

HOUSING POLICY, TENURE CHOICE AND THE DEMAND  
FOR HOUSING IN GREATER VANCOUVER

by

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## ABSTRACT

In economic history the study of the economics of housing is a relatively recent phenomena. Current macro-economic and micro-economic theories depend to a large extent on research undertaken within the last twenty five to fifty years. For the most part much basic economic theory has not been applied to the analysis of housing markets and the impact of housing policies.

In view of the current extent of concern by business, government and the public with regard to housing problems, the lack of research which applies simple economic principles to the study of housing markets is unfortunate. In general, research has been coloured by emotion and rhetoric due to the prevalence of the concept that adequate shelter at a price the consumer can afford should be a basic human right. As popular issues, housing problems that are perceived have tended to be controversial generating quick but often irrational attempts to provide solutions. It is becoming more and more clear that whatever problems are perceived there are no simple solutions. The reason being that housing problems are not simple problems. No one sector should bear the brunt of criticism nor can any one sector provide the solution to such a complex problem.

In view of the complexity of the problem, it is essential that some rational form of analysis be used in order to, firstly, identify the cause of the problem and secondly suggest a viable solution. Although this study looks at housing markets and the impact of housing policies in the context of the Greater Vancouver Regional District the methodology and conclusions may generally be applied to other areas in Canada. Moreover the methodology of the analysis can be used for any housing market.

This study firstly develops the methodology for analysis and secondly, summarizes the major factors influencing demand for housing and consumer choice within housing submarkets. Some of these factors can be termed natural while some are better termed policy-induced. For example, the rate of immigration is a natural factor influencing demand while preference for home ownership generated by subsidies to home-owners may be termed a policy-induced demand factor. Thirdly the study shows the impact of the various demand factors on the housing market and submarkets through an application of economic statics. Finally, some conclusions are made in the light of the results of the analysis. Implicit throughout the entire analysis is an evaluation of some of the major aspects of Canadian housing policy.

## TABLE OF CONTENTS

	<u>PAGE</u>
Abstract	
List of Tables	
List of Figures	
Acknowledgement	
 INTRODUCTION . . . . .	 1
Chapter I      CHARACTERISTICS OF HOUSING . . . . .	6
1.1      A DESCRIPTION OF HOUSING	7
1.11      Stock	7
1.12      Flow	7
1.13      Form of Tenure	9
1.2      NATURE OF THE COMMODITY AND THE MARKET	13
1.21      Immobility	13
1.22      Durability	15
1.23      Heterogeneity	16
1.24      High Cost	19
1.25      Poor Communication	22
1.26      Government Intervention	24
 Chapter II      THEORY OF THE SUPPLY OF AND DEMAND FOR HOUSING	 30
2.1      BASIC SUPPLY AND DEMAND	30
2.11      Utility and Consumer Choice	32
2.12      Tenure Choice	34
2.13      Supply and Demand Variables	34
2.14      Supply of Land	37
2.15      Supply of Housing	39
2.2      THE ECONOMIC MODEL OF THE HOUSING MARKET	40
2.3      THE HOUSING MODEL BY TENURE SUBMARKET	43
2.4      MANIPULATION OF THE MODEL	47
2.51      Changing Demand Variables	47
2.52      Changing Supply Variables	50
2.53      Price Controls	53

	<u>PAGE</u>
Chapter III	EVALUATION OF THE HOUSING MARKET 59
3.1	DISTRIBUTION AND ALLOCATION 59
3.2	DISTRIBUTION AND ALLOCATION IN THE HOUSING MARKET 62
3.3	HOUSING STANDARDS, HOUSING NEEDS AND HOUSING DEMAND 65
3.4	MARKET INDICATORS 68
	- Vacancy Rates
	- Utilization Rates
	- Price Stability
3.5	THE DEFINITION OF A HOUSING SHORTAGE 71
Chapter IV	THE CHOICE BETWEEN RENTING AND OWNING 77
4.1	SUBSTITUTABILITY, CONSUMER CHOICE AND UTILITY 79
4.2	THE REAL COSTS OF RENTING AND OWNING 84
4.21	Capital Costs 85
4.22	Ongoing Costs 86
4.3	THE INFLUENCE OF REALLOCATIVE POLICIES 90
4.31	Non-Taxation of the Imputed Income of Owned Homes 90
4.32	Exemption from Capital Gains Tax of Owned Homes 93
4.33	Other Federal Policies 94
4.34	Policies in the Province of British Columbia 96
4.4	THE IMPLICATIONS 97
Appendix - Chapter IV	104
	FURTHER COMMENTS on the COSTS OF RENTING AND OWNING
APPENDIX 4.1	A CASE COMPARISON 104
APPENDIX 4.2	RHOSP: SUBSIDY TO RENTER OR OWNER? 107

		<u>PAGE</u>
Chapter V	OTHER DEMAND VARIABLES IN GREATER VANCOUVER	110
	5.1 HOUSEHOLD FORMATION AND HOUSING DEMAND	110
	5.11 The War Babies	113
	5.12 Formation of One-Person Households	115
	5.13 Net Migration	118
	5.2 INCOME AND THE DISTRIBUTION OF INCOME	121
	5.3 PRICE AND PRICE EXPECTATIONS	125
	5.4 CREDIT AVAILABILITY, COST AND DEMAND	128
Chapter VI	CONCLUSIONS	139
	6.1 THE APPARENT PROBLEM	139
	6.2 THE INFLUENCE OF HOUSING POLICY ON DEMAND AND ON THE HOUSING MARKET	141
	6.3 THE IMPLICATIONS	146

## BIBLIOGRAPHY

## LIST OF TABLES

	<u>PAGE</u>
Chapter IV	
4-I TAX SUBSIDY TO HOME OWNERSHIP DUE TO NON-TAXATION OF IMPUTED RENTAL INCOME	91
Appendix - Chapter IV	
I CASE COMPARISON OF THE COSTS OF OWNING VERSUS RENTING	106
Chapter V	
5-I HOUSING SUPPLY AND DEMAND IN THE GVRD 1956-1981	111
5-II GROWTH OF ONE PERSON HOUSEHOLDS IN GREATER VANCOUVER	116
5-III MIGRATION TO THE GVRD	119
5-IV AGE AND SEX DISTRIBUTION OF MIGRANTS TO THE GVRD 1966-71	119
5-V APARTMENT RENTS IN GREATER VANCOUVER, 1964-74	125
5-VI AVERAGE SALES PRICE IN THE GREATER VANCOUVER AREA: MULTIPLE LISTING SALES, 1964-74	126
5-VII NHA - INSURED MORTGAGE LOANS: CHANGES IN SELECTED TERMS, 1954-1972	131
5-VIII NHA - INSURED MORTGAGE LOANS: MAXIMUM TERMS AS OF OCTOBER, 1973	132

## LIST OF FIGURES

	<u>PAGE</u>
Chapter II	
2-1 OVERVIEW OF THE HOUSING MARKET	31
2-2 STOCK AND FLOW MODEL OF THE HOUSING MARKET	41
2-3 & 2-4 THE HOUSING MODEL BY TENURE SUBMARKET	44
2-5 & 2-6 SHIFT IN DEMAND FROM RENTAL TO OWNERSHIP	49
2-7 & 2-8 DEMAND AND CHANGING FACTOR COSTS	52
2-9 RENT CONTROLLED SUBMARKET	55

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## INTRODUCTION

There is probably no topic the subject of more emotional debate than the cost and availability of housing. Despite this concern and the increased diversion of human and capital resources to the study of urban problems and the resultant policy decisions, the problems seem to remain unsolved and in fact grow worse.

It is the intent of this thesis to look specifically at the housing market and more importantly the factors which influence change in the housing market. It has not been surprising that considerable pressure has been applied to the housing supply sector in Greater Vancouver. Unlike most other major Canadian cities Vancouver is faced with a relatively limited amount of land suitable for housing. Moreover growth in Greater Vancouver has been rapid due to population growth generated by the relatively strong economy in British Columbia and the mild climate on the West Coast. Moreover a strong trend toward urbanization and migration to large urban centres has had its impact.<sup>1</sup>

Considerable research has already been directed toward specific problem areas which have resulted. For example, recent research has looked at the shortage of residential rental accommodation in Greater Vancouver.<sup>2</sup> Further research has explored the

shortage of building lots in Greater Vancouver and more generally the supply of new housing in Greater Vancouver.<sup>3</sup> However these problem areas are not the real issues. These problem areas have been created by the responses of business and governments to a more deep-seated problem. The real issues are the preferences of the Canadian consumer which have been molded by years of policies from various levels of government. These policies either directly or indirectly have influenced the Canadian consumer and his choice in housing.

