any change in the investment policies of the lending institutions will therefore show up first in their volume of commitment (or 'approvals' as they are designated in Central Mortgage and Housing Corporations publication, Canadian Housing Statistics).

THE AVAILABLE MORTGAGE DATA

The description of the available mortgage data will start with a description of the commitments data to be followed by the description of the data on disbursements, repayments and net change in mortgage portfolios of lending institutions.

MORTGAGE COMMITMENTS

By issuing a commitment, the lending institution binds itself to provide the mortgage funds requested by the prospective borrower as required.(5) The granting of the commitment will be preceded by an application for a mortgage loan. The lending institutions frequently grant a builder a

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(4) See H. Woodard, Canadian Mortgages (Collins, Don Mills, Ontario, 1959), Chapter V, also M. Wilkinson and Dorothy K. Newman, "FHA and VA Housing Statistics and the Housing Market", Construction Review (Washington, June, 1957), also S.B. Klaman, op. cit., Table A-11, page 2 90.

(5) For further details on the commitment procedure see H. Woodard, op. cit., page 74. H. Woodard uses the term 'approval' in his description rather than 'commitment' as is done in the text above.

TABLE 16: LENDING INSTITUTIONS'* MORTGAGE COMMITMENTS, TOTAL AND NEW RESIDENTIAL COMPONENTS, 1953-1959

Year	Total Commitments (Millions of Dollars)	Commitments for New Residential Construction (Millions of Dollars)	New Residential Construction as Percent of Total (%)
1953	581	375	65%
1954	904	644	71%
1955	1,195	874	73%
1956	998	680	68%
1957	771	517	67%
1958	1,192	810	68%
1959	1,083	651	60%
1953-59	6,724	4,551	68%

* Institutions included are: life companies, chartered banks, loan, trust and other companies.

Source: Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA).

forward commitment, often taking the form of an informal verbal promise. No data are available on these forward commitments.(6)

The commitment data for all types of loans and lenders are published each quarter by Central Mortgage and Housing Corporation in Canadian Housing Statistics.(7) Commitments

(6) For a discussion of the forward commitment technique see S.B. Klaman, op. cit., pages 178-182.

(7) Canadian Housing Statistics, is now on annual publication, with monthly supplements.

for new residential construction are also published monthly in the Bank of Canada's monthly 'Statistical Summary'.(8) The annual data show that lending institution as a whole committed about 68% of their mortgage funds to new residential construction in the period 1953-1959.

MORTGAGE DISBURSEMENTS

The actual disbursement of the mortgage funds will lag behind the issuance of a commitment by varying time periods, depending on the type of loan made. If it is a loan on existing real estate, the lag will not be long, probably less than a month, and the mortgage loan will be disbursed in one lump sum. If on the other hand, it is a loan on new residential construction, the disbursement of the loan will be made in periodic payments, spread over the construction period of the structure serving as security for the loan.(9)

Monthly data on disbursements (gross loans made) of all types of mortgages lumped together are available for 12 life companies in the Bank of Canada's Statistical Summary . Central Mortgage and Housing Corporation provides estimates of annual disbursements for new residential construction by

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(8) Central Mortgage and Housing Corporation, Canadian Housing Statistics, Monthly Supplement, are the original source of the data.

(9) See note 4 above.

TABLE 17: LENDING INSTITUTIONS'* MORTGAGE DISBURSEMENTS, TOTAL AND NEW RESIDENTIAL COMPONENT, 1953-1959

Year	Total Disbursements (Millions of Dollars)	Disbursements for New Residential Construction (Millions of Dollars)	New Residential Construction as Percent of Total (%)
1953	453	262	53%
1954	649	437	67%
1955	969	705	73%
1956	1,091	750	70%
1957	781	525	67%
1958	971	692	71%
1959	1,091	733	67%
1953-59	5,985	4,084	68%

* Institutions included are: life companies, chartered banks, loan, trust and other companies.

Source: Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA).

type of lender.(10) The same publication also provides annual estimates of total disbursements by type of lender.(11) The annual data on disbursements, Table 17 above, show that the lending institutions as a whole disbursed 68% of their

(10) Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA, 1st quarter and annual issues), Table entitled, "Expenditure on New Housing by Source of Funds".

(11) Central Mortgage and Housing Corporation, ibid., Table entitled, "Institutional Mortgage Investment".

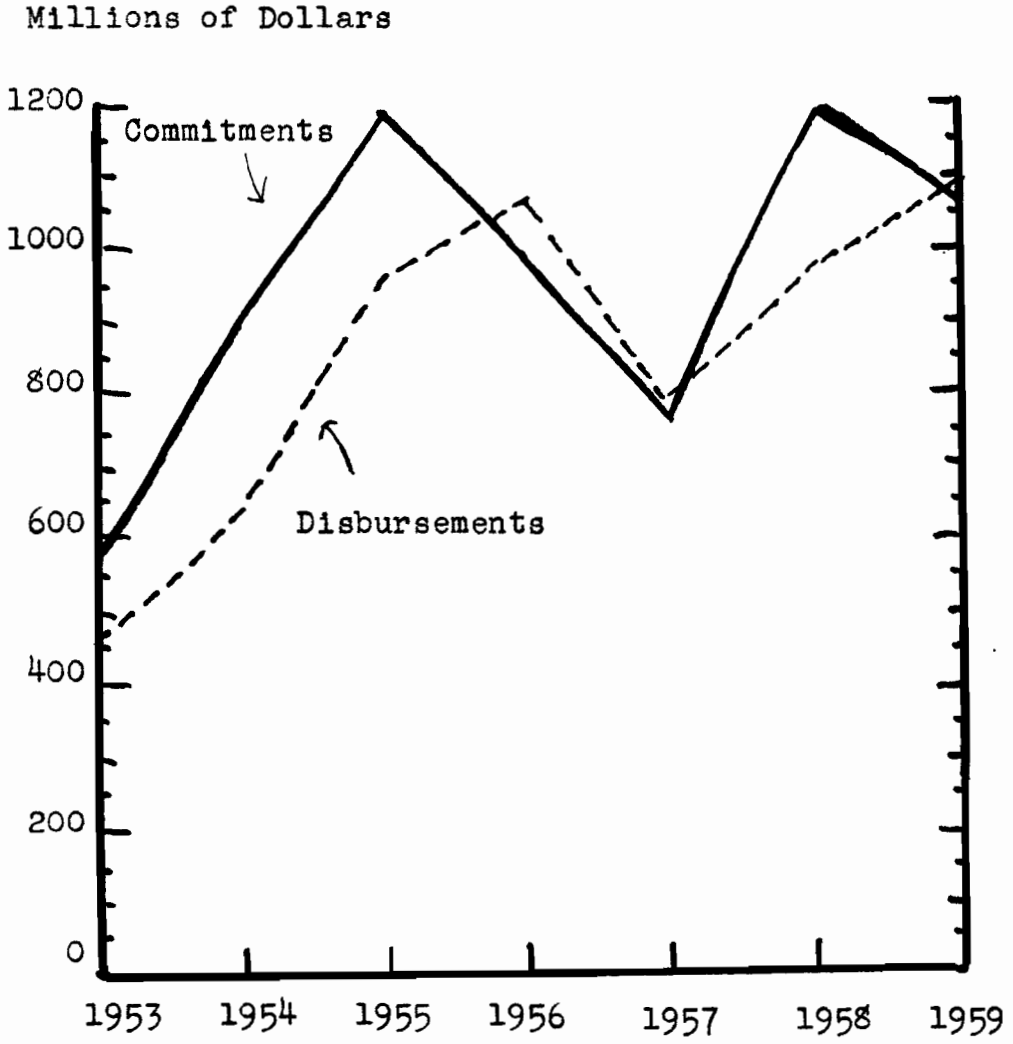
total disbursement on account of new residential construction, the same proportion that is shown in the commitment data in Table 16. This is not really surprising as the two series merely measure the same phenomenon at different time periods as is illustrated by Chart 5.

After this brief description of disbursements, the gross flow that tends to increase the mortgage portfolio of the lenders, we must turn to the repayments, that is the gross flow that leads to a reduction in the mortgage portfolios of the lenders.

MORTGAGE REPAYMENTS

The volume of repayments is largely determined by the amount of mortgage loans outstanding and the amortization terms of these mortgages (that is the average maturity life of the loan). Thus, in contrast to the disbursements, which depend mainly on the current situation, the flow of repayments is largely determined by historical conditions in the mortgage market. The current situation does, however, also have an effect on the volume of repayments, in that an existing loan can often be repaid ahead of schedule or refinanced, if current interest rates are below the contract mortgage

CHART 5: MORTGAGE COMMITMENTS AND DISBURSEMENTS OF LENDING INSTITUTIONS, 1953-1959



Source: Tables 16 and 17.

rate.(12) If the mortgage document contains a repayment clause, it is usual to demand a penalty for this privilege to prepay, often interest for 3 months.(13)

The importance of repayments as a source of funds differs as between the various categories of lenders. This will be shown later in this chapter where each group of lenders is discussed separately. For all the lending institutions combined repayments provided 38% of the funds disbursed during 1953-1959, as shown in Table 18.

Repayments as a source of mortgage funds are least important for the chartered banks, whose mortgage portfolio is comparatively new, and who are restricted by law to NHA mortgages that have a long amortization period. It is, however, a very important source of funds for the loan and trust companies, who have been in the mortgage business a long time and who specialize in conventional mortgages on

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(12) The wish to obtain a new bigger mortgage than the existing one, especially when the property serving as underlying security for the mortgage is sold, is perhaps a more powerful reason for prepaying a mortgage. This is taken into account by Housing and Home Finance Agency in, Recommendations of Federal Agencies (United States Senate, Committee on Banking and Currency, Sub-committee on Housing, in Study of Mortgage Credit, Washington, 1961), page 72, where they say, "The pattern of mortgage debt repayment in relation to the outstanding debt is not a constant one .... In observing the estimate of net mortgage requirements as a percentage of outstanding mortgage debt have been projected to show a lower percentage during years of relatively low .. sales activity, and a higher percentage during years of relatively high activity".

(13) H. Woodard, op. cit., pages 207-210.

TABLE 18: LENDING INSTITUTIONS'* MORTGAGE REPAYMENTS, AS PERCENT OF DISBURSEMENTS, 1953-1959

Year	Repayments (Millions of Dollars)	Disbursements (Millions of Dollars)	Repayments as Percent of Disbursements (Millions of Dollars)
1953	217	453	48%
1954	236	649	37%
1955	298	969	31%
1956	325	1,067	30%
1957	346	781	44%
1958	400	971	41%
1959	459	1,091	42%
1953-59	2,281	5,981	38%

* Institutions included are: life companies, chartered banks, loan, trust and other companies.

Source: Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA).

existing property, where the repayment period is shorter. The life companies occupy an intermediate position in this respect.

Monthly data on repayments are published for 12 life companies in the Bank of Canada's,'Statistical Summary'.(14) Central Mortgage and Housing Corporation provides annual repayment estimates by type of lender.(15) These latter data

(14) Bank of Canada, Statistical Summary (OTTAWA, current issues), Table entitled, Canadian Investment Transactions of Twelve Life Insurance Companies.

(15) Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA, 1st quarter on annual issues), Table entitled,"Institutions Mortgage Investments".

from 1953 onwards were utilized in constructing Tables 14 to 18. However, for a deeper understanding of the anatomy of the mortgage market, it is not enough to study the gross flows. We must also keep in mind that these gross flows, that is disbursements minus repayments, result in net flows that will affect the portfolio distribution of the lenders.

NET CHANGE IN MORTGAGE PORTFOLIO

As explained earlier the net change in the mortgage portfolio of the lenders can be estimated roughly by the formula; disbursements minus repayments = net change.

But we must not think that the net change, because it is here for the sake of convenience presented as a residual, requires less analysis than the other components. On the contrary, the lending institutions, when planning their commitments, and then their disbursements on mortgage accounts, must constantly keep in mind how these commitments will eventually affect their net investments in mortgages, and therefore the distribution of their portfolio between mortgages and other earning assets . Any change in their investment policy will therefore appear first in their commitment data.

To understand the mortgage data properly it is important to bear in mind that the lending institutions' mortgage investment programme is geared to achieve a certain

net change in their mortgage portfolio. The size of this net change will depend on the availability and yield of other competing financial instruments (federal, provincial and municipal and corporate bonds), As pointed out before, the lenders will have to plan their commitments well in advance to achieve the desired net change.(16) The analysis in Chapters IV and V will thus concentrate on the commitment data. Before proceeding to that Chapter, we must, however, take a closer look at the financial institutions active in the mortgage market.

THE MAJOR MORTGAGE LENDERS

Now that the available mortgage statistics have been described briefly, it is possible to start examining the data in greater detail. The best way to do this, is to examine the mortgage lending done by each of the major groups of lenders since 1953. The major groups of lenders here considered are; the life companies, loan, trust and other companies, chartered banks, Central Mortgage and Housing Corporation, and a residual sector. In examining each of these groups, their mortgage activity will be related whenever possible to their rate of asset growth, the proportion of their asset growth placed in mortgages, mortgage repay-

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(16) See for instance S.B. Klaman, op. cit., page 17, "Many life companies plan their operations a year or more ahead".

ments as a source of funds, and the importance of new residential construction in their mortgage lending.

These data will be presented in tabular form for each group of lenders supplemented by a brief description of the data.

THE LIFE COMPANIES

Asset Growth:

The rate of asset growth per annum of life companies has ranged from 10% during 1955 to 6% during 1959 and has averaged 7%. This is slightly higher than the historical growth rate of 6½% in the period 1926-1958 as calculated by Wm. C. Hood.(17)

Net Investment in Mortgages:

Of this asset growth about 60% has been put into mortgages, ranging from 100% of asset growth during 1956 to 41% of asset growth during 1958. As pointed out above, the proportion of asset growth devoted to mortgage investment will fluctuate according to the attractiveness of mortgages in the capital market. As a result of this relatively heavy mortgage lending, the proportion of mortgages to total assets has increased from 29% at the end of 1953 to 42% at the end of 1959.

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(17) Wm. C. Hood, op. cit., page 332.

TABLE 19: LIFE COMPANIES, SELECTED RATIOS, 1953-1959

Year	Asset Growth (%)	Net Investment in Mortgages as % of Asset Growth (%)	Mortgages Repayments as % of Disbursements (%)	Mortgage Repayments as % of Outstanding Portfolio (%)	Disbursements on New Residential Construction as % of Total Disbursements (%)
1953	9%	48%	42%	11%	65%
1954	7%	79%	36%	10%	76%
1955	10%	71%	36%	11%	74%
1956	7%	100%	34%	10%	70%
1957	8%	50%	47%	9%	69%
1958	8%	41%	54%	8%	71%
1959	6%	60%	47%	8%	74%

Source: Calculated from data published by Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA, current issues).

Mortgage Repayments:

Mortgage repayments on the existing mortgage portfolio of the life companies have fluctuated within a relatively narrow range, around the 10% mark. The range has been from 11% in 1953 to 8% during 1959. The increasing emphasis on NHA lending, with its longer amortization period is probably the cause of this gradual decline in the proportion of mortgage repayments to total mortgage portfolio. This ratio is, after all, nothing more than the

reciprocal of the average life of mortgage portfolio. Thus, a repayment ratio of 11% implies a mortgage portfolio whose average life span is about 9 years; while a repayment ratio of 8% implies an average life span of 12.5 years.(18)

Mortgage repayments have provided about half the funds that life companies have disbursed on mortgage accounts during the period 1953-1959. This proportion has ranged from 34% during 1956 to 54% during 1958.

Mortgages for New Residential Construction:

The life companies have always emphasized new construction in their mortgage lending. Thus, during the period 1953-1959, their disbursements for new residential construction have averaged 67% of their total disbursements, and have ranged from 65% to 76%.

THE LOAN, TRUST AND OTHER COMPANIES

Asset Growth:

The annual asset growth of these companies during the last 7 years has averaged around 9% per annum, and has ranged from 5% in 1953 and 1957 to 18% in 1954. Their asset growth appears to be influenced to a substantial degree

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(18) The average life span of mortgages calculated on this basis is lower than the contract rate specified in the contract document, due to prepayments. This was commented on in note 12 above.

TABLE 20: LOAN, TRUST AND OTHER COMPANIES, SELECTED RATIOS, 1953-1959

Year	Asset Growth (%)	Net Investment in Mortgages as % of Asset Growth (%)	Mortgages Repayments as % of Disbursements (%)	Mortgages Repayments as % of Outstanding Portfolio (%)	Disbursements on New Residential Construction as % of Total Disbursements (%)
1953	5%	98%	63%	18%	27%
1954	18%	35%	53%	17%	32%
1955	11%	59%	51%	19%	43%
1956	6%	104%	49%	17%	43%
1957	5%	47%	66%	16%	38%
1958	15%	42%	52%	18%	46%
1959	8%	75%	56%	20%	36%

Source: Calculated from data published by Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA, current issues).

by monetary policy. This is particularly noticeable in the trust companies whose assets increase sharply, when chartered banks assets do.

Net Investment in Mortgages:

The loan, trust and other companies invested about 60% of their asset growth in mortgages during 1953-1959 period, ranging from 35% during 1954, to 104% during 1956. This means that in 1956, apart from investing all their asset growth in mortgages, these companies actually decreased

their portfolio of other capital market assets for the purpose of increasing their mortgage portfolio. It must be remembered that this could be due to the fact that these companies, when making their mortgage commitments at the end of 1955, overestimated their future asset growth during 1956 when many of the commitments would have to be disbursed.(19) Indeed, the figures tend to support such a view, as the asset growth of these companies declined from 11% per annum during 1955 to 6% during 1956. The loan, trust and other companies may have been forced to sell other assets to honour their previous mortgage commitments.

Mortgage Repayments:

Mortgage repayments of loan, trust and other companies have fluctuated between 16% and 20% of their total mortgage portfolio in the 1953-1959 period. The average life of the loan, trust and other companies mortgage portfolio has thus fluctuated between 6.5 years and 5 years.(20)

The fact that the average life of the mortgage portfolio of loan, trust and other companies is much shorter than the average life of the life companies' mortgage port-

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(19) In the United States, a special type of credit, has been developed to meet such a situation. S.B. Klaman, op. cit., page 23. "While throughout the postwar decade mortgage companies have remained the dominant uses of warehousing credit, occasional, dramatic uses of such credit have been made by life insurance companies that have become temporarily overcommitted in mortgages relative to expected cash inflows".

(20) See note 18.

folio, is a reflection of the fact that conventional mortgages on existing real estate predominate in their mortgage portfolio and these mortgages are traditionally written for shorter periods.

More than half the current disbursements of loan, trust and other companies are provided from mortgage repayments on their existing mortgage portfolios.

Mortgages for New Residential Construction:

Mortgages for new residential construction have always played a secondary role in the mortgage lending of loan, trust and other companies. They have done most of their lending on existing real estate. Thus, their disbursements for new residential construction have varied between 27% and 46% of their total mortgage lending during the 1953-1959 period.

THE CHARTERED BANKS

Asset Growth:

The rate of asset growth of the chartered banks is heavily dependant on monetary policy with an "easy" money policy stimulating a more rapid rate of asset growth and a "tight" money policy imposing a very slow rate of asset growth and at times, even imposing a decline in bank assets. Previous to 1954 banks were not permitted by the Bank Act

TABLE 21: CHARTERED BANKS, SELECTED RATIOS, 1953-1959

Year	Asset Growth (%)	Net Investment in Mortgages as % of Asset Growth (%)	Mortgages Repayments as % of Disbursements (%)	Mortgages Repayments as % of Outstanding Portfolio (%)	Disbursements on New Residential Construction as % of Total Disbursements (%)
1953	6%	--	--	--	--
1954	7%	12%	--	--	100%
1955	11%	22%	.4%	1%	100%
1956	.5%	390%	2%	1%	100%
1957	5%	18%	8%	2%	100%
1958	12%	16%	10%	4%	100%
1959	-.3%	-423%	10%	3%	100%

Source: Calculated from data published by Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA), and Bank of Canada's, Statistical Summary (OTTAWA, various issues).

to lend on mortgages. However, the National Housing Act of 1954 empowered them to make NHA mortgage loans.

Since 1954, the annual rate of asset growth of chartered banks has fluctuated between 12% during 1958 and -0.3% during 1959, with the average rate of growth during that period just under 6%.

Net Investment in Mortgages:

The fact that the asset growth of the chartered banks varied over a much wider range than the asset growth of the

other financial institution - during 1959 their assets actually declined - makes it difficult to relate their net investment in mortgages to their asset growth. For what it is worth, the rate of net investment in mortgages as a percentage of asset growth since 1954 has fluctuated between 39% and -423%. In 1960, the banks' mortgage lending policy was further complicated by the fact that the Bank Act forbids them to make loans at an interest rate higher than 6%, while the NHA maximum mortgage rate was raised to 6.75% in mid-December, 1959. As a result, the banks did almost no mortgage lending during 1960.

Mortgage Repayments:

Mortgage repayments to chartered banks have ranged between 1% of the outstanding mortgage portfolio during 1955 and 1956, and 4% of the outstanding mortgage portfolio during 1958.

This means that average life of the mortgage loans outstanding with the chartered banks during 1958 was 25 years. This is a reflection of the fact that the chartered banks make only NHA mortgages, whose amortization period is typically 25 years, while the banks have not been in the mortgage business long enough to get a high volume of prepayments, that is, mortgage repayments in excess of the amounts stipulated in the mortgage document. Prepayments typically occur when the existing mortgage has been reduced

substantially as a result of the normal repayments, and it is desired to sell the property serving as the underlying security of the mortgage.(21) In such a case, the existing mortgage, is often repaid in full, and a new mortgage for a higher amount is negotiated to facilitate the sale. As a result of this practice, the average length of the outstanding mortgage portfolio as calculated by repayments is usually much lower than the average length of the mortgage portfolio as observed from the contractual obligations written into mortgage documents.(22)

Mortgages for New Residential Construction:

As chartered banks are restricted by law to NHA mortgages only, and NHA mortgages are presently granted only for new construction, all the chartered banks' mortgage lending is for new construction.

CENTRAL MORTGAGE AND HOUSING CORPORATION (CMHC)

Asset Growth:

Almost all the assets of CMHC consist of NHA mortgages. CMHC obtains the money needed to make these mortgages from the Consolidated Revenue Fund. The rate of asset growth

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(21) See note 12 above.

(22) See notes 18 and 22 above.

TABLE 22: CENTRAL MORTGAGE AND HOUSING CORPORATION SELECTED RATIOS, 1953-1959

Year	Asset Growth (%)	Net Investment in Mortgages as % of Asset Growth (%)	Mortgages Repayments as % of Disbursements (%)	Mortgages Repayments as % of Outstanding Portfolio (%)	Disbursements on New Residential Construction as % of Total Disbursements (%)
1953	18%	95%	23%	7%	89%
1954	11%	97%	35%	8%	91%
1955	1%	-- *	108%	8%	70%
1956	0%	-- *	120%	10%	62%
1957	7%	78%	57%	10%	78%
1958	48%	91%	16%	11%	95%
1959	28%	96%	22%	9%	94%

* Mortgage portfolio declined slightly during the year.

Source: Calculated from data published by Central Mortgage and Housing Corporation, Canadian Housing Statistics - Annual Report.

of the Corporation thus depends on the direct lending policy of the federal government.

In response to these changes in policy, the rate of asset growth of the corporation, has ranged from zero during 1956 to 48% during 1958, when direct lending was stepped up considerably to stimulate building as an anti-recession measure.

Net Investment in Mortgages:

As the money CMHC obtains from government is for the purpose of making mortgage loans, it is not surprising that the net investment in mortgages as a percentage of asset growth is typically over 90%.

Mortgage Repayments:

The mortgage repayment pattern of CMHC's outstanding mortgage portfolio is very similar to the pattern of the mortgage repayments accruing to life companies. This is not surprising as both institutions concentrate on mortgages with a long amortization period. Thus, the mortgage repayments accruing to CMHC represent about 10% of the outstanding mortgage portfolio. These repayments are, however, not automatically available for reinvestment into mortgages, but have to be turned over to the Receiver General of Canada. In other words, the money borrowed by CMHC from the federal government must be repaid out of the mortgage repayment received by the Corporation. New mortgage loans made must be financed out of new appropriations approved by Parliament. In this way, Parliament has a close continuous control over the mortgage lending activities of its housing agency, CMHC.

Mortgages for New Residential Construction:

All of CMHC's mortgage lending is for new residential construction, except a small amount of mortgage lending

associated with the sale of real estate in the possession of CMHC, either as a legacy of Wartime Housing,(23) or due to repossessions as a result of mortgage delinquencies. Thus during 1958-1959, 95% of the mortgage advances made by CMHC were for new residential construction.

The mortgage data for CMHC have here been presented in the same form as the data for the other lenders for the sake of unity in the form of presentation. But CMHC's mortgage lending is not undertaken in response to the usual market forces, such as yield differentials on other investments, etc., but is an expression of one facet of the government's housing policy. This fundamental difference in motivation should not be overlooked when the mortgage data of the different types of institutions participating in mortgage lending are examined.

THE RESIDUAL SECTOR

Asset Growth:

National accounting data, particularly relating to wealth estimates, have not been sufficiently developed to permit an estimate of the rate of asset growth in the residual sector as a whole. This sector included, however, three

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(23) For a description of the activities taken over from Wartime Housing, see Central Mortgage and Housing Corporation, Annual Report to the Minister of Reconstruction and and Supply for the Year 1947, page 13.

TABLE 23: RESIDUAL SECTOR, SELECTED RATIOS, 1953-1959

Year	Asset Growth (%)	Net Investment in Mortgages as % of Asset Growth (%)	Mortgages Repayments as % of Disbursements (%)	Mortgages Repayments as % of Outstanding Portfolio (%)	Disbursements on New Residential Construction as % of Total Disbursements (%)
1953	**	**	65%	28%	24%
1954	**	**	59%	28%	16%
1955	**	**	**	**	13%
1956	**	**	**	**	11%
1957	**	**	**	**	17%
1958	**	**	**	**	**
1959	**	**	**	**	**

** Not available.

Source: Calculated from data published by Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA, 1st quarter and annual issues).

large pools of institutionally administered savings which will be discussed separately later in this chapter.

Net Investment in Mortgages:

As no estimate is available on the rate of asset growth in the residual sector, it is not possible to relate the net investment in mortgages of the residual sector, to its increase in assets. This residual sector held over 40% of the mortgage outstanding in Canada at the end of 1959.

That sector's lending on new residential construction is, however, much less than the above figures would suggest.

Mortgage Repayments:

The mortgage repayment figures of the residual sector also reflect the fact that financing of new residential construction does not form a very important component of its mortgage activity. Thus, mortgage repayments during 1953 and 1954 represented about 28% of its outstanding mortgage portfolio, which suggests an effective average life of just under 4 years for its mortgage portfolio. The predominance of mortgages on existing real estate, plus second mortgages, whose life span is relatively short, explains the high repayment ratio.

As a result of this high repayments ratio about 60% of the funds annually disbursed by this sector came out of mortgage repayments.

Mortgages for New Residential Construction:

Between 1953 and 1957 the disbursement of the residual sector for new residential construction as a percent of their total disbursements have ranged from a low of 11% during 1956 to a high of 24% during 1953, just before the 1954 National Housing Act came into force. It can thus be seen that the residual sector devoted only a small portion of its total mortgage activities to the financing of new residential construc-

tion. To a minor degree, this may be due to the fact that the residual sector does not contain many lenders that qualify as approved lenders under the National Housing Act, and therefore cannot originate NHA loans for new construction.

THE INSTITUTIONAL PART OF THE RESIDUAL SECTOR

The residual sector, includes in addition to individuals, also three large pools of institutionally administered savings, namely estate trust and agency funds administered by the trust companies, trusteed pension funds and credit unions. At the end of 1959 the total assets accumulated by the above institutions totalled $11.2 billion. The estate trust and agency funds accounted for $6.9 billion.(24) The trusteed pension funds accounted for $3.1 billion(25) and the credit units accounts for $1.2 billion.(26) The assets accumulated in estate trust and agency funds, are however not all portfolio funds, as they include also income producing real estate, as well as going business concerns, possibly in the process of liquidation. The assets of these three pools combined have more than doubled in the 1954-1959

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(24) Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA, 1st quarter and annual issues).

(25) Bank of Canada, Statistical Summary - Financial Supplement, 1960, page 91.

(26) Bank of Canada, ibid., page 91.

period from $5.5 billion to $11.2 billion. They have thus grown at an average annual rate of over 10%. None of the above lenders are heavy mortgage investors, and apart from a few pension funds, none of them are approved lenders under the National Housing Act. The mortgage portfolio of the estate trust and agency funds increased by $.33 billion from the end of 1953 to the end of 1959, from $.16 billion to $.48 billion. The asset growth of the estate trust and agency funds was $2.7 billion in the same period, from $4.2 billion to $6.9. Thus, on the average 12% of the asset growth of the estate trust and agency funds were invested in mortgages from the end of 1953 to the end of 1959.

The mortgage portfolio of the trusteed pension funds increased by $.24 billion in the 6-year period 1954-1959, from $.04 billion at the end of 1953 to $.28 billion at the end of 1959. The assets of trusteed pension funds increased by $2.25 billion during the same period. The trusteed pension funds on the average thus invested about 11% of their asset growth in the mortgage market. Most of the mortgages acquired by the estate trust and agency funds, and the trusteed pension funds were acquired in the secondary mortgage market. No data are available for such transactions relating to conventional mortgages. The data on secondary mortgage market transaction in NHA mortgages show however that pension funds were the most important group of

purchasers.(27) The data also show that the trust company group were the heaviest sellers. This suggests that the trust companies sold NHA mortgage to the estate trust and agency funds under their administration. The third group of institutions included in the residual sector, the credit unions, increased their mortgage portfolio by $.18 billion in the 1954-1959 period. Their asset growth in the same period was $.67 billion, from $.49 billion to $1.16 billion. The credit union thus invested about 27% of their asset growth in mortgages.

The residual sector as a whole held over 40% of the mortgages outstanding in Canada at the end of 1959, or about $4 billion out of the $10.7 billion mortgages outstanding. The combined holdings of the estate trust and agency funds, the trusteed pension funds and the credit unions accounted for $1.2 billion of these mortgages or about 30% of the residual sector's holdings. The other $2.8 billion of mortgages outstanding at the end of 1959 or just over one-quarter of the total were thus held by individuals. The importance of the residual sector in the financing of new residential construction is much less than its holdings of 40% of the outstanding debt would suggest.

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(27) Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA, current issues). Table entitled, "Purchases of Insured Mortgages".

SUMMARY

The mortgage market which represents one-quarter of the capital market as a whole is dominated in both the United States and in Canada by the major financial institutions. This dominance of the major financial institutions is most pronounced in lending for new residential construction. The acquisition of a mortgage portfolio, particularly where the underlying security is new residential construction - which accounts for two-thirds of the major institutions mortgage loans - requires the major lenders to plan ahead further than the case when they acquire other portfolio investments. This is due to the fact that the mortgage funds provided must be committed long before they are disbursed, and thereby find their way to into the lender's portfolio. For this reason it is the commitment data which should be used when changes in the financial institutions lending policy are considered. The lending institutions obtain the funds which they invest in new mortgages (disbursements) partly from the repayments made to them on the mortgages which they already hold. The major mortgage lenders, e.g., the life loan trust and other companies, obtain about one-half of their current mortgage investments from this source. This is true also of the residual sector as a whole. Chartered banks, on the other hand, in 1959 only obtained about 10% of their new mortgage

loans from repayments, while repayments accruing to CMHC are turned over to the Consolidated Revenue Fund and are not automatically available for new mortgage lending. The other half of the major lenders' current mortgage loans were financed by them by diverting a proportion of the new savings they attract, to the mortgage market. The non-bank lenders, life, loan trust and other companies diverted about 60% of their new savings inflow to this purpose. This proportion varied of course from time to time in response to changes in capital market yields. This will be discussed more fully in Chapter V where the relationship between the mortgage market and the money market is considered.