It is the intent of this thesis to demonstrate how these policies have generated shifts in consumer demand which have resulted in a misallocation of the existing stock of dwelling units and given impetus to supply responses which have not been in tune with the needs of the community. Coincidentally these policies have exacerbated shortages in various housing submarkets, in particular the market for rental units and the market for owned units.

The methodology of the analysis will be as follows. Chapter One will look at the characteristics of housing and the characteristics of the market in which it trades to provide a background for those not acquainted with the unique qualities of the housing commodity. These unique qualities place limitations on the numerical measurement of demand, the ex-

isting stock of housing and the flow of new units. Hence rigorous economic analysis often depends on too many assumptions to be of practical value.

Despite these limitations, Chapter Two will provide the basics for the economic analysis of the housing market. The methodology will entail the use of economic statics and although the extent of changes generated by the variables cannot be measured certainly the direction of change and potential impact will be clear. As well the static model will be expanded to show the interdependence of the housing submarkets by tenure.

The purpose of Chapter Three will be to discuss the means by which policies influencing the housing market and the housing market itself can be evaluated. Often it is charged that a housing crisis exists and this chapter attempts to strip away the rhetoric and look at the means by which the equity or efficiency of the housing market can be judged.

Using the first three chapters as a basis for analysis, Chapter Four looks at the consumer's choice in tenure and the economic factors and government policies which influence that choice. It demonstrates the bias toward home ownership which is consistent throughout much policy which, either directly or indirectly, has an influence on the consumption of housing.

Clearly numerous other factors have considerable impact on the demand for housing. To look only at policies which have generated demand and influenced tenure choice would ignore the most obvious variables which influence demand for housing. Chapter Five provides a cursory analysis of some of the major demand factors in Greater Vancouver but in the context of the question of tenure choice.

The conclusions contained in Chapter Six will draw together the theoretical basis for analysis, the analysis of government policies influencing housing demand and tenure choice and the other demand variables. The conclusion will summarize what has gone wrong and why and in the process provide some suggestions for change.

FOOTNOTES - INTRODUCTION

1. N.H. Lithwick, Urban Canada: Problems and Prospects, (Ottawa: C.M.H.C., December, 1970), p. 33, p. 136, p. 181.
2. Robert C. Levine, The Economic Reasons for the Shortage of Residential Rental Accommodation in Greater Vancouver, Master's Thesis, University of British Columbia, 1974.
3. Gary A. Young, The Municipal Subdivision Process in Metropolitan Vancouver, Master's Thesis, University of British Columbia, April 1974; and Ian L. Beveridge, The Land Development Process as it Affects the Supply of Housing within the Greater Vancouver Regional District, (Vancouver: The Real Estate Board of Greater Vancouver, May 1974).

## CHAPTER I

### CHARACTERISTICS OF HOUSING

Before the economics of the housing market can be analyzed the actual commodity which is the subject of this discussion and the market in which it trades must be carefully delineated. There have been attempts to define housing and the market in such a way as to make them quantifiable. The goal of such attempts being to establish some sort of standard and some system of measurement with a view to precise forecasting. Although this type of empirical research can be helpful in describing the nature and direction of human actions it is limited by the quality of the data input and by the fact that it is using past data to forecast future trends. The most serious criticism, however, is that such analysis ignores economic variables such as consumer preferences, prices and incomes when deriving standards and methods of measurement. This chapter will provide some insight into the housing commodity and the market in which it trades in order that later chapters can explore the role of the consumer and his preferences rather than evaluating and measuring the market using some vacuous standard.

## 1.1 A DESCRIPTION OF HOUSING

Housing is a physical object or flow of services for which there exists a consumer demand. It is perhaps most simply defined as shelter but such a simplistic view of a commodity considered to be a right of all is unacceptable. Disregarding for the time being the social issues, housing can be best described in any one or all of three ways.)

### 1.11 Stock

Firstly, the stock of housing or capital assets in the form of housing structures is a quantifiable and more commonly used means of defining the amount of housing available to Canadians. Statistics provided monthly and summarized yearly by the Central Mortgage and Housing Corporation record dwelling starts, completions and units under construction by dwelling type. These are measures of additions to the stock. Dwelling types are defined as single detached, semi-detached and duplex, row and apartment and others. In census years, Statistics Canada actually measures the existing stock of occupied dwellings. For example, in 1971 in the Vancouver Metropolitan area there were 345,870 occupied dwellings, 142,345 of which were tenant occupied with the remaining 59% of the stock being owner occupied.<sup>1</sup>

### 1.12 Flow

The stock approach, however, ignores the concepts of capacity and

quality. Capacity and quality of the housing stock are representative of the flow of services which any given stock can provide and are not easily quantifiable unlike the notion of physical stock. The flow of services approach is the second way of describing housing. This approach negates the analysis of housing as a commodity or good; it now becomes a flexible mix of characteristics determined not only by the nature of the stock but also the way in which it is used.

Why is the concept of flow so difficult to quantify or define? The statistics representing the existing stock or additions to it do not account for size or quality of the units, the sizes of rooms, the age and condition of the unit or external factors such as location, neighborhood and amenities. All these factors are most important in evaluating the flow of services provided by the housing unit. Statistics enumerating the stock or additions to it give no indication of the way in which the stock and the flow of services it provides are used. Variations in demand which establish the trading price also determine the degree to which the stock and flow are employed. Suffice to say that the existence of a single family dwelling implies nothing about the number or size of families which can consume its services, it implies nothing about the number or size of families who may want to consume its services, and finally it makes no value judgement about the degree of usage which is socially acceptable.

The stock of housing can be viewed as assets which have at any given time a certain capital value and rental value. The stock is represented by the market capital value and the flow of services by the market rental value. Although contemporary real estate practice often assumes a constant ratio between the capital value and the rental value such an assumption is undermined by opportunity costs unique to each buyer and inconsistent risk and operating costs between different dwelling units. Nonetheless as the capital value is a means of quantifying the stock of housing, the rental value (which can be established even if the unit is owner-occupied) is a means of quantifying the flow of services. The measurement of stock and flow by market capital value and market rental value ensures that general trends in prices will elicit appropriate responses from the production sector and that capital or rental value will indicate the consumers preference for different types of housing and housing itself, relative to other goods and services.

### 1.13 Tenure

The third means by which housing may be conceptualized is by tenure. Here an understanding of the law of real property is essential to distinguish between the rights of the owner or tenant (leaseholder). Contemporary land law in

Canada is derived from the feudal times in England where over many years a strict set of legal rules grew up for recognizing a limited number of interests in land. Mediæval landlords and their lawyers defined ownership in two main ways: (a) According to the length of time that the holder of the interest would have the right to exclusive possession of the land, called estates in time; (b) according to the kind of use permitted or restricted on the land, called interests less than estates.<sup>2</sup>

Of interest in this analysis are the major categories of estates in time called freehold estates and leasehold estates. The greatest interest a man can hold in land is the fee simple estate, a type of freehold which allows him to hold the land infinitely subject only to its return to the government in the event of his death without having relatives to inherit the property or a will to designate its recipient. A real property owner is said to hold the fee simple in his property.

Unlike the freehold estate, the leasehold estate is an interest in land for a definite period of time. The length of time may vary and leaseholds of ninety-nine years are not uncommon. In a leasehold estate the party to whom the interest is granted is called the lessee or tenant while the grantor of the interest is called the lessor or landlord.

In other parts of Canada, residential leaseholds of one year or more are common while in British Columbia most residential leaseholds are on a month to month basis and the relationship between landlord and tenant is commonly called renting.

It should be noted that the law, when referring to land, generally includes the land and all that is permanently attached to it, including buildings, trees and the like. A fee simple or leasehold interest in land are bundles of rights which are the commodity traded on the market. With more typical commodities the commodity itself rather than the right to its use is traded. The bundle of rights composing a fee simple or leasehold interest may be restricted by any number of statutes, municipal by-laws, interests less than estates such as an easement or covenant, or a mortgage.

There is however a type of fee simple interest which, although a recent concept in both Canada and British Columbia, has enjoyed considerable popularity. This concept is that of the condominium corporation or strata corporation which is most simply defined as "one overall area having within its boundaries certain specified parts owned in fee simple by the individual owners and other areas owned by all the individual owners as tenants in common".<sup>3</sup> The condominium refers to a legal form of tenancy and hence the physical structure

need not be a row house or apartment, although strata corporations often take this form.<sup>4</sup> The typical condominium or strata title owner is similar in many respects to the holder in fee simple of a single detached house but his interest or "bundle of rights" is restricted to the extent that he shares the common area and since he is usually in close proximity to his neighbors his freedom as an occupant is limited almost to the same extent as the renter of an apartment unit.

The concept of tenure should be extended to include the notion of investment and consumption. The home owner at the time of purchase invests to the extent that he commits to pay the full capital market value of the unit either immediately or over a period of time. The renter normally commits to pay as he consumes hence the capital investment must be made by another party, in particular, the owner of the unit. Hence the home owner is both investor and consumer while the renter is simply a consumer.

Housing can be described in many ways. As a physical structure or stock and as a consumption item or flow of services. Moreover it can be delineated according to tenure or the bundle of legal rights attached to the unit. Having explored the nature of housing by looking at the different ways it is viewed it is essential now to look at the nature of the commodity and the market in which it trades.

## 1.2 THE NATURE OF THE COMMODITY AND THE MARKET

A market is perhaps best described as the context in which the pricing mechanism works to allocate goods and services among competing consumers. Chapter Two will deal with the behaviour of the housing market but before it is necessary to discuss the unique characteristics of the housing commodity and the market in which it trades.

Traditional economic analysis builds from the concept of a market which has perfect competition.

"....each economic agent is so small relative to the market that it can exert no perceptible influence on price; the product is homogeneous; there is free mobility of all resources, including free and easy entry and exit of business firms into and out of an industry; and all economic agents in the market possess complete and perfect knowledge." 5

Such a market would ensure the efficient organization of the country's resources. Dwelling units are immobile, durable, heterogeneous and very expensive; there is imperfect communication in the marketplace and government intervention is common place. The combination of these characteristics has considerable influence on the efficient organization or allocation process in the housing market precluding the operation of a perfectly competitive market.<sup>6</sup>

### 1.21 Immobility of the Commodity

A dwelling unit once constructed is virtually immobile. This

ensures that the market will be local with transportation costs a variable in the consumers decision-making process. Unlike a commodity such as gasoline where the transportation cost of the commodity itself is a factor, the housing commodity requires that the consumption of housing services take place where the service is offered and hence the consumer must transport himself. Immobility has demanded and resulted in the development of complex transportation networks and, consequently, relative land value is, to a large extent, dependent on the proximity, ease and cost of transportation. Obviously these implications apply not only to housing but also to industry and have been a key factor in determining the nature, the rate and the extent of urban growth.<sup>7</sup>

Not only is each individual housing unit immobile but also the supporting infrastructure. Roads, utilities and other services such as schools and community centres, once established, are immobile just as housing units are, and the permanence of this infrastructure locks the market into a predetermined pattern. The permanent nature of these major capital assets adds to the inertia of the housing sector.

This inertia is particularly important when externalities are brought into the picture. Consider the influence on surrounding dwelling units of airport expansion, freeway and rapid transit construction, factory noise and smoke pollution.

## 1.22 Durability of the Commodity

Housing is a durable commodity. Hence at any one time the market may consist of dwelling units ranging in age from new to over 100 years old in Canada and perhaps centuries old in the United Kingdom and on the Continent. Purchases of durables are characterized firstly by their dependence on prior purchase decisions and secondly by their sporadic nature. In other words, once a purchase is made it is not likely to be repeated at least in the short term due to the long life of the commodity. Due to the large economic commitment required purchases are made based on current and anticipated economic conditions and hence effective demand can be volatile. There may or may not exist substitutes for the physical asset but substitutes do exist through varying legal interests in the commodity. For example, houses may be rented or owned, automobiles may be rented or owned and so on. By their nature durables are not purchased to be consumed but for the flow of services they provide.<sup>8</sup>

Both the prior characteristic of immobility and that of durability preclude flexibility from being readily present in the housing market. New additions to the housing stock can only occur slowly, and growth and change is incremental in nature. This situation is further aggravated by building restrictions, zoning by-laws<sup>9</sup> and by other policy measures such as rent control.<sup>10</sup> Some flexibility is present in the

existing stock and this characteristic is best represented by the conversion of existing single detached houses into duplexes or multiple-family apartments. In Vancouver some of the large older homes in the Shaughnessy and Kitsilano areas have been converted (where controls have permitted) and are typical of the change which takes place in the inner area of most major urban areas subsequent to suburban growth and coincident with rising land values in the central city.

To some degree flexibility exists as a result of the rate of utilization. Although rate of utilization is most readily indicated by vacancy rates it is also important to consider utilization in a less measurable and less apparent context. The phenomena of doubling or undoubling adds great flexibility to the housing stock. Statistically this may be measured in terms of the distribution of households among the occupied dwelling units, the distribution of persons per room and others.<sup>11</sup> Vacancy and utilization are important indicators in the market as measures of flexibility of an immobile and durable commodity.

### 1.23 Heterogeneity of the Commodity

In a market where perfect competition exists it is a provision that the product of one seller be identical to that of another

seller, or homogeneous. It is argued that the producer who has a slightly differentiated product has a degree of control over the price of his specific variety, a situation which is at odds with requirements for perfect competition.<sup>12</sup> Edgar O. Olsen argues that in fact perfect competition can exist in the housing market because it is not the heterogeneous dwelling unit which is the commodity but a homogeneous "unobservable theoretical entity called housing service".<sup>13</sup> This approach, though it may be valuable for theoretical analysis is lacking in practice because the homogeneous entity of housing service cannot be defined and, as Olsen admits, it is "unobservable". The complexity of the housing commodity due to variations in age, tenure, space, rent, price, quality, location, amenity, neighborhood, transportation and work opportunities guarantee that the definition of a standard unit which is homogeneous can only be an intellectual exercise.

A characteristic which is helpful in dealing with a heterogeneous commodity is that of substitutability. In the housing market though the product is heterogeneous most of the products are only slightly differentiated and hence can be substitutes for one another. Substitutability is a characteristic common to any durable good and allows the type of market to exist where purchases are sporadic due to the ability of the consumer to postpone purchase until his economic circumstances are

appropriate. A range of legal interests in real property allow the consumer to rent or lease rather than own a dwelling unit, substituting one interest in land for another.

An economic definition of substitute commodities is provided by the concept of cross-elasticity. If a rise in price of commodity "A" increases the demand for commodity "B", the two commodities are said to be substitutes. Although housing is a heterogeneous commodity the product is grouped into clusters of substitutes or submarkets, each product within the submarket providing a flow of housing services of equal utility to the consumer. The consumers utility decision is based on the list of characteristics mentioned prior - location, age, tenure, space, rent, price, quality, amenity, neighborhood, transportation and work opportunities. Professor F.G. Pennance argues that housing submarkets "are highly artificial constructs since they rest on possibilities of substitution across a number of these 'frontiers'. The classification of housing by common physical or price characteristics may therefore not be very helpful or even relevant for economic choice, since some of the closest substitution links may exist between housing of completely different location, type and value."<sup>14</sup>

The Greater Vancouver housing market will be divided into submarkets by tenure for the purposes of this analysis. The most important 'frontier' in view of the hypothesis is that

of tenure, the choice between rental and ownership. The restrictions on analysis based on such an artificial classification must be recognized at the outset as the customer does not view his choice so simply.

#### 1.24 High Cost of the Commodity

High acquisition cost relative to other consumer goods is a characteristic of most durable commodities. Since the cost of housing is so high relative to a majority of durable commodities in the household budget cost should be considered a separate characteristic.

Location is a major factor in land value and the determination of land use but the value of structures in existence dominates land use patterns. For example, the redevelopment decision is deferred until the discounted value or 'net present value' of the expected flow of net income from a new building exceeds that from the present building by more than the cost of demolition and rebuilding. Hence it is not the physical durability of the housing product but its economic value which determines what adjustments occur in the marketplace. These two characteristics are not to be confused because with fluctuations in supply and demand dwelling units often outlive their economic value. At the same time, durability and immobility slows down the adjustment of supply to changes

in demand so that "in the lay-out and building pattern of urban areas the market situation always appears to be one of disequilibrium."<sup>14</sup>

The high cost of housing causes consumer decision making to be dependent on the economy; the effect of substitution which allows massive shifts of consumer preference from one form of tenure to another hence results in volatile demand. This characteristic has implications for the housing construction industry. It must be flexible hence Canadian home builders for the most part operate so that they can be here today and gone tomorrow. In British Columbia, the majority of builders are small, not heavily capitalized and dependent on others to ensure an orderly and profitable development process.<sup>16</sup> Mortgage funds, land, construction materials and labour costs are all outside the control of the builder hence he is a price taker. The development approval process is a further constraint within which the developer-builder must operate.<sup>17</sup> The characteristics which ensure that the housing market is often in disequilibrium guarantee that the housing construction industry is almost as fickle as the consumer in order that the industry survive. This is a vicious circle.