CHAPTER IV

THE IMPACT OF MONETARY-FISCAL POLICY ON THE MORTGAGE MARKET

The impact of monetary policy alone - not explicitly linked with fiscal policy - will be considered in the next chapter within the framework of the Canadian money market. In this chapter the scope will be somewhat wider to permit a discussion of the combined impact of monetary-fiscal policy on the mortgage market. In order to analyse this impact it is useful to present the gross flow of mortgage fund data in the form of a simple model using the concepts developed in the previous chapter.(1)

FLOW OF MORTGAGE FUNDS MODEL

The gross flow of mortgage funds from lending institutions was described in the previous chapter, as depending on the asset growth of the lending institutions' active in the mortgages, and the funds available from mortgage repayments. Funds available from sales in the secondary mortgage market are here added to complete the picture.

The flow of mortgage funds from the major lending institutions is presented in the form of a notational model

(1) The flow of mortgage funds model developed here is based on the description of the mortgage market by J.V. Poapst in "The National Housing Act 1954", Canadian Journal of Economics and Political Science (May, 1956), pages 234-243, see especially page 235.

$$m_f = m_b + m_l + m_o$$

$$m_b = q_b i_b A_b + r_b M_b + S_b$$

$$m_l = q_l i_l A_l + r_l M_l + S_l$$

$$m_o = q_o i_o A_o + r_o M_o + S_o$$

m_f = gross mortgage flow from major financial institutions.

m_b = gross mortgage flow from banks.

m_l = gross mortgage flow from life companies.

m_o = gross mortgage flow from loan, trust and other companies.

A_b = Assets of banks.

A_l = Assets of life companies.

A_o = Assets of loan, trust and other companies.

M_b = Mortgage portfolio of banks.

M_l = Mortgage portfolio of life companies.

M_o = Mortgage portfolio of loan, trust and other companies.

S_b = Secondary market sales of banks.

S_l = Secondary market sales of life companies.

S_o = Secondary market sales of loan, trust and other companies.

q_b = rate of asset growth of banks.

q_l = rate of asset growth of life companies.

q_o = rate of asset growth of loan, trust and other companies.

i_b = proportion of asset growth devoted to mortgages by banks.

i_l = proportion of asset growth devoted to mortgages of life companies.

i_o = proportion of asset growth devoted to mortgages of loan, trust, and other companies.

r_b = proportion of mortgage portfolio repaid to banks during year.

r_l = proportion of mortgage portfolio repaid to life companies during year.

r_o = proportion of mortgage portfolio repaid to loan, trust and other companies during year.

The actual data are also presented in Table 24. By considering the flow of mortgage funds in this way, we see at once that a great many of the factors determining the present flow of mortgage funds are a legacy from the past and have to be taken as given data when considering the impact of present monetary-fiscal policy on the mortgage market. Thus, both the total assets of lending institutions and their present mortgage portfolio are legacies from the past. The flow of mortgage repayments is also to a large extent a legacy from the past, as this flow is determined by the contractual repayments written into the outstanding mortgage portfolio. However, the flow of mortgage prepayments can fluctuate in response to current market conditions.

Apart from the possible effect on the flow of prepayments, monetary-fiscal policy will influence the current flow of mortgage funds through their effect on the asset growth of lending institutions and their effect on the proportion of asset growth these institutions invest in mortgages. Table 24 presents the historical data for 1953-1959 using the notation suggested above.

TABLE 24: VARIABLES INFLUENCING GROSS FLOW OF MORTGAGE FUNDS FROM LENDING INSTITUTIONS, 1953-1959

Variables	Notation	1953	1954	1955	1956
Gross Mortgage Flow (Millions of Dollars)					
Banks	m_b	--	75	234	237
Life Co.'s	m_l	317	407	507	578
Loan, Trust and Other Co.'s	m_o	136	167	228	252
Assets (Jan. 1) (Millions of Dollars)					
Banks	A_b	8,112	8,627	9,248	10,257
Life Co.'s	A_l	4,417	4,811	5,137	5,642
Loan, Trust and Other Co.'s	A_o	1,236	1,292	1,531	1,696
Mortgage Portfolio (Jan. 1) ($ mil.)					
Banks	M_b	--	--	74	294
Life Co.'s	M_l	1,214	1,402	1,658	2,016
Loan, Trust and Other Co.'s	M_o	479	534	617	714
Secondary Market Sales - ($ mil.)					
Banks	S_b	--	1	13	34
Life Co.'s	S_l	--	--	--	5
Loan, Trust and Other Co.'s	S_o	--	--	4	11
Asset Growth (% per Annum)					
Banks	q_b	6%	7%	11%	0.5%
Life Co.'s	q_l	9%	7%	10%	7%
Loan, Trust and Other Co.'s	q_o	5%	18%	10%	6%
Net Investment in Mortgages - (% of Annual Asset Growth)					
Banks	i_b	--	12%	22%	390%
Life Co.'s	i_l	48%	79%	71%	100%
Loan, Trust &Other Co.'s	i_o	98%	35%	59%	104%
Mortgage Repayments (% of Outstanding Portfolio)					
Banks	r_b	--	--	1%	1%
Life Co.'s	r_l	11%	10%	11%	10%
Loan,Trust &Other Co.'s	r_o	18%	17%	19%	17%

Source: Central Mortgage and Housing Corporation, Canadian Housing Statistics(OTTAWA),Bank of Can.-Statistical Summary (OTTAWA).

TABLE 24: (cont'd) VARIABLES INFLUENCING GROSS FLOW OF MORTGAGE FUNDS FROM LENDING INSTITUTIONS, 1953-1959

Variables	Notation	1957	1958	1959
Gross Mortgage Flow (Millions of Dollars)				
Banks	m_b	145	264	239
Life Co.'s	m_l	441	410	500
Loan, Trust and Other Co.'s	m_o	195	297	352
Assets (Jan. 1) (Millions of Dollars)				
Banks	A_b	10,308	10,812	12,089
Life Co.'s	A_l	6,035	6,544	7,066
Loan, Trust and Other Co.'s	A_o	1,798	1,896	2,188
Mortgages Portfolio (Jan. 1) ($ mil.)				
Banks	M_b	493	586	790
Life Co.'s	M_l	2,408	2,660	2,875
Loan, Trust and Other Co.'s	M_o	820	866	990
Secondary Market Sales - ($ mil.)				
Banks	s_b	42	34	37
Life Co.'s	s_l	9	8	2
Loan, Trust and Other Co.'s	s_o	12	6	3
Asset Growth (% per Annum)				
Banks	q_b	5%	12%	-0.3%
Life Co.'s	q_l	8%	8%	6%
Loan, Trust and Other Co.'s	q_o	5%	15%	8%
Net Investment in Mortgages - (% of Annual Asset Growth)				
Banks	i_b	18%	16%	-423%
Life Co.'s	i_l	50%	41%	60%
Loan, Trust and Other Co.'s	i_o	47%	42%	75%
Mortgage Repayments (% of Outstanding Portfolio)				
Banks	r_b	2%	4%	3%
Life Co.'s	r_l	9%	8%	8%
Loan,Trust &Other Co.'s	r_o	16%	18%	20%

Source: Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA), Bank of Canada, Statistical Summary (OTTAWA).

The analysis which follows will be conducted on the assumption that a combination of monetary-fiscal policy which leads either to accelerated growth in the assets of lending institutions active in the mortgage market or to a rise in the proportion of assets that these institutions devote to investment in mortgages, will lead to an increased flow of mortgage funds and will thus be designated as favourable to the flow of mortgage funds. A combination on monetary-fiscal policy that leads to a slowdown in the asset growth of lending institutions or a reduction in the proportion of assets devoted to mortgages, will be designated as unfavourable to the flow of mortgage funds.

MONETARY-FISCAL POLICY COMBINATIONS

Theoretically, the following different combinations of monetary-fiscal policy can be distinguished.(2) An 'easy' money policy combined with a budget surplus, a balanced budget or a budget deficit. A 'neutral' money policy combined with a budget surplus, a balanced budget, or a budget deficit. A 'tight' money policy combined with a budget surplus, a balanced budget, or a budget deficit.

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(2) For an up-to-date analysis of the impact of monetary-fiscal policy on the seconomy see, The Report of the Commission on Money and Credit, Money and Credit: Their Influence on Jobs, Prices and Growth, Prentice Hall, Inc., Englewood Cliffs, N.J., 1961).

The theoretical impact of each of these cominations is considered below.

EASY MONEY POLICY

An easy money policy, taken in isolation, should be considered favourable for an increased flow of mortgage funds. As an easy money period is defined as a period during which the money supply increases at a relatively rapid rate, it will be reflected in a relatively rapid increase in the assets of chartered banks, in recent years, one of the more important lenders on mortgage account.

The bulk of the money supply is composed of deposits with the chartered banks. These deposits in turn represent about 95% of the total liabilities of the chartered banks. As total liabilities must equal total assets in a balance sheet, that part of the money supply which is composed of deposits with the chartered banks is also equal to about 95% of the assets of chartered banks. An easy money policy will thus be reflected not only in a relatively rapid increase in the money supply but also in the relatively rapid increase in the assets of chartered banks, one of the more important lenders on mortgage account since 1954.(3)

(3) Thus during 1958, the major assets of the chartered banks increased by $1.28 billion, while the money supply - measured by total deposits with chartered banks plus currency held outside the banks - increased by $1.32 billion. From the end of 1953 till the end of 1959, major assets of chartered banks increased by $3.42 billion, while the money supply increased by $3.40 billion. Bank of Canada, Statistical Summary - Financial Supplement, 1959, (OTTAWA, 1960), pages 19-34.

This rapid increase in chartered bank assets may also be reflected in a more rapid asset growth of other financial institutions that accept deposits from the public, e.g., trust and loan companies.(4) This could occur as members of the public shift some of their deposits with chartered banks to loan and trust companies, as these latter pay higher interest rates on their deposits.

An easy money policy will thus tend to increase the flow of funds accruing to financial institutions important in the mortgage lending field, enabling them to make more mortgage loans.

EASY MONEY POLICY COMBINED WITH BUDGET SURPLUS

A period of budget surplus is here defined as a period during which the amount of government securities outstanding in the capital market is reduced. That is the excess of income over expenditure on the part of government is used to reduce part of the outstanding debt. A budget surplus, as here defined, will thus lead to a reduction in the demand for funds from a source that competes with mortgages in the capital market. It will thus be favorable to an increased flow of mortgage funds, as it will permit

(4) Thus net changes in the major assets of chartered banks in each of the years from 1953 to 1959, was, .52 billion, .62 billion, 1.01 billion, .05 billion, .50 billion, 1.28 billion, -.05 billion. The net changes in assets of the trust companies the same years was .01 billion, .15 billion, .09 billion, .03 billion, .18 billion, .11 billion. Bank of Canada, Statistical Summary (OTTAWA), and Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA, 1st quarter and annual issues).

financial institutions to increase the proportion of their asset growth which they are willing to invest in mortgages.

This particular combination of monetary and fiscal policy can therefore definitely be considered as favourable to the flow of mortgage funds.

EASY MONEY POLICY COMBINED WITH BALANCED BUDGET

A balanced budget period is here defined as a period during which the amount of government securities outstanding remains unchanged. This does not mean that no new government securities will be issued during the period under consideration, but that gross new issues will be exactly counterbalanced by retirements. In other words the emphasis here will be on the cash budget - which included loans made to crown corporations etc. - rather than on the administrative budget, which does not include the above items.

This combination also should lead to an increase in the flow of mortgage funds. The easy money part of the policy will lead to an increase in the assets of the financial institutions making mortgage loans, while the fact that the amount of government securities outstanding is not increased, will make it easier for financial institutions to increase the proportion of their asset growth, which they devote to investment in mortgages. In other words as a result of the easy money policy financial institutions will have more funds to invest. As there is no increase in the amount

of federal government securities outstanding - the budget assumed to be in balance - competition for the funds available to the financial institution will be lessened and more funds will be potentially available for investment in mortgages. These funds could of course also be invested in other long-term portfolio investments, e.g. provincial bonds, municipal bonds or corporate bonds. The focus in this chapter is however placed on the relationship between mortgage investments and investments in federal government securities.

EASY MONEY POLICY COMBINED WITH BUDGET DEFICIT

A period of budget deficit is here defined as a period during which the amount of federal government securities outstanding is increased. From the point of view of mortgage lending, monetary and fiscal policy here work at cross purposes.(5) Thus, while the easy money policy which leads to a more rapid growth in the assets of financial institutions, will be favorable to an increased flow of mortgage funds, the increase in government securities outstanding will compete with mortgages in the capital market, and will thus offset the favourable effect of easy money.

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(5) This is recognized in the mortgage market literature, see for instance, L. Grebler and O. Jones, The Secondary Mortgage Market, Purpose, Performance and Potential, (University of California, 1961), page 80.

The problem thus is to devise a measure that will show which of these two forces is dominant, the favourable effect of the easy money policy, on the unfavourable effect of the budget deficit. It can be argued that if after deducting from the total assets of financial institutions that fraction of the increase in government debt outstanding which corresponds to the fraction these institutions had invested in government bonds in the previous year, the period can still be described as an easy money period, then this combination can be said to be favourable to an increased flow of mortgage funds, and vice-versa. It is felt here that deducting the total increase in government securities outstanding from the assets of financial institutions would give undue weight to fiscal policy as financial institutions are not the only purchasers of government bonds. It is therefore suggested here that the appropriate weight to be applied is the proportion of assets that the financial institution had invested in government securities in the year previous to the one being considered. Thus the weight given to fiscal policy increases when the proportion of assets financial institution invest in government securities increases, and diminishes when the proportion of assets invested in government securities diminishes.

An easy money policy combined with a budget deficit can thus be either favourable, unfavourable or neutral, with respect to its influence on the flow of mortgage funds, depending on the particular policy mix.

NEUTRAL MONEY POLICY

A neutral money policy is theoretically described as a monetary policy that permits money to perform its functions of medium of exchange, unit of account and store of value, without affecting the economy in any way. Thus, theoretically a neutral money policy will neither accelerate nor retard the asset growth of financial institutions. It will thus be neither favourable nor unfavourable to the flow of mortgage funds.

NEUTRAL MONEY POLICY COMBINED WITH BUDGET SURPLUS

This combination can be considered as favouring an increased flow of mortgage funds. While no stimulus is given by the monetary policy, a budget surplus will reduce the competition for long-term funds that mortgages must face in the capital market, and will therefore permit the financial institutions to increase the flow of funds allocated to mortgages.

NEUTRAL MONEY POLICY COMBINED WITH BALANCED BUDGET

The neutral money policy part of the combination will not affect the flow of mortgage funds in either direction. The balanced budget part of the combination on the basis of the definition here adopted, i.e. a budget policy that leaves the amount of government securities outstanding unchanges, as

it will call for no adjustment to the assets of financial institutions is here also considered as having a neutral effect on the flow of mortgage funds. This combination is therefore assumed to be neutral with respect to its affect on the flow of mortgage funds from financial institutions.

NEUTRAL MONEY POLICY COMBINED WITH BUDGET DEFICIT

Here again, the neutral money policy part of the combination will not affect the flow of mortgage money in either direction. The budget deficit part of the combination will, however, be detrimental to the flow of mortgage funds. As the amount of capital market instruments competing with mortgages in the capital market will be increased, while the assets of the lending institutions making mortgage loans will not increase at more than the neutral rate, this policy combination must be labelled unfavourable to the flow of mortgage funds.

TIGHT MONEY POLICY

A tight money policy, taken by itself should be considered unfavourable for an increased flow of mortgage funds. A tight money period is here defined as a period during which the money supply either decreases, or does not increase, or increases at less than the neutral rate. This will be reflected in parallel movements in the assets

of lending institutions as a whole. The asset growth of lending institutions will thus be less than usual. A tight money policy taken by itself must therefore, in the framework of the present analysis, be considered as unfavourable to the flow of mortgage funds.

TIGHT MONEY POLICY COMBINED WITH BUDGET SURPLUS

While the tight money part of the policy is unfavourable to the flow of mortgage funds, due to its effect on the rate of asset growth of financial institutions active in mortgage lending, the surplus budget part of the policy will be favourable to the flow of mortgage funds, because it enables lending institutions to devote a larger share of their asset growth to mortgage investments. Whether this particular combination is favourable or unfavourable to the flow of mortgage funds will thus depend on the proportions with which tight money is mixed with budget surplus.

Again the problem is to devise a measure that will show which of the two forces is dominant, the unfavourable effect of the 'tight' money policy or the favourable effect of the budget surplus. As before, the weight assigned to fiscal policy will be determined by the proportion of assets financial institutions had invested in government securities in the previous year. It will therefore be argued that if after adding to the assets of lending institutions the amount by which government securities outstanding have been reduced,

adjusted for the ratio of government securities to total assets the previous year, the period can be characterized as a neutral money period, then this combination of monetary and fiscal policy does not affect the flow of mortgage funds in either direction. If as a result of this policy combination, the adjusted assets of lending institutions make it possible to characterize the period as an easy money period, then this combination can still be considered favourable to the flow of mortgage funds. If on the other hand, as a result of this policy combination the adjusted assets of lending institutions still lead us to characterize the period as a tight money period, then this policy mix must be considered unfavourable to the flow of mortgage funds.

TIGHT MONEY POLICY COMBINED WITH BALANCED BUDGET

As the 'tight' money policy will restrain the asset growth off the lending institutions active in the mortgage field, this part of the policy will be unfavourable to mortgages. As there are no changes in government securities outstanding during the period, there are no adjustments to be made to the assets of lending institutions, and there is nothing to modify the unfavourable effect of the tight money policy. Therefore, this combination must be considered unfavourable to the flow of mortgage funds.

TIGHT MONEY POLICY COMBINED WITH BUDGET DEFICIT

This policy mix will be unfavourable to the flow of mortgage funds. The tight money policy will retard the asset growth of the lending institutions, and if severe enough, may actually cause them to decline, while the budget deficit part of the policy will mean that a greater quantity of federal government bonds will somehow have to be absorbed. This policy mix will therefore be unfavourable to the flow of mortgage funds on both scores - retarded asset growth of lending institutions and a decline in the proportion of assets devoted to mortgage investment.

MONETARY-FISCAL POLICY MODEL

We are now faced with the problem of making the analytical framework in which monetary and fiscal policy was discussed in this Chapter, operational in the sense of using it to describe the historical data. In order to do this, we must put the various mixtures of monetary-fiscal policy in quantitative and therefore measureable terms.

The definitions adopted here were chosen for operational reasons. No attempt will be made to delve into the theoretical discussions that have revolved around the proper definition of the money supply or the problem of where the borderline between 'tight' and 'easy' money is.

A 'neutral' money policy is here considered as a policy that leaves the income velocity of money unchanged from one year to the next. Income velocity will be calculated in a somewhat unorthodox way, namely by taking the ratio of total financial institutions' assets over Gross National Product. The reason for using financial institutions' assets rather than money supply is the fact that the whole analytical argument has here been made in terms of the impact of monetary policy on assets of lending institutions.

The concept of a balanced budget is again defined as a period during which the volume of government debt outstanding remains unchanged. This is in conformity with the argument advanced before that fiscal policy makes its impact on the mortgage market through the competition it offers mortgages in the capital market for the investment dollar of the financial institutions. The various possible monetary-fiscal policy mixtures discussed before are presented below in notational form.

NOTATIONAL PRESENTATION OF POSSIBLE MONETARY POLICIES

$$\frac{Y_{t-1}}{A_{t-1}} = \frac{Y_t}{A_t} = \text{'Neutral Money Policy}$$

$$\frac{Y_{t-1}}{A_{t-1}} < \frac{Y_t}{A_t} = \text{'Tight' Money Policy}$$

$$\frac{Y_{t-1}}{A_{t-1}} > \frac{Y_t}{A_t} = \text{'Easy' Money Policy}$$

Y_{t-1} Gross National Product in the previous year.

Y_t Gross National Product in the current year.

A_{t-1} Assets of financial institutions in the previous year.

A_t Assets of financial institutions in the current year.

NOTATIONAL PRESENTATION OF POSSIBLE FISCAL POLICIES

$G_{t-1} = G_t$ = Balanced budget

$G_{t-1} < G_t$ = Budget deficit

$G_{t-1} > G_t$ = Budget surplus

G_{t-1} = Government securities outstanding in previous year.

G_t = Government securities outstanding in current year.

G^f_{t-1} Government securities held by financial institutions in previous year.

NOTATIONAL PRESENTATION OF COMBINED MONETARY-FISCAL POLICIES (6)

Where $\frac{Y_{t-1}}{A_{t-1}} = \frac{Y_t}{A_t - \left[(G_t - G_{t-1}) \quad (G^f_{t-1} + A_{t-1})\right]}$, the combined monetary-fiscal policy is neutral with respect to the flow of mortgage funds.

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(6) The notational presentation of the combined monetary-fiscal policy merely puts into notational form the arguments presented in the previous section. The guiding principle is simply that where the income velocity of money measured here by relating assets of financial institutions to Gross National Produce - adjusted for changes in the amount of Federal Government securities outstanding - remains unchanged from one year to the next, the combined monetary-fiscal policy is judged to be neutral in its effect on the flow of mortgage funds from financial institutions. When this income velocity declines the effect on the flow of mortgage funds is judged to be favourable. When this income velocity increases, the effect on the mortgage flow is judged to be unfavourable.

Where $\frac{Y_{t-1}}{A_{t-1}} < \frac{Y_t}{A_t - [(G_t - G_{t-1}) \quad (G^r_{t-1} + A_{t-1})]}$, the

combined monetary-fiscal policy is unfavourable with respect to the flow of mortgage funds.

Where $\frac{Y_{t-1}}{A_{t-1}} > \frac{Y_t}{A_t - [(G_t - G_{t-1}) \quad (G^r_{t-1} + A_{t-1})]}$, the

combined monetary-fiscal policy is favourable with respect to the flow of mortgage funds.

MONETARY-FISCAL POLICY MIX AND MORTGAGE COMMITMENTS BY LENDING INSTITUTIONS, 1953-1959

Now that the analytical concepts have been given operational meaning, it is possible to see whether they help to explain the actual historical mortgage lending pattern of financial institutions. Table 25 gives the historical mortgage commitment data for the financial institutions for the years 1953-1959 and the monetary-fiscal policy that characterizes each of the years on the basis of the definition adopted above. The data selected for examination are those on mortgage commitments made by lending institutions. The reason for choosing mortgage commitments is that any change

TABLE 25: MONETARY-FISCAL POLICY AND MORTGAGE COMMITMENTS,* 1953-1959

Year	Adjusted Income Velocity of Financial Institutions Assets **	Federal Government Securities Outstanding ($ Billions)	Type of Monetary-Fiscal Policy	Effect on Mortgage Flow	Mortgage Commitments ($ Millions)
1953	1.63	15.64	'Easy' Money Budget Deficit	Favourable	581
1954	1.49	15.47	'Easy' Money Budget Surplus	Favourable	904
1955	1.46	16.00	'Easy' Money Budget Deficit	Favourable	1,195
1956	1.56	15.23	'Tight' Money Budget Surplus	Unfavourable	998
1957	1.56	15.17	'Neutral' Money Budget Surplus	Neutral	771
1958	1.46	16.42	'Easy' Money Budget Deficit	Favourable	1,192
1959	1.52	17.14	'Tight' Money Budget Deficit	Unfavourable	1,083

* Commitments of life, loan and trust companies and chartered banks.

** Adjusted income velocity of financial institutions calculated as indicated in the text.

Source: Federal government securities outstanding, Bank of Canada, Statistical Summary (OTTAWA), Mortgage Commitments: Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA).

in the investment policies of lending institutions shows up first in the commitment data as explained before in Chapter III.

1953: 'EASY' MONEY COMBINED WITH BUDGET DEFICIT

As was pointed out before the easy money part of this policy should be favourable to the flow of mortgage funds, while the budget deficit part of the policy should be unfavourable to that flow. The size of the budget deficit on the basis of the definition here adopted was $.45 billion. To allow for this deficit, the assets of lending institutions have to be adjusted downwards by 28% of the $.45 billion (the proportion of assets held by lending institutions in the form of government securities in the previous year). After this adjustment is made, the income velocity of lending institutions' assets, still show a decline. Thus, in terms of the analysis adopted here, this policy mix can still be regarded as favourable to the flow of mortgage funds. The data on mortgage commitments by lending institutions show that these commitments did indeed increase from $503 million in 1952 to $581million in 1953. The pattern of mortgage lending during the year therefore conforms to the pattern our analysis would lead us to expect.

1954: 'EASY' MONEY POLICY COMBINED WITH BUDGET SURPLUS

This type of policy combination it was shown earlier will definitely be favourable to the flow of mortgage funds. On the one hand, the 'easy' money part of the policy will lead to a rapid growth in the assets of lending institutions, on the other hand, the budget surplus part of the policy will mean that mortgages will have to face less competition for the investment dollar of lending institutions. The historical data bear out this expectation. Mortgage commitments from lending institutions increased from $581 million in 1953 to $904 million in 1954. This sharp increase in mortgage commitments from lending institutions is, however, not due solely to the favourable monetary-fiscal climate. A new Housing Act (NHA 1954) was passed during the year permitting chartered banks to make NHA mortgage loans. As the chartered banks were previously not permitted to make mortgage loans, this meant a considerable increase in the lending potential of institutions active in the mortgage field. However, even if allowance is made for the entry of the chartered ba nks into the mortgage field, by deducting the $158 million mortgage loans approved by banks during 1954, non-bank lending institutions increased their mortgage commitments from $581 million during 1953 to $746 million during 1954.

1955: 'EASY' MONEY POLICY COMBINED WITH BUDGET DEFICIT

This is the same policy combination that prevailed during 1953. As was pointed out before from the point of view of the flow of mortgage funds the outcome depends on the particular mix of the two policies. The budget deficit, on our definition, was again of substantial size, $.53 billion. However, after adjusting the assets of lending institutions for the deficit (by deducting $.53 billion X 26.5%) these assets still indicated an 'easy' money policy.

The 1955 situation can thus be described as favourable to the flow of mortgage funds. The historical data on mortgage commitments from lending institutions bear this out. These commitments increased from $904 million during 1954 to $1,195 million during 1955.

The magnitude of this increase was perhaps, due in part to the fact that the chartered banks, who were still relatively new to mortgage lending, utilized the favourable monetary-fiscal climate to build up their NHA mortgage portfolio at a rapid rate. However, even if allowance is made for the $326 million mortgage commitments of the chartered banks, we find that the non-bank financial institutions increased their mortgage commitments from $746 million during 1954 to $869 million during 1955.

1956: 'TIGHT' MONEY POLICY COMBINED WITH BUDGET SURPLUS

When this type of policy combination was discussed before it was pointed out that the tight money part of the policy would be detrimental to the flow of mortgage funds, while the budget surplus part of the policy would be favourable. The final outcome would depend on the particular policy mix. On the basis of the analysis adopted here, the policy mix during 1956 must be judged unfavourable to the flow of mortgage funds. Thus the budget surplus, although of considerable magnitude, $.77 billion, was not sufficient, when the appropriate adjustment is made to the assets of lending institutions (by increasing their assets by $.77 billion X 22%) to outweigh the adverse effect of the 'tight' money policy. Again, the historical data support this conclusion, for mortgage commitments from lending institutions declined from $1,195 in 1955 to $998 million during 1956.

The analysis of the mortgage data has so far been carried out in terms of the supply of mortgage funds. One cannot, however, neglect the possibility that the decline in the mortgage flow was due to a decline in the demand for mortgages. Thus, it can be argued that the 'tight' money policy successfully curbed the demand for mortgage funds. It can further be argued that the budget surplus contributed to a further decline in demand by withdrawing funds from the income stream. It is, however, difficult to maintain this

argument as incomes continued to increased during the year.(7) This would suggest that the 'tight' money -budget surplus combination did not in fact have an adverse effect on incomes, and therefore also had no adverse effect on the demand for mortgage funds.

1957: 'NEUTRAL' MONEY POLICY COMBINED WITH BUDGET SURPLUS

When this combination was discussed in the previous section it was argued there that the 'neutral' money part of the policy would not affect the flow of mortgage funds either way, while the budget surplus part of the policy would be favourable to the flow of mortgage funds, so that the combination as a whole should be considered favourable to the flow of mortgage funds. When we look at the historical data, however, we see that mortgage commitments from lending institutions continued the decline started in the previous year, from $998 million during 1956 to $771 million in 1957. This is contrary to the results one would expect on the basis of the analysis adopted above.

It is possible to argue that the 'neutral' money policy followed a period of 'tight' money, and can thus be

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(7) Per capita personal disposable income increased from $1,160 during 1955 to $1,250 during 1956. Based on data reprinted from Dominion Bureau of Statistics publications in Bank of Canada, Statistical Summary - Financial Supplement for 1959 (OTTAWA). pages 123 and 129.
Personal disposable income during 1955 was $18,298 million, during 1956 it was $20,153 million. Canada's population during 1955 was 15,698,000 and had risen to 16,081,000 during 1956.

regarded as a mere continuation of that policy begun a year earlier. Also the annual data hide the fact that monetary policy was not eased until late in the year, around August, after the investment decisions of financial institutions affecting the current year, had been largely decided. No recourse will be had here to the above argument, however. This year merely points up the fact that monetary and fiscal policies, although extremely important, are not the only influences that affect the flow of mortgage funds. Demands from other sectors of the economy are also important. The whole analysis here has repeatedly emphasized that fiscal policy makes its impact on the flow of mortgage funds by varying the competition that mortgages have to face in the capital market from Federal Government securities. Mortgages compete in the capital market not only with Federal Government securities, however. Provincial bonds and municipal bonds, as well as corporate bonds also compete with mortgages in that market, as was pointed out in Chapter III. It can be argued that during 1957, it was the strong competition from corporate bonds, rather than the monetary-fiscal climate, that led to the continued decline in the flow of mortgage commitments from lending institutions, Thus, the net flow of corporate bonds increased from $.8 billion in 1956 to $.97 billion in 1957.

The whole complex of demand and supply forces is mirrored continually in the capital market by the relative

interest rate structure of the various classes of capital market instruments. While the monetary-fiscal policy combination undoubtedly influences the level and structure of yields in the capital market, the demand for funds from the junior governments and the corporate sector must also be taken into account. The financial institutions take this force into account by adjusting their investment decisions on the basis of the yield structure in the whole capital market, not merely the yield on federal government bonds. This will be discussed further in Chapter V where monetary policy is considered in greater detail.

The historical data on the flow of mortgage funds from lending institutions during 1957, although they behave contrary to our expectations when only monetary and fiscal policy are taken into account, thus merely draw our attention to the fact that these are not the only influences affecting the flow of mortgage funds. They also bring to our attention the point that a decline in the flow of mortgage commitments from lending institutions cannot always be blamed on the prevailing monetary-fiscal policy.

As before, the foregoing analysis concentrates on the supply side of the mortgage market. Again, it is possible to argue that the budget surplus operated to reduce incomes, and thereby also the demand for mortgages. Demand for mortgage funds was however strong throughout 1957. This can be seen from the fact that the Bank of Canada felt it

necessary to use moral suasion to persuade the chartered banks to commit at least $150 million to the mortgage market.(8) This demonstrates quite clearly that the constraints on mortgage lending during 1957 came from the supply side and not the demand side.

1958: 'EASY' MONEY POLICY COMBINED WITH BUDGET DEFICIT

This type of policy combination is similar to the policy prevailing during 1953 and 1955. It was argued there that the easy money part of the policy can be considered favourable to the flow of mortgage funds, while the budget deficit part is unfavourable. The eventual outcome was said to depend on the particular mixture of the two policies. The budget deficit during 1958 was very large indeed, as government securities outstanding increased by $1.25 billion during the year. One has to go back to the war years to find an equivalent increase in government debt outstanding in any one year. Monetary expansion was, however, also extremely rapid. Indeed, the Governor of the Bank of Canada, in his annual report of that year, indicated that large scale monetary expansion was permitted for the sake of carrying out the fiscal policy decided upon.(9) Thus, after making the

(8) See Bank of Canada, Annual Report of the Governor to the Minister of Finance for the Year 1957 (OTTAWA, 1958), page 28.