What exactly is meant by high cost? There exists no agreement on what housing should cost but many housing authorities base

policy on a 20-25% of gross income or total expenditure rule of thumb. For example the Assisted Home-Ownership Program under the new sections 34.15 and 34.16 of the National Housing Act limits the expenditure of eligible families to no more than 25% of their gross income in meeting the monthly costs of mortgage loan repayments and municipal taxes but excluding operating costs.<sup>18</sup> It must be recognized that such figures are simply conventions and should be regarded as such although there is some agreement among land economists as to the level that convention has established.<sup>19</sup> Needless to say 20-25% of income is a sizeable proportion to spend on one commodity.

The concept of substitution of one form of tenure for another has already been introduced. A further reason for this activity is the high cost of the housing product which has resulted in different ways of paying for basically the same flow of services. A residential leasehold allows a month to month payment with minimal additional financial liability. Leaseholds can be prepaid and prepayment of a long lease can be virtually equivalent to the market value of the fee. If a property in fee simple is not purchased outright a sizeable initial cash outlay is demanded and the title to the property is often hypothecated by a mortgage agreement which outlines a repayment schedule for the balance, each payment a combination

of interest on the principal and a return of part of the principal. The existence of residential leaseholds and a mortgage market is for the most part due to the high capital cost of the housing commodity. Naturally the availability and cost of mortgage loans becomes a major factor in consumer and developer decision making.

#### 1.25 Imperfect Communication within the Market

It is a pre-requisite for perfect competition that "all economic agents in the market possess complete and perfect knowledge." It is possible to argue that the real estate industry through multiple-listing services and private rental services along with newspaper advertising go a long way toward providing a workable communications process regarding the commodity being traded in the market. Unfortunately, the complexity of the product itself and of legal transactions ensures that the individual in the marketplace cannot at one time be aware of all the factors which might come to play on his decision. It is for this reason that intermediaries such as real estate agents and lawyers have become necessary.

For most Vancouverites the purchase of a home is seldom undertaken more than two or three times in a lifetime.<sup>20</sup> The procedure is complicated and the transactions costs are high. The information which the transactions costs represent is available to any agent in the market place but not without lengthy research, hence the existence of intermediaries in

the marketplace. Ernest M. Fisher succinctly describes the market for homes in fee.

In most cases both the buyer and seller are inexperienced in the real estate market. The transactions however, involve such technical aspects as title search, title assurance and other details unfamiliar to the inexperienced, and, as a consequence, different specialists participate in the transaction at one stage or another. In this situation the buyer's or seller's decisions are frequently made more on the basis of a specialist's advice than as a result of his own analysis or understanding of the transaction, and the outcome may depend more on the persuasiveness of the specialist than on the merits of the terms. In such a market the prices of almost similar homes may vary widely. 21

The rental market is less hampered by communication problems. In the apartment market a more standardized product exists and the turnover is much more rapid. The lack of complexity of the rental commitment makes it attractive to the more mobile such as young families, singles and transients and hence the rapid turnover. Fisher nonetheless describes the rental market as one where information is greatly restricted.<sup>22</sup> The rental market for single detached homes could not be described as being as efficient as the apartment rental market since the product is as varied as the single detached homes in the ownership market. Moreover houses for rent at least in the Vancouver area are not common.<sup>23</sup> In a rental market where vacancies are extremely low such as currently exists in Vancouver information on rental units comes at a premium and as a result rental services free to the landlord

and charged to the prospective tenant have flourished. Suffice to say that despite the communications mechanisms which have evolved, the market for homes in fee and homes for rent even at best does not consist of agents having perfect and complete knowledge.

#### 1.26 Government Intervention

The prior characteristics of housing and the market in which it trades might be termed internal forces. However any discussion of the subject is incomplete without mention of the external forces created by government intervention. Government intervention is so common that it must be considered by itself a characteristic of housing markets. Intervention is justified by policymakers on the grounds that where the market mechanism does not provide for the needs of society the government must step in.

Government responses come from many directions. In Canada policies originate from three and sometimes four "levels" of government. Federal, Provincial, Regional and Municipal governments are directly involved in various aspects of the housing market. Strange as it may seem there is too often a lack of coordination or even communication between these sources of power in the market.

Not only does housing policy originate from four levels of government, but also policy directed toward other social and economic areas, as distinct from housing, may have a very real influence on the housing market. Obvious examples include transportation policy and immigration policy. Even within the housing market, regulation comes from all directions with different objectives in mind and often little concern for coordination. Prime examples include land use control and the real property tax. So, even within various levels of government, different departments with their own policy goals have a very real influence on the housing market at the expense of a cohesive general housing policy.

If a cohesive policy existed there are two directions it might take. The first might attempt to make the market mechanism work better while the second might replace the market mechanism entirely. Often policymakers justify the second approach using the argument that the market mechanism has already failed to solve the problem. Professor Pennance undertakes a discussion of this policy decision concluding that the competitive market cannot be accused of failing to solve the problem because a competitive market has never existed. Although he refers to the British market much of the commentary is easily applicable to Canada.

....Housing...has been shot through with price controls, fiscal incentives and subsidies, disincentives to proper maintenance, planning restrictions on new building, legislative and institutional obstacles to property transfers that have hindered mobility between regions and tenure groups, and state encouraged or imposed standards of housing and amenities fixed without regard to the preferences of consumers.<sup>24</sup>

He further argues

If there are no restrictions on price, consumer choice, or the entry of new producers or sellers, a strongly competitive market will ensure that the size, quantity and quality of houses that are built, and the distribution of the existing stock will be dictated by the tastes, incomes, and preferences of households. The existence of real or 'imagined' imperfections in such a market is no signal for the wholesale abandonment of these very substantial benefits.<sup>25</sup>

## FOOTNOTES - CHAPTER 1

1. Canadian Housing Statistics, (Ottawa: Economics & Statistics Division, C.M.H.C., March, 1974), p. 106 and 1971 Census Population and Housing Characteristics by Census Tract, (Ottawa: Statistics Canada, August 1974).
2. A discussion of land law and its origins suitable for the layman is included in J.E. Smith and D.A. Soberman, The Law and Business Administration in Canada, (Toronto: Prentice-Hall, 1964), p. 370-392.
3. S.W. Hamilton, I.Davis and J. Lowden, Condominium Development in Metropolitan Vancouver, (The Real Estate Council of Greater Vancouver, December 1971), p.2.
4. A comprehensive discussion of the condominium concept and the Greater Vancouver experience is presented in S.W. Hamilton and Ronald Roberts, Condominium Development and Ownership, (Real Estate Board of Greater Vancouver, October 1973).
5. C.E. Ferguson, MicroEconomic Theory, (Homewood, Illinois: Richard D. Irwin, 1966), p. 194.
6. The negative nature of the term 'imperfect market' does not necessarily imply that no hope exists for the housing market. In fact, few, if any goods trade in a market which could be defined as perfectly competitive. What is more important is that unless the market economy is to be rejected entirely, policies must be directed towards allowing the housing market to respond effectively. The concept of efficiency and allocation is discussed in depth in Chapter 3 of this thesis.
7. A short summary of early theories about patterns of land use and some contemporary concepts is included in Wallace F. Smith, Housing: The Social and Economic Elements, (Berkeley and Los Angeles: University of California Press, 1970), pp. 325-55.
8. A discussion of the unique characteristics of consumer durables is presented by Michael K. Evans in Macro-Economic Activity: Theory Forecasting and Control, (New York: Harper & Row, 1969), p.150-183. Also by Arnold C. Harberger (ed.) in his introduction to The Demand For Durable Goods, (Chicago: University of Chicago Press, 1960), p. 3-9.

9. F.G. Pennance & Hamish Gray, Choice in Housing, (London: The Institute of Economic Affairs, 1968), p. 8.
10. The 'fossilization' of the housing market because of rent control is described by F.A. Hayek, 'the repercussions of rent restriction' in Verdict on Rent Control, (London: The Institute of Economic Affairs, 1972), pp. 6-7.
11. Chester Rapkin, Louis Winnick and David M. Blank, Housing Market Analysis, (Washington, D.C.: Housing Market and Home Finance Agency, 1953), Chapter 4.
12. C.E. Ferguson, Micro-Economic Theory, p. 193 and pp. 252-3.
13. Edgar O. Olsen, "A Competitive Theory of the Housing Market", American Economic Review, Volume 59 (September 1969), p. 613.
14. F.G. Pennance, Housing Market Analysis and Policy, (London: The Institute of Economic Affairs, 1969), pp. 17-18.
15. Pennance, Housing Market Analysis and Policy, p. 14.
16. Edmund V. Price, The Housebuilding Industry in Metropolitan Vancouver, Master's Thesis, University of British Columbia, April 1970.
17. Gary A. Young, The Municipal Subdivision Process in Metropolitan Vancouver, Master's Thesis, University of British Columbia, April 1974.
18. Canada Statute, National Housing Act, 1973, Sections 34.15 and 34.16.
19. Adela Nevitt, Housing Taxation & Subsidies, (London: Nelson 1966) p. 135 and Lionel Needleman, The Economics of Housing, (London: Staples Press, 1965), p. 160.
20. A survey of census tract data in Greater Vancouver indicates that where a high proportion of the homes are owner-occupied and where the tract has not been recently developed a significant proportion of the homes have been occupied by the current owner for more than ten years. 1971 Census, Population and Housing Characteristics by Census Tract, (Ottawa: Statistics Canada, August 1974).

21. Ernest M. Fisher, Urban Real Estate Markets; Characteristics and Financing, (New York: National Bureau of Economic Research, 1951), p. 45.
22. Ibid, p. 92.
23. The 1971 census data indicates that areas which are predominantly single family are also predominantly owner-occupied. 1971 Census Population and Housing Characteristics, (Ottawa: Statistics Canada, August 1974).
24. F.G. Pennance, Choice in Housing, (London: Institute of Economic Affairs, 1968), p. 8.
25. Pennance, Choice in Housing, pp. 9-10.

## CHAPTER II

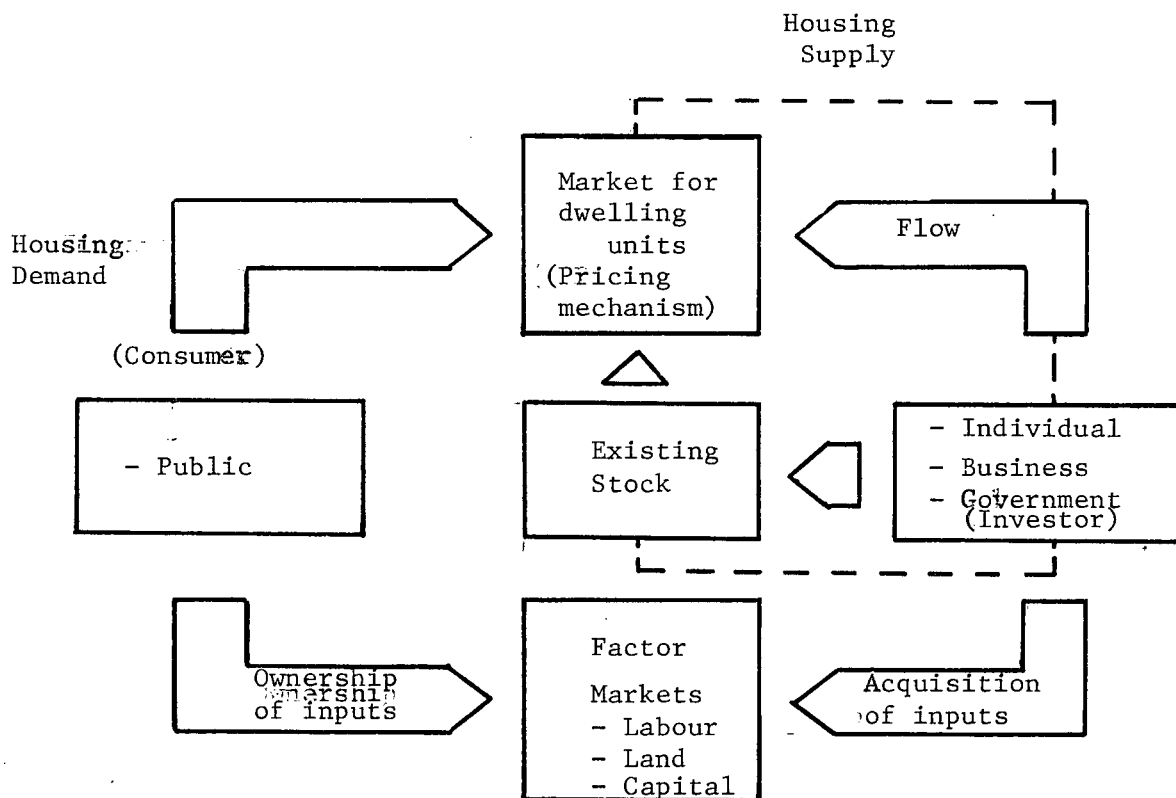
### THEORY OF THE SUPPLY OF AND DEMAND FOR HOUSING

While describing the characteristics of housing and of the market it has been difficult to avoid infringement upon the dynamics of housing market behaviour. This chapter will deal specifically with the interaction of supply and demand in the housing market; the purpose at this stage will simply be to provide an overview of market activity and to build an economic model as a basis for later analysis.

#### 2.1 BASIC SUPPLY AND DEMAND

A highly simplified representation of the housing market is shown in Figure 2.1. It represents the market process of balancing, through the use of the price mechanism, the demands of consumers with the quantity of goods being produced. Numerous factors influence the forces of supply and demand as they come together in the market. This paper will deal primarily with the demand side and the demographic, income, price, credit and policy variables which influence that demand in Greater Vancouver. The supply side is influenced by another set of variables which will be discussed briefly but detailed study of these factors is not within the scope of this paper.

Figure 2.1 Overview of the Housing Market



The bare elements of supply and demand are as follows: 1) When the price of a good is raised (with all other things held constant) less of it will be demanded. 2) Similarly the supply schedule shows that as the price of a good is raised (with all other things held constant) more of it will be supplied. The endogenous variables are price and quantity and the exogenous variables are held constant. The equilibrium price is that at which the amount willingly supplied and willingly demanded are equal. This is the price mechanism at work and this notion combined with that of marginal utility will ensure that scarce resources are not misallocated provided that income and wealth are distributed equitably and that there are no externalities.

Shifts in supply and demand result from changes in exogenous variables. For example, the flow of new units would increase and ultimately the supply would shift (increase) as a result of reduced production costs. Increased demand for housing can result from an increase in the number of consumers demanding the same housing services, a constant number of consumers demanding more housing services per consumer or a combination of both. Any changes in demand induced by exogenous variables (not price) will result in a shift of the curve.

## 2.11 Utility and Consumer Choice

Demand for housing is also related to the relative demand for

other goods. The concept of utility and marginal utility is useful to understand budget constrained consumer decision making. Utility is the satisfaction derived from the consumption of a good or service during a given time period. The more an individual consumes the more his utility increases, however, the marginal or extra utility added by the last unit consumed decreases with the consumption of successive new units.

Considering the consumers demand for a range of goods and services, indifference curve analysis suggests that the consumer will maximize his satisfaction with the combination of housing and other goods at a point where the line of attainable combinations or the budget line meets the consumers indifference curve between housing and other goods. Here the marginal rate of substitution between housing and other goods is equal to the ratio of the price of other goods over the price of housing. The consumer maximizes his utility by consuming quantities of housing and other goods such that the marginal utility per dollar of each alternative is equal.<sup>1</sup>

That is:

$$\frac{MU_H}{P_H} = \frac{MU_{OG}}{P_{OG}}$$

Where

$$MU_H = \text{Marginal utility of housing}$$

$$P_H = \text{Price of housing}$$

$MU_{OG}$  = Marginal utility of other goods

$P_{OG}$  = Price of other goods

Hence any factors which influence price or marginal utility on either side of the equation will change the mix of goods consumed.

## 2.12 Tenure Choice

As has been discussed housing is a heterogeneous commodity and demand is difficult to classify. For the purposes of this analysis two classifications by tenure will be considered. There exists a demand for homes in fee or home-ownership and for residential leaseholds or rental units. Hence in the context of utility and indifference analysis the consumer will make his decision based on the utility to be derived from either home ownership or rental and their relative price and the utility to be derived from other goods and their relative price. The classification of demand according to tenure is highly artificial as consumer preferences are based not only on tenure and structural form but also location, age, and work opportunities. Demand is the summation of every consumers utility based decision based on how much housing and what characteristics will maximize his utility given his preferences and resources.

## 2.13 Supply and Demand Variables

Before going on it would be valuable simply to list those

variables which have an influence on the supply of and demand for housing. Supply and demand are closely inter-related in the housing market and a number of variables are common to both supply and demand. Those factors which can influence supply include:

1. Housing prices and rents
2. Development cost variables
  - a) Construction costs
  - b) Land costs
  - c) Interim financing costs
3. Non-financial operating costs
  - a) Real estate taxes and operating expenses
  - b) Capital cost allowance and income tax
4. Financial variables
  - a) Mortgage rates
  - b) Non-price mortgage terms and mortgage availability including loan to value ratios, amortization period, term to maturity and quality constraints
5. Builder, developer and lender organization, structure and expectations.