(9) See Bank of Canada, Annual Report of the Governor to the Minister of Finance for the Year 1958 (OTTAWA, 1959), page 5.

appropriate deduction from the assets of lending institutions, to take account of the prevailing fiscal policy ($1.25 billion X 16.4% has to be deducted from these assets on the basis of the formula suggested earlier) these assets still indicate an 'easy' money policy. On the basis of the present analysis the monetary-fiscal policy combination prevailing during 1958 must therefore be judged favourable to the flow of mortgage funds, despite the unusually large budget deficit incurred during the year. The historical data on mortgage commitments from lending institutions bear out this analysis. These commitments, increased from $771 million in 1957 to $1,192 million in 1958.

Again it can be argued that the increase in mortgage lending was due partly to the income effects of the 'easy' money-budget deficit policy mix. Thus both the 'easy' money and the fiscal deficit part of the policy would tend to increase income. The favourable income effect would then lead to an increase in the demand for mortgage funds. It is here considered, however, that the underlying demand for mortgages was strong throughout the whole period reviewed (1953-1959) and that changes in mortgage commitments were dominated by changes on the supply side. Central Mortgage and Housing Corporation's annual report for 1958 in describing mortgage lending activity during 1958 put it this way,

> "The underlying strength of conditions in the housing market was reflected in the ease with which the larger supply of mortgage funds was taken up." (10)

1959: 'TIGHT' MONEY POLICY COMBINED WITH BUDGET DEFICIT

When the type of policy combination was discussed earlier it was argued that this policy combination is definitely unfavourable to the flow of mortgage funds. The 'tight' money part of the policy would retard the asset growth of financial institutions active in mortgage lending, while the budget deficit part of the policy would increase the competition that mortgages have to fact in the capital market by increasing the amount of government securities that have to be absorbed in the capital market. Once more the historical data on mortgage commitments by lending institutions bears out this analysis. These commitments declined from $1,192 million in 1958 to $1,083 million in 1959. Considering the fact that the monetary-fiscal climate was definitely unfavourable to the flow of mortgage lending, the recorded decline is rather small. This is due to the fact that competition from non-government sources declined during the year as net new issues of corporate bonds declined from $.65 billion during 1958 to $.16 billion during 1959. We are reminded once more that, although the monetary-fiscal

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(10) Central Mortgage and Housing Corporation, Annual Report to the Minister of Public Works for the Year 1958 (OTTAWA), page 9.

climate is usually the dominant influence, as far as the effect on the flow of mortgage funds is concerned, other factors, particularly the demand for funds from corporations, must be taken into account. All these factors are usually taken into account by contrasting the flow of mortgage commitments from lending institutions with the yield differentials between mortgages and yields in other sectors of the capital market. This was not done here because it was desired to analyse the combined influence of monetary and fiscal policy, and show the channels through which these policies affect the flow of mortgage funds. The relationship between yield differentials and the flow of mortgage commitments will be discussed in the next chapter.

Again it can be argued that the decline in mortgage commitments can equally well be explained by the adverse income effects of the tight money part of the policy not completely offset by the favourable income effect of the budget deficit part of the policy. Once more it will be reiterated here that demand for mortgages was not seriously impaired by the prevailing monetary-fiscal climate. As a matter of fact mortgage loan applicationsto CMHC depleted the parliamentary appropriations during that year.(11) The volume of loan applications was so heavy that by October

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(11) Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA, 4th quarter 1959), page 6.

30th, sufficient were on hand to take up, in the next few months, all the funds remaining of the $1 billion sanctioned by Parliament. This demonstrates quite clearly that once more changes in the supply of mortgage funds dominated the mortgage market.(12)

DIRECT GOVERNMENT LOANS

The foregoing analysis did not distinguish between an increase in government securities to finance the whole gamut of government activities, and an increase for the sake of utilizing the funds to make direct government mortgage loans. These so-called direct loans made via Central Mortgage and Housing Corporation must now be mentioned briefly.

The National Housing Act 1954, as subsequently amended, provides for government funds to be channelled into the mortgage market via CMHC. Basically, the guiding principle has been to make funds available in areas where

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(12) For an even stronger expression of this point of view see Central Mortgage and Housing Corporation, Annual Report to the Minister of Public Works for the Year 1960 (OTTAWA), pages 7-10. The following extract from that report summaries the view expressed there, "A powerful current of demand for new housing characterized the fifties. The actual volume of lending ... and the consequent volume of house-building, were determined largely by what lenders would invest ..., rather than by the demand for loans. Demand remained half-concealed therefore, its full latent strength unknown, its dynamic trend hidden, as long as the available mortgage money supplies were insufficient to articulate the whole of it." Central Mortgage and Housing Corporation, ibid., page 7.

financial institutions are not willing to lend (small rural centres) or in time periods when institutions cut down on their mortgage lending, and direct a greater proportion of their accruing resources to other investments. These direct government funds are typically available for new construction only. This implies the principle that all purchasers of new dwellings have at all times the right to obtain loans under the prevailing NHA terms. This principle was modified during part of 1960, when direct loans were available only to prospective home owners earning $5,000 or less per year. Funds made available to the mortgage market in this way are obtained from the Federal Government's Consolidated Revenue Fund, and therefore contribute towards increases in Federal Government bonds outstanding. These direct loans can thus affect the type of fiscal policy followed in any one year.

As a result of these direct loans, the flow of mortgage funds has been protected from adverse influences, whether originating in the prevailing monetary-fiscal climate or in a heavy demand for funds from the corporate sector. In the above analysis, the decline in the flow of mortgage funds from lending institutions during 1957 was described as originating not from an adverse monetary-fiscal climate, but from the rapid expansion in the demand for corporate funds. Nevertheless, direct loans were vastly expanded during the year, with mortgage commitments from CMHC increasing from $20 million in 1956 to $235 million in 1957. During 1959,

when on the basis of our analysis the monetary-fiscal climate could be designated as unfavourable to the flow of mortgage funds, the unfavourable climate was also largely offset by direct loans from CMHC, with commitments of $367 million. It can therefore be argued that the flow of mortgage funds in the period here under consideration, 1953-1959, was well protected from adverse influences of any kind, whether they originated in the private sector of the economy or were the result of prevailing monetary-fiscal policy.

CHAPTER V

MORTGAGES AND THE MONEY MARKET

In the previous Chapter the emphasis was placed on devising a framework that would permit analysis of the combined impact of monetary-fiscal policy on the mortgage market. The framework devised for that purpose emphased the impact of monetary policy on the asset growth of financial institution. In this Chapter the emphasis will be placed on monetary policy alone and the way in which the effects of monetary policy are transmitted to the mortgage market, via the money market and the capital market.

Before delving into the interrelationships between the money and capital markets, it is necessary to describe briefly the objectivesof monetary policy, the weapons at the disposal of the Canadian monetary authorities to achieve these objectives, and the money market itself, the main arena where the monetary authorities operate. As we are here mainly concerned with the Canadian situation the references will be mainly to Canadian sources.

OBJECTIVES AND TECHNIQUES OF MONETARY POLICY

OBJECTIVES OF MONETARY POLICY

Basically the monetary authorities objectives are[1] to promote and maintain high levels of employment and income

(1) The objectives of monetary policy listed in the text are based on E.P. Neufeld, Bank of Canada Operations, 1935-1954 (TORONTO, 1955), Chapter 2, pages 16-35. Professor Wm. C. Hood lists the same objectives in Financing of Economic Activity in Canada (Royal Commission on Canada's Economic Prospects, OTTAWA, 1958), pages 27-28.

as well as price stability. In addition the monetary authorities are also charged with the duty of helping to finance the federal government and to manage the national debt. As a corollary to managing the national debt the monetary authorities are also interested in maintaining orderly conditions in the government bond market. Monetary policy in Canada is executed via the Bank of Canada. The Bank of Canada is also responsible for implementing the exchange rate policy of the country. This latter function will, however, be largely ignored here.

The major objectives of monetary policy listed above namely maintaining high levels of employment, price stability, and orderly conditions in the government bond market can at times come into conflict.(2) Where such conflict of objectives occurs the monetary authorities are faced with the additional task of deciding which of the objectives should be given priority at any particular time. Thus it has been seriously questioned recently whether the objective of maintaining high levels of employment and maintaining price stability are compatible.(3) The suggestion that these two objectives may be incompatible arises out of the fact that

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(2) E.P. Neufeld, op. cit., page 34.

(3) "Are the three major elements of our economic goal compatible with each other" is the question posed by Neil H. Jacoby as editor of United States Monetary Policy - Its Contribution to Prosperity Without Inflation (The American Assembly, Columbia University, N.Y., 1958), page 5.

the maintenance of high levels of employment may involve large increases in the money supply to bolster demand, while the maintenance of price stability may dictate no increase in the money supply or even a reduction in the money supply. The objective of financing government activities may also come into conflict with the objective of maintaining price stability. Thus the Governor of the Bank of Canada has stated that the large increase in the money supply during 1958 was a result of the federal government's financial requirements, and by implication possibly prejudiced the objective of price stability.(4) It is clear from the above description of monetary objectives that the monetary authorities cannot be expected to take into account only or even mainly what effect their action will have on the mortgage market. On the whole, monetary policy will be decided on other grounds and the mortgage market must adjust to it. There are exceptions, however, such as in 1957 when the Governor of the Bank of Canada assured the chartered banks that sufficient reserves would be made available to them to permit them to make mortgage commitments of $150 million during the year. This episode is referred to later in this Chapter.

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(4) Bank of Canada, Annual Report to the Minister of Finance for the Year 1958 (OTTAWA), page 28.

TECHNIQUES OF MONETARY POLICY

The monetary authorities will in the main try to achieve their objectives by controlling the cash reserves of the chartered banks. This is not, however, the only way open to the central bank - in Canada the Bank of Canada - to try and achieve their objectives. In addition to exercising control over the assets of chartered banks the Bank of Canada can also use moral suasion to persuade the chartered banks, and even other lenders, to cut down or expand certain types of lending. Control over the chartered banks cash reserve, is translated into control over the chartered banks lending capacity by stipulating that chartered banks must maintain a fixed proportion of their deposit liabilities in the form of cash, that is, bank notes plus deposits at the Bank of Canada. The cash assets ratio operative in Canada presently is 8%. This ratio merely determines the leverage effect of changes in the cash assets of the chartered banks. Thus, the statutory requirement that chartered banks maintain 8% of their deposit liabilities in cash assets means that an increase of say $10 million in the chartered banks cash asset holdings will support increased deposit liabilities of $125 million or 12½ times the increase in cash assets. In the United States where the statutory requirement calls for reserves of 5% (5) against savings deposits,

(5) Reduced to 4% during 1962.

changes in cash assets permit a 20-fold increase in demand deposit liabilities. The leverage effect of changes in cash assets on deposit liabilities is thus dependant on the statutory regulation in force. As statutory regulation determines the size of the leverage effect of changes in the chartered banks cash assets, changes in this statutory requirement constitute a powerful weapon of monetary control.
At present these can be varied without recourse to new legislation between 8% and 12%. The actual changes in the banks cash reserves in Canada are brought about by open market operations and shifts in Federal Government deposits between the chartered banks and the Bank of Canada. Changes in bank rate are not at present used in Canada as a signal of changes in the direction of monetary policy.(6) Bank rate is however retained as a penal rate at which the Bank of Canada supplies 'lender of last resort' facilities. These facilities are available to banks and a special group of investment dealers at interest rates one-quarter of 1% higher than the prevailing rate on three months treasury bills. Banks obtain this lender of last resort accommodation in the form of advances from the Bank of Canada. The investment dealers obtain the lender of last resort accommodation in the form of sale and repurchase agreements with the Bank of Canada. This involves the sale to the Bank of

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(6) Canada returned to a fixed bank rate percent at the end of June 1962.

Canada of Federal Government securities maturing in three years or less on the understanding that they will be repurchased or the agreement renegotiated within a week. Because the Bank of Canada accepts only Federal Government securities maturing in three years or less as collateral for the temporary loans which it makes, these are the securities that will later in this Chapter be considered as 'money market' securities.

Moral suasion, whereby the Bank of Canada indicates to the country's credit institutions that it considers lending for certain purposes desirable or undesirable, as the case may be, is also used as a monetary weapon in Canada. Only one instance is on record in the 1953-1959 period where moral suasion has affected the mortgage market directly. This episode is described by the Governor of the Bank of Canada, in his Annual Report for 1957, as follows:

> "In discussing this situation with the chartered banks, I expressed the view that they should maintain continuity in mortgage lending as an important field of investment for savings entrusted to them. At a meeting in March the banks agreed to resume operations in this field on much the same scale as in 1956 ... the Bank of Canada indicated that the total resources of the banks as a group could be expected to increase during 1957, by an amount at least great enough to take care of their disbursement on mortgage loans in that year, so that it would not be necessary for the banks to dispose of other assets in order to maintain a flow of funds for insured housing loans." (7)

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(7) Bank of Canada, Annual Report to the Minister of Finance for the Year 1957 (OTTAWA), page 40.

Of all the weapons available to the Bank of Canada to control the activities of the chartered banks, moral suasion when it is directed to mortgage lending, is the only one that affects the mortgage market directly. All the other control techniques of monetary policy listed above, affect the mortgage market indirectly via the portfolio adjustments which the chartered banks and other lenders undertake in response to Bank of Canada actions. These portfolio adjustments will frequently involve purchases and sales of Federal Government securities in the money market, which is described below.

THE MONEY MARKET

SIZE OF THE MONEY MARKET

This description of the money market will basically be along the same lines adopted in sketching the capital market. The emphasis will be on the amount of securities outstanding in the money market and on the participants in that market. As noted by Professor Wm. C. Hood,(8) the Canadian money market, has in the main operated along its present lines since June 1st, 1954. The securities involved are treasury bills (Wm. C. Hood mentions three months treasury bills only, but since then six months and one year

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(8) Wm. C. Hood, op. cit., pages 405-411.

treasury bills have been added) and Federal Government securities maturing in three years or less. Securities maturing in three years and over are here considered as part of the capital market. Unfortunately, no statistics are published on the amount of government securities outstanding with a maturity of three years or less. For this reason the data on Federal Government securities maturing within two years or less have been used here. It must therefore be borne in mind that the size of the money market is understated. Table 26 gives the amount of money market securities outstanding on a quarterly basis in the 1952-1959 period.

As can be seen from Table 26, the securities qualifying for trading in the money market represented about one-quarter to one-third of the total marketable Federal Government debt. In terms of its relationship to the capital market as a whole at the end of 1954, the $3.2 billion money market instruments outstanding represented a little over 10% of the $31.04 billion outstanding in the money and capital markets combined. By 1959, the money market had grown to $4.9 billion and again represented just over 10% of the money and capital markets which by then had grown to $44.87 billion. The importance of the money market is, however, much greater than a mere comparison of size of outstanding securities suggests. For one thing, as mentioned above, the money market represents a significant proportion of the amount of marketable Federal Government securities. Also in terms of gross

TABLE 26: MONEY MARKET SECURITIES OUTSTANDING, 1952-1959

Date	Treasury Bills (Billions of Dollars)	2 Years and Under (Billions of Dollars)	Total (Billions of Dollars)	Money Market Securities as % of Gov't. Market Debt * (%)
1952 Mar.	1.40	1.91	3.31	24%
Jun.	1.40	1.91	3.31	24%
Sep.	1.50	1.91	3.41	24%
Dec.	1.40	2.15	3.55	26%
1953 Mar.	1.55	1.93	3.48	25%
Jun.	1.40	1.93	3.33	24%
Sep.	1.40	2.13	3.53	25%
Dec.	1.40	1.83	3.23	23%
1954 Mar.	1.40	1.37	2.77	20%
Jun.	1.40	1.37	2.77	20%
Sep.	1.47	1.87	4.34	25%
Dec.	1.53	1.68	3.21	25%
1955 Mar.	1.59	1.67	3.26	24%
Jun.	1.71	1.62	3.33	25%
Sep.	1.78	1.08	2.86	21%
Dec.	1.73	1.78	3.51	26%
1956 Mar.	2.10	1.77	3.87	28%
Jun.	1.67	2.71	4.38	33%
Sep.	1.73	2.32	4.05	31%
Dec.	1.58	2.17	3.75	29%
1957 Mar.	1.63	3.15	4.78	38%
Jun.	1.63	3.00	4.63	37%
Sep.	1.66	2.94	4.60	37%
Dec.	1.63	2.54	4.17	33%
1958 Mar.	1.53	2.54	4.07	32%
Jun.	1.50	3.30	4.80	37%
Sep.	1.50	1.82	3.32	25%
Dec.	1.50	2.32	3.82	28%
1959 Mar.	1.60	2.30	3.90	29%
Jun.	1.96	2.51	4.47	32%
Sep.	2.02	2.44	4.46	32%
Dec.	2.08	2.87	4.95	36%

* Excludes Canada Savings Bonds.

Source: Bank of Canada, Statistical Summary (OTTAWA, various issues).

flows the amount of money market securities issued annually is in fact greater than the amount of longer term government securities issued. Thus in 1959, the amount of treasury bills issued totalled $6.6 billion (the net increase in the amount outstanding was only $.6 billion, an increase from $1.5 billion to $2.1 billion) while the gross new issues of other government securities were less than half that amount $2.9 billion, and gross new issue of all other capital market instruments was $8 billion.

The most important participants in the money market are, the Bank of Canada, the chartered banks, and a group brokers dealing in government securities. No separate statistics are published on the holdings, or the transactions, of these brokers, although Professor Wm. C. Hood mentions that the brokers make this information available to the Bank of Canada.(9) Their holdings are included in the holdings of money market securities by the general public. Even these data are available only from the 3rd quarter of 1956. (10) These holdings are presented in Table 27. It can be seen from the Table that the amount of securities held by the general public has varied between $.8 billion on September 1958 and $2.4 billion at the end of 1959 while in terms of percentage

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(9) Wm. C. Hood, ibid., page 407.

(10) Bank of Canada, Statistical Summary (OTTAWA, current issues).

TABLE 27: GENERAL PUBLIC'S HOLDINGS OF MONEY MARKET SECURITIES, 1956-1959

Date	Total (Billions of Dollars)	Banking System (Billions of Dollars)	General Public (Billions of Dollars)	General Public as % of Total
1956 Sep.	4.1	2.6	1.5	37%
Dec.	3.7	2.3	1.4	36%
1957 Mar.	4.8	2.8	2.0	42%
Jun.	4.6	2.6	2.0	42%
Sep.	4.6	2.8	1.8	39%
Dec.	4.2	2.7	1.5	36%
1958 Mar.	4.1	2.7	1.4	33%
Jun.	4.8	3.2	1.6	33%
Sep.	3.3	2.5	.8	24%
Dec.	3.8	2.4	1.4	37%
1959 Mar.	3.9	2.1	1.8	47%
Jun.	4.5	2.2	2.3	51%
Sep.	4.5	2.1	2.4	55%
Dec.	4.9	2.5	2.4	48%

Source: Bank of Canada, Statistical Summary (OTTAWA, current issues).

of total outstanding, the amount held outside the banking system has varied between 24% and 55%.

MONEY MARKET YIELDS

Owing to the short-term of money market securities and the fact that they are Federal Government obligations, there are almost no risks of capital losses attached to those securities. Their yield should, therefore, accurately reflect

supply and demand conditions in the money market. The supply of money market securities is determined by the Department of Finance, and thus changes on the supply side cannot properly be considered as due to changes in monetary policy. They can, however, be considered as part of debt management policy on which the Bank of Canada gives advice. Changes on the demand side can, however, be induced by the monetary authorities. Open market operations designed to increase the cash assets of the chartered banks will involve purchase of Federal Government securities, usually money market securities. This will constitute a direct increase in the demand for money market securities. In addition the chartered banks, which find their cash assets increased as a result of these open market operations, may not be able to increase their loan portfolio immediately and will therefore purchase money market securities. Thus open market operations designed to increase the cash assets of chartered banks should increase the price of money market securities. An increase in the price of money market securities is equivalent to a decline in the yield on the securities. Open market operations designed to increase the cash assets of the chartered banks, should therefore lead to lower yields on money market securities. Open market operations designed to decrease the cash assets of chartered banks, on the other hand, should lead to an increase in money market yields. Table 28 examines the

TABLE 28: QUARTERLY CHANGES IN MONEY MARKET SECURITIES AND YIELDS, 1956-1959

Date	Total (Billions of Dollars)	Monetary System (Billions of Dollars)	Treasury Bill Yields (Basis Points)	Dominant Cause
1956 Dec.	- .4	- .3	51	-D
1957 Mar.	1.1	.5	3	+S
Jun.	- .2	- .2	11	-D
Sep.	0	.2	- 1	+D
Dec.	- .4	- .1	- 18	-S
1958 Mar.	- .1	0	- 65	-S
Jun.	.7	.5	- 55	+D
Sep.	-1.5	- .7	55	-D
Dec.	.5	- .1	122	-D
1959 Mar.	.1	- .3	81	-D
Jun.	.6	.1	81	+S
Sep.	0	- .1	39	-D
Dec.	.4	.4	- 38	+D

Source: Based on data published by Bank of Canada in their Statistical Summary (various issues).

actual data to determine whether changes in money market yields did in fact change in response to changes in demand from the banking system. The yields used in this presentation are the yields on three-month treasury bills, while changes in the holdings of money market securities by other than the general public are considered as changes induced by monetary policy. To help interpret the data changes in the total quantity of money market securities outstanding are also presented. This will help determine whether the changes in yields were induced by changes in demand (changes

in monetary policy) or by changes in supply (changes due to debt management policy).

The last column in Table 28 seeks to isolate whether monetary or debt management was dominant in determining the changes in yield. Where changes in demand (D) are dominant, monetary policy has been the most important influence. Where changes in supply (S) are dominant, changes in debt management policy (on which the Bank of Canada gives advice) are the determining influence.(11)

The domanant cause listed in Table 28 has been identified as follows: Changes in the holdings of money market securities by the monetary system are assumed to reflect changes in monetary policy. Thus, it is assumed that open market operations designed to increase the cash reserves of chartered banks will also lead them to increase their holdings of money-market securities. They will thus lead to an increased demand for money market securities. Open market operations designed to decrease the cash reserves of the chartered banks will lead them to decrease their holdings of money market securities and thus lead to a decline in the demand for money market securities. For this reason changes in the monetary's system's holdings of money market securities

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(11) "The responsibilities of the monetary authorities as debt managers are important responsibilities and conditions in the market for government debt may greatly facilitate or seriously hinder the execution of monetary policy". Wm. C. Hood, op. cit., page 455.

are considered as changes in the demand for money market securities. It is the Department of Finance that has the final voice on whether the amount of money market securities outstanding will be increased by new issues or reduced by retiring maturing issues. For this reason changes in the total amount of money market securities outstanding are here considered as changes on the supply side, dominated by debt management considerations.

Where an increase in the demand for money market securities is associated with a decrease in money market yields (an increase in their price) demand is considered as the dominating influence in the market. Where a decline in the demand for money market securities is associated with an increase in money market yields (a decline in their price) demand is also considered as the dominant influence in the money market. Thus, in a period when demand changed in the opposite direction to yields (in the same direction as price) demand is considered the dominant influence in the money market. Where demand changed in the same direction as yields (in the opposite to price) supply forces are considered to predominate.

In two-thirds of the case considered above, changes in demand, that is monetary policy proved to be the determining influence. In a ll of these cases, yields declined as demand due to monetary policy increases or increased as demand due to

monetary policy declined. It can thus be stated that monetary policy is most often the dominant cause of changes in the three-month treasury bill rate.

YIELD CHANGES AND THE MORTGAGE MARKET

CAPITAL MARKET YIELDS

Monetary policy depends heavily on open market operations for its success. These operations, it was seen largely determine the changes in short-term interest rates. However, a smoothly functioning capital market depends "upon the

> presence in the capital market of buyers and sellers of financial assets, who are sensitive to changes in differential yields and who will shift their demand for assets from those whose yields have risen less to those whose yields have risen more... Holders of assets must hold overlapping groups of assets; otherwise there can be no mechanism, whereby increases in the prices of one obligations can spread to the prices of other obligations either of the same debtor but of different maturity or another debtor and of the same or different maturity."(12)

A smoothly functioning capital market should therefore permit changes in short-term money market market rates to be transmitted to long-term Federal Government bond rates via portfolio changes of the institutions trading in the money and capital markets. This would be a case of institutions being willing to change their holdings of financial assets of the same debtor (the Federal Government) but of different

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(12) Wm. C. Hood, ibid, page 455.

maturity. If short-term and long-term rates constantly change in the same direction, we can assume that these changes in money market yields initiated by monetary policy are in fact being transmitted to the long-term capital market, in the form of changes in yields on long-term Federal Government bonds. Table 29 compares, on a quarterly basis, the changes in yield on the three months treasury bill rate with the changes in yield on a long-term government bond, the 3¾% 1975/1978 maturity. The reason for choosing this particular bond is that it bears a relatively high coupon (yield distortions due to capital gain considerations are thus minimised vis-a-vis some of the other long-term Federal Government bonds outstanding, e.g. the 3¼% 1979 maturity). The result would not be substantially different if another bond were chosen.

The data presented in Table 29 show that, on the whole, in the Federal Government securities market, changes in short-term rates resulted also in changes in long-term rates. The only period for which this was not true was during the first half of 1958 (the data for the 4th quarter of 1954 and the 1st quarter of 1955 are ignored here because the yield movement in the contrary direction was less than five basis points). Professor Wm. C. Hood notes that "one

> of the most profound and perplexing obstacles to the conduct of monetary policy is the state of expectations in the capital market."(13)

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(13) Wm. C. Hood, ibid., page 31.

TABLE 29: CHANGES IN SHORT AND LONG TERM YIELDS, 1953-1959

Quarter		Short Term (Basis Points)	Long Term (Basis Points)
1953	2Q	20	4
	3Q	21	0
	3Q	- 33	- 23
1954	1Q	-229	- 34
	2Q	- 10	- 7
	3Q	- 33	- 4
	4Q	- 10	2
1955	1Q	3	- 6
	2Q	35	0
	3Q	39	16
	4Q	73	12
1956	1Q	8	1
	2Q	- 12	- 2
	3Q	64	42
	4Q	51	9
1957	1Q	3	4
	2Q	11	17
	3Q	- 1	9
	4Q	- 18	- 47
1958	1Q	- 35	21
	2Q	- 55	21
	3Q	55	15
	4Q	22	39
1959	1Q	81	12
	2Q	81	20
	3Q	39	53
	4Q	- 38	- 1

Source: Calculated from yields as published by Bank of Canada, Statistical Summary (OTTAWA, various issues).

The first half of 1958, is perhaps such a period where expectations of higher long-term rates were firmly held, due to the heavy demand for funds expected from the Federal Government

(Federal Government debt outstanding increased in fact by $1.25 billion during 1958) so that long-term rates continued to go up, while short-term rates declined.

GOVERNMENT BOND YIELDS AND OTHER CAPITAL MARKET YIELDS

The success of traditional monetary policy depends not only on the ability to transmit changes in short-term yields - the arena in which the monetary authority usually operates - to the long-term government bond market. It is important, also, that these changes in long-term Federal Government bond yields be diffused throughout the whole capital market. E.P. Neufeld states that "the trend and

> relative stability of prices, in that market will normally influence the whole array of fixed interest market debt".(14)

This is borne out by the data in Table 30 where the changes in capital market yields are tabulated.

For the period as a whole, we can say that the yields of all the capital market instruments generally moved in the same direction. The only major exception occurred during the first quarter of 1958, when Federal Government bond yields increased while yields on other capital market instruments continued to decline. We have already seen that, during that quarter, long-term Federal Government bond yields increased as a result of the heavy projected financial requirements of

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(14) E.P. Neufeld, op. cit., page 31.

TABLE 30: CHANGES IN CAPITAL MARKETS YIELDS, 1953-1959

Quarter		Federal Bonds	Corporate Bonds	Provincial Bonds	Municipal Bonds	NHA Mortgages
		(Basis Points)				
1953	2Q	4	9	3	4	0
	3Q	0	-- 1	1	3	0
	4Q	- 23	- 7	- 10	- 22	0
1954	1Q	- 34	- 29	- 50	- 48	- 25
	2Q	- 7	- 17	- 17	- 24	0
	3Q	- 4	- 7	- 6	- 1	0
	4Q	2	1	0	- 2	0
1955	1Q	- 6	- 3	- 5	- 9	- 25
	2Q	0	- 4	- 2	- 1	0
	3Q	16	6	23	7	0
	4Q	12	20	32	32	0
1956	1Q	1	1	- 5	6	25
	2Q	- 2	24	14	35	0
	3Q	42	47	80	64	0
	4Q	9	31	32	26	0
1957	1Q	4	10	- 15	- 7	50
	2Q	17	9	23	23	0
	3Q	9	32	4	16	0
	4Q	- 47	- 55	- 55	- 65	0
1958	1Q	21	- 24	- 6	- 10	0
	2Q	21	5	5	15	0
	3Q	15	20	38	13	0
	4Q	39	13	17	8	0
1959	1Q	12	2	8	14	0
	2Q	20	35	30	32	0
	3Q	53	48	67	76	0
	4Q	- 1	6	- 7	0	75

Source: Based on bond yield data published by Bank of Canada in their Statistical Summary (OTTAWA, various issues), and bond yield data published by McLeod, Young, Weir and Company, "McLeod, Young, Weir Bond Yield Average" (TORONTO, monthly issues).

the Federal Government, in spite of a decline in short-term rates. This would therefore seem to be a case of changes in long-term Federal Government bond yields leading changes in other sectors of the capital market. We can say then that as a general rule open market operations initiated through monetary policy will determine changes in short-term rates. These changes will be transmitted to the long-term Federal Government bond market, and from there to the rest of the capital market. But a demonstration that in Canada monetary policy has effectively determined interest rate changes in the money and capital markets does not prove that these changes have greatly affected the quantity of capital market securities offered on the market. In other words none of the foregoing shows whether increases in interest rates have significantly dampened the demand for capital market funds from corporations, municipalities and provinces, or whether declines in interest rates have increased the demand for capital market funds from those sources. Economists are still very much divided on this question, as to whether the demand for capital funds is very responsive to change in interest rates.(15) This question will not be touched upon here as far as the capital market as a whole is concerned. The effect of yield changes will be examined only in relation to the mortgage market.

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(15) See for instance, "Controversial Issues in Recent Monetary Policy; a Symposion", The Review of Economics and Statistics (August, 1960), pages 245-282.

YIELDS CHANGES AND MORTGAGE FLOWS

Table 30 shows that mortgage yields under the NHA changed infrequently. This is due to the fact that the NHA rate is set administratively. Except for conventional mortgage rates it is typically the highest rate in the capital market. As this rate is changed infrequently and by administrative edict, while other long-term rates change freely and continuously in response to market forces the yield differential between the NHA rate and other market rates fluctuates more widely than the yield differential between the other capital market instruments.

Table 31 shows the differential between the NHA rate, and corporate bonds yields together with funds committed for NHA lending by non-bank lending institutions.

As can be seen from Table 31 commitments for NHA loans from lending institutions were very much influenced by the yield differential between the NHA rate and corporate bond yields. The seasonal pattern of lending, with most of the commitments concentrated in the 2nd and 3rd quarters of the year, obscures this relationship between yields differential and NHA commitments to some extent. However, it is quite clear that commitments were very much higher during 1955 and the first half of 1956, when this differential was relatively wide, as compared to the subsequent period, when the yield differential was much narrower.

TABLE 31: YIELD DIFFERENTIALS AND NHA COMMITMENTS, 1954-1959

Quarters		NHA Rate Minus Corp. Bond Yields (Basis Points)	NHA Mortgage Commitments * (Millions of Dollars)
1954	2Q	156	69
	3Q	163	99
	4Q	162	110
1955	1Q	140	56
	2Q	144	125
	3Q	138	85
	4Q	118	50
1956	1Q	142	41
	2Q	118	130
	3Q	71	75
	4Q	40	20
1957	1Q	80	24
	2Q	71	48
	3Q	39	23
	4Q	96	10
1958	1Q	120	22
	2Q	115	87
	3Q	95	59
	4Q	82	40
1959	1Q	80	28
	2Q	45	66
	3Q	- 3	30
	4Q	66	8

* NHA Mortgage commitments of life, loan, trust and other companies.

Source: Yield data as in Table 30. NHA mortgage commitments as published by Central Mortgage and Housing Corporation in Canadian Housing Statistics (OTTAWA).

S.B. Klaman examines this relationship between yields and mortgage flows in the United States.(16) His data suggest that in the United States changes in gross mortgage flows lag behind changes in yield differentials possibly by as long as nine months. But he uses gross mortgage flow data(17) that is, disbursements date, e.g. mortgage funds not only committed, but actually paid out. In this presentation, commitments data were used. As commitments precede disbursement in some cases by as long as half a year, the lag between changes in yield differentials and changes in commitments should be much shorter. This lag in Canada is probably not longer than three months.(18)

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(16) S.B. Klaman, The Post-War Residential Mortgage Market (Princeton, 1961), page 123.

(17) S.B. Klaman recognizes however that the commitment data would give better results, see S.B. Klaman, ibid., page 121, note 14.

(18) Thomas Mayer quotes estimates that suggest a lag of between 6 and 8 months in the United States between the easing of credit and the start of construction, Thomas Mayer, "The Infexibility of Monetary Policy", The Review of Economics and Statistics, (November, 1958), page 361. In the same article on page 362, Thomas Mayer also quotes an estimate that the start of construction follows the Federal Housing Administration's (FHA) mortgage commitment by about $2\frac{1}{2}$ months. If this $2\frac{1}{2}$ months period is deducted from the lower range - that is 6 months quoted above as the lag between a change in monetary policy and the start of construction, it would leave a lag of $3\frac{1}{2}$ months between a change in monetary policy and a change in FHA commitments. This is close to the 3 months lag suggested in the text for Canada.

SUMMARY

Monetary policy in framing its objectives, cannot be expected to give special weight to its impact on the mortgage market. But the techniques through which monetary policy is enforced do affect the mortgage market. When the Central Bank uses moral suasion as one of its weapons, this effect on the mortgage market can be a direct one, such as occurred in 1957. When the other weapons at the disposal of the Central Bank are used for example, open market operations and other techniques designed to control the cash assets of the chartered banks, the effect on the mortgage market is not a direct one. In these cases monetary policy makes its initial impact on the money market. Interest rate movements in that market, which in size comprises about 10% of the capital market, are largely determined by monetary policy. These short-term interest rate changes induced by monetary policy are transmitted to the long-term federal government bond market and from there to the rest of the capital market. As interest rates on NHA mortgages do not fluctuate freely but are set by administrative decree, the changes in interest rates induced by monetary policy result in changes in the yield differentials between NHA mortgages and other capital market instruments. Lending institutions adjust the volume of their NHA lending in response to these changes in yields differentials. They curtail their lending when this differential narrows and increase their lending when the differential widens.

CHAPTER VI

THE LEVERS OF POLICY AND THE MORTGAGE MARKET

In this Chapter an attempt is made to present the policy measures - other than monetary-fiscal policy, which was discussed in the previous two chapters - available to influence the mortgage market. These policy measures are grouped on the basis of their impact on either the demand or supply side of the market.

Policy measures affecting the demand for mortgage funds operate via their effect on downpayment requirements, monthly carrying charges, or the universe covered by the NHA legislation. This latter universe can in turn be subdivided into elegibility requirements affecting the type of dwelling or the type of borrower, qualifying for an NHA loan.(1)

Policy measures affecting the supply of funds operate via their effect on the yield, security, and liquidity of the mortgage. Supply is also affected by measures designed to

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(1) Ramsey Wood, in his discussion of the impact of credit terms on demand considers only downpayment requirements and monthly carrying charges. The extension of the area to which the NHA borrowing terms apply added here is merely a variant of changes in downpayments and monthly carrying charges as terms are more favourable to borrowers under NHA. See Ramsey Wood, "Credit Terms and Demand for Residential Construction", included in Study of Mortgage Credit - Hearings (United States Senate Subcommittee, Washington, 1959), Appendix, pages 87-120.

widen the band of possible mortgage lenders and by the use of direct government funds.(2)

POLICY MEASURES AFFECTING THE DEMAND FOR MORTGAGE FUNDS

In this description of the policy measures affecting the demand for mortgage funds, no account is taken of the underlying forces that influence the demand for dwellings. Therefore, the rate of household formation, the level of family income, the number of dwellings required, to replace dilapidated dwellings, or to provide a margin of vacancies needed to facilitate family movements, and dwellings required to permit a continuation of the movement of farm families to urban centres, will all be neglected, not because they are unimportant, but rather because as a result of their paramount importance they require exhaustive treatment in their own right.(3)

Here it is merely intended to point out how legislation can, by adopting measures that will reduce downpayment requirements and monthly carrying charges, increase the demand for mortgage funds. Conversely, policy measures designed

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(2) S.B. Klaman, in an article on the availability of residential mortgage credit emphasises yields and widening the band of mortgage lenders. S.B. Klaman, "The Availability of Residential Mortgage Credit", included in Study of Mortgage Credit - Hearings (United States Senate Subcommittee, Washington, 1959) pages 189-208. The concept of security of the mortgage loan and liquidity are here added as factors influencing the net yield to the lender. The use of direct government funds, also considered here is merely an extension of the concept of widening the bands of mortgage lenders, in this case government being the mortgage lender.

(3) These factors were treated in more detail in Ch.I.

to increase downpayment requirements and monthly carrying charges, will tend to reduce the demand for mortgage funds.

DOWNPAYMENT REQUIREMENTS

It is generally agreed that measures leading to lower downpayment requirements will lead to an increase in demand because it will allow people with a lower amount of accumulated liquid savings to enter the market as homeowners,(4) while in the case of rental dwellings, it will require a smaller equity investment by entrepreneurs. As was pointed out in Chapter I, measures leading to lower downpayment requirements will lead to a greater demand by shifting the demand curve upward so that more dwelling units will be demanded at the same price, and therefore also more mortgage funds will be demanded. Table 32 shows that for borrowers under the National Housing Act, downpayments have been reduced from $3,340 during 1953 to $3,150 during 1959 although the average cost of dwellings have increased from $11,687 to $14,549. Downpayments as a percent of the cost of a dwelling were thereby reduced from 29% to 22%.

Downpayment requirements can be regulated by three types of measures or a combination of any of the three:

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(4) For a description of how reduced downpayment requirements increase the purchasing power of a buyer see E.M. Fisher, Urban Real Eastate Market: Characteristics and Financing (National Bureau of Economic Research, N.Y., 1951), pages 65-67. Leo Grebler describes how changes in downpayment requirements in the United States under the FHA and VA programme were used to stimulate demand for housing and therefore also the demand for mortgage funds to finance the aquisition of the homes. See Leo Grebler, Housing Issues in Economic Stabilisation Policy (National Bureau of Economic Research, N.Y., 1960), pages 69-76.

TABLE 32: DOWNPAYMENT AS PER CENT OF COST OF DWELLING AND INCOME OF BORROWERS UNDER NHA, 1953-1959

Year	Average Cost	Average Downpayment	Downpayment as % of Cost (%)	Downpayment as % of Income (%)
1953	$11,687	$3,340	29%	70%
1954	12,335	3,084	25%	62%
1955	12,598	2,773	22%	55%
1956	13,366	3,217	24%	61%
1957	14,512	3,826	26%	66%
1958	14,314	3,103	22%	55%
1959	14,549	3,150	22%	55%

Source: Central Mortgage and Housing Corporation, Canadian Housing Statistics, 3rd Quarter, 1960 (Ottawa), Table 27 and comparable tables in earlier issues.

control over prices of dwelling, control over maximum size of mortgage loans and control over the loan to value ratio.

CONTROL OVER PRICES OF DWELLINGS:

As the downpayment on a dwelling represents the difference between the price that is paid for a dwelling and the amount of mortgage that is carried on the dwelling, control over the price of dwellings will influence the amount of the downpayment.

This control may be direct by legislating a maximum price for a dwelling if it is to qualify for any of the benefits the government extends under its housing legis-

lation.(5) It may also be indirect by limiting the size of the dwelling, etc., that can qualify for the benefits extended by housing legislation.(6) Legislation of this kind will, however, affect only the NHA part of the housing market. If the price stipulated is so low as to make it impossible for the building industry to supply dwellings profitably at the stipulated price, the builder will not build under the scheme.

The usual reason for stipulating a maximum price for dwellings eligible for the benefits granted under housing legislation, is to ensure that the purchasers of luxury dwellings are not covered by the legislation. During periods of acute shortages, the reason may be to prevent excessive profits by builders under the Housing Acts.

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(5) The integrated housing plan in force in Canada during 1945 is a case in point. This programme is described in Central Mortgage and Housing Corporation's Annual Reports to the Minister of Reconstruction and Supply for the Year 1948. Page 14 in the following terms, "The integrated housing plan was developed in 1945 to encourage builders to construct moderate priced homes for sale to veterans. In consideration for the builder offering to sell at a price not in excess of an amount fixed by the Corporation, the builder is given priority assistance."

(6) The agency programme undertaken in 1957 imposed size limitations on the homes qualifying for mortgage loans. See Central Mortgage and Housing Corporation, Canadian Housing Statistics - 2nd Quarter, 1957 (Ottawa), page 6.

CONTROL OVER MAXIMUM SIZE OF THE MORTGAGE LOAN:

While the stipulation of a maximum loan that can be granted under the housing legislation will also in some measure, affect the downpayment requirements, its main purpose is to ensure that the builders and buyers of luxury dwellings do not benefit by the housing legislation.(7)

CONTROL OVER THE LOAN TO VALUE RATIO:

This is the most flexible tool available to regulate the downpayment requirements of a prospective buyer. Thus, if the permitted loan to value ratio is 100% then the equity requirements are zero. This, while an extreme case, has actually happened in the United States where war veterans, under the VA (Veterans' Administration) legislation, can obtain a mortgage representing 100% of the value of houses approved by the VA.

The loan to value ratio stipulated under the housing acts is typically greater than the 66 2/3% presently granted outside the sphere of the housing act, that is in the conventional mortgage market.(8)

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(7) The National Housing Act 1954, stipulated a maximum loan amount of $12,800 on a single family home ownership dwelling. This was raised in December, 1960 by an amendment to the 1954 NHA Act to $14,900.

(8) Conventional loan to value ratios were raised during 1961 to 66 2/3% by an amendment to the Insurance Act. Loan to value ratios were fixed under the National Housing Act 1954 at 90%, the first $8,000 of lending value and 70% of the remainder. Loan to value ratios were gradually increased through the years. The December 1960 amendment to the Act raised loan to value ratios to 95% of the first $12,000 and 70% of the remainder.

It is obvious that the higher the loan to value ratio of the mortgage loans granted, the lower will be the downpayment requirements. A corollary of this is the fact that the equity of the owner in his property will be reduced. From the point of view of the lender, the risk of making a high ratio loan is greater because in case of default, if the lender has to take over the property on which the mortgage is granted, his margin of safety is lower if the owner's equity is low. For this reason, the high ratio mortgage loans available under the Housing Acts are guaranteed by the Federal Government. This aspect will be discussed more fully later under the subtitle of 'security', where the supply of mortgage funds is discussed.

Controls over the downpayment needed to purchase a home are very powerful as a tool to be used in stimulating or dampening the demand for mortgage funds. Table 32 shows that the downpayment as a percent of the average cost of a home financed under the National Housing Act has been gradually reduced from 29% in 1953 to 22% in 1959.

MONTHLY CARRYING CHARGES

The monthly carrying charges on a mortgage are composed of the interest payments that have to be made on the mortgage, and the amount of capital repayments that have to be made on a mortgage, or the rate at which the mortgage

is amortized.(9)

The practice of permitting a mortgage to be fully repaid through regular monthly repayments, to be spread over many years, has made the mortgage instrument much safer from the point of view of both the purchaser of a dwelling who assumes the mortgage, and the lending institution that provides the mortgage money. The purchaser of a dwelling is enabled to repay his mortgage monthly, either out of his income if a home-buyer, or out of the revenue of the property, if it is a multiple unit rental property, without at any time being called upon to pay a large lump sum that may be difficult to raise if such a large lump sum were to become due during a period of monetary stringency. The lender, on the other hand, has the benefit of regular repayments on the mortgage which steadily reduces the risk of default, by steadily increasing the equity cushion on the property. Also, as payments are made monthly, any financial difficulties that the borrower encounters, come quickly to the attention of the mortgage lending institution, making it possible to take early remedial action.(10)

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(9) For an analysis of the influence of the monthly carrying charges on demand for dwellings, and therefore mortgage funds, see Ramsey Wood, op. cit., pages 93-105, also E.M. Fisher, op. cit., pages 67-77, also Charles Abrams, "Credit Terms and Effective Demand for New Housing", included in Study of Mortgage Credit - Hearings (United States Senate Subcommittee, Washington, 1959), Appendix, pages 81-86.

(10) These advantages of the fully amortized mortgage are described by E.M. Fisher, op. cit., pages 21-23.

TABLE 33: MONTHLY CARRYING CHARGES (GROSS DEBT SERVICE) AS PER CENT OF INCOME OF BORROWERS UNDER NHA, 1953-1959

Year	Average Income ($)	Average Gross Debt Service ($)	Average Gross Debt Service as % of Income (%)
1953	$4,803	$ 871	18.1%
1954	4,962	927	18.7%
1955	5,023	934	18.6%
1956	5,312	972	18.3%
1957	5,798	1,073	18.5%
1958	5,628	1,120	19.9%
1959	5,716	1,155	20.2%

Source: Central Mortgage and Housing Corporation, Canadian Housing Statistics, 3rd Quarter, 1960 (Ottawa), Table 27, and comparable tables in earlier issues.

Housing legislation has played a major role in promoting the use of fully amortized mortgage loans, and has thereby contributed greatly to making the mortgage market more stable. Legislation which leads to lower monthly carrying charges, will lead to an extension in the demand for mortgages. This can be represented in Diagram "A", Chapter I, as a movement along the demand curve. It is thus merely an application to the mortgage market of the economic principle that as the price of a good is reduced more of it will be demanded.

Table 33 above shows that carrying charges on an NHA home have increased from $871 per annum in 1953 to $1,155 per annum in 1959. This reflects the fact that the effects of

lengthening the amortization period on NHA mortgages was more than offset by increases in the average loan amount and increases in the NHA interest rate. This increase in carrying charges has also been more rapid than the increase in income of the average NHA home-buyer, so that the G.D.S. ratio has increased from 18.1 percent in 1953 to 20.2 percent in 1959.

The carrying charges on a given mortgage can be regulated by legislation affecting the mortgage interest rate and the amortization period of the mortgage.

THE MORTGAGE INTEREST RATE:

Although the interest payments on a typical NHA mortgage loan average about 50% of the monthly carrying charges, over the life of the loan, variations in the mortgage interest rate for the sake of stimulating or stifling demand are not usually practicable. The reason for this is that the mortgage interest rate, while a cost item to the buyer, is also one of the major determinants in the supply of mortgage funds, and must be in line with conditions in all the sections of the capital market. Thus, unless subsidies are contemplated, it would not be practical to lower NHA mortgage interest rates for demand reasons, unless conditions in the capital market were such that mortgage funds would be forthcoming at the lower rate of

interest.(11) The interest rate in short is a price, and any undue tampering with the rate runs into all the difficulties encountered in the market, when price fixing is resorted to. Changes in the NHA rate are tabulated in Table 36.

THE AMORTIZATION PERIOD OF THE MORTGAGES:

The monthly carrying charges on a mortgage can, however, also be influenced by changes in the period over which the mortgage is amortized.(12)

Thus a mortgage of $10,000 at 6% p.a. fully amortized over 15 years, will require monthly payments of interest and principal of $83.99 while the same $10,000 mortgage at 6% will require monthly payments of only $63.99 if amortized over 25 years. This is, in fact, the tool which can be used with the minimum amount of friction, to vary the monthly carrying charges.

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(11) The stimulation of demand was given as one of the reasons for lowering the FHA rate in the United States from 5.75% to 5.50% in February, 1961. The rate was reduced again in May, 1961 to 5.25%, but this second cut made FHA mortgages less competitive and a restoration to 5.50% was considered. See Wall Street Journal (N.J., September 14th), page 28.

(12) See for instance, H. Woodard, Canadian Mortgages (Collins, Don Mills, Ontario, 1959), pages 197-204.

The National Housing Act 1954, stipulated a maximum term of 30 years for home-ownership mortgages. This was extended to 35 years by an amendment to the 1954 Act in December, 1960.

Table 33 shows that despite the lengthening of the permissible amortization period the monthly carrying charges have increased for NHA borrowers. As a percentage of average income the increase has been from 18% in 1953 to 20% in 1959.

UNIVERSE COVERED BY LEGISLATION

Demand can also be affected by changes in legislation that affect the universe this legislation encompasses.(13)

As the terms of lending under NHA are more favourable to the borrower in that both downpayment requirements and carrying charges are lower on NHA mortgages compared to downpayments on conventional mortgages, any extention of the universe covered by NHA legislation will lead to an increase in the demand for mortgages both by shifting the demand curve upwards and by moving demand to a lower point on the demand curve. This increased demand for NHA mortgage funds will be offset to some extent by a decline in the demand for conventional mortgages. The scope of legislation can be broadened or narrowed to include a greater or smaller variety of either dwellings eligible for NHA mortgages or borrowers eligible for NHA mortgages.

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(13) While all the previously described methods affecting demand apply equally to all mortgages, NHA mortgages as well as conventional mortgages, the extension of the area covered by NHA legislation will increase demand for NHA funds only and reduce the demand for conventional mortgage funds as explained in the text above.

TABLE 34: STARTS FINANCED UNDER NHA AS PER CENT OF TOTAL STARTS

Year	Starts (Dwelling Units)	Starts Financed Under NHA (Dwelling Units)	NHA as % of Total (%)
1953	102,409	39,989	39%
1954	113,527	50,373	44%
1955	138,276	65,377	47%
1956	127,311	43,395	34%
1957	122,340	47,468	39%
1958	164,632	81,950	50%
1959	141,345	62,333	44%
1953-59	909,840	390,885	43%

Source: Central Mortgage and Housing Corporation, Annual Report to the Minister of Public Works for the Year 1959, (Ottawa).

Table 35 below shows that changes in legislation relating to the universe covered by NHA legislation have not resulted in any marked increase in the proportion of NHA funds as a proportion of total mortgage funds disbursed. Thus during 1954, 22% of the mortgage funds disbursed were NHA insured funds. During 1959 the proportion was still 22% although it had climbed as high as 28% during 1958, the peak year for house-building.

CHANGES IN LEGISLATION AFFECTING THE TYPE OF DWELLING ELIGIBLE:

Earlier in this Chapter it was pointed out that one of the aims of fixing a maximum price on dwellings eligible for federal assistance under NHA was to exclude luxury

dwellings. It is, however, possible by legislation or by administrative regulation to make much finer distinctions as to the type of dwelling eligible for assistance under the National Housing Acts.

Most of the legislative changes that have in fact occurred here can be discussed under the following two basic divisions; mortgages on new construction, both single-family dwellings and multiple-family dwellings; and mortgages on existing real estate, both single-family dwellings and multiple-family dwellings.

As was pointed out before the terms of lending on mortgages obtained under the National Housing Acts are usually much more favourable to the borrower than the terms of lending under conventional financing. Therefore, any extension in the scope of the legislation that increases the number and variety of dwellings that come under the Act, will increase the demand for mortgage funds, not only because of the higher mortgage amount needed to finance each dwelling unit (higher loan to value ratio) but also because more dwelling units will very likely be demanded.

In the post-war period, the supply of funds has, in general, never been plentiful enough to encourage legislation that would encompass all the different types of dwellings enumerated, above.(14)

(14) This is the impression one gets from a perusal of the text in Central Mortgage and Housing Corporations's quarterly publication, Mortgage Lending in Canada, for the years up to and including 1954, and Canadian Housing Statistics from 1955 onwards.

TABLE 35: DISBURSEMENTS UNDER NHA AS PER CENT OF TOTAL DISBURSEMENTS, 1954-1959

Year	Total Disbursements (Billions of Dollars)	Disbursements Under NHA (Billions of Dollars)	NHA as % of Total (%)
1954	1.85	.40	22%
1955	2.44	.55	23%
1956	2.83	.54	19%
1957	2.30	.35	15%
1958	2.89	.80	28%
1959	3.31	.74	22%
1954-59	15.62	3.38	22%

Source: Central Mortgage and Housing Corporation, Canadian Housing Statistics - 4th Quarter, 1959, Table 31, and ibid., 1st Quarter, 1960, Table 38.

In view of this scarcity of funds, and the urgent need to increase the available stock of dwellings, the National Housing Acts have, in the main, concerned themselves with new residential construction only. However, the financing of existing dwellings was not neglected completely, for Home Improvement Loans were available to help finance needed alterations and repairs in existing dwellings.

CHANGES IN LEGISLATION AFFECTING THE ELIGIBILITY OF BORROWERS:

The demand for dwellings and the mortgage funds needed to finance those dwellings can also be stimulated or restrained by legislative changes affecting the band of potential

borrowers under the National Housing Acts. Most of the legislative changes in this field can be classified as legislation stipulating; income requirements of borrowers, location of borrowers, or occupation of borrowers.

INCOME REQUIREMENTS:

There are two aspects to the income requirements under the National Housing Acts, 1954. Firstly, the Act can limit eligible borrowers' annual income. If this is done, only persons with incomes below a certain level become eligible for loans under NHA. In this way, an attempt is made to ensure that people with very high incomes, who are presumably better able to take care of their housing needs, do not benefit from the assistance offered by legislation.(15) The income requirements can be applied also to multiple family rental dwellings by granting loans on exceptionally favourable terms to entrepreneurs who will bind themselves to rent only to tenants with low incomes.(16) Secondly, legislation can place a limit on the proportion of income that it

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(15) No annual maximum income restrictions have been placed on NHA borrowers obtaining their loans from private sources. However, during 1960, borrowers obtaining loans from government funds - direct loans from Central Mortgage and Housing Corporation - were restricted to an income of $5,000 per annum or less. See Central Mortgage and Housing Corporation, Canadian Housing Statistics, 1st Quarter 1960 (OTTAWA), page 6.

(16) Loans made to limited dividend companies under Section 16 of the National Housing Act, 1954, restrict the income of tenants permitted to move into the dwellings financed by Section 16 loans.

permits borrowers under the Act to pay for carrying the mortgage (the so-called gross debt service - Income Ratio, abbreviated as G.D.S. ratio). This second type of restriction is designed to protect the lender. By placing a limit on the proportion of income that can be spent by the borrower on carrying his mortgage (this applies only to home-owners), the legislation tries to assure that the borrowers will be able to meet their monthly commitments.(17)

The government has an interest in ensuring that the borrower is in a position to repay the loan, for as we shall see, in the second half of this Chapter, one of the most effective aids that the government gives to the mortgage market is to insure the lenders against loss for non-payment on the part of the borrower. The GDS requirement givesat least some assurance to the government that the borrower will in fact, be able to carry the loan.

LOCATION OF BORROWER (AND PROPERTY ON WHICH THE MORTGAGE IS GRANTED):

The demand for dwellings and funds can also be affected by legislation that stipulates the geographical area in which these loans will become available. In Canada, the area has often been delimited on a population density basis.

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(17) The GDS ratio was fixed at 23% in the National Housing Act 1954. At present it stands at 27%. For a description of the evolution of this concept see H. Woodard, op. cit., page 63.

Thus, at one time, NHA direct loans, that is loans made by CMHC out of Federal Government funds, were available only in centres of 5,000 population and less.(18) The rationale behind this restriction was that the less densely populated areas are less well served by private lenders, than the more densely populated cities. Any relaxation of this restriction, to permit direct lending right across the country, would naturally tend to increase demand and vice-versa. There are no area restrictions on direct loans at the present time.

OCCUPATION OF BORROWERS:

Direct loans can also be restricted depending on the occupation of the borrowers. Thus, direct loans have some times included builders and, at others, have excluded them.(19) Direct loans were also available to help develop primary industries.(20)

Table 34 above shows that in the 1953-1959 period 43% of the new dwelling units started were assisted by the NHA

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(18) See H. Woodard, op. cit., page 16. This applies only to loans made out of government funds via Central Mortgage and Housing Corporation.

(19) See Central Mortgage and Housing Corporation, Canadian Housing Statistics - 3rd Quarter, 1960 (OTTAWA), page 6. This applies only to loans made with Government funds via Central Mortgage and Housing Corporation.

(20) Section 17 of the National Housing Act 1954, makes provision for loans to be made by Central Mortgage and Housing Corporation to finance the construction of dwellings for workers engaged in mining, logging, lumbering and fishing.

legislation. The universe encompassed by the NHA legislation thus covered in one way or another almost half the house-building programme undertaken in the country annually in recent years.

POLICY MEASURES AFFECTING THE SUPPLY OF MORTGAGE FUNDS

In this description of the legislative measures available to influence the supply of mortgage funds, no attempt will be made to discuss measures that affect either the rate of asset growth of lending institutions active in the mortgage market, or measures that affect the total flow of savings within the economy. Both these factors were touched upon to some degree in the previous chapter, where the impact of monetary and fiscal policy on the flow of mortgage funds was considered. Here it is intended merely to consider the legislative measures that could result in a greater or lesser flow of mortgage funds from a given volume of savings. The legislative measures available to influence the flow of mortgage funds will make their impact on the supply of mortgage funds via their effect on the yield on mortgage loans,(21)

(21) Warren L. Smith portrays the relationship of yields and the supply of mortgage funds in the United States and shows that when yield differentials between FHA mortgages and corporate bonds widen, the supply of FHA funds increases and vice-versa. See Warren L. Smith,"The Impact of Monetary Policy on Residential Construction, 1948-1958". Included in Study of Mortgage Credit - Hearings (United States Senate Subcommittee, Washington, 1959), Figure 26, page 257. In the previous chapter the same relationship between supply of mortgage funds and yields was shown to exist in Canada also. See also Note 2 for this chapter.

the security of mortgage loans(22) and the liquidity of mortgage loans.(23) The supply of mortgage funds will also be affected by legislation designed to widen the band of participants, in the mortgage market and by legislation affecting the supply of direct loans from government institutions.(24)

Lending institutions adjust their investment portfolios on the basis of the yield, security and liquidity of the securities available to them. The emphasis placed on each of these investment qualities will depend on the type of institution, and particularly on the structure of their liabilities, whether short-term or long-term, etc. The supply of mortgage funds can, however, be increased by measures

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(22) Improving the security of FHA mortgages in order to increase the supply of FHA mortgage funds is one of the suggestions offered by Robert E. Scott, "Suggested Modification of the FHA, VA and FNMA Programs to Improve the Supply and Distribution of Mortgage Credit Available for Home Financing", included in Study of Mortgage Credit - Hearings (United States Senate, Subcommittee, Washington, 1959), page 316.

(23) The desire to increase the flow of mortgage funds by improving the liquidity of mortgages underlies the suggestions for the creation of some form of Central Mortgage Bank. See for instance, Thomas P. Coogan, "Proposal for a Central Mortgage Reserve Bank", included in Study of Mortgage Credit - Hearing (United States Senate, Subcommittee, Washington, 1959), pages 356-360. In Canada Central Mortgage and Housing Corporation has sought to improve liquidity by encouraging a more active secondary mortgage market. See Central Mortgage and and Housing Corporation, Annual Report to the Minister of Public Works for the Year 1961 (Ottawa), pages 9-13.

(24) See Note 2 to this chapter.

that encourage institutions previously not active in the mortgage market, to enter that market, thereby widening the band of participants in the mortgage market. Finally, as mentioned above, government agencies can supplement the flow of private mortgage funds with direct government funds.

YIELD ON MORTGAGE LOANS

The interest rate charged on a mortgage loan less the service charges associated with administering a mortgage portfolio, constitutes the net yield on that mortgage portfolio. Although it is widely recognized that the service charges associated with acquiring and administering a mortgage portfolio are higher than the expenses associated with acquiring and administering other fixed interest bearing obligations (federal, provincial, municipal and corporate bonds), no precise estimate of these expenses are available.(25) By comparing the gross yield on mortgages with the gross yield on other types of fixed interest bearing securities, we can, however, tell whether the spread between the yield on mortgages and these other securities is greater or smaller at different periods of time. When the spread is greater,

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(25) Knowledeable writers suggest that administrative charges on a mortgage portfolio run at around one-half of 1%, while acquisition fees add another 1.5% to the costs of operating a mortgage portfolio. See Sydney A. Sheppard's, "The Role of a Secondary Mortgage Market", Business Quarterly (University of Western Ontario, Fall, 1959), page 151.

TABLE 36: SPREAD BETWEEN NHA RATE AND CORPORATE BOND YIELDS, 1953-1959

(Basis Points)

Month	1953	1954	1955	1956	1957	1958	1959
Jan.	137	137	162	122	84*	104	84
Feb.	135	143	139*	127	89	110	83
Mar.	136	139*	140	142*	80	120	80
Apr.	132	152	142	124	77	113	77
May	133	154	144	118	72	113	55
June	127	156	144	118	71	115	45
July	127	159	144	112	67	108	41
Aug.	127	160	139	98	41	104	22
Sept.	128	163	138	71	39	95	-3
Oct.	131	161	137	47	53	97	-2
Nov.	133	161	127	39	84	93	-1
Dec.	135	162	118	40	96	82	66*

* NHA rate changed during the month.

Source: NHA Rate: Central Mortgage and Housing Corporation, Canadian Housing Statistics (Ottawa).

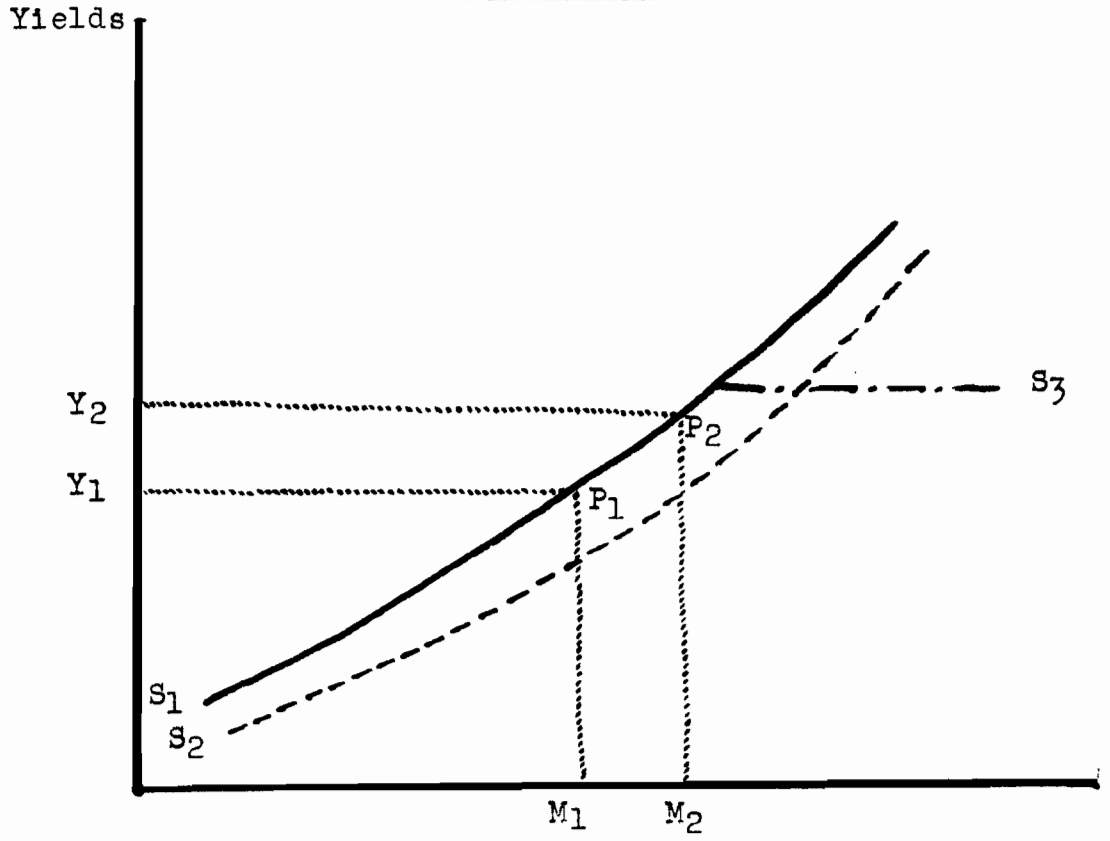
The following changes in the rate were made in the 1952-1959 period.