Those variables which influence demand include:

1. Demographic variables
  - a) Population size
  - b) Age-sex composition of the population
  - c) Number and size of family and non-family households
  - d) Internal migration and immigration
2. Income and employment variables
  - a) Personal disposable income, past, present and expected
  - b) Income distribution
  - c) Employment and unemployment

3. Consumer asset holdings, size and liquidity
4. Price variables
  - a) Housing prices and rents, taxes and operating expenses
  - b) Alternative consumer good prices
5. Financial variables
  - a) Mortgage rates
  - b) Non price mortgage terms and mortgage availability
    - loan to value ratio
    - amortization period
    - term to maturity
    - quality constraint
  - c) Imputed cost of equity funds
6. Amenities, Transportation and services
7. Consumer tastes and preferences and expectations<sup>2</sup>

Even though some of the variables such as prices and rents and the financial variables are shared by both the supply and the demand sides those factors which influence demand combine along with shifting consumer tastes, preferences and expectations to make the pressures of demand fluctuate quite dramatically in the housing market.

Perhaps the best way to demonstrate the dramatic fluctuations in demand for housing is to look historically at consumer preferences. For the purposes of this paper the preference for rented or owned dwelling units must be explored and both cross sectional and longitudinal observation of consumer preference will be helpful in giving some insight into demand volatility.

Using a longitudinal approach it is possible to see how changing needs, resources and preferences over the life cycle result in changes in demand. These life cycle changes combined with changes in incomes, subsidies, mortgage availability and so on require that their influence on the market be considered carefully as they are far from constant. Much contemporary analysis assumes that demand is simply a force which must be met; otherwise, the processes on the supply side must be improved. A more rational approach would be to recognize that the combination of volatile demand and a relatively fixed supply must result in an imbalance in the market place.

So far, the dominance of demand factors in housing market analysis has been assumed. The dominance of demand is essential to the thrust of this paper, hence, a main purpose of this chapter is to justify such a concept.

#### 2.14 Supply of Land

It is surprising that there could be so much disagreement with the idea that demand dominates the price determination process in the housing market. The very basics of urban economic theory support this concept. Unimproved land is in fixed supply.<sup>3</sup> Hence the value paid for land to put it to use depends on the demand for it. In economic terms the supply of unimproved land is perfectly inelastic. Hence for a given stock, the greater the demand the higher the price and the

smaller the demand the lower the price. The price for land either improved or unimproved depends on the demand which in turn depends on the use to which the land can be put. Of course, all land is not unimproved but in urban areas land use controls ensure that at least in the short run the supply of urban land for particular uses is fixed while in rural areas the length of time required to bring unimproved land into production ensures that the supply is again nearly inelastic in the short run. Hence demand is the only variable and price changes are the result of changes in demand. Land can be used more intensively but as a rule the shift to more intensive use is not a short run phenomena.

The value of land is determined in the first instance by location. Although this basic notion is complicated in an urban setting by the existence of land use controls, transportation facilities and other services the principle as described by Hurd still holds true. "Since value depends on economic rent and rent on location, and location on convenience, and convenience on nearness, we may eliminate the intermediate steps and say that value depends on nearness."<sup>4</sup> Location and use are those characteristics of land which generate demand and the possible use of the land determines the price that will be bid. Hence it is not the demand for land itself but the demand for the services produced by the "highest and best use"<sup>5</sup> of the land which determines price.

Ricardo correctly viewed rents (land values) as transfers rather than costs and he argued, "corn is not high because rent is paid, but rent is paid because corn is high..."<sup>6</sup> The argument regarding housing is parallel.

## 2.15 Supply of Housing

Supply at any point in time is a large stock of immobile, durable and relatively inflexible units. Increments in supply are provided by new construction which at best is a slow process.<sup>7</sup> Actors on the supply side, generally business or government provide increments to the standing stock either by new construction or conversion of the existing stock. The immobility, durability and high cost of new units ensures that investors must not only be assured of an existing demand but also a continuing demand for the services provided by the units. Here the distinction must be made between investors and builders. The builder simply constructs the unit while the investor provides the capital with the expectation that over a period of time the returns generated will justify his opportunity cost. In the case of single family homes or strata title units the return to the investor is generated immediately that the unit is sold. In the case of rental units the return accrues to the investor over a period of time.

The large amount of capital required to produce housing units either for ownership or for rental force the investor to be

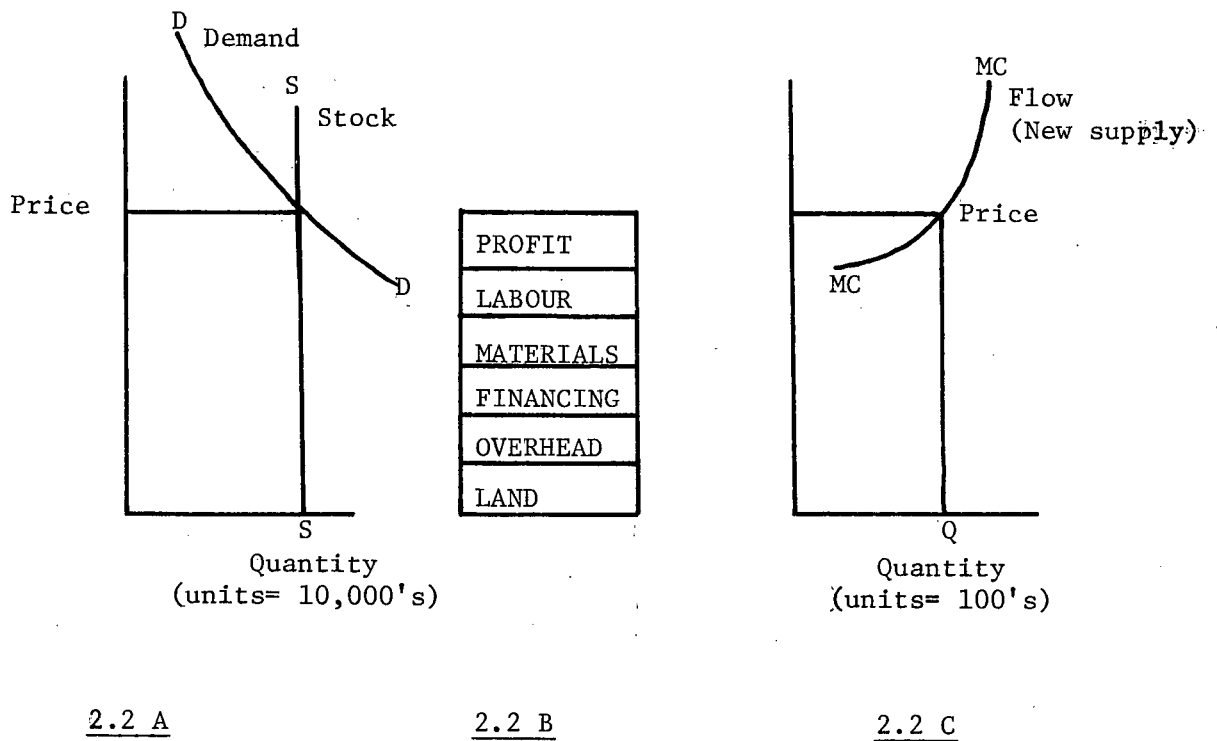
certain of his market. The immobility and durability of the commodity ensure that the investor cannot take his product to the consumer reinforcing the investor's need for certainty of demand in the marketplace. Housing is a complex commodity which results in a lengthy and complicated production process involving numerous tradesmen, planners, architects, entrepreneurs and regulatory bodies.<sup>8</sup> Because of these various factors the supply of housing is virtually inelastic. Only over a long period of time can new construction or conversion be significant relative to the existing stock.

## 2.2 THE ECONOMIC MODEL OF THE HOUSING MARKET

The key to the question of supply in the housing market is the determination of price levels and the consequent rate of new construction. The price for newly constructed units, which in a particular year can amount at most to 3-4% of the existing stock, is determined by the price of the available stock. As a result the factors of production in the new construction process only influence price in the long run. The average market price of housing at a given time is determined by the demand for the existing stock as is shown in Figure 2.2A.

Housing is not homogeneous hence particular units will differ in price. The general level of prices, however, determines the profitability of building new units. Individual investors calculate the costs of the factors of production, labour, materials, financing, overhead and land in order to arrive at

Figure 2.2 Stock and Flow Model of the Housing Market



Source: - David Baxter, Speculation in Land, Urban Land Economics  
 Report no. 7, Faculty of Commerce and Business Administration,  
 University of British Columbia, p. 5.

an estimated profit. This procedure is diagrammed in Figure 2.2B. Depending on the margin of profit, developers respond by adding the appropriate number of new units in Figure 2.2C.<sup>9</sup>

Clearly lower factor costs increase the profit at the margin for the investor. However it should be noted that factor costs are not a once only calculation. Financing costs and materials and labour costs can change rapidly enough to render an initial investment decision invalid. For the investor in rental units ongoing costs such as financing and operating costs can squeeze the original profit margin. Investors must compete in existing markets for the factors of production hence they act as price takers in the markets for labour, materials, financing, overhead and land. Moreover as the price of housing increases the higher margin of profit will attract more entrepreneur-investors with the result that factor costs will be bid up.