Aug. 1952 - Mar. 1954	-	5.75%
Mar. 1954 - Feb. 1955	-	5.50%
Feb. 1955 - Mar. 1956	-	5.25%
Mar. 1956 - Jan. 1957	-	5.50%
Jan. 1957 - Dec. 1959	-	6.00%
Dec. 1959 ----		6.75%

Corporate bond yields: McLeod, Young, Weir & Co. Ltd. (Toronto), average of 20 corporate bonds, comprising 10 industrial bonds and 10 public utility bonds.

then we can say that investment in mortgages has become profitable vis-a-vis other investments, and vice-versa. Table 36 above presents the monthly data for the 1953-1959 period. This spread has, on the whole, become narrower since 1953.

DIAGRAM "B"



An increase in mortgage yields will lead to a greater supply of mortgage funds. This is illustrated in Diagram "B" above by a movement to a higher point on the supply curve from P_1 to P_2 increasing the supply of mortgage funds from M_1 to M_2. A decline in rates, conversely would lead to a decline in the flow of mortgage funds.

It will be remembered that in Chapter I in Diagram "A" a decline in the rate of interest was treated as a decline in the cost of production of a house. As the response of builders was there under discussion, this was depicted as a lowering of the supply curve. Here it is the response of lending

institutions that is under discussion and their response to changes in interest rates. The lending institution's response to interest rate changes must be measured as a movement along their supply curve for mortgage funds.

Legislative changes affect the yield on mortgages, and therefore the supply of mortgage funds, by the way in which they determine the maximum rate of interest that can be charged on mortgages available under the various NHA acts.

The different interest rate policies possible under the NHA can perhaps best be discussed under the following three headings: freely fluctuating interest rates, fixed interest rates, and subsidized interest rates.

FREELY FLUCTUATING INTEREST RATES:

One ppossibility is to allow the rate of interest paid on NHA mortgages to be determined by market forces.(26) After all, this is the way mortgage interest rates are determined for conventional mortgages, outside the sphere of the NHA. In this way, the problem of making the yield on NHA mortgages competitive with other types of investments, would be solved in the market place rather than by legislation or administrative action. Where private funds are often

(26) For one amongst many pleas to permit freely fluctuating interest rate on federally assisted mortgage loans. See J.J. O'Leary, "The Effects of Monetary Policies on the Residential Mortgage Market", included, Study of Mortgage Credit - Hearings (United States Senate Subcommittee, Washington, 1959), pages 235-243.

supplemented by public funds, there would still remain the problem of how to fix the interest rate on the direct government funds placed in the mortgage market. There is the further difficulty that where government assumes some obligation for the debt incurred under the various NHA Acts, it is only natural that it should wish to maintain a measure of control over the terms at which these obligations are offered. Neither in Canada nor in the United States are interest rates on federally assisted mortgage loans allowed to fluctuate freely.

INTEREST RATES FIXED BY LEGISLATION OR ADMINISTRATIVE ACTION:

In order to stimulate an adequate flow of funds under the federally assisted programme, it is essential that the maximum permitted interest rate be high enough to allow an adequate spread between the mortgage rates and yields on the long-term fixed debt instruments that compete with funds for mortgages. In Canada, the procedure has been to tie the maximum permissible interest rate on insured mortgages to the prevailing rate in the long-term government bond market. Thus, at the time when a new rate is struck, the legislation permits a differential of 2¼% between the NHA rate and long-term federal government bond yields.

This differential is ample to assure mortgages a competitive position in the capital market. In a period of rising interest rates, however, if the maximum rate is not

adjusted, it is quite possible for federally assisted mortgages to become a less attractive investment on a yield basis, thereby drying up the supply of funds under the federal programme. The yield on mortgages under the Act can also be supplemented by allowing lending institutions to charge a servicing fee on mortgages below a certain amount, on the principle that a mortgage portfolio consisting of numerous small mortgages is more costly to administer than a portfolio of large mortgages.(27)

SUBSIDIZED INTEREST RATES:

Finally, it is possible to increase the yield on the mortgage portfolio by supplementing the interest rate paid by borrowers with a government subsidy.(28)

SECURITY OF MORTGAGE LOANS

The types of loss that the mortgage lender has to guard against, apart from possible decline in the value of money, are as follows; loss of the principal sum lent, loss

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(27) In the United States for instance under Section 203 (i) of the FHA an additional service charge of 1/2% could be charged on mortgage loans below $9,000. When the Housing Act was amended in June, 1961 the extra service charge provision was cancelled.

(28) In Canada the joint loan programme in force before 1954 whereby the federal government supplied one-quarter of the funds used to make NHA loans at below market rates, offer one example of subsidized interest rate. The joint loan programme will be described in greater detail in Chapter VII.

of the interest rate stipulated for and loss due to the legal and other costs involved in enforcing the claims of the mortgage lender.

To guard against this possibility of loss, it is customary for the lender to lend less than the appraised value of the property given as security for the mortgage debt. On conventional loans, the usual loan is for 66 2/3% of the appraised value of the property. This means that on a home appraised at $21,000, the lending institution would give a mortgage of $14,000, leaving a cushion of $7,000 to cover any possibility of loss in case the borrower cannot meet his commitments.(29) As it is, one of the purposes of the NHA to bring the possibility of home ownership within the reach of most families the terms of lending under NHA as stated in the previous section are much more favourable in this respect. This, however, quite understandably diminishes the security of the loan in the eyes of the lender. For this reason, the federal government insures the mortgage lenders against loss on their NHA mortgages. In effect, the federal government substitutes its own credit (the highest form of security available in the investment world) for the security available in the form of a higher "equity" cushion under

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(29) J.E. Morton stresses the importance of a large equity cushion as a safeguard against losses due to foreclose. His study indicates that "relatively large equity apparently was effective in avoiding default by a borrower". J.E. Morton, Urban Mortgage Lending: Comparative Markets and Experience (Princeton, 1956), page 108.

conventional loans. The borrowers are charged 2% on the mortgage amount for this service. This money is paid into an insurance fund out of which claims can be met. Conceptually there is thus no subsidy involved in this federal guarantee.(30)

Legislation affecting the security of mortgage loans can be depicted in Diagram "B" as a shift in the supply curve. Thus if due to legislation security of the mortgage loan is improved, more funds will be supplied at each interest rate than before. This is shown in Diagram "B" by a downward shift in the supply curve from S_1 to S_2. Under the various NHA Acts, the lender is protected against all the three forms of loss previously mentioned.

PROTECTION AGAINST LOSS OF PRINCIPAL:

Before the 1954 NHA Act, the guarantee of principal was by way of a pool guarantee. Under the 1954 NHA Act, an insurance fund was established with a 2% insurance fee paid by borrowers out of which losses are met. The lender, if he wishes to claim from the fund, must foreclose the property on which the insured mortgage was granted, and deliver it with a free title to CMHC, which operates the insurance fund.

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(30) For a description of the functions of the insurance fund and the insurance fees paid by borrowers, see H. Woodard, op. cit., pages 310-315.

The lender will then be paid the balance outstanding on the mortgage in question. Prior to March 1959, the legislation provided for the payment of only 98% of the amount outstanding. The amendment of March 1959, however, took this so-called 2% bite out of the loss settlement clause, and the present position is that the lender is paid 100% of the amount outstanding in cash. It may be noted in this connection that in the United States the mortgage insurance given through FHA stipulates a settlement in government debentures, and not cash. The VA, on the other hand, does settle claims in cash, but limits the insurance to the top $7,500 of the outstanding balance on the mortgage.

PROTECTION AGAINST LOSS OF INTEREST:

Protection against loss of interest is necessary to cover the period when the mortgage goes into default until all the legal remedies have been applied, the property foreclosed, and the final loss settlement collected from the mortgage insurance fund. The legislation of 1954 allows interest for a period of six months after default occurs at the full rate of interest stipulated in the mortgage document and an additional 12 months at the interest rate stipulated in the mortgage document, less 2%. Thus, if foreclosure proceedings take longer than six months, the lender may not get the full interest rate stipulated in the mortgage contract.

PROTECTION AGAINST LOSS DUE TO OTHER EXPENSES INCURRED IN CASE OF DEFAULT :

To compensate the mortgage lenders against loss incurred in acquiring title to the property on which the insured mortgage was granted, the lender received a further sum of $125.00 as acquisition fee, under the 1954 NHA Act. This protection was further strengthened by amendment of the NHA Act in March 1959, when the acquisition fee was increased from $125.00 to $150.00.(31)

As can be seen from the foregoing, the protection against loss available to the lenders under the NHA, is such as to make NHA mortgages, in terms of security, almost equal to government guaranteed bonds.

LIQUIDITY OF MORTGAGE LOANS

The concept of liquidity has been elaborated mainly with reference to the investment operations of commercial banks. In that context, it applies to loans of very short term, e.g., day-to-day loans and investment in short-term government securities. Mortgages are written for relatively long periods of time and can obviously not be considered liquid in that sense. The widespread adoption of amortized

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(31) J.E. Morton, in discussing expenses associated with foreclosure mentions not only delinquent interest payments, but also taxes, etc., paid by the lender at the time of foreclosure. J.E. Morton, op. cit., page 110.

mortgages, that is the practice of making monthly repayments on the outstanding balance of the mortgage has, however, improved the liquidity of mortgages even in the above sense. It means, as was seen in Chapter III, that long established mortgage lenders can count on a steady stream of mortgage repayments, whereby the mortgage portfolio, unless replenished up by new mortgages made, will be steadily reduced.(32)

A second concept of liquidity has, however, been developed in banking theory, namely, the ease with which an asset can be sold or 'shifted' to other investors, before maturity. Long-term government securities are considered to be 'liquid' in this sense, in that they can be readily sold.(33) As a sale before maturity can involve a capital loss if interest rates have risen between the period that the bond was acquired and the period when it has to be sold, this type of liquidity is not without its risks. Improved liquidity of the mortgage document will have the same kind of effect on the supply of mortgage funds as an improvement in the security of the mortgage document. Thus at an unchanged yield more mortgage funds will be supplied as the liquidity of the mortgage document improves. This also is depicted in Diagram "B" by a downward shift in the supply curve from S_1 to S_2.

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(32) See Tables 18, 19 and 20 in Chapter III.

(33) See R.S. Sayers, Modern Banking (Oxford), 1951, pages 222-227.

TABLE 37: SALES AND PURCHASES OF NHA INSURED MORTGAGES, 1954-1959

(Millions of Dollars)

	Approved Lenders		Corporate Pension Funds		Other Corporations		Total*	
Year	Sales	Purchases	Sales	Purchases	Sales	Purchases	Sales	Purchases
1954	.6	.3	--	.3	--	--	.6	.6
1955	17.5	.2	--	14.6	--	2.6	17.5	17.5
1956	49.6	1.9	--	34.2	--	12.3	49.6	49.6
1957	62.2	.2	--	30.6	--	31.4	62.2	62.2
1958	47.7	.5	--	31.1	--	16.1	47.7	47.7
1959	42.5	.5	--	36.9	--	5.2	42.5	42.5
1954-/59	220.1	3.6	0	147.7	0	67.6	220.1	220.1

* Components may not add up to total due to rounding.

Source: Central Mortgage and Housing Corporation, Canadian Housing Statistics - 1st Quarter, 1960 (OTTAWA), Tables 29 and 30.

To improve liquidity in this second sense, it is necessary to develop and improve a secondary mortgage market, that is a market where mortgages can be readily bought and sold. In Canada, at the present time, while a secondary mortgage market is in existence for NHA mortgages, it is as yet no fully developed. Table 37 above shows that in the period 1954-1959, sales of NHA mortgages in the secondary mortgage market, totalled $220.1 million.

In the United States, there has been a more vigorous attempt to establish a secondary mortgage market, thereby

making mortgages more liquid, through the establishment of the Federal National Mortgage Association. (FNMA), a government agency, authorized to issue debentures and with the proceeds to buy and sell federally insured mortgages in the open market.(34) Any improvement in the liquidity of the mortgage document should encourage existing mortgage lenders to devote a greater proportion of their portfolio to mortgages, thereby increasing the flow of mortgage funds.

WIDENING THE BAND OF PRIVATE MORTGAGE LENDERS

A further way of influencing the flow of mortgage funds is by increasing the number of potential participants in the mortgage market.

Widening the band of mortgage lenders, through legislative changes also lead to a greater supply of mortgage funds by lowering the supply curve of mortgage funds. This assumes that the new mortgage lenders brought into mortgage lending would have been willing to lend at prevailing yields but were prevented from doing so by restrictive legislation. Thus before the 1954 National Housing Act, the chartered banks were prevented by legislation from making mortgage loans. The 1954 Act removed this restriction as far as NHA mortgages are concerned, thereby greatly increasing the flow of funds potentially available for mortgage investments.

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(34) This is discussed more fully in Chapter VII.

Large pools of institutionalized savings not presently readily available for NHA mortgages, include the growing pools of pension funds, credit union funds, and funds held by trust companies in their estate, trust and agency departments.(35) Any legislative changes that would permit and encourage the administrators of these pools of savings to become more active in the NHA mortgage market could help to stimulate an increased flow of mortgage funds. In this connection, it must be pointed out that NHA mortgages are available to these investors in the secondary mortgage market. As these investors do not appear eager to divert a larger proportion of their assets to mortgages, it is quite possible that little could be achieved by legislation in this field. It is worth noting in this connection that in Canada, even the institutions specializing in mortgage financing, e.g., institutions habitually investing over 70% of their assets in mortgages (the loan companies)(36) are not very powerful in the capital market in terms of total assets, compared to the mortgage specialists in the United States (the savings and loan associations). These latter associations were indeed actively encouraged by federal legislation in the 'Depressed Thirties'.(37)

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(35) As shown in Chapter III, funds accumulated in these institutions totalled $11.2 billion at the end of 1959. That is$1.8 billion higher than the $9.4 billion accumulated by the life, loan and trust companies.

(36) See Appendix tables A-7 and A-8.

(37) This is discussed more fully in Chapter VII.

TABLE 38: STARTS FINANCED BY CMHC, AS PER CENT OF TOTAL STARTS, 1953-1959
(Dwelling Units)

Year	Starts	CMHC Direct Loan Starts			CMHC as % of all Starts
		Rental	Owner Occupancy	CMHC Total	
1953	102,409	1,700	3,207	4,907	5%
1954	113,527	771	444	1,215	1%
1955	138,276	1,442	677	2,119	2%
1956	127,311	1,979	733	2,712	2%
1957	122,340	7,202	15,131	22,333	18%
1958	164,632	8,809	26,986	35,795	22%
1959	141,345	5,993	29,240	35,233	25%
1953-59	909,840	27,896	76,418	104,314	11%

Source: Central Mortgage and Housing Corporation, Canadian Housing Statistics (OTTAWA).

DIRECT GOVERNMENT FUNDS

If it is felt that the flow of mortgage funds forthcoming from private sources is not sufficient to finance the desired house-building programme, public funds can be used to supplement the flow of private funds.

The supply of government funds is not undertaken in response to the usual yield considerations, but to correct what is considered to be a deficiency in the supply of mortgage funds and prevailing yields. In terms of Diagram "B", the supply of mortgage funds thus becomes infinitely elastic at the point where government enters the mortgage market

as a supplier along S_3. The amount supplied will then depend on the strength of the demand for funds at the terms set by government. This demand, as was shown, in the earlier part of this Chapter can however, be influenced by the eligibility requirements imposed on the seekers of government funds.

From 1935 to 1954, public funds were made available in the form of 'joint'loans, whereby the federal government supplied one-quarter of the money advanced to borrowers by approved lenders, while the lending institution supplied the additional three-quarters of the loan.(38) The government's share was loaned to the lending institution at a lower rate than they obtained from the borrower. There was thus, an element of subsidy involved. The extent of the subsidy is difficult to calculate, for the lending institution was responsible for the servicing of the mortgage portfolio with all the administrative costs that this involved. This joint loan technique was abandoned in the new Act of 1954, when the insured loan technique was introduced. The admission of the chartered banks to the ranks of mortgage lenders, however, more than compensated for this loss of federal funds under the 1954 Act. The federal government

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(38) For a description of the joint loan programme, see H. Woodard, op. cit., pages 9-20. The description of the joint loan programme in this text is based on Woodard.

also retained the right to make mortgage loans via CMHC. Since 1957, the federal government, through CMHC, has in fact been one of the major sources of funds, for new residential construction as can be seen from Table 38.

With this description of the policy levers affecting the demand and supply of mortgage funds as background, we can now turn, in Chapter VII, to a consideration of mortgage policy in the 1929-1959 period in both Canada and the United States.

CHAPTER VII

MORTGAGES AND POLICY IN CANADA AND THE UNITED STATES, 1929-1959

The previous chapters have outlined the role of the mortgage market, the development of that market within the capital market as a whole, the way in which fiscal and monetary policy affect the mortgage market and how these policy changes are transmitted to that market via the money market. The levers of credit policy available to the authorities for influencing the mortgage market and their method of operation were also discussed. Before going on in the final chapter to consider possible future developments in the mortgage market, it may be useful to review government policy in Canada and the United States as it affected mortgages in the 1929-1959 period.

The period under review offers a good opportunity to contrast mortgage policy in a period of depressed economic conditions, prior to 1939, with mortgage policy in the more prosperous post-war period. This review of policy will start by examining some of the problems which the policy makers sought to solve. Then the remedies suggested by the experts will be considered. Finally the actual legislation adopted and the institutions relied upon to make this legislation effective will be discussed.

MORTGAGE PROBLEMS 1929-1959

The makers of mortgage policy had three basic objectives during the 30 years under review. The emphasis on each of these objectives shifted, of course, as prevailing economic conditions changed. The three basic objectives were: how to prevent large scale foreclosures and the economic hardships resulting therefrom; how to stimulate housebuilding activity, thereby contributing not only to creating employment opportunities but also providing better housing for the nation; and how to stimulate a greater flow of mortgage funds.

PROBLEMS OF FORECLOSURES

Following the financial crash of 1929, the prevention of foreclosures became the most pressing policy objective. Foreclosure proceedings are started by a lender when the mortgage borrower is unable to pay the interest or capital payments stipulated in the mortgage contract. The mortgage is then said to be in default. Foreclosure proceedings differ from province to province in Canada,(1) and from state to state in the United States. H. Woodard, for illustrative purposes, gives the following brief summary of foreclosure and sales procedures in Nova Scotia.(2)

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(1) Advisory Committee on Reconstruction, Final Report of Subcommittee on Housing and Community Planning, (OTTAWA, 1944), page 187. This publication will be referred to as the Curtis Report.

(2) H. Woodard, Canadian Mortgages (Collins, 1959) page 266.

> "Default having occurred, the mortgagee (lender) would commence an action in the Supreme Court for foreclosure and sale. Through prescribed legal channels, official notice (usually accompanied by a detailed statement of claim) would be served on the defendents, who have a limited time to appear if they wish to file a defence. Such defence is not common as the existance of the default is usually easily proven by the lender. Failing a defense appearance, the judge, on receipt of an application supported by information required by statute, would grant an order for foreclosure and sale of the mortgaged property... The forthcoming sale would also be advertised in the local press at least once a week for four or five weeks. The sale would then proceed at the appointed time and place. Following the sale, the sheriff would give a deed to the successful purchaser."

Incidentally even a successful foreclosure action does not guarantee the lender that he will get the full amount owing to him on the defaulted mortgage, for the price received for the property in a declining real estate market, may be less than the amount still outstanding on the mortgage. No precise data are available on the extent of foreclosures in Canada in the Thirties.(3)

O.J. Firestone, however, hints at a way to measure the impact of foreclosures, namely, to use census data to measure changes in owner-occupied dwellings. In order to utilise these data, one would have to assume that the shift in tenure from owner-occupied status to rented status is the result only of foreclosure proceedings, and that none

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(3) O.J. Firestone, Residential Real Estate in Canada (Toronto, 1951), page 132.

of the foreclosed properties are sold to new home-owners. O.J. Firestone, of course, does not make such a sweeping assumption, but he does point out that(4),

> "... Another reduction in owner occupany occurred in 1932 and 1933. In these two years, the Depression which held the whole North American continent in its grip was at its worst. In 1932 .... the owner occupied dwelling stock was reduced by 16,200 units." (5)

This is just over 1% of the 1,376,200 owner-occupied dwelling stock at the end of 1930. In the United States where foreclosure data are available, foreclosures reached 2% of the owner-occupied dwelling stock in the same year (1932).(6)

Although as was mentioned above no accurate data on foreclosures in the 1930's exist for Canada, it is quite clear that foreclosures were nevertheless a problem. This is seen from the fact that "moratoria" legislation, the classical debtor relief measure, was passed by most of the provinces.(7)

Similar legislation was enacted by most of the states in the United States.(8) H. Woodard gives the following

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(4) O.J. Firestone, ibid., page 53.

(5) O.J. Firestone, ibid., page 45.

(6) Non-farm foreclosures during 1932 totalled 250,000 in the United States while the total owner occupied stock at the end of 1930 totalled 10,550,000. Data published by Housing and Home Finance Agency (HHFA), Annual Report.1959 (WASHINGTON, 1959), pages 297 and 321.

(7) H. Woodard, op. cit., page 279.

(8) M. Colean, The Impact of Government on Real Estate Finance in the United States (National Bureau of Economic Research, N.Y., 1950), page 40.

description of a moratorium,(9)

> "A moratorium (or, in the plural, moratoria) is the term used in the mortgage business to describe legislation enacted to assist debtors by postponing or suspending their contractual payments. It is usually in a form which prevents lenders from invoking their customary legal powers as long as the particular legislation is in effect and provided that the debtor complies with the terms of the moratoria."

Woodard further points out some of the inequities involved in the moratoria procedure.(10)

> "It will be apparent, therefore, that moratorium legislation can produce some strange inequities. In normal times, a person who becomes unemployed or is stricken by some other disaster can lose his home in a mortgage foreclosure action, as there is no special legislation to assist him. However, when there is mass distress throughout the country and mass actions by mortgagees are in evidence there may be moratoria proclaimed, despite the fact that the attendant collective circumstances are no worse than those of the person who experiences some disaster in comparatively normal times.
>
> "While most moratoria have the semblance of denying relief to those whose circumstances do not warrant it, in practice, whether it is a judge, a court or a debt adjustment board which hears the case, there has been a tendency in the past to grant relief automatically and to stay the proceedings of a mortgagee. Therefore, one objection to moratoria is that persons who can afford to pay granted equal relief with that accorded to the unfortunate ....
>
> .... Another adverse feature of moratorium legislation from a lender's standpoint is that a province finds it relatively easy to enact it but much more difficult to rescind it. For example, Ontario enacted such legislation in 1932

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(9) H. Woodard, op. cit., page 278.

(10) H. Woodard, ibid., page 279.

> to meet circumstances which prevailed at that time, and yet it was not until 14 years later that the legislation was allowed to lapse through its non-renewal in 1946."

The usual effect of mortgage moratoria legislation is that the repayment of the mortgage is delayed.(11)

> "Usually it is provided that (foreclosure) action is forbidden if the borrower pays interest and taxes only."

The most urgent problem in the early Thirties in both Canada and the United States was thus how to prevent large-scale foreclosure actions. In Canada, the problem was tackled mainly by the enactment of provincial moratoria. In the United States also moratoria legislation was resorted to by the States, but action was also taken by the federal authorities to stem the volume of foreclosure actions. For one thing,

> "In 1932, federal authorities ...., ordered receivers of closed banks under their jurisdictions to discontinue foreclosures." (12)

thereby decreasing the number of foreclosures. No comparable action was taken in Canada. This is not surprising as no Canadian banks went bankrupt in the 1930's and anyway the banks here were not permitted to make mortgage loans at that time (banks were brought into mortgage lending by the 1954 National Housing Act).

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(11) H. Woodard, ibid., page 280.

(12) M. Colean, op. cit., page 40.

Further action to prevent large scale foreclosures was taken in the United States by the creation in 1932 of the Home Loan Bank Board and the creation in 1933 of the Home Owner's Loan Corporation under the supervision of the Home Loan Bank Board. These institutions will be discussed in detail later in this Chapter. Briefly, the intention was to provide funds via a government organization,

> "for taking over and refinancing mortgages on one-to-four family dwellings that were either delinquent or held in frozen institutions".(13)

In the years 1933-1936, this Corporation made loans totalling $3.49 billion.(14) About 1,000,000 defaulted mortgages were thereby prevented from being foreclosed.(15) Foreclosures were thereby possibly kept ot less than half of what they would otherwise have been.(16)

No comparable action was taken in Canada, possibly because the number of foreclosures was proportionately lower than in the United States. However, as was seen above, the provinces did take moratoria action.

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(13) M. Colean, ibid., page 95.

(14) M. Colean, ibid., page 95.

(15) Report of the Committee to Study the Federal Home Loan Bank System, A Program to Revitalize the Federal Home Loan Bank System, (Savings Associations League of New York State, 1958), page 52.

(16) Based on foreclosure data published by HHFA, Annual Report, 1959, page 321. Foreclosures in the 1933-1936 period are there shown at over 750,000.

The problem of foreclosures and the moratoria legislation to mitigate the hardships associated with foreclosure, were not forgotten even in the prosperous post-war period. We can see this from the evidence presented by Mr. J.T. Bryden to the Banking and Commerce Committee in 1954, when the National Housing Act of 1954 was under consideration. In his evidence Mr. Bryden said,

> "The mortgagee (lender) can be subjected not only to retarding action by the borrower and subsequent encumbrances, but also to delays of statutory and other requirements designed to afford grace to the borrower and the mortgagee (lender) is further subject to the equitable jurisdiction of Courts whereunder additional delays may follow. Likewise, enactment of moratoria legislation could prevent the commencement and completion of mortgage actions and so postpone further the acquisition of title and in this way add important delays in enabling the mortgagee to realise on the security.(17)

However, the problem has lost its urgency as can be seen from Woodard's assessment of the post-war situation,(18)

> "Whether moratoria legislation will ever be widespread again is a matter for conjecture. There may be less reason for its introduction than was the case in the past. The widespread use of the monthly payment has removed the burden of financial peak loads which were inherent in former repayment patterns. In addition, increased social insurance benefits of various kinds now provide a stream of income when financial aridity threatens".

Woodard then goes on to say:

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(17) House of Commons Standing Committee on Banking and Commerce, Minutes of Proceedings and Evidence No.6, (Ottawa, 1954), page 172.

(18) H. Woodard, op. cit., page 281.

> "Any major recession could cause widespread default. If such should occur, the actions of mortgagees (lenders) will be a governing influence to some extent. Certainly any attempt at mass foreclosures might bring speedy legislative relief to the borrowers. Conversely, a general collective willingness of lenders to make adjustments and postponements in needy cases could go a long way towards postponing the introduction of moratoria legislation." (18a)

As the difficulties associated with the widespread foreclosures and the moratoria legislation prevalent during the Thirties appear to have lost most of their urgency these problems will not be considered in any great detail in the rest of this Chapter.

THE PROBLEM OF STIMULATING HOUSE BUILDING

The stimulation of house-building became an important policy objective in the Thirties. This is the opinion expressed by the subcommittee on Housing and Community Planning, in its 1944 report (Curtis Report). After discussing briefly the feeble public housing efforts made immediately after the First World War, the subcommittee goes on to say,(19)

> "No further public interest in housing was taken until the depression years of the thirties, but during this period the subject was frequently discussed as a possible road to recovery. .... no public action resulted until 1935. In that year, a special committee to study housing was set up by the House of Commons."

(18a) H. Woodard, op. cit., page 6.

(19) Curtis Report, op. cit., page 26.

This committee was charged ...

> "to consider and report upon the inauguration of a national policy of house-building to include the construction, reconstruction and repair of urban and rural dwelling houses in order to provide such dwelling houses as may be necessary; upon such terms and conditions as may be best adopted to the needs and requirements of the people".(20)

The Committee made recommendations favouring financing for new housing and rehabilitation projects.

The Dominion Housing Act of 1935 was passed in response to these recommendations. This Act will be discussed later in this Chapter. It is H. Woodard's judgment that,

> "by this Act a nationwide housing programme was contemplated with the basic intent of stimulating employment through the construction of new houses."(21)

We thus see from the foregoing that the stimulation of house-building was a major policy aim in Canada during the Thirties. It was hoped, by stimulating house-building, to contribute to economic recovery and to provide adequate housing for the population. Briefly the methods relied upon involved efforts to evoke a greater flow of mortgage funds. This was the third major policy objective listed at the beginning of the Chapter and will be discussed more fully below. It may be that the emphasis in Canada on creating employment opportunities through the construction of new

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(20) House of Commons, Journal No. 23, (Ottawa, 1935), page 135.

(21) H. Woodard, op. cit., page 9.

housing constitutes one of the important reasons why legislation here has been concerned mainly with the stimulation of a flow of funds for new construction (apart from home improvement loans) as opposed to the trend in the United States where the legislation was designed to facilitate mortgage financing of existing as well as new dwellings.

The stimulation of house-building continued to preoccupy the policy makers in the post-war period also. This can be seen from the preamble to the 1954 National Housing Act where it is described as,

> "An Act to Promote the Construction of New Houses, the Repair and Modernization of Existing Houses, and the Improvement of Housing and Living Conditions".

The emphasis had, however, shifted from employment considerations to the aim of providing better housing conditions. Any stimulation of the economy, or the creation of employment, would thus be an additional, but welcome benefit.

In the United States, although the aim of increasing the amount of 'house-building' was an important policy objective, the emphasis on 'home-ownership' was equally important. This can be seen from the fact that when President Hoover in 1931 called a conference to discuss housing problems it was referred to as 'President's Conference on Home Building and Home Ownership'.(22)

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(22) President Hoover's, Conference on Home Building and Home Ownership (Washington, 1932, eleven volumes). This conference is referred to by M. Colean, op. cit., Chapter 6.

The emphasis on ownership as an objective meant that financing of existing dwellings was considered as important as the financing of new dwellings. It will be seen later in this section that this emphasis was apparent also in the 1934 National Housing Act (United States) when the principle of 'guaranteed mortgages' was introduced to be administered by the Federal Housing Administration (FHA). The terms of lending under that Act were identical for new and existing homes. L. Grebler, D. Blank and L. Winnick however regard the Act as the first major federal effort in the United States to influence the volume of new residential construction,

> "Federal activities designed directly to affect new residential construction did not exist before the National Housing Act of 1934, except for some quantitatively insignificant operations during World War I."(23)

As the L. Grebler, D. Blank and L. Winnick study is concerned with capital formation in residential real estate, they naturally emphasize the impact of the legislation on new construction and major improvements (these also are part of residential capital formation). Because of this they do not emphasize the impact of that legislation on financing of existing dwellings. That this impact was nevertheless considerable, even in their estimate, can be seen from the following,

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(23) L. Grebler, D. Blank and L. Winnick, Capital Formation in Residential Real Estate: Trends and Prospects (Princeton, 1956), page 143, note 1.

> "Because the government programs, particularly that of the FHA, have emphasized new construction, FHA and VA loans have been somewhat less important in relation to total residential mortgage lending on both existing and new residential real estate." (24)

That the policy makers in the United States are still concerned with the number of new houses built can be seen from the recommendations made by the United States Senate Subcommittee on Housing, which included in its final report a recommendation that the President of the United States stipulate a target housing objective every two years, expressed in terms of the number of houses that should be built over these two years.(25) It will be recalled here that the ability of the mortgage market to finance sufficient new dwellings to house the increase in new families, was one of the criteria suggested in Chapter 1, for testing the performance of the mortgage market.

THE OBJECTIVE OF STIMULATING A GREATER FLOW OF MORTGAGE FUNDS

In Canada the objective of stimulating a greater flow of total mortgage funds appears to have been subordinated in the 1930's to the objective of increasing the volume of housebuilding by stimulating the demand for new housing. It was apparently felt that the existing lending institutions had

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(24) L. Grebler, D. Blank and L. Winnick, op. cit., page 246.

(25) Report of Committee on Banking and Currency, Subcommittee on Housing, Study of Mortgage Credit (United States Senate, Washington, 1960).

sufficient funds available to meet the then existing demand for mortgage funds and therefore the problem was merely to induce the lenders to make loans on new construction available on more generous terms, thereby stimulating a greater demand for housing and thus also for mortgage financing. This does not seem to be stated explicitly in the literature. For instance, neither H. Woodard, nor O.J. Firestone makes this point specifically. This interpretation can perhaps however be read into Firestone's remarks that,

> "more houses were built when materials and labour were scarce during the war and immediate post-war period than in the thirties when materials and labour were plentiful but remained unused to a large extent." (26)

This is in contrast with the situation in the post-war period, when the problem of stimulating a greater flow of funds from lending institutions clearly became the dominant policy objective. We can see this from Woodard's comment ....

> "it was becoming increasingly apparent that it was not within their (the lending institutions') capacity to provide the mortgage funds required to meet Canada's growing housing needs." (27)

In the United States apart from the problem of foreclosures mentioned before, the problem of providing a greater flow of mortgage funds was the predominant objective even during the Thirties. Thus, M. Colean discusses the increased federal intervention in the real estate field as a result of

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(26) O.J. Firestone, op. cit., page 4.

(27) H. Woodard, op. cit., page 20.

the impact of the depression in the following terms.(28)

> "Neither the Federal Land Bank System nor the Federal Home Loan Bank System was able to cope effectually with the flood of foreclosures that swept over the nation in the early thirties.. In this situation, the federal government's initial measures were designed to make foreclosure unnecessary by refinancing delinquent mortgage loans on farm and home property ... While these operations were getting under way, the government was already concerning itself with other means of re-opening and widening the channels of mortgage credit."

It would then appear to be Colean's judgement that the financial collapse in the United States in the Thirties had clogged the flow of mortgage funds.

The emphasis in the United States in the Thirties, was on stimulating the flow of funds while in Canada, the emphasis was on stimulating the demand for loans. This may very well be due to the fact that financial institutions in Canada withstood the depression years better than their United States counterparts, and therefore it was not obvious in Canada that the potential supply of mortgage funds from the lending institutions was a possible deterrent to achieving a larger house-building programme. By 1939, the problem of the supply of mortgage funds was beginning to get more attention in Canada. This can be seen from the introduction in 1939 of a bill to create a Central Mortgage Bank as an integral part of the Bank of Canada.(29)

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(28) M. Colean, op. cit., page 28.

(29) J. Gillies, "Some Financial Aspects of the Canadian Government's Housing Program: History and Prospective Developments", Journal of Finance (March 1953), page 28.

This proposal will be discussed later in this Chapter. It is cited here only to show that in Canada the problem of increasing the flow of mortgage funds did not come to the fore until just before the outbreak of World War II. As was stated above, it became the dominant policy objective in the post-war period. Also, as Woodard takes pain to point out the aim was to obtain these funds from private sources,

> "Every attempt seems to have been made throughout the years to vest the mortgage business in the hands of private entreprise." (30)

In the United States the preoccupation with stimulating the flow of mortgage funds apparent in the Thirties continued in the post-war period. We can see this from the fact that even as late as 1958 a special Senate Housing Subcommittee was constituted to consider the question, "Does the Decade 1961-70 pose problems in private Housing and Mortgage Markets which require Federal legislation by 1960".(31) It is apparent from the papers presented in that enquiry that in the post war period it was not only the adequacy of the volume of mortgage funds that preoccupied the policy makers, but also the stability of that flow.

To sum up then, both in Canada and in the United States, the major objectives of the policy makers were how to

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(30) H. Woodard, op. cit., page 29.

(31) Committee on Banking and Currency, Subcommittee on Housing, Study of Mortgage Credit (United States Senate, Washington, 1958).

prevent foreclosures, how to stimulate more house-building and how to stimulate a greater flow of mortgage funds. In Canada, provincial moratoria mitigated the hardships caused by threatened foreclosures. In the United States moratoria, introduced by the States were also resorted to but in addition the Federal Government supplied funds to prevent foreclosures via the Home Loan Bank System and the Home Owner's Loan Corporation (HOLC). In Canada the emphasis on increased house-building resulted from a desire to provide additional employment opportunities, as well as the desire to provide more adequate housing for the population. In both countries this preoccupation with stimulating the house-building programme continued also in the post war period. In Canada the desire to stimulate a greater flow of private mortgage funds did not find expression in proposed legislation until 1939 possibly because before 1939 the emphasis was on stimulating the demand for mortgage funds. It has, however, been a major objective in the post war period. In the United States the problem of increasing the flow of mortgage funds was predominant even during the Thirties, possibly as a result of the collapse of financial institutions after the 1929 financial crash. But apparently there was never any real fear that the potential supply of mortgage funds from private sources in the United States would be inadequate to finance new construction. This can be seen from the fact that the legislation did not at first discriminate between mortgage

finance for new construction and mortgage finance for existing dwellings. This difference in emphasis in the United States as compared to Canada, where the legislation confined itself in the main to new construction, is due perhaps to the greater emphasis in the United States in the Thirties on home-ownership as compared to the emphasis in Canada in the Thirties on new dwellings. In both countries the objective of stimulating a greater flow of mortgage funds has remained in the forefront throughout the post war period, but in the United States this objective has been widened to include not only a greater flow of mortgage funds, but also greater stability in that flow (less year to year fluctuations).

SOME SUGGESTED REMEDIES

The remedies suggested to achieve the objectives of preventing foreclosures increasing the flow of mortgage funds can perhaps best be discussed with the framework of a list of shortcomings from which the mortgage market was reputed to suffer. M. Colean quotes Horace Russell as listing the following eight shortcomings: (32)

Short-term mortgage loans.
Small loan to value ratios.
Lump sum rather than amortized mortgages.

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(32) M. Colean, op. cit., pages 44-45, quotes from H. Russell, Private Housing Legal Problems; Housing, the Continuing Problem (National Resources Planning Board, Washington, 1940), pages 41-42.

> High interest rates vis-a-vis other long-term loans.
>
> Absence of a steady market for mortgages.
>
> Lack of credit facilities for home financing institutions.
>
> Lack of insurance facilities for savings in saving deposit institutions.
>
> Absence of proper lending and appraisal practices and procedures and the impossibility of obtaining uniform, co-operative action among thousands of widely scattered local home-financing institutions.

It was not, however, out of sheer caprice that the above features were so strongly embedded in the pre-war mortgage market. The first three practices listed developed mainly through the efforts of the lenders to adapt the mortgage document to varying economic conditions.

The short-term loan was adopted by the lenders, M. Colean suggests, in an effort to get the loan repayed before economic adversity or debt relief legislation intervened,

> "These repeated breachings of the mortgage contract may have had some influence ... (in making) ... mortgage loan ... on a short term basis, in the hope of getting payment before a new catastrophe and a new moratorium intervened." (33)

This practice of granting short-term mortgage loans in turn led to the third shortcoming listed above, the lump sum rather than the amortized mortgage. It was clearly impossible to amortize fully over a short period (say five years) as the terms of repayment would become too onerous

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(33) M. Colean, op. cit., pages 80-81.

for most borrowers.(34) If the mortgage became due in a period of mortgage credit stringency, the borrower would have great difficulty in obtaining a new mortgage and would be in danger of losing his property through foreclosure proceedings.

The small loan to value ratio, the second shortcoming listed above - typically not more than 60% of the value of the underlying property - was also partly the result of the lender's fear that the mortgage would fall due during unfavourable economic conditions. As Colean points out,

> "the mortgage contract does not provide either for increasing the amount of security or for quickly calling the loan in a period of falling value. Consequently, mortgage lending practice commonly requires that the amount loaned be limited to a figure considered to be no more than the lowest value to which the security may fall during the term of the loan.(35)

This practice was also encouraged by the legislation governing the major mortgage lenders. The purpose of that legislation was to safeguard the savings entrusted to them,

> "The primary purpose of the legal regulations of financial institutions is to maintain a watch over their solvency in the interests of those whose funds are entrusted to them." (36)

However according to Woodard, the average loan to value ratio before 1935 was about 50% in Canada,(37) although the legislation permitted life, loan and trust companies to make 60% loan

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(34) J.E. Morton, Urban Mortgage Lending, Comparative Markets and Experience (Princeton, 1956) pages 7-9.

(35) M. Colean, op. cit., page 46.

(36) M. Colean, ibid., page 73.

(37) H. Woodard, op. cit., page 9.

to value ratio mortgages.(38) Actual mortgage lending practice was thus more conservative than the relevant legislation. Incidentially, the permitted loan to value ratio on conventional mortgages (mortgages not covered by National Housing Act legislation) was raised during 1961 to 66 2/3%.

In short, mortgage lending was considered a risky business because of the bad experience of lenders with foreclosures and moratoria. In order to protect themselves somewhat against these risks, lenders adopted terms of lending which involved short-term, low loan-to-value ratio, unamortized mortgages - the first three shortcomings listed above. High interest rates and absence of a steady market for mortgages, were also due basically to this large element of risk involved in mortgage lending.

It is not surprising that greater risks are associated with higher interest rates. This is merely one of the facts of economic life. However, Horace Russell, as quoted by Colean seems to imply that mortgage interest rates should not be considerably higher than interest rates charged on other types of long-term loans, such as railroad bonds or public utility bonds.(39) It must be remembered, in this connection, that the costs of administering a mortgage portfolio, estimated at around 1/2%, are considerably higher

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(38) H. Woodard, ibid., pages 29-30.

(39) M. Colean, op. cit., pages 44-45.

than the costs of administering a portfolio of bonds, estimated at around .1%. In addition, there are further costs associated with originating the mortgage loan, estimated at 1% of the mortgage. Mortgage interest rates would thus be higher than interest rates charged on long-term bonds, even if lenders considered the degree of risk associated with both types of investment as being the same.

The absence of a steady market for mortgages (a secondary mortgage market) is however also attributed by Russell and Colean to the riskiness of mortgage investments(40) This they feel is due to "the lack of facilities for insuring the repayment of mortgage loans". This in turn may have contributed to "a lack of a sufficient number of sound mortgage associations expanding on a national scale." (41)

The sixth deficiency listed above, the lack of credit facilities for home financing institutions was in fact a plea for a lender of last resort for mortgage investors. In short, it represents a wish, in the United States to have a Central Bank for mortgage lenders in the same way as the commercial banks had been given a more efficient Central Bank, in 1913, in the form of the Federal Reserve Banks. The need - and wish - for such a facility is summarized as follows by the Federal Home Loan Bank Board(42)

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(40) M. Colean, ibid., pages 44-45.
(41) M. Colean, ibid., page 44.
(42) Federal Home Loan Bank Board (FHLBB), The Federal Home Loan Bank System (Washington, 1961), page 21.

"Emerging Needs for a Central Credit Facility".

> "While the financial system rapidly adapted itself to the growing demands for home mortgage funds, some essential needs were left unmet. There was no organized credit facility for enabling mortgage lending institutions to meet seasonal or other unanticipated changes in mortgage loan demands or in savings withdrawals. Means for transferring funds for home financing from capital surplus to capital deficit areas were highly inadequate. Local institutions had no access to the national security markets when their service to the community required additional funds to supplement available local savings. Mortgage loans could not easily be shifted from one holder to another.
>
> "Problems of this kind were not limited to home financing institutions. Similar difficulties in commercial banking led to the establishment of the Federal Reserve System in 1913, although this association had many other purposes as well.
>
> "The first proposals for a nation-wide facility to enable savings and loan associations to use their mortgage holdings as a basis for credit were made as long ago as 1918-1919... A plan ... was introduced in 1919 in Congress as 'A Bill to Create a Federal Home Loan Bank Board and Home Loan Boards for the Purpose of Aiding and Financing the Construction of Homes'.
>
> "The Banking Committees of both houses held hearings but failed to report the bill favourably. Similar bills were introduced in later years, but interest in them waned as the home-building boom of the 'twenties' gathered momentum. If the prosperity of the 'twenties' obscured the basic problems in home finance that were outlined earlier, the deepening depression of the early 'thirties' brought them into the limelight."

This deficiency of a lack of credit facilities for home financing institutions, which came to the forefront again during the 'Thirties', is thus not due in essence to the risks of mortgage lending, as were the five earlier shortcomings listed. It can be described as an institutional deficiency not really closely associated with the risks of mortgage lending.

The seventh deficiency listed above, namely a lack of insurance facilities for savings in savings deposits institutions, did not really become urgent until the 1930's, when the widespread failures of financial institutions in the United States caused considerable losses to savers. This deficiency, in so far as it relates to the mortgage market, is again due to the risks involved in mortgage lending. For it is as a result of losses sustained in the operation of their business that some lenders are forced into bankrupcy and become unable to repay the savings entrusted to them by the public. This was not a problem unique to the mortgage market and the mortgage lenders. Commercial banks, not specialized in mortgage lending, also went bankrupt - despite the existence of a lender of last resort, namely the Federal Reserve Banks.

The problems encountered by the commercial banking system - and the remedies adopted - will not be elaborated upon here. These problems are merely mentioned here to point out that the loss of savings due to failure of financial institutions led to suggestions of insuring deposits in savings institutions in the United States. In Canada, there was no comparable financial collapse, therefore there was no comparable pressure to insure the public's savings entrusted to the financial institutions.

The last deficiency mentioned above, namely, the absence of proper lending and appraisal practices and pro-

cedures and the impossibility of obtaining uniform, co-operative action among thousands of widely-scattered local home-financing institutions, is also not a deficiency due to the risks of mortgage lending. It is again a deficiency due to institutional factors.

One of the results of this deficiency is to increase the difficulties involved in creating a national mortgage market. As a result of the different appraisal practices, a mortgage lender would be reluctant to buy a mortgage originated by another lender, for he would not be quite certain whether the real estate security underlying the mortgage met his own lending criteria. If it is desired to create an active secondary mortgage market, this deficiency must thus somehow be overcome.

In short then, most of the basic deficiencies in the mortgage market could be traced back to the peculiar risks involved in mortgage lending. These risks induced lenders to offer terms of lending which contributed to instability in the mortgage market (short-term loans, low loan-to-value ratio, unamortized mortgages and high interest rates). In addition, informed observers of the mortgage scene considered that the institutional framework of the mortgage market was not sufficiently elaborate. In particular, it was pointed out that the mortgage institutions lacked a lender of last resort (a Central Mortgage Bank) and did not

develop facilities for selling mortgages from one investor to another (a secondary mortgage market), thereby inhibiting many institutions from entering the mortgage market and others from participating more heavily in mortgage financing.

The remedies suggested, and those adopted, would have to centre around the problems of reducing the risks and improving the terms of mortgage lending. In addition, the remedies suggested would also have to involve extending the institutional facilities of the mortgage market, to attract more savings to the mortgage lenders, to provide for a lender of last resort for the mortgage lender and to develop a secondary mortgage market. As President Hoover put it, a method must be found to create "a federally-sponsored 'financial reservoir' for home financing institutions".(43)

Reducing the risks of mortgage lending would quell the lender's fears of large-scale foreclosures. Improving the terms of lending for the borrower would increase the demand for new dwellings, thereby stimulating house-building. Extending the institutional facilities would help to achieve the objective of stimulating the flow of private mortgage funds.

We can see, from the fact that President Hoover urged the Finance Committee of the "Conference on Home Building and Home Ownership" to produce a concrete and workable federally-

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(43) FHLBB, ibid., page 23.

sponsored plan,(44) that it was fully realized that federal intervention of some kind would be necessary to achieve the three-fold objective of preventing foreclosures, stimulating house-building and stimulating a greater flow of mortgage funds through the methods of reducing the risks of mortgage lending, improving the terms of lending and extending the number and the scope of operations of financial institutions active in the mortgage field.

In discussing federal intervention in the affairs of financial institutions, Miles Colean stresses the chartering power of the government and the power to determine the character of the institutions.(45) By using its power to charter institutions aggressively, the Federal Government can to some extent try to make more credit available. Colean puts it this way: (46)

> "A primary impact of the state upon the financial system comes from its power to charter financial institutions. This power, of course, is fundamental to the creation of large pools of credit and to the manner and method through which credit is made available for realty needs. Under-chartering may result in an insufficiency of credit, over-chartering may bring the reverse. However, there is little evidence that, prior to the 1930's, the chartering power was used with any positive intent of directly influencing the flow of credit, unless it was on the theory that the greater the number of banks, the better the credit facilities."

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(44) FHLBB, ibid., page 44.
(45) M. Colean, op. cit., pages 63-75.
(46) M. Colean, ibid., page 46.

Colean thus implies that after 1930 the federal power to charter financial institutions was used more aggressively to provide more adequate financial facilities. Moreover, with the power to charter financial institutions is coupled the power to regulate the investment practices of the newly-chartered institutions - whether they can invest in real estate, mortgages, stocks, bonds, etc. In this connection, Colean makes the point that:

> "Savings and loan associations are the only institutions that are required - in contrast to being permitted - to lend on mortgage security. With the others, alternative investments may be listed at length and, as a group, are frequently given preference over mortgage loans; with the savings and loan associations, it is the alternative investments that are restricted in relation to total investments." (47)

In discussing this power to charter financial institutions, Colean further points out that these could be either private institutions or wholly government-owned institutions. He puts it this way:

> "The courses open to the federal government in making effective use of this instrument were several: (1) it could create mortgage lending institutions, using federal funds when necessary to encourage their establishment and to assure their adherence to federal policy; (2) it could create institutions wholly financed and controlled by the government and thereby set lending terms in accordance with its estimate of credit needs." (48)

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(47) M. Colean, ibid., page 69.

(48) M. Colean, ibid., page 82.

It was thus widely suggested in the United States in the 1930's that the federal power to charter financial institutions should be actively used to help stimulate the flow of mortgage funds. It was also pointed out that in order to achieve this objective the Federal Government should also use its power to regulate the investment practices of the financial institutions chartered. Furthermore, it was suggested that the Federal Government need not confine itself to chartering only privately-owned institutions, but should also contemplate the creation of wholly government-owned financial institutions.

This emphasis on institutions is in sharp contrast to the attitude in Canada in the 'Thirties'. Neither Woodard nor Firestone mention any proposals that the federal power to charter financial institutions should be used aggressively. The Curtis Report also does not suggest that such proposals were put forward in the 1930's. The exception to this is, of course, the bill introduced in Parliament in 1939 to create 'A Central Mortgage Bank'(49). This will be discussed later. As a general rule, however, it can be said that, in contrast to the United States in the 'Thirties', there was in Canada no strongly-expressed sentiment to use the chartering power of the Federal Government aggressively to encourage private financial institutions in order to in-

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(49) Referred to in note 29 above.

crease the flow of mortgage funds. Nor was there any strong sentiment expressed to create a wholly government-owned agency for that purpose. This should perhaps not be cause for surprise, if we bear in mind that Canada did not have a Central Bank until 1935, when the Bank of Canada was created.

To sum up then, the prime objectives of the policy-makers before World War II were, preventing foreclosures, stimulating a larger building programme and stimulating a greater flow of mortgage funds. It was suggested that these objectives could best be met by reducing the risks of mortgage lending, improving the terms of mortgage lending and extending the number and scope of institutions active in the mortgage market. In the United States in the 'Thirties', it was further suggested that the number and scope of the financial institutions active in the mortgage market could best be increased by an aggressive use of the federal power to charter financial institutions. Furthermore, it was pointed out that the Federal Government need not confine itself only to chartering private institutions but could also create wholly government-owned institutions to supplement and supervise the activities of the private institutions. The public institutions could also provide the functions of lender of last resort as well as a secondary mortgage market. In Canada, in the 'Thirties', this stress on institutional changes did not become evident until 1939, but has become stronger in the postwar period.

With this brief sketch of objectives and suggested remedies as background, we can now turn to the actual legislation adopted and the institutions, both privately-owned and publicly-owned, relied upon to make the legislation effective.

LEGISLATION AND INSTITUTIONS

The description of legislation in this section will be selective in the sense that not each of the amendments to the Housing Act will be discussed. The purpose of this selectivity is to bring out more clearly how the legislation sought gradually to bring about the changes in the mortgage market which would help to achieve the three main objectives of preventing foreclosures, stimulating home-building and stimulating the flow of mortgage funds. These changes, as discussed in the previous section, involved reducing the risks of mortgage lending, and improving the institutional framework of the mortgage market by providing a lender of last resort for the mortgage lender, as well as a facility for selling mortgages in a so-called secondary mortgage market. It was further pointed out in that section that it was realized that in improving the institutional structure of the mortgage market federal intervention might be necessary. The intention was, however, in both Canada and the United States to create a framework within which the private lenders could provide the mortgage funds needed from their own re-

sources, with as little as possible recourse to government funds.

In adopting this selective approach to the description of the legislation, most of the detail of the various changes in the terms of lending and the measures taken to favour special groups, such as low and moderate income groups as well as elderly persons, etc., will be neglected as will also all measures dealing with providing funds for publicly owned housing, be it subsidized or unsubsidized public housing. In short, it is not intended here to present an exhaustive listing in great detail of the immensely varied housing legislation enacted in the United States and Canada during the thirty years under review. The procedure here will be to review first the prewar legislation in the two countries, then the postwar legislation will be considered.

PRE-WAR LEGISLATION IN THE UNITED STATES

THE FEDERAL HOME LOAN BANK ACT, 1932

The first important piece of legislation enacted in the United States in the period 1929-1939 was the creation of the Federal Home Loan Bank System in 1932. This System was created by the Federal Home Loan Bank Act of 1932.

The new System followed the pattern of the Federal Reserve System in that it had a central governing board appointed by the President of the United States, and a group of

eleven regional banks. These regional Federal Home Loan Banks were authorized to make loans to member institutions. All properly chartered savings and loan associations, savings banks, or insurance companies engaged in placing mortgages on houses and small buildings could become members.(50) Almost all of the members are savings and loan associations. The Home Loan Bank System was to provide a means whereby mortgage funds could be transferred from surplus to deficit areas, to provide funds to its members so as to enable them at all times to meet the needs of their communities for mortgage credit, and to supply credit to its member institutions for emergency purposes.(51) This last function, to supply credit to members for emergency purposes, qualifies the system for the title of Central Bank of the savings and loan associations. Federal Home Loan Banks accomplish these purposes by making advances to member financial institutions rather than through direct transactions with the general public.(52)

Thus the intention was to give the mortgage lenders a lender-of-last-resort. The temporary loans made by the Home Loan Banks to their members are in the form of advances. Both short-term and long-term advances can be obtained. The member institutions were required to purchase Home Loan Bank

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(50) M. Colean, op. cit., page 93.

(51) Report of the Committee to Study the Federal Home Loan Bank System, op. cit., page 93.

(52) Report of the Committee to Study the Federal Home Loan Bank System, ibid., page 47.

stock equal to 2% of the member institution's mortgage holdings. This provided the initial capital of the Federal Home Loan Banks. The Federal Home Loan Banks were also empowered to obtain additional funds by issuing debentures. The amount of debentures issued could not exceed five times the amount of Federal Home Loan Bank stock outstanding. This means that if each member institution purchased only the minimum 2% of stock, the total amount of debentures that could be issued would equal 10% of the member institution's mortgage portfolio. Member institutions could, however, purchase more than the 2% minimum of Home Loan Bank stock.

Member institutions could borrow from their regional Federal Home Loan Bank up to twelve times the amount of stock which they held. If they held the minimum required amount of stock, namely 2%, they could borrow up to 24% of the value of their mortgage portfolio from their regional Federal Home Loan Bank. The Secretary of the Treasury has to approve each issue of Federal Home Loan Bank debentures.

To get the system started, the Secretary of the Treasury was authorized to purchase capital stock of the Federal Home Loan Banks. Thus, at the end of 1939, the Secretary of the Treasury held $125 million Federal Home Loan Bank stock on behalf of the Government of the United States. Member institutions held only $41 million in Federal Home Loan Bank stock at that time. By 1951 the government held stock had been completely retired while the stock held

by member institutions had risen to $271 million.(53)

One way of measuring the use made of the system's lender of last resort function is to relate the advances made to members to the total savings accumulated by the member institutions. On the basis of this measure, the most intensive use made of the lender of last resort facility occurred in 1938 when advances equalled 8% of the members' savings capital.(54) In Canadian terms, at the end of 1939 this would be equivalent to advances of about $20 million made to loan companies (total assets of loan companies at the end of 1939 were $260 million - 8% of this total would equal $21 million). The absence of a lender of last resort did not, however, seem to have inhibited the growth of the loan companies in the pre-war period in Canada. At the end of 1939, the assets of the loan companies equalled 4% of the assets of the major financial institutions here. In the United States the assets of the savings and loan associations represented 5% of the assets of the major financial institutions, not much more than their Canadian counterpart.

The legislation creating the Federal Home Loan Bank System appears to have come about as a result of years of effort on the part of the savings and loan associations to obtain a lender of last resort.(55) In addition to this

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(53) Report of the Committee to Study the Federal Home Loan Bank System, ibid., page 20.

(54) Report of the Committee to Study the Federal Home Loan Bank System, ibid., page 4, Table 1.

(55) FHLBB, op. cit., pages 21-24.

function, the Federal Home Loan Banks were also empowered, as an emergency measure, to make direct loans to home-owners unable to obtain financing elsewhere.(56) This power was repealed a year later in 1933 when the Home Owner's Loan Corporation was established for the express purpose of preventing foreclosures.

HOME OWNER'S LOAN ACT, 1933

The Home Owner's Loan Corporation was created by the Home Owner's Loan Act, 1933. It was clearly an emergency depression measure.(57) The Home Owner's Loan Corporation (HOLC) made 80% loans on homes valued at $20,000 or less. The maximum loan amount was fixed at $14,000. HOLC made about 1,000,000 loans in the 1933-1936 period. It is quite possible that the incidence of foreclosures was thereby reduced to about half of the foreclosures that might have occurred without the aid extended by HOLC.

The Home Owner's Loan Act, 1933, in addition to creating HOLC, also widened the powers of the Federal Home Loan Bank Board. It made the Board responsible for the chartering and supervision of privately financial federal savings and loan associations thereby helping "to provide local mutual thrift and home financing institutions in which

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(56) FHLBB, ibid., page 24.

(57) Curtis Report, op. cit., page 62.

people could invest their funds, and to provide for sound and economical home financing".(58) Under the provisions of the Home Owner's Loan Act, 1933, the United States Treasury was also authorized to subscribe up to 50% of the shares in any one federal association.(59) The intention of the legislation was thus to encourage the formation of a greater number of thrift institutions. The Secretary of the Treasury used the above power to purchase $261 million stock in newly formed institutions. Almost all of this stock had since been retired.(60)

Thus, in addition to providing a lender of last resort for the mortgage lenders, the United States Government also actively encouraged the establishment of additional savings institutions by permitting the Federal Treasury to provide funds for the new institutions in the form of capital stock.

NATIONAL HOUSING ACT, 1934

The United States Government went even further to encourage the flow of savings into financial institutions. Thus, as part of the National Housing Act, 1934, the Federal Savings and Loan Insurance Corporation (FSLIC) was established.

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(58) Curtis Report, ibid., page 62.

(59) M. Colean, op. cit., page 97.

(60) M. Colean, ibid., page 97.

The function of FSLIC was to insure the safety of savings placed with local thrift and home financing institutions.(61)

Each deposit with a member institution was insured up to a maximum of $5,000. This maximum was raised to $10,000 in 1950. Savings deposits in commercial banks were insured a year earlier, in 1933, when the Federal Deposit Insurance Corporation (FDIC) was established under the provisions of the Banking Act of 1933.(62)

It is Colean's judgment that,

> "Both these institutions (FSLIC and FDIC) played important parts in restoring public confidence in commercial banks and savings and loan associations and, indirectly, in overcoming the paralysis of the mortgage market." (63)

In Canada, there was no equivalent enactment of savings deposit insurance legislation. There was also no use made of the power to charter savings institutions. Possibly, no need was felt for legislation of this kind in Canada. Financial institutions flourished in Canada without such legislation. Thus, at the end of 1939, the assets of the major Canadian financial institutions at $6.9 billion represented 110% of the $5.6 billion G.N.P. This ratio was not much below the 112% comparable United States figure. There the assets of the major financial institutions benefiting from the favourable legislation discussed above totalled

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(61) FHLBB, op. cit., page 25.
(62) M. Colean, op. cit., page 62.
(63) M. Colean, ibid., page 96.

$111.7 billion at the end of 1939, while the United States G.N.P. reached $91.1 billion in that year.

THE FEDERAL HOUSING ADMINISTRATION

The National Housing Act of 1934 also created the Federal Housing Administration (FHA). The Federal Housing Administration is the agency through which the Federal Government in the United States insures mortgages on residential property. FHA does not lend money nor does it build houses; it provides a system of insurance for loans made by private lending institutions.(64)

The idea of providing mortgage insurance was not new. Mortgage guarantee companies had flourished briefly and collapsed spectacularly in the years just before FHA was created.(65) But many of the features of the FHA plan were new.

The Government undertook to provide the initial insurance funds and to pay the operating expenses. The Treasury guaranteed the principal and accrued interest of the debentures that would be paid in case of a foreclosed mortgage. Settlement of claims was thus not in cash. Provision was also made for a secondary market for FHA-insured mortgages, through permission to establish national mort-

(64) Curtis Report, op. cit., page 62.
(65) M. Colean, op. cit., page 96.

gage associations which were authorized to buy and sell FHA-insured mortgages and to borrow money for this purpose through the issuance of notes or bonds.

The only association chartered under the above provisions was the Federal National Mortgage Association (FNMA), incorporated in 1938 and owned and operated by the Reconstruction Finance Corporation.(66)

As originally conceived, FHA was to be merely an adjunct to the existing mortgage credit system. Under its provisions, however, the terms of lending were liberalized. Loans were available at up to 80% of the value of the underlying real estate security, as compared with the conventional 60% loan. Interest payments were lower and amortization periods were longer, up to 20 years.(67) The terms of lending were the same for new homes and for existing homes.(68) It was not until 1950 that the terms of lending on new homes were made more liberal than those on existing homes, through higher loans, amortized over a longer period. In 1954, the terms of lending on existing homes were again made identical to the terms of lending on new homes.

Colean, in commenting on the 1934 legislation which created FHA, points out that up to that time the Federal Home Loan Bank Board had been the main focus for the measures

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(66) Curtis Report, op. cit., page 62.

(67) M. Colean, op. cit., page 98.

(68) Committee on Banking and Currency, Subcommittee on Housing, Study of Mortgage Credit - Recommendations of Federal Agencies (United States Senate, Washington, 1961), page 187.

to stimulate non-farm home finance. The National Housing Act of 1934, however, created a separate independent agency, the FHA, to give a new impetus to lending.(69)

The 1934 legislation thus made possible government insured loans, thereby greatly reducing the risks associated with mortgage lending. It also made possible more liberal terms of lending, thereby stimulating the demand for housing. The way in which more liberal terms of lending increase demand was discussed in the previous chapter.

Grebler, Blank and Winnick express the opinion that this liberalization of the terms of lending did, indeed, increase the demand for housing in the United States. They put it this way,

> "There is some reason for believing that the FHA program in the middle and the late thirties helped to accelerate the expansion of residential building."(70)

The secondary mortgage market activity in FHA-insured mortgages provided for in the new legislation can be viewed as an alternative method for providing a lender of last resort function. Thus FNMA provided the holders of FHA mortgages with such a facility by purchasing FHA-insured mortgages. Very little use was made of this privilege in the pre-war period. It can nevertheless be argued that whereas the Federal Home Loan Banks provided their member institutions

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(69) M. Colean, op. cit., page 97.