It must be recognized that capital is mobile. For entrepreneurs to invest in the production of new housing units either for immediate sale or for rental the projected rate of return must be higher or at least as great as the entrepreneur's opportunity cost. If the anticipated profits from the production of new units does not exceed the investor's opportunity cost investment in new production will not take place. Hence there will be no flow of new units. The opportunity cost of

investing in a new alternative is defined as the yield on the best investment alternative.<sup>10</sup>

### 2.3 THE HOUSING MODEL BY TENURE SUBMARKET

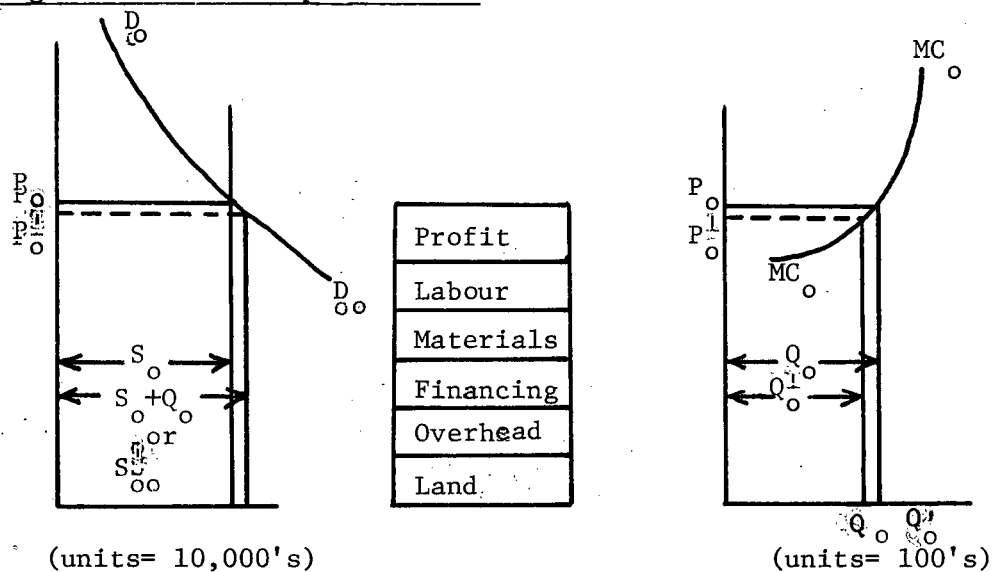
Having introduced the basic economic model for the housing market this model should now be considered in the context of the two tenure classifications. Because of the differing utility to be derived according to tenure, demand in the rental submarket may be quite different from demand in the ownership submarket. Consequently the general model should be extended into a model with two submarkets defined according to tenure.

The two sub-market model is diagrammed in Figure 2.3 and Figure 2.4. In each submarket there exists a stock sector (2.3A and 2.4A) and a flow sector (2.3B and 2.4B). The stock sector indicates the demand for and the existing stock of housing units, either owned or rented. The flow sector indicates the intersection of the price (determined in the stock sector) with the marginal cost curve of new construction. That point of intersection in each submarket indicates the level of new construction which will take place according to tenure type.

Figure 2.3A shows the process of price determination in the ownership submarket. Supply is represented by  $S_0$ , the stock

Figure 2.3 and 2.4 The Housing Model by Tenure Submarket

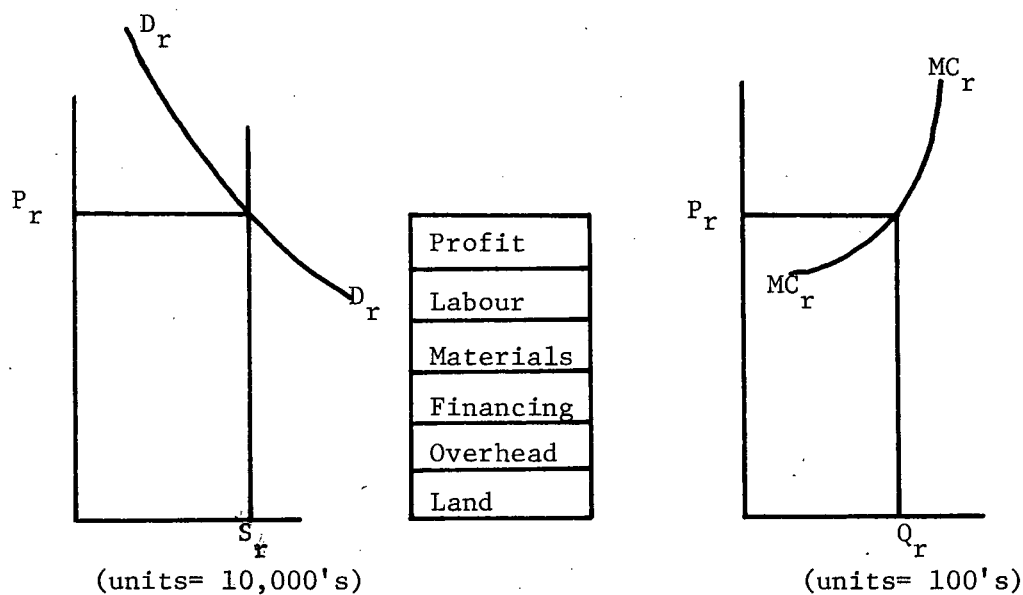
Figure 2.3 Ownership Submarket



2.3 A

2.3 B

Figure 2.4 Rental Submarket



2.4 A

2.4 B

of dwellings currently owned or for sale. Obviously the stock in the short run is fixed as  $S_0$ .  $S_0$  is perfectly price inelastic, that is, the stock is fixed and a change in price will not immediately result in new units on the marketplace.  $D_0$ .  $D_0$  is the demand for owned units which is downward sloping to the right simply because demand increases as price falls, in this respect demand is relatively price-elastic.<sup>11</sup> The equilibrium price is  $P_0$ .

Figure 2.3B shows the determination of new construction in the ownership submarket, in other words the flow sector of the ownership submarket.  $MC_0$ .  $MC_0$  is the marginal cost of new construction to the developer-builder and the level of new construction or  $Q_0$  is determined by the intersection of  $MC_0$ .  $MC_0$  with the price level  $P_0$ , determined in the stock sector of the ownership submarket.<sup>12</sup> To relate these figures to the previous discussion no new construction would take place if the curve  $MC_0$ .  $MC_0$  fell in its entirety above the price level  $P_0$ . No new construction would take place until demand  $D_0$ .  $D_0$  shifted up to create a price equilibrium which would intersect with  $MC_0$ .  $MC_0$  or until factor prices fell such that  $MC_0$ .  $MC_0$  shifted down where it would intersect the existing  $P_0$ . Figures 2.4A and 2.4B are identical to figures 2.3A and 2.3B respectively although they represent the stock and flow sectors of the rental submarket.

In a similar model L.B. Smith suggests that the flow sector of the ownership submarket represents the production of one quarter, arguing that in a period of three months new construction cannot have any effect on price.<sup>13</sup> Since new construction contributes at a maximum 3-4% of the existing stock in a given twelve month period, the existing stock as represented by  $S_0 S_0$  in the price determination sector will shift only marginally to the right even over a one year period resulting in a minimal change in price level. Figure 2.3A has been altered to show the influence of the addition of  $Q_0$  units in the price determination sector given that other aspects of the model remain static for the length of time required to produce  $Q_0$ .

The model appears to assume that the entire dwelling stock both in the ownership submarket and the rental submarket is utilized. Since dwelling units for sale or for rent often remain vacant there should be some way of taking this into account. Smith suggests that vacancies can be built into the model by letting the stock of dwelling units and their demand jointly determine price and vacancy levels, and by inserting the capitalized expected cost of vacancies as an argument in the cost function  $MC_0 MC_0$  or  $MC_r MC_r$ .<sup>19</sup> This is a reasonable approach as the developer will build into his cost function the holding costs of a new dwelling before it is sold or the expected vacancy rate of a rented unit. As

demand increases the holding period or the vacancy rate will fall shifting the developer's cost curve downward and triggering new construction provided again that the equilibrium price intersects the marginal cost curve at some point.

## 2.4 MANIPULATION OF THE MODEL

Having constructed a model which will be the basis of this study changes in the variables which influence the various aspects of the model can be shown and the repercussions traced through the sectors of each submarket. The aspects of the model which would most often be subject to shifts because of changing variables are the demand curves. The marginal cost curves as well could be subject to shift by the supply variables but usually only in the long run. The stock in both submarkets will shift only in the long run and since marginal revenue or price is an equilibrium condition it will not change independently unless controls are instigated.