(70) L. Grebler, D. Blank and L. Winnick, op. cit., page 70.

with a lender of last resort facility by making advances to them, FNMA extended the same provilege to holders of FHA-insured mortgages by standing ready to purchase these mortgages if called upon to do so.

To sum up then, the pre-war legislation in the United States provided private mortgage lenders with a lender of last resort. The legislation also aimed at increasing the number of mortgage lenders by an active use of the federal power to charter new institutions whose savings deposits were insured. Mortgage insurance was introduced to encourage the major financial institutions to undertake more mortgage lending. The terms of lending on FHA-insured mortgages were made much more liberal than the terms of lending then prevailing in the non-insured conventional mortgage market thereby encouraging increased home-building. No distinction was made in FHA-insured mortgages between lending on new houses and lending on existing houses. The lender of last resort function provided for in the pre-war legislation was of two types. One type was available to members of the Federal Home Loan Bank System in the form of advances from their regional Federal Home Loan Bank. The other type was available only for FHA-insured mortgages and involved the sale of these mortgages to FNMA. This latter type, the secondary market facility offered from 1938 onward by FNMA was not widely used in the pre-war period.

PRE-WAR LEGISLATION IN CANADA

THE DOMINION HOUSING ACT, 1935

In discussing the Dominion Housing Act of 1935, Firestone makes the following comment,(71)

> "It was not until 1935 that the federal government attempted to cope with the housing problem in a continuing fashion... The act offered financial assistance to those building homes for owner occupancy and for rent on credit terms more favourable than could be obtained from other sources."

H. Woodard considers that the Act effected the following changes in the terms of mortgage lending.(72) It provided a high ratio loan for ten years, renewable for another ten years. These loans could be amortized through monthly payments. The interest rate was subsidized by Crown participation in the loan. The Act also provided for minimum standards of construction, subject to on-site inspections to ensure compliance. Loans could be made up to 80% of value, in contrast to the conventional 60% loans to which mortgage lenders were limited before the 1935 Act. The loans were made jointly by the lending institution and the Federal Government. The lending institution supplied three-quarters of the loan (the traditional 60% loan to value ratio) while the Federal Government supplied the additional one-quarter loan

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(71) O.J. Firestone, op. cit., page 117.

(72) H. Woodard, op. cit., page 10.

(the extra 20% that brought the loan to value ratio up to 80%).

In addition, provision was made for losses to be shared in the same proportion as the loans were advanced. That is, the lender assumed three-quarters of the losses on each loan in default, while the Government assumed the other one-quarter of any losses incurred on the mortgage. The interest paid by the borrowers under this scheme was 5%. The borrower thus paid less than the then prevailing mortgage rate of 6%-6½%. (73) The Government provided its one-quarter share of the loan to the lender at 3%. The lender thus earned about 5.67% if he made an 80% loan. The interest subsidy arose out of the fact that the Federal Government made its one-quarter share of the loan to the lender at the low rate of 3% but permitted the lender to charge the borrower 5% on the full loan. However, the lending institution made and administered the loans, and incurred expenses in doing so, while the Federal Government received a net 3% without incurring any administrative expenses. It is therefore difficult to calculate how much subsidy was involved. The matter is further complicated by the fact that the Federal Government gave generous loss guarantees on the loans without charge. This would tend to increase the element of subsidy involved in the joint lending procedure.

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(73) H. Woodard, ibid., page 10.

The 1935 Dominion Housing Act produced 4,900 housing units involving mortgage loans of $19.6 million. Woodard remarks that these results were not phenomenal but that they justified the legislation in the economic climate then existing. He goes on to say that the Act will best be remembered for its long-term impact on the traditional mortgage pattern.(74)

Thus both the 1934 Act in the United States, whereby FHA was created and government insured mortgages introduced, and the 1935 Dominion Housing Act in Canada, whereby 'joint lending' was introduced aimed at reducing the risks of mortgage lending and at improving the terms of lending. In the United States, the Federal Government confined itself to insuring the loans, charging the borrower a fee of one-half of 1% on the declining balance of the mortgage loan. In Canada, the Federal Government in addition to providing one-quarter of the needed funds under the joint loan program also assumed part of the risks of lending at no charge to either borrowers or lenders. The Canadian Government also subsidized the interest rate paid by the borrower by making its share of funds available at a lower rate than that prevailing in the market.

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(74) H. Woodard, ibid., page 71.

NATIONAL HOUSING ACT, 1938

Woodard summarizes the objectives of this Act as

> "a further attempt to reduce unemployment in the construction industry; to improve housing conditions ..." (75)

The 1938 National Housing Act also lessened still further the risk of 'joint' mortgage lending. It introduced the principle of 'pool guarantees'.(76) Under the pool guarantee system, the Federal Government agreed not only to share in one-quarter of the loss on each of the joint loans made under the 1938 Act, but in addition agreed to share losses up to an additional 25% of all the joint loans made by the lender. In effect, this meant that the joint loan was practically 100% protected against loss. All the other features introduced by the 1935 Act, such as subsidized interest rates, monthly amortized mortgages, etc., remained almost unchanged.

Woodard points out that as a result of the buoyant economic conditions and the rise in real estate prices during the six-year period in which the Act was in force, lenders, who were protected against losses up to $4.6 million by the pool guarantees established under the Act, in fact experienced losses of less than $2,000.

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(75) H. Woodard, ibid., page 11.

(76) H. Woodard, ibid., page 12.

Mortgage lenders in Canada were, however, not provided with a lender of last resort. An attempt was made in 1939 to provide such a lender but the scheme did not come to fruition because of the outbreak of war in 1939. The try to create a lender of last resort is, nevertheless, worth recording.

PROPOSAL TO CREATE A CENTRAL MORTGAGE BANK, 1939

By 1939, Gillies states,

> "Government officials were convinced that one reason for the reluctance of lenders to make mortgage loans was the absence of a mortgage market." (77)

It was this belief that led the Honourable C.A. Dunning, then Minister of Finance, on May 1st, 1939, to present a Bill in the House of Commons to create a Central Mortgage Bank.(78)

The proposed Central Mortgage Bank was to provide permanent rediscount facilities for member companies making mortgage loans. The member companies would be required to buy shares in the proposed Central Mortgage Bank. The total capital stock of the Bank was to be limited to $10 million. In addition, the Bank would be authorized to issue debentures not exceeding $200 million. The Central Mortgage Bank was to operate as an integral part of the Bank of Canada.(79) The Bill never passed the preliminary stage, for with the outbreak

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(77) J. Gillies, op. cit., page 28.

(78) House of Commons, Debates, (Ottawa, May 1st, 1939) page 3667.

(79) This description is based on J. Gillies, op. cit. page 29.

of war in 1939 and the recovery of the economy the problems associated with mortgage lending faded into the background. The intention thus was to create a lender of last resort facility for Canadian mortgage lenders.

This completes the brief sketch of the pre-war legislation in both the United States and Canada. The legislation in both countries led to a liberalization of lending terms. The risks associated with mortgage lending were also reduced. In the United States, the legislation further created two types of lenders of last resort. One type was provided by the Federal Home Loan Banks to its member institutions in the form of advances. The other type was given by the Federal National Mortgage Association in the form of purchases of FHA-insured mortgages. In the United States, the Federal Goverment also used its power to charter new financial institutions aggressively in an attempt to increase the number of savings institutions. Furthermore, the savings accumulated in the financial institutions were insured by government created corporations.

In Canada, it was only the outbreak of war in 1939 that prevented the creation of a lender of last resort in the form of the proposed Central Mortgage Bank. This would have given the mortgage lenders here an institution similar in many respects to FNMA in the United States. No attempt was made in Canada either to encourage the growth of new savings institutions or to insure the savings deposited in financial

institutions. The financial resources of the major financial institutions measured as a percentage of Gross National Product were, nevertheless, about the same in both countries. In Canada, however, the predominant financial institutions in terms of assets, the chartered banks, were not permitted to make mortgage loans. Also the federal government supplemented the private flow of funds by providing one-quarter of the mortgage loans made under the National Housing Acts.

POST-WAR LEGISLATION IN THE UNITED STATES

Following the procedure in the previous section, the legislation presented here will again be selective. Only those laws that develop a new principle relating either to the form in which the risks associated with mortgage lending are reduced or the form in which the lender-of-last-resort function is provided, will be discussed.(80)

SERVICEMEN'S READJUSTMENT ACT, 1944

The Servicemen's Readjustment Act of 1944, although passed before the end of the War, is here considered because it introduced a new form of mortgage guarantee that resulted in considerable house-building activity in the post-war

(80) For a more complete discussion of the post-war legislation see S.B. Klaman, The Post-War Residential Mortgage Market (Princeton, 1961), also L. Grebler, Housing Issues in Economic Stabilization Policies (Princeton, 1959) also M. Colean, op. cit., Chapters 6-8.

period. The new terms of lending under the Act were available only to World War II veterans. Later, in the 1950's veterans of the Korean War also became eligible. The programme was to be a temporary one which would be discontinued ten years after the War. This deadline has since been extended several times. The present termination date is 1967.

Under the Servicemen's Readjustment Act of 1944 and its subsequent amendments, the Administrator of Veteran's Affairs was authorized to guarantee the top half of a mortgage loan made by a private financial institution to an eligible veteran. The maximum permitted loan to value ratio of such mortgage loans (VA loans) was 100%. The veteran borrower, therefore, was not required to make any down payment. VA loans were amortized over twenty-five years and the interest rate was initially set at 4%. In cases offoreclosure, the Veteran's Administration undertook to pay the guaranteed portion of the mortgage in cash rather than in debentures, the stipulated form of loss settlement under FHA. The loans made under this legislation and its subsequent amendments are referred to in the literature as VA loans. The new principles introduced from the point of view of minimizing the risks of mortgage lending are, first the guaranteeing of the top half of the VA loan, and secondly, cash settlement rather than settlement by debentures in cases of foreclosure. The new legislation also eased the terms of lending to the extent of requiring no down payment. Only veterans were eligible for these loans.

During 1951, the VA programme was further extended. The Veteran's Administration then undertook to make direct government funds available for VA loans in remote areas if loans from private lenders were not readily available. The Veteran's Administration thus provided the functions of lender-of-last-resort for the veteran requiring a loan in remote areas. The lender-of-last-resort facility for the institutions making VA loans was provided by FNMA which was authorized to purchase VA guaranteed mortgages as well as FHA-insured mortgages.

NATIONAL HOUSING ACT, 1954

The National Housing Act of 1954 is selected for consideration here because under that Act the Federal National Mortgage Association (FNMA) was re-organized along the lines on which it presently operates.

As was mentioned earlier, FNMA, originally established in 1938 operates the government's secondary market facility and in this way provides a lender-of-last-resort function for holders of FHA-insured mortgages and VA-guaranteed mortgages. It extends this lender of last resort function by standing ready at a price to purchase eligible FHA and VA mortgages. Some of the mortgages bought by FNMA are resold when market conditions are more favourable. These sales provide FNMA with funds to make new purchases at a subsequent date.

FNMA presently has three functions, namely, secondary market operations, special assistance functions and management and liquidating functions. These functions are officially described as follows:(81)

"Secondary Market Operations

These operations provide supplementary assistance to the secondary market for FHA-insured and VA-guaranteed home mortgages by providing a degree of liquidity for mortgage investments, thereby improving the distribution of investment capital available for home mortgage financing. This objective is accomplished through the purchase of acceptable mortgages in areas where, and at times when, investment funds are in short supply and by the subsequent resale of mortgages in areas where and when investment capital is available."

"Special Assistance Functions

Upon specific authorization by the President of the United States or by the Congress these functions provide special assistance for financing selected types of home mortgages that are originated under special housing programs. Provision is also made for special assistance through the purchase of home mortgages, generally as a means of retarding or stopping a decline in mortgage lending and home-building activities which threaten the stability of a high level national economy."

"Management and Liquidating Functions

These functions require FNMA to manage and liquidate its portfolio of mortgages acquired under contracts entered into between February 10, 1938 and November 1, 1954 and those mortgages that were or will be acquired subsequently from authorized services in an orderly manner with a minimum of adverse effect upon the home mortgage market and minimum loss to the federal government."

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(81) For a brief historical sketch of FNMA see Housing and Home Finance Agency (HHFA), Annual Report 1959 (Washington, 1960), page 228.

FNMA is thus not merely a lender-of-last-resort as a result of its secondary mortgage market operations. It is also the agency through which federal government funds are channelled into the mortgage market for special purposes. FNMA channels these additional government funds into the mortgage market by purchasing mortgages made under the special assistance programmes at par from the mortgage originators. The private mortgage lenders would not usually be prepared to make these special assistance loans out of their own resources. The special assistance procedure thus utilizes the existing network of mortgage lenders to make mortgage loans for special purposes on the understanding that FNMA will purchase these special mortgage loans at par.

The management and liquidating function of FNMA are merely a legacy of the past and will not therefore be discussed here.

At the end of 1959, FNMA's total mortgage portfolio amounted to $5.6 billion or 10% of the $59.2 billion FHA-insured and VA-guaranteed mortgages outstanding. Of the $5.6 billion figure $2.0 billion were held under FNMA's secondary market operations functions, $1.6 billion under its special assistance functions and $2.0 billion under its management and liquidating functions.

One way of measuring the use made of the lender of last resort facility available under FNMA's secondary market

operations is to contrast the purchases made under that program with the total fo FHA-insured amd VA-guaranteed mortgages made in the same period. In the 1954-1959 period FNMA purchased $2.7 billion FHA-insured and VA-guaranteed loans under its secondary market operations function. This represents 6% of the $46.7 billion FHA-insured and VA-guaranteed mortgages made in the same period.(82) Incidentally, in Canada approved lenders sold over 6% of the NHA mortgages which they originated in the Canadian secondary mortgage market. The function of the Canadian secondary mortgage market, as it has been operating up to now, is not so much to provide a lender-of-last-resort facility as to provide a means whereby a greater number of private lenders can be drawn into the mortgage market. Canada's secondary mortgage market facilities provided in the Canadian mortgage market will be discussed in greater detail later in this Chapter.

The 1954 legislation in the United States, whereby FNMA was re-organized on its present lines, contemplated an organization initially financed by the Federal Government which would gradually be transformed into a privately financed institution.(83) It will be recalled here that the Federal Home Loan Banks, the lenders-of-last-resort of the savings and loan associations, were also established on the

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(82) Based on data published by HHFA, ibid., pps.329, 331, 336.

(83) HHFA, ibid., page 228.

same principles. FNMA, in contrast to the Federal Home Loan Banks, is still very far from being wholly private owned. At the end of 1959, the Secretary of the Treasury of the United States held $209 million of the preferred stock of FNMA while only $53 million of FNMA's stock was held by private owners. FNMA can issue debentures equal to ten times the amount of stock outstanding to finance its secondary mortgage market activities. At the end of 1959, $1.8 billion of these debentures were outstanding in the market. Of these debentures, $1.7 billion were held by private investors and $.1 billion were held by the Secretary of the Treasury. The secondary market operations of FNMA thus required about $300 million in public funds, two-thirds in the form of preferred stocks of FNMA and one-third in the form of FNMA debentures.

Each seller of mortgages to FNMA is required to purchase FNMA stock. At the end of 1959, these required stock purchases equalled 2% of the unpaid balance of mortgages sold to FNMA. The required stock purchases are sometimes reduced to 1%, depending on conditions in the mortgage market and the general economy.(84) As FNMA stock is traded below par in the open market, at about 70% of par, this stock purchase requirement increases the cost of using the secondary mortgage market facilities of FNMA. In addition to the stock purchase requirement, FNMA charges a one-half of 1% purchase

(84) HHFA, ibid., page 238.

and marketing fee. These charges are in addition to the costs of selling mortgages to FNMA at a discount. At the end of 1959 the price paid by FNMA for 5-3/4% FHA-insured mortgages fluctuated between $97-$99 per $100 depending on the loan to value ratio of the loan, the geographical location in which the loan was made, etc.

FNMA's secondary mortgage market operations thus involve the trading of FHA-insured and VA-guaranteed mortgages at a discount. This discount need not involve the sellers of mortgages to FNMA in a loss, as lenders in the United States are permitted to originate FHA-insured and VA-guaranteed mortgages at a discount. This naturally raises the effective interest rate which the lender receives on his mortgage investment. It usually also raises the downpayment requirements of the borrower.(85) In Canada, approved lenders must originate NHA mortgages at par. The sale of NHA mortgages in a secondary mortgage market at a discount would thus involve the approved lenders in a book loss.

FNMA, apart from its secondary market purchases, also provides three other types of lender-of-last-resort facilities. These are the purchase option procedure, the standby commitment procedure and the collateral loans procedure.

Under the 'purchase option' procedure FNMA gives institutions selling mortgages to it under its regular secondary

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(85) For a description of the discount procedure see, S.B. Klaman, op. cit., pages 85-98.

mortgage market programme the right to repurchase these mortgages at an additional fee of one-half of 1%. The lenders taking advantage of this scheme are in addition required to pay the one-half of 1% purchase and marketing fee. They are also required to purchase 2% of FNMA's stock. In the 1954-1959 period $7.6 purchase options were entered into. This represents about one-quarter of 1% of the $2.7 billion mortgages purchased under the secondary mortgage market functions in the same period.

Under the 'standby commitment' procedure instituted in August of 1956, FNMA issues twelve-month commitment contracts to purchase one-to-four family housing mortgages and two-year contracts to purchase multi-family housing mortgages. The price paid for a mortgage under a 'standby commitment' is less than the price paid for mortgages purchased under the ordinary secondary mortgage market terms. Thus, at the end of 1959 the price quoted by FNMA under its standby commitment procedure for a one-to-four family house, 5-3/4%, FHA-insured mortgage was $93 per $100 while the secondary mortgage market price for the same mortgage was $97-$99 per $100. The intention is to encourage the lenders to lend on new construction. The mortgages thus originated can then be sold as a last resort to FNMA. In the meantime, the mortgage originator has a full twelve months time in which to try and place the mortgage with a private investor at a more favourable price.

In the first three years of the operation of the standby commitment procedure, from August 6, 1956 to the end of 1959, FNMA purchased $75 million in mortgages. The mortgage lender obtaining a standby commitment from FNMA must pay a fee of 1½% of the mortgage involved and in addition must use 1/2$ to buy FNMA stock. If the mortgage is sold to FNMA during the standby commitment period an additional 1½% of FNMA stock must by purchased.

The granting of 80% loan-to-value ratio collateral loans by FNMA for a period of twelve months is the most recent addition to its lender of last resort type of activities. FNMA was given this power by the 1961 Housing Act, and no data are as yet available on the use made of this facility.

The post-war legislation in the United States thus further reduced the risk of mortgage lending by introducing the VA-guaranteed mortgage. The terms of lending were further liberalized by providing for no down payment on VA-guaranteed mortgages. Direct government funds were made available to the mortgage market - for veterans through the VA direct loan programme and for other special groups through FNMA's special assistance programmes. These direct loans represented about 4% of the loans made in the 1954-1959 period to finance new residential construction. The lender-of-last-resort functions of FNMA were also expanded to include not only FNMA open market purchases, which remained the predominant form, but

also the purchase option procedure, the standby commitment and the collateral loans arrangement. The total lender-of-last-resort aid extended represented about 6% of total FHA-VA activity.

POST-WAR LEGISLATION CANADA

In discussing the post-war legislation in Canada no attempt will be made to cover all the Acts dealing with Housing.(86) The laws discussed will be selected on the same basis as the United States legislation discussed above. Thus the guiding principle will be whether any new institution was created by the legislation, or whether there was any new way in which the risks of mortgage lending were reduced or whereby the facility of lender-of-last-resort was introduced or extended.

ACT TO CREATE CENTRAL MORTGAGE AND HOUSING CORPORATION, 1945 (CMHC):

This Corporation, CMHC, was formed in 1945 to operate as a quasi-commercial organization with government policy direction. It became the Government's housing agency and started operations on January 1, 1946. All of its capital was supplied by the Government and the Corporation took over

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(86) O.J. Firestone, op. cit., pages 127-131, lists the Housing Acts up to 1949. H. Woodard, op. cit., pages 6-29 gives a historical survey of the legislation up to 1957.

the Government's share of joint loans made under the previous housing acts. Before the creation of CMHC, that is from 1935 until December 31, 1945, the various housing acts were administered by the National Housing Administration, a division of the Department of Finance.(87) CMHC's activities as a mortgage lender were discussed in Chapter III, together with the mortgage activity of the other lenders. Attention must be drawn here, however, to Section 29 of the CMHC Act, which permits the Corporation to purchase mortgages and debentures from loan and trust companies. It also permits the Corporation to make loans to the loan and trust companies on the security of mortgages. In effect the CMHC Act created a lender-of-last-resort. The evidence given by Mr. Graham Towers and Mr. B. Mansur to the standing committee on Banking and Commerce on February 18, 1954 confirms this. Mr. Towers at that time Governor of the Bank of Canada said then in answer to a question by Mr. Tucker on the powers of Central Mortgage and Housing Corporation as compared with the powers that were to be conferred on the Central Mortgage Bank in 1939, "I do not think these powers are very different." (88) Mr. Mansur, then president of CMHC, said on the same occasion,

> "I think that under Section 29 of the CMHC Bank Act, and Section 11 of Bill 102, our powers (CMHC) will be rather wider than those contained in the Central Mortgage Bank Act." (89)

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(87) H. Woodard, op. cit., pages 15-16.

(88) House of Commons Standing Committee on Banking and Commerce, Minutes of Proceedings and Evidence No. 8 (Ottawa, 1954), page 259.

(89) House of Commons Standing Committee on Banking and Commerce, ibid., page 259.

It is thus quite clear that CMHC has the power to act as a lender-of-last-resort. This power has apparently been used only once - when one of the approved lenders sold part of its NHA mortgage portfolio to CMHC under Section 29.(90) Lender-of-last-resort powers can, after all, be used only when lenders request assistance. The very meagre use made of these powers to date thus reflects the fact that mortgage lenders here have not felt the need for emergency help of the lender-of-last-resort type. It must be reiterated, however, that on paper this facility is available to the loan and trust companies.

1947 AMENDMENT TO NATIONAL HOUSING ACT, 1944:

By this amendment CMHC was authorized to make direct mortgage loans from Crown funds, when in the opinion of the Corporation joint loans were not available to potential borrowers. This legislation was designed to make loans freely available in smaller centres and remote communities, where institutional lenders were reluctant to make loans.(91) At the outset, direct loans were restricted to areas with populations below 5,000. In 1952 CMHC made direct loans in areas with populations below 50,000.(92) This restriction

(90) Central Mortgage and Housing Corporation, Annual Report to the Minister of Resources and Development for the Year 1950 (Ottawa, 1951), pages 14-15.

(91) H. Woodard, op. cit., page 16.

(92) Central Mortgage and Housing Corporation, Annual Report to the Minister of Resources and Development for the Year 1952 (Ottawa, 1953), page 5.

was subsequently further relaxed to cover the whole country.

1948 AMENDMENT TO THE NATIONAL HOUSING ACT, 1944:

Under this amendment, CMHC was authorized to guarantee assured rental returns to owners of new rental projects. The majority of the loans made for these projects were in the form of direct CMHC loans, but the approved lenders also participated in the scheme. In evaluating this programme Woodard says,

> "This guaranteed rentals plan was responsible for the production of over 21,000 much needed moderate rental housing units." (93)

NATIONAL HOUSING ACT, 1954:

The 1954 Act introduced three major changes. It changed the way in which the risks of mortgage lending were reduced. It changed the scope of activities of financial institutions active in the mortgage market and it provided lender-of-last-resort facilities.(94) Under this Act the chartered banks, the largest financial institutions in the country were drawn into the mortgage market. The idea of an insured loan made entirely by the lender comparable to the United States FHA arrangement was introduced instead of the joint loan. Provisions were made for a secondary mortgage market. Chartered banks

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(93) H. Woodard, op. cit., pages 18-19.

(94) The 1954 Act is described by H. Woodard, ibid., pages 20-29, also by J.V. Poapst, "The National Housing Act 1954", Canadian Journal of Economics and Political Science (May, 1956), pages 234-243. See also, Wm. C. Hood, The Financing of Economic Activity in Canada (Royal Commission on Canada's Economic Prospects, Ottawa, 1958), page 445.

had been mentioned in the literature as a possible source of funds for mortgages well before the new Act was introduced. Gillies put it this way,

> "If life and fire insurance companies, loan companies, and trust companies are unwilling to extend their operations - in the face of increased demand for mortgage money is there any other source of funds available for financing the Canadian - government housing programme under the terms now in existence? A possible, and perhaps obvious source of funds would seem to be the commercial banks." (95)

The banks were, however, not at all eager to enter the mortgage business. Woodard remarks on this reluctance as follows,(96)

> "... during Committee discussions on the Bill 102, the banks gave the impression of being an unwilling bride at the mortgage marriage. The banks made it clear that they had not requested mortgage lending authority and that they could not forecast the extent of their participation. However, they implied that their widespread services would be available to implement the Act provisions."

As can be seen from the description of the mortgage lenders in Chapter III, the banks did in fact become major lenders under the Act. They are still not, however, permitted to make conventional mortgage loans, that is loans not covered by NHA insurance. Hood suggests that they should be given this right,(97)

> "the entry of the banks into the field of mortgage lending is surely to be welcomed but not the limiting of their participation to NHA loans."

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(95) J. Gillies, op. cit., page 30.

(96) H. Woodard, op. cit., page 21.

(97) Wm. C. Hood, op. cit., page 447.

The first effect of the new 1954 NHA Act was to widen considerably the range of institutions participating in mortgage lending. Secondly, provision was made for secondary mortgage market activity. When the secondary mortgage market activity of FNMA was discussed above it was mentioned as a device whereby FNMA gives lender-of-last-resort privileges to holders of FHA-VA mortgages. It was, however, suggested that CMHC also has these powers under Section 29 of the CMHC Act. The provisions for secondary mortgage market activity contained in the 1954 Act were consequently not aimed at providing lender-of-last-resort facilities for NHA mortgage holders. They were aimed primarily at widening still further the band of participants in the mortgage market. Woodard puts it this way,(98)

> "To permit more widespread holdings of mortgages under the new Act, provision was also made to allow such mortgages to be held by any person or company, provided that the insured mortgages were continuously administered and serviced by an approved lender under the Act. This opened the National Housing mortgage door to pension funds and to holders of other trusteed funds, as well as to individuals."

It may be worthwhile to point out in this connection that in the United States it was not until 1961 that individuals and other non-approved lenders were permitted to own FHA mortgages. As a matter of fact activity in the secondary mortgage market has not been inconsiderable. Over 6% of the NHA

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(98) H. Woodard, op. cit., pages 20-21.

mortgages originated by the approved lenders were resold to other investors as a result of these provisions. Two-thirds of these sales were made to pension funds. This means that pension funds were thereby encouraged to provide indirectly over 4% of the funds made available to NHA lending.(99)

The third effect of the 1954 Act was to change completely the way in which the risks of mortgage lending were reduced. Under the joint loans system the Federal Government provided one-quarter of the funds and assumed only part of the risk of mortgage lending. Under the new insured loans system, the lenders would provide all the funds and the loan would be insured for 98% of the outstanding balance.

The borrowers of the NHA funds would have to pay 2% of the amount borrowed for this insurance. Claims in case of losses would be settled in cash. The system was thus very similar to the FHA insurance system in force in the United States since 1934. The 1954 Act applied only to new construction. No NHA loans were made available on existing dwellings, in contrast to the FHA provisions in the United States where such loans were permitted. Although the 1954 Act was amended from time to time in subsequent years, no major changes were made affecting the risks of mortgage lending, the provision of more extensive lender-of-last-resort facilities, or the

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(99) Based on data published by Central Mortgage and Housing Corporation, Canadian Housing Statistics (Ottawa, various issues).

widening of the band of lenders operating in the mortgage market. The direct lending powers of CMHC were, however, used much more from 1957 onwards.

Post-war legislation in Canada thus gave mortgage lenders a lender-of-last-resort when CMHC was created at the end of 1945. The lender-of-last-resort power has not however been used extensively. It drew the Government further into the mortgage field by permitting direct loans since 1947. It experimented briefly with rental insurance. It reduced the risks of mortgage lending still further by introducing insured NHA loans in 1954. The terms of lending under the Act and subsequent amendments were continuously eased. It expanded the band of mortgage lenders greatly by drawing the chartered banks into mortgage lending. Other institutions, such as pension funds etc., were also given access to the NHA market via the secondary mortgage market. Finally, as the need arose the direct lending powers of the Government were used with great vigour from 1957 onwards.

CHAPTER VIII

WHAT NEXT IN THE MORTGAGE MARKET?

THE MORTGAGE MARKET IN REVIEW

On the whole, the picture presented so far shows that the mortgage market is an active market. The mortgage component of the capital market has grown faster than its competitors in that market. Thus, during the 1953-1959 period, the mortgage component of the capital market has grown from 18% to 24%.(1) Forty per cent of the net flow of funds through that market within this period was absorbed by mortgages.(2) The major financial institutions have, on the whole, favoured mortgages as an investment outlet for their funds. This is shown by the fact that all the major financial institutions increased the mortgage component in their portfolio.(3) Also, the lending institutions active in the mortgage market have grown more rapidly than total economic activity, as measured by the Gross National Product in the 1953-1959 period. This is shown by the fact that the income velocity of financial institutions' assets declined from 1.63% during 1953 to 1.57% during 1959.(4) And yet, despite

(1) See Appendix Table A-3.
(2) See Chapter III, Table 15.
(3) See Appendix Table A-13.
(4) See Chapter IV, Table 25.

this satisfactory growth in the assetsof financial institutions active in the mortgage market, and despite the fact that these institutions increased the proportion of their assets devoted to mortgages, government intervention increased in the mortgage market during the 1953-1959 period. As this government intervention was concentrated in the new residential component of the mortgage market, this intervention can best be measured by the proportion of new dwelling unit starts financed with direct government money via CMHC. This proportion increased from 5% during 1953 to 25% during 1959,(5) with special emphasis on the owner-occupancy part of the market. This increased government intervention in the new residential component of the mortgage market in recent years suggests that the private financial institutions active in the mortgage market, although their mortgage lending record is good, were unable to satisfy the full demand for new residential mortgages. The question therefore arises as to what can be done to increase even further the mortgage flow forthcoming from private financial institutions, particularly the new residential component of this flow. Before considering this question further, it may be worthwhile to examine whether there is anything we can learn from the United States' experience in the same period.

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(5) See Chapter VI, Table 30.

THE CANADIAN AND UNITED STATES MORTGAGE MARKETS COMPARED

The increase in mortgage debt outstanding in the United States was just as rapid as the increase in Canada in the 1953-1959 period.(6) There also, the federal government supplemented the flow of mortgage funds for new residential construction, by supplying funds directly via the VA administration and indirectly via the Federal National Mortgage Association's purchases under special assistance programme.(7) The scope of this intervention was, however, much smaller than the intervention here. Thus only 4% of starts in the 1957-1959 period (8) were financed in this way in the United States compared to the 25% in Canada. The reasons for this slightly better performance in the United States are not far to seek. It is due partly to the fact that the assets of financial institutions grew faster in the United States in relation to the long-term debt outstanding in the 1953-1959 period, than was the case in Canada. (9)

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(6) See Appendix Tables A-1 and A-2.

(7) For a description of these programmes see Chapter VII.

(8) Direct VA loans numbered 63,000 in the years 1957-1959 while mortgages purchased by FNMA under its special assistance programme totalled 97,000. Those two programmes combined equalled 4% of the 3,600,000 privately initiated starts in the same period. Based on data published by Housing and Home Finance Agency in, Housing Statistics - Historical Supplement, October 1959, page 223 and in, Annual Report, 1959, Table A-55, page 336, and Table A-1, page 287.

(9) See Appendix Table A-9.

Furthermore, it was the savings and loan associations, the mortgage specialists, devoting 83% of their assets to mortgages, that showed the fastest rate of growth, thereby further benefiting the mortgage market.(10)

One of the reasons for this more rapid growth of the savings and loan associations is the fact that they are permitted to pay higher dividends (interest rates) on their shares (deposits) than commercial banks pay on their time deposits. Thus, savings and loan associations payed 4½% dividend on their shares, while commercial banks were permitted to pay only 3% on their time deposits.(11) The general public was willing to take advantage of this higher rate available at savings and loan associations because deposits up to $10,000 are insured by the federal government through the Federal Savings and Loan Insurance Corporation (FLIC). (12) Time deposits in commercial banks and mutual savings banks are also government insured. The fact that the savings and loan associations financed a growing industry, house-building, enabled them to find a profitable outlet for these funds.

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(10) See Appendix Table A-8.

(11) This refers to the 1959 period. Savings and loan associations during 1962 advertised rates as high as 4.8%. See rates as advertised in the current issues of Wall Street Journal.

(12) This is described in Chapter VII.

There is another feature to the United States mortgage market, not apparent in the statistics presented so far, that may help to elicit a greater flow of mortgage funds from the private mortgage market, in the United States as compared to its Canadian counterpart. That is the existence in the United States of a group of mortgage brokers, that originate mortgages, warehouse them with funds borrowed from commercial banks, and eventually place these mortgages with permanent investors.(13) The fact that the Federal National Mortgage Association (FNMA) stands ready to purchase and sell FHA and VA mortgages, at a price, at all times, under their secondary mortgage market function, is a great help to these mortgage bankers.(14) In Canada, most of the mortgage originators are also the permanent investors. There has therefore been no opportunity for mortgage brokers in NHA mortgages to develop in Canada, and thus also no need for mortgage warehousing facilities to be extended by the chartered banks, or Central Mortgage and Housing Corporation.(15)

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(13) See S.B. Klaman, The Post-War Rise of Mortgage Companies (Princeton University Press, 1954), and J. Guttentag, "Mortgage Warehousing," Journal of Finance (December, 1957).

(14) For a descriptio of FNMA's secondary market operations, see Chapter VII. Data published by the Housing and Home Finance Agency, Annual Report 1959 (Washington), page 235, show that during 1959, 85% of the mortgages purchased by FNMA under their secondary market activities were sold by mortgage companies.

(15) Secondary mortgage market activities relating to NHA mortgages would show up in Table 36, Chapter VI.

To sum up then, the outstanding differences in the United States and Canadian mortgage market are, first the fact that the mortgage specialists in the United States capital market grew very rapidly and secondly, that the secondary mortgage market is better developed there.

The rapid growth of the mortgage specialists is due to the fact that they were able to offer a higher interest rate for funds deposited with them, while the fact that these deposits up to $10,000 per account, are granted by the federal government, made these institutions, from the point of view of the public, just as safe as the commercial banks. The better developed secondary mortgage market provides a device whereby the mortgage origination function and to some extent the servicing function also, are carried out by specialist firms who later place these funds with permanent investors.

POSSIBLE FUTURE DEVELOPMENTS IN THE CANADIAN MORTGAGE MARKET

The brief comparison between the Canadian and the United States mortgage market made above has revealed that the major differences between the two markets are, firstly, the existance of powerful specialist mortgage lenders (savings and loan associations) fostered by favourable legislation,(16) and secondly, the post-war rise of a network of

(16) For a description of this legislation see Chapter VII.

mortgage brokers originating mortgages, financed largely by short-term loans from commercial banks and further aided by the secondary mortgage market operations of the Federal National Mortgage Association, a government institution. These institutions, namely savings and loan associations, and the network of mortgage brokers, are mentioned here merely to complete the description of the present framework of the United States mortgage institutions, and not because it is felt that because these institutions operate in the United States, the same type of institutions should necessarily develop here also. The financial institutions in Canada proved themselves strong enough to survive the depression years without government assistance. There was in Canada therefore, no loss of confidence in the financial institutions, and no need for government insurance on their deposits, to overcome this loss of confidence. As to the emergence of a network of mortgage brokers, this may be a case of a large absolute market, making it possible for a greater division of labour to take place, in this case, the division between searching out the new loans, and in some cases, also servicing the loan, as opposed to providing the necessary permanent funds. The development of a group of mortgage brokers in Canada will thus depend on the future growth of the mortgage market, in terms of absolute size. So much for the lessons to be drawn from Canadian and United States comparisons.

We turn now to possible developments suggested by the discussion of the available levers of policy in Chapter VII. In trying to project possible developments from that list, only those items relating to the supply of funds will be discussed. One of the most significant commissions resulting from such a procedure, is the fact that all the topics falling under the title of 'the scope of the universe covered by legislation' will be left out of the discussion. This means that the question as to whether government insured mortgages should or should not be made available on existing dwellings, rather than, as is now the case, on new residential construction only, will be left out completely. In other words, it is felt on the basis of the analysis of mortgage policy in Chapter VII, that the problem of how to stimulate a greater flow of mortgage funds from the private lenders, will be more urgent than the problem of stimulating a greater demand for mortgage funds.

The policy levers operating on the supply side as shown in Chapter VI exert their influence in the mortgage market through their effect on the yield, security and liquidity of the mortgage instrument, and their effect on widening the band of non-government participants in the mortgage market. The possible future developments in the Canadian mortgage market will therefore here be discussed in that light.

As was pointed out in Chapter VI, the yield that financial institutions can obtain from their new government guaranteed mortgages depends to some extent, on the way in which the mortgage interest rate on government insured mortgages is fixed. The historical data show that there have been wide fluctuations in these yield differentials between NHA mortgages and other long-term securities.(17) This, as was shown in Chapter V, has resulted in wide fluctuations in the supply of funds forthcoming under NHA. These fluctuations are revealed even in the yearly data which show, for instance, that disbursements under NHA declined from $.54 billion during 1956 to $.35 billion during 1957.(18) Thus, almost the whole decline in the disbursements for new residential construction in the 1956-1957 period, from $.75 billion to $.53 billion was concentrated in the NHA sector.(19)

It has therefore been argued that interest rates on government insured mortgages should be allowed to move more freely, so as to remain at all times, competitive with prevailing rates in other sectors of the capital market. In Canada, this argument has been advanced by Professor Wm. C. Hood.(20) The contra-view has not been argued publicly in

(17) See Chapter VI, Table 35.

(18) Based on data published by Central Mortgage and Housing Corporation, Canadian Housing Statistics (Ottawa, 1st Quarter, 1959), Table 31.

(19) See Chapter III, Table 16.

(20) Wm. C. Hood, Financing of Economic Activity in Canada (Royal Commission and Canada's Economic Prospects, Ottawa, 1958), page 441.

Canada. However, in the United States two distinguished professors, Seymour Harris(21) and Warren Smith(22) have argued against changing the present procedure of fixing the mortgage rate on government insured mortgages, on the ground that a fixed rate on government insured mortgages makes monetary policy more effective and helps keep the average price of houses lower than they would otherwise by, by restraining house-building in boom periods. There is thus far from unanimity on this subject. The proponents in the United States of letting the interest rate fluctuate freely, think mainly in terms of stabilizing the flow of residential mortgage funds rather than increasing that flow in absolute terms.

The flow of mortgage funds can also be influenced by increasing the security of the government insured mortgage instrument, as was pointed out in Chapter VI. The present status of NHA mortgages is, however, so secure that it is difficult to envisage any changes in this direction that could help elicit a greater flow of new residential mortgage funds from private lenders.

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(21) See S.E. Harris, "The Case for Lower and More Rigid Rates on Government Underwritten Mortgages", 14th Annual Conference for Senior Executives in Mortgage Banking (N.Y. University, 1959).

(22) Warren L. Smith, "The Impact of Monetary Policy on Residential Construction, 1948-1958", (Committee on Banking and Currency, Subcommittee on Housing, Study of Mortgage Credit - Hearings, United States Senate, Washington, 1959), Appendix, pages 262-263.

The improvement of the liquidity of the mortgage instruments, offers another lever whereby the flow of mortgage funds could be increased. Suggestions have been made particularly in the United States that a Central Mortgage Bank be created around the nucleus of the existing Federal National Mortgage Association, to provide a greater degree of liquidity to the mortgage market.(23)

In Canada, the building industry through its association (NHBA) has championed this course of action. Briefly, the intention is to create an institution that will buy and sell NHA mortgages and raise funds by issuing debentures backed by its portfolio of NHA mortgages. Not all sectors of the mortgage market are however, in favour of such an institution. Mr. Sidney A. Shepherd, of the Bank of Montreal, acting in a private capacity, has voiced opposition to the plan, on the grounds that it is unnecessary and unworkable without special concessions from the federal government.(24)

The proponents of a Central Mortgage Bank think not only in terms of increased liquidity, but also feel that such a bank would help dampen fluctuations in the flow of mortgage funds by buying mortgages in periods of

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(23) O. Jones and L. Grebler, The Secondary Mortgage Market: Its Purpose, Performance and Potential (University of California, 1961), Chapter XII, pages 189-198.

(24) S.A. Sheppard, "The Role of a Secondary Mortgage Market", Business Quarterly (University of Western Ontario, Fall, 1959), pages 149-156.

financial stringency and selling them during periods of financial ease. In this connection it is upon recalling that as shown in Chapter VII, CMHC already has the power to buy and sell mortgages. This power was, however, presumably granted to enable CMHC to alleviate liquidity crises rather than to even out fluctuations in the flow of mortgage funds. More important from the point of view of increasing the absolute flow of mortgage funds, is the argument that by creating a Central Mortgage Bank, a wider band of financial institutions can be induced to participate more actively in the mortgage market. The way in which such a Central Mortgage Bank will help to elicit a greater flow of mortgage funds from prospective lenders, is to offer them, instead of the mortgage documents, a debenture backed by their government insured mortgage portfolio. It is claimed that in this way, it will be possible to tap more of the savings collected by pension funds and estate trust and agency funds, administered by trust companies.(25) The attraction from the point of view of the pension fund would be that they would get a high yielding debenture, which itself is backed by government insured mortgages. It must be pointed out in this connection that insofar as pension funds buy government securities,

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(25) It was shown in Chapter III that these funds are growing more rapidly than the active mortgage lenders; but devote only a small proportion of their funds to mortgage investment.

they help to provide the federal government with the funds that are channelled into the mortgage market via CMHC. The savings accumulated in these pension funds are thus channelled into the mortgage market, in an indirect way. The tapping of pension funds and estate trust and agency funds for the mortgage market via institutions specializing in issuing debentures backed by mortgages, may prove a difficult business. If we bear in mind the costs of originating and administering a mortgage portfolio and a margin of profit for the institution, we can see that the debentures offered by such institutions could not carry a rate of interest much higher than the maximum NHA rate minus .75%. This would mean at the end of 1959, debentures of 6%, which is a little below the 6.09% corporate bond average prevailing at the end of December, 1959. Under such circumstances, it is a little hard to imagine that the administrators of the pension funds and estate trust and agency funds will be very eager to acquire this type of debenture.

In the United States the mortgage brokers whose business it is to hunt out new permanent investors in mortgages, have made a more determined effort to entice the pension funds into the mortgage market. Several of these brokers have banded together to form a corporation through which they hope to develop the pension funds business. Briefly, the idea is that the new corporation would administer

the mortgage portfolio for the pension funds, but the pension funds would acquire ownership of a definite block of mortgages.(26) The rapid growth of pension funds discussed in Chapter III, may eventually force them to look more kindly on investment in mortgages. They are already investing more heavily in mortgages in Canada than their United States counterparts, despite the strenuous efforts of the mortgage brokers there, described above to tempt them deeper into the mortgage market.(27)

The whole presentation so far has assumed that the mortgage market, especially the new residential component, has an almost insatiable appetite for funds, and is forever looking for new sources to satisfy this appetite. During the period under review, 1953-1959, this was a good approximation of the actual situation. Faint whispers are however

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(26) See James W. Rouse, "Facilities for Mortgage Credit", (Committee on Banking and Currency, Subcommittee on Housing, Study of Mortgage Credit - Hearings, United States Senate, Washington, 1959), Appendix, pages 361-366.

(27) The proportion of assets invested in mortgages at the end of 1956.was 2% for personal trust funds and 1.6% for non-insured pension funds. See S.B. Klaman, "The Availability of Residential Mortgage Credit", (Committee on Banking and Currency, Subcommittee on Housing, Study of Mortgage Credit - Hearings, United States Senate, Washington, 1959), Appendix, page 206, Table 90. In Canada these funds have 8% and 9% of their assets invested in mortgages respectively. For a description of their mortgage activity see Chapter III.

beginning to be heard that the situation is changing in this respect, that the demand for funds for new residential construction may become less insistent than they have been up to the present.(28) Should this prove to be the case, the problem of trying to develop new sources of funds from private lending institutions would become much less urgent. Nevertheless on balance it would seem that future developments in the mortgage market are likely to centre around efforts to entice a wider band of lenders to participate more intensively in the mortgage market. The most promising target from this point of view is the large pool of savings accumulated in the pension funds.

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(28) See for instance, Central Mortgage and Housing Corporation, Annual Report to the Minister of Public Works for the Year 1959 (Ottawa), pages 7-10. The opening sentence in the above article reads as follows, "For the first time in a decade and a half, new housing in 1960 was subject for a brief period to the unfamiliar constraint of demand." page 7.

APPENDIX

CAPITAL MARKET DATA FOR CANADA AND THE UNITED STATES, 1939-1959

TABLE A-1: PUBLIC AND PRIVATE DEBT OUTSTANDING IN CANADA, 1939-1959

Year	Federal Government Bonds	Provincial Government Bonds	Municipal Government Bonds	Corporate Bonds	Mortgages	Total
	(Billions of Dollars)					
1939	4.44	1.82	1.08	2.82	1.63	11.25
1945	17.48	1.78	.84	1.95	1.33	23.38
1946	17.31	1.85	.83	1.95	1.50	23.48
1947	16.71	2.07	.86	1.95	1.77	23.36
1948	16.48	2.27	.87	2.07	2.12	23.80
1949	15.82	2.58	.98	2.27	2.55	24.20
1950	15.89	2.74	1.12	2.44	3.10	25.29
1951	15.33	3.11	1.30	2.79	3.61	26.14
1952	15.19	3.42	1.51	3.07	4.09	27.27
1953	15.64	3.76	1.77	3.44	4.72	29.33
1954	15.47	4.01	2.07	3.84	5.65	31.04
1955	16.00	4.23	2.33	4.25	*	*
1956	15.23	4.71	2.61	5.18	*	*
1957	15.17	5.33	2.96	6.21	*	*
1958	16.42	5.90	3.31	6.88	*	*
1959	17.14	6.40	3.60	7.03	10.70	44.87

* Not available.

Source: Federal Government bonds; Bank of Canada, Statistical Summary, various issues. Provincial bonds; 'Funded debt' plus guaranteed bonds, Bank of Canada, Statistical Summary - Financial Supplement, 1959, pages 104-105. Municipal bonds; 'Direct and Guaranteed Bonded Debt (Net)', Bank of Canada, Statistical Summary - Financial Supplement, 1959, pages 112-113. Corporate bonds; Bank of Canada, Statistical Summary (Jan.-Mar. issues). Data previous to 1953 pushed back by deducting annual net new issues. Mortgages; data for 1939 estimated by interpolating 1936 and 1946 data published in H. Woodard, Canadian Mortgages (Collins, Don Mills, Ontario, 1959), page 3. Data for 1945-1954 estimated by adding to the 1945 total net changes in mortgage loans outstanding as published by L.M. Read, S.J. Handfield-Jones and F. Emmerson, "The National Transaction Accounts for Canada, 1946-1954 in Wm. C. Hood, Financing of Economic Activity in Canada (Royal Commission on Canada's Economic Prospects, 1958), pages 497-505. Data for 1959 as published by Central Mortgage and Housing Corporation, Economic Research Bulletin No.77 (Oct., 1960), page 1.

TABLE A-2: PUBLIC AND PRIVATE DEBT OUTSTANDING IN THE UNITED STATES, 1939-1959

Year	Federal Government Bonds	State and Local Government Bonds	Corporate Bonds	Mortgages	Total
	(Billions of Dollars)				
1939	41.9	20.0	39.7	36.3	137.9
1945	278.7	16.6	34.6	35.5	364.8
1946	259.2	15.9	37.0	41.6	353.7
1947	257.0	16.8	41.0	48.9	363.6
1948	252.8	18.7	46.7	56.2	374.4
1949	257.1	20.9	50.0	62.7	390.7
1950	256.6	24.2	52.8	72.8	406.4
1951	259.5	27.0	58.3	82.3	427.1
1952	267.4	29.6	64.3	91.4	452.7
1953	275.2	32.7	68.6	101.3	477.8
1954	278.8	37.9	72.1	113.8	502.6
1955	280.8	43.2	77.9	130.0	531.9
1956	276.7	48.0	83.8	144.7	553.2
1957	275.0	52.5	91.9	156.3	575.7
1958	283.0	57.2	97.8	171.9	609.9
1959	290.9	62.4	102.1	191.0	646.4

Source: Federal Government bonds; for the years 1939-1949, 'Gross Direct Federal Debt', published in Raymond W. Goldsmith, Study of Savings in the U.S.A. (Princeton University Press, 1955), column F-19, page 1017. Subsequent data taken from Federal Reserve Board, Federal Reserve Bulletins(Washington) various issues. State and Local Government bonds; United States Department of Commerce, Survey of Current Business (Washington, Oct.1950, May 1956 and current issues). Corporate bonds; from total private long-term debt outstanding published by Miles Colean in "A More Effective Mortgage Insurance System", included in United States Senate, Study of Mortgage Credit,(United States Senate 1958), page 306,deduct total mortgages outstanding. The 1958 and 1959 data were calculated by adding the net flow of corporate bonds during those years, as published by the Federal Reserve Board, Federal Reserve Board Bulletin (Washington, various issues). Mortgages; data for 1939 from Raymond W. Goldsmith, ibid. Data for 1945-1952 from S.B. Klaman, The Volume of Mortgage Debt in the Post-War Decade, 1945-1955 (Princeton University Press,1957). Data for the years 1952-1957 estimated by adding net increase in mortgages outstanding as published by J.J. O'Leary, "Post-War Trends in the Sources and Uses of Capital Funds", included in United States Senate, Study of Mortgage Credit (United States Senate, 1958). Data for 1958-1959, as published by Federal Reserve Board in Federal Reserve Board Bulletin (Washington, various issues).

TABLE A-3: EACH CLASS OF PUBLIC AND PRIVATE DEBT OUTSTANDING, AS % OF TOTAL, CANADA, 1939-1959

Year	Federal Government Bonds (%)	Provincial Government Bonds (%)	Municipal Government Bonds (%)	Corporate Bonds (%)	Mortgages (%)	Total (%)
1939	39	16	10	20	14	100
1945	75	8	4	8	6	100
1946	74	8	4	8	6	100
1947	72	9	4	8	7	100
1948	69	10	4	9	9	100
1949	65	11	4	9	11	100
1950	63	11	4	10	12	100
1951	59	12	5	11	14	100
1952	56	13	6	11	15	100
1953	53	13	6	12	16	100
1954	50	13	7	12	18	100
1955	*	*	*	*	*	100
1956	*	*	*	*	*	100
1957	*	*	*	*	*	100
1958	*	*	*	*	*	100
1959	38	14	8	16	24	100

* Not available.

Source: Calculated from data in Appendix Table A-1.

TABLE A-4: EACH CLASS OF PUBLIC AND PRIVATE DEBT OUTSTANDING, AS % OF TOTAL, UNITED STATES, 1939-1959

Year	Federal Government Bonds (%)	State and Local Government Bonds (%)	Corporate Bonds (%)	Mortgages (%)	Total (%)
1939	30	15	29	26	100
1945	76	5	9	10	100
1946	73	4	10	12	100
1947	71	5	11	13	100
1948	68	5	12	15	100
1949	66	5	13	16	100
1950	63	6	13	18	100
1951	61	6	14	19	100
1952	59	7	14	20	100
1953	58	7	14	21	100
1954	55	8	14	23	100
1955	53	8	15	24	100
1956	50	8	15	26	100
1957	48	9	16	27	100
1958	47	9	16	28	100
1959	45	10	16	29	100

Source: Calculated from data in Appendix Table A-2.

TABLE A-5: ASSETS OF FINANCIAL INSTITUTIONS IN CANADA, 1939-1959

Year	Chartered Banks	Life Companies	Loan Companies	Trust Companies	Total
	(Billions of Dollars)				
1939	3.59	2.11	.26	.23	6.19
1945	6.41	2.89	.28	.28	9.86
1946	6.82	3.07	.30	.31	10.50
1947	7.01	3.28	.34	.32	10.95
1948	7.65	3.48	.35	.34	11.82
1949	7.86	3.73	.40	.39	12.38
1950	8.61	3.97	.41	.42	13.41
1951	8.58	4.13	.42	.45	13.58
1952	9.22	4.42	.43	.47	14.54
1953	9.69	4.81	.47	.47	15.44
1954	10.40	5.14	.54	.62	16.70
1955	11.65	5.64	.60	.71	18.60
1956	12.06	6.04	.64	.74	19.48
1957	12.42	6.54	.69	.77	20.42
1958	13.76	7.05	.77	.95	22.53
1959	13.46	7.51	.84	1.06	22.87

Source: Chartered banks; Bank of Canada, Statistical Summary - Financial Supplement (Ottawa, various issues). Life Companies; Central Mortgage and Housing Corporation, Mortgage Lending in Canada 1949 and Canadian Housing Statistics, 1st Quarter and annual issues. Loan companies, Central Mortgage and Housing Corporation, ibid. Trust companies; Central Mortgage and Housing Corporation, ibid.

TABLE A-6: ASSETS OF FINANCIAL INSTITUTIONS IN THE UNITED STATES, 1939-1959

Year	Commercial Banks	Life Companies	Savings and Loan Associations	Mutual Savings Banks	Total
	(Billions of Dollars)				
1939	65.2	29.2	5.4	11.9	111.7
1945	160.3	44.8	8.7	17.0	230.8
1946	150.6	48.2	10.2	18.7	227.7
1947	155.4	51.7	11.7	19.7	238.5
1948	155.6	55.5	13.0	20.5	244.6
1949	157.7	59.6	14.5	21.5	253.3
1950	168.9	64.0	16.9	22.4	272.2
1951	180.4	68.3	19.2	23.5	291.4
1952	188.6	73.4	22.7	25.3	310.0
1953	193.0	78.5	26.7	27.2	325.4
1954	202.4	84.5	31.6	29.4	347.9
1955	210.7	90.4	37.7	31.4	370.2
1956	217.5	96.0	42.9	33.4	389.3
1957	222.7	101.3	48.1	35.2	407.3
1958	238.7	107.6	55.1	37.8	439.2
1959	244.7	113.6	63.5	38.9	460.7

Source: Commercial banks; Raymond W. Goldsmith, Financial Intermediaries in the American Economy since 1900 (Princeton University Press, 1958), page 73. Also L. Grebler, D.M. Blank and L. Winnick, Capital Formation in Residential Real Estate, Trends and Prospects (Princeton University Press), page 481. Also Federal Reserve Board, Federal Reserve Bulletin (Washington, various issues). Savings and loan associations; Raymond W. Goldsmith, ibid., page 74. Also, United States Senate, Study of Mortgage Credit (United States Senate, 1958), page 313. Also Federal Reserve Board, ibid., Mutual savings banks; Raymond W. Goldsmith, ibid., page 73, L. Grebler, D.M. Blank and L. Winnick, ibid., page 483, also Federal Reserve Board, ibid.

TABLE A-7: ASSETS OF EACH TYPE OF FINANCIAL INSTITUTION, AS % OF TOTAL ASSETS OF FINANCIAL INSTITUTIONS IN CANADA, 1939-1959

Year	Chartered Banks (%)	Life Companies (%)	Loan Companies (%)	Trust Companies (%)	Total (%)
1939	58	34	4	4	100
1945	65	29	3	3	100
1946	65	29	3	3	100
1947	64	30	3	3	100
1948	65	29	3	3	100
1949	63	30	3	3	100
1950	64	30	3	3	100
1951	63	30	3	3	100
1952	63	30	3	3	100
1953	63	31	3	3	100
1954	62	31	3	4	100
1955	63	30	3	4	100
1956	62	31	3	4	100
1957	61	32	3	4	100
1958	61	31	3	4	100
1959	58	33	4	5	100

Source: Calculated from data in Appendix Table A-5.

TABLE A-8: ASSETS OF EACH TYPE OF FINANCIAL INSTITUTION AS % OF TOTAL ASSETS OF FINANCIAL INSTITUTIONS IN THE UNITED STATES, 1939-1959

Year	Commercial Banks (%)	Life Companies (%)	Savings and Loan Associations (%)	Mutual Savings Banks (%)	Total (%)
1939	58	26	5	11	100
1945	69	19	4	7	100
1946	66	21	4	8	100
1947	65	22	5	8	100
1948	64	23	5	8	100
1949	62	24	6	8	100
1950	62	24	6	8	100
1951	62	23	7	8	100
1952	61	24	7	8	100
1953	59	24	8	8	100
1954	58	24	9	8	100
1955	57	24	10	8	100
1956	56	25	11	9	100
1957	55	25	12	9	100
1958	54	24	13	9	100
1959	53	25	14	8	100

Source: Calculated from data in Appendix Table A-6.

TABLE A-9: LONG-TERM DEBT OUTSTANDING AS % OF ASSETS OF FINANCIAL INSTITUTIONS IN CANADA AND THE UNITED STATES, 1939-1959

Year	Canada (%)	United States (%)
1939	182	123
1945	237	158
1946	223	155
1947	213	152
1948	201	153
1949	196	154
1950	189	149
1951	193	147
1952	187	146
1953	189	147
1954	186	145
1955	*	144
1956	*	142
1957	*	139
1958	*	139
1959	192	140

* Not available.

Source: Calculated from Appendix Table A-1, A-2, A-5, A-6.

TABLE A-10: THE POSITION OF MORTGAGES IN THE CAPITAL MARKET AND IN THE PORTFOLIOS OF LENDING INSTITUTIONS IN CANADA AND THE UNITED STATES, 1939-1959

Year	Mortgages as % of Total Debt Outstanding		Mortgages as % of Financial Institutions Assets		Mortgages Held by Financial Institutions as % of Mortgages Outstanding	
	Canada	United States	Canada	United States	Canada	United States
1939	14	26	11	17	40	52
1945	6	10	6	9	42	59
1946	6	12	6	12	40	63
1947	7	13	6	13	40	65
1948	9	15	7	16	42	68
1949	11	16	9	17	41	69
1950	12	18	10	19	41	71
1951	14	19	11	20	41	72
1952	15	20	11	22	41	73
1953	16	21	12	23	41	74
1954	18	23	14	25	41	75
1955	*	24	16	27	*	76
1956	*	26	19	29	*	77
1957	*	27	20	29	*	76
1958	*	28	20	30	*	76
1959	24	29	23	32	48	76

* Not available.

Source: Mortgages as per cent of total debt outstanding calculated from data in Appendix Tables A-1, A-2. Mortgages as per cent of financial institutions assets calculated from data in Appendix Tables A-5, A-6, A-11, A-12. Mortgages held by financial institutions as per cent of mortgages outstanding calculated from data in Appendix Tables, A-1, A-2, A-11, A-12.

TABLE A-11: MORTGAGES HELD BY FINANCIAL INSTITUTIONS IN CANADA, 1939-1959

Year	Chartered Banks	Life Companies	Loan Companies	Trust Companies	Total
	(B i l l i o n s o f D o l l a r s)				
1939	*	.39	.17	.09	.65
1945	*	.33	.14	.07	.54
1946	*	.37	.15	.07	.59
1947	*	.45	.17	.08	.70
1948	*	.59	.19	.10	.88
1949	*	.73	.23	.10	1.06
1950	*	.90	.27	.11	1.28
1951	*	1.08	.29	.13	1.50
1952	*	1.21	.31	.14	1.66
1953	*	1.40	.35	.15	1.90
1954	.07	1.66	.40	.18	2.31
1955	.29	2.02	.44	.23	2.98
1956	.49	2.41	.50	.27	3.67
1957	.59	2.65	.52	.28	4.04
1958	.79	2.86	.57	.34	4.56
1959	.97	3.14	.63	.41	5.15

* Chartered banks were not permitted to lend on mortgages until 1954.

Source: Central Mortgage and Housing Corporation, Mortgage Lending in Canada, 1949, and Canadian Housing Statistics, various issues. These data have been reprinted in Canadian Housing Statistics, 1961.

TABLE A -12: MORTGAGES HELD BY FINANCIAL INSTITUTIONS IN THE UNITED STATES, 1939-1959

Year	Commercial Banks	Life Companies	Savings and Loan Associations	Mutual Savings Banks	Total
	(B i l l i o n s o f D o l l a r)				
1939	4.32	5.68	4.13	4.84	18.97
1945	4.77	6.64	5.32	4.20	20.93
1946	7.23	7.16	7.28	4.44	26.11
1947	9.44	8.68	8.97	4.86	31.95
1948	10.90	10.83	10.41	5.80	37.94
1949	11.64	12.91	11.71	6.71	42.97
1950	13.66	16.10	13.75	8.26	51.77
1951	14.73	19.31	15.65	9.75	59.44
1952	15.87	21.25	18.48	11.23	66.83
1953	16.85	23.32	22.04	12.79	75.00
1954	18.57	25.98	26.18	14.85	85.58
1955	21.00	29.45	31.47	17.28	99.20
1956	22.72	32.99	35.78	19.56	111.05
1957	23.34	35.24	40.05	20.97	119.60
1958	25.52	37.06	45.60	23.04	131.22
1959	28.15	39.30	53.09	24.99	145.53

Source: Commercial Banks; Raymond W. Goldsmith, Study of Savings in the U.S.A. (Princeton University Press, 1955), also S.B. Klaman, The Volume of Mortgages in the Post-War Decade, 1945-1955 (Princeton University Press, 1957), also Federal Reserve Board, Federal Reserve Board Bulletin. Life companies; United States Life Insurance Associations, Life Insurance Fact Book (N.Y., annual issues), also S.B. Klaman, ibid., Savings and Loan Associations; United States Senate, Study of Mortgage Credit, (United States Senate, 1958),page 313, also S.B. Klaman, ibid., also United States Savings and Loan League, Savings and Loan Fact Book (Chicago, annual issues), also Federal Reserve Board, ibid. Mutual Savings Banks, Raymond W. Goldsmith, ibid., page 737, also S.B. Klaman, ibid., also Federal Reserve Board, ibid.,

TABLE A-13: MORTGAGES AS % OF ASSETS OF FINANCIAL INSTITUTIONS IN CANADA, 1939-1959

Year	Chartered Banks (%)	Life Companies (%)	Loan Companies (%)	Trust Companies (%)	Total (%)
1939	--	18	65	39	11
1945	--	11	50	25	6
1946	--	12	50	23	6
1947	--	14	50	25	6
1948	--	17	54	29	7
1949	--	20	58	26	9
1950	--	23	66	26	10
1951	--	26	69	29	11
1952	--	27	72	30	11
1953	--	29	74	32	12
1954	1	32	74	29	14
1955	2	36	73	32	16
1956	4	40	78	36	19
1957	5	41	75	36	20
1958	6	41	74	36	20
1959	7	42	75	39	23

Source: Calculated from Appendix Tables A-5, A-11.

TABLE A-14: MORTGAGES AS % OF ASSETS OF FINANCIAL INSTITUTIONS IN THE UNITED STATES, 1939-1959

Year	Commercial Banks (%)	Life Companies (%)	Savings and Loan Associations (%)	Mutual Savings Banks (%)	Total (%)
1939	7	19	76	41	17
1945	3	15	61	25	9
1946	5	15	71	24	12
1947	6	17	77	25	13
1948	7	20	80	28	16
1949	7	22	81	31	17
1950	8	25	81	37	19
1951	8	28	82	41	20
1952	8	29	81	44	22
1953	9	30	83	47	23
1954	9	31	83	51	25
1955	10	33	83	55	27
1956	10	34	83	59	29
1957	10	35	83	60	29
1958	10	34	83	61	30
1959	12	35	84	64	32

Source: Calculated from data in Appendix Tables, A-6, A-12.

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JF - Journal of Finance

JPE - Journal of Political Economy

QJE - Quarterly Journal of Economics

RES - Review of Economics and Statistics.

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