### 2.41 Changing Demand Variables

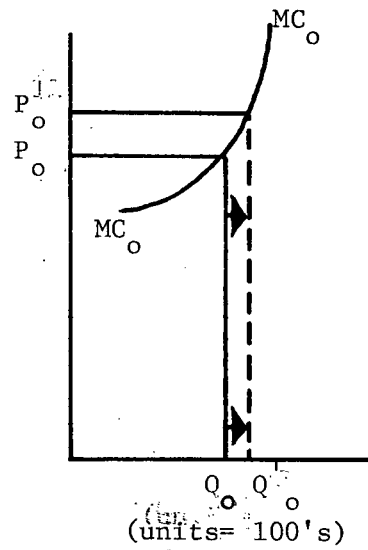
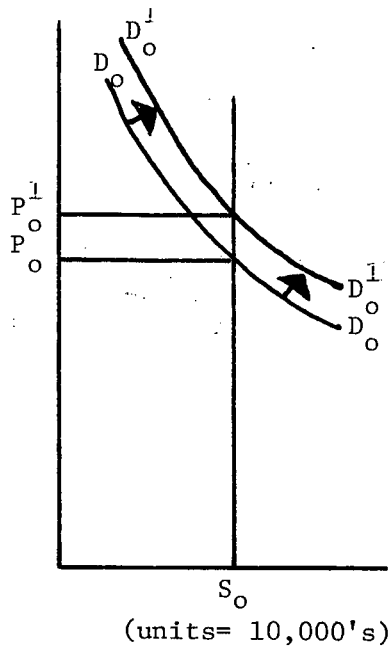
There are two types of shift in demand which may be observed. Firstly demand in both submarkets may shift up or down due to demographic changes. Varying migration rates, headship or family formation rates may result in changes in the number of households in the market place bidding for both owned and rented accommodation. If for example in-migration takes place

there will be more households bidding for the existing stock of owned or rented units. Vacancies will drop and eventually prices will rise. A price rise is essentially an upward shift in marginal revenue hence in the flow sector of each submarket the intersection of the marginal revenue and marginal cost curves will result in a higher level of new construction. However, implicit to such a change in production are higher factor costs due to increased demand for inputs of the construction process. As new construction is completed and sold or rented the stock curve as represented by  $S_o S_o$  or  $S_r S_r$  will shift out very slightly but not far enough in the short run for prices to be influenced to any degree. In fact it is more likely that ongoing changes in demand will have more than negated the marginal benefits of new construction in such a short time period.

Secondly, demand may shift between submarkets rather than a overall growth in demand in both submarkets. Due to demographic changes or variations in homeowner subsidies it is possible for demand to shift between submarkets with demand shifting up in one submarket and down in the other. If, for example, a home-ownership subsidy was increased, demand in the ownership submarket would shift up as many households who previously were not in that submarket would shift over from the rental submarket. Such a shift in demand is indicated in figures 2.5 and 2.6. The result would be increasing vacancies in the rental market along with falling prices and a decreasing number

Figure 2.5 and 2.6 Shift in Demand from Rental to Ownership

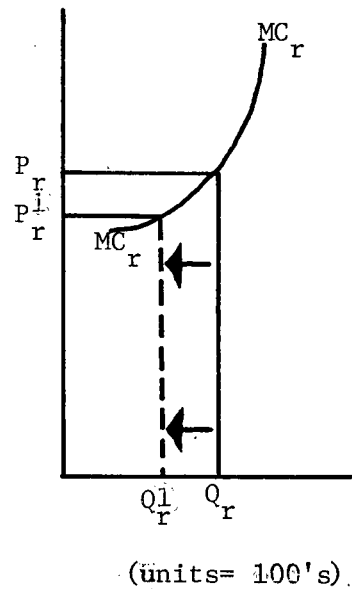
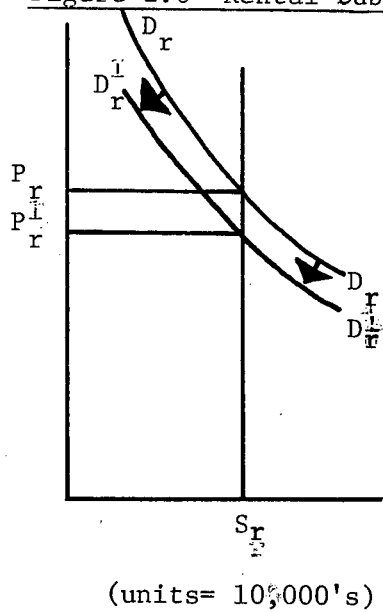
2.5 Ownership Submarket



2.5 A

2.5 B

Figure 2.6 Rental Submarket



2.6 A

2.6 B

of vacant dwellings for sale along with rising prices. In the flow sector the production of dwellings for sale would increase as marginal revenue or price shifted up and at the same time factor costs would rise. In the rental sector the volume of new construction would fall as prices fall. One important point must be noted, prices in the rental sector are not perfectly flexible as in British Columbia where rents are now fixed for a period of one year.<sup>15</sup> As a result changes in market equilibrium of the rental submarket take much longer than in the ownership submarket where in most cases prices are completely free. Even without landlord tenant legislation rents generally tend to be sticky. Despite declining vacancy rates in British Columbia rents did not tend to change except on a yearly basis or when tenants had vacated. Evidence on the matter is not clear but the relatively stable rate of increase of average rents prior to 1974 would seem to bear out this statement.<sup>16</sup>

#### 2.46 Changing Supply Variables

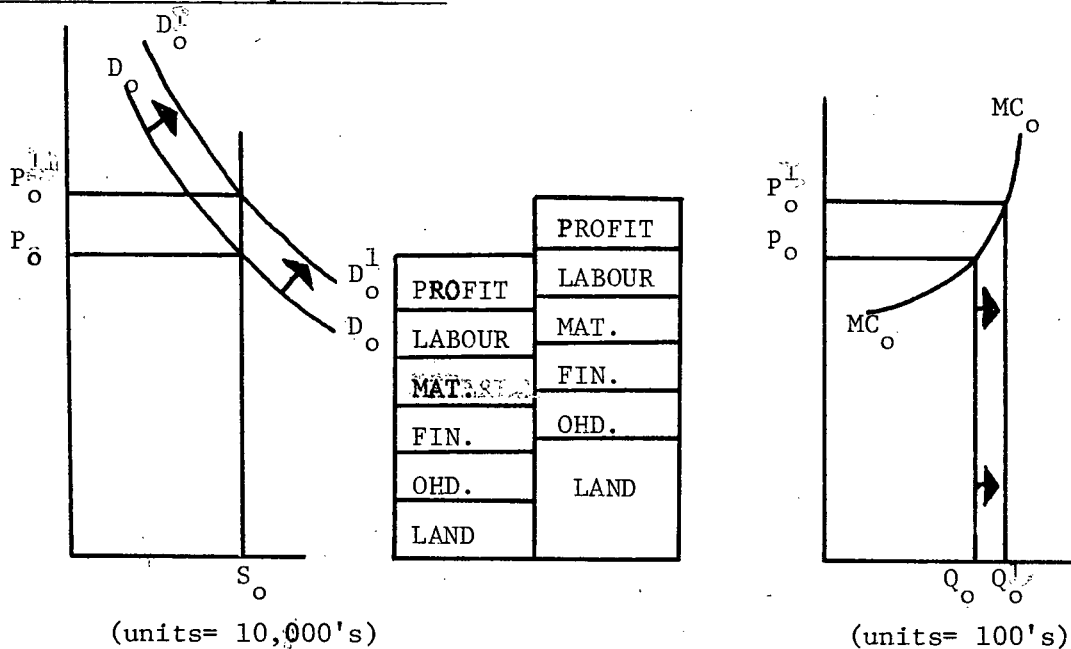
A shift in the marginal cost curves as a result of changing supply variables should be explored. In order for the marginal cost curve to shift it is necessary that resource prices change as a result of changing supplies of those resources or for technological change to take place. This is quite different from movement along the cost curve in response to increased resource demand because of higher product prices.<sup>17</sup> If, for example, the availability of interim financing was increased development costs would fall and the marginal cost curve would shift downward

and to the right with the result that the intersection of the marginal cost curves and marginal revenue curves would indicate a higher level of construction. This same process would take place if a municipality allowed a large number of residential lots to be placed on the market or made available land for apartment construction through rezoning. However it must be noted that the shift in the cost curve has no effect on the market price of the dwelling unit. The change in cost only influences the level of construction which ultimately may shift the stock supply curve to the right but only in the long term could the  $S_o S_o$  curve or the  $S_r S_r$  curve be shifted far enough to effectively reduce prices of a dwelling unit.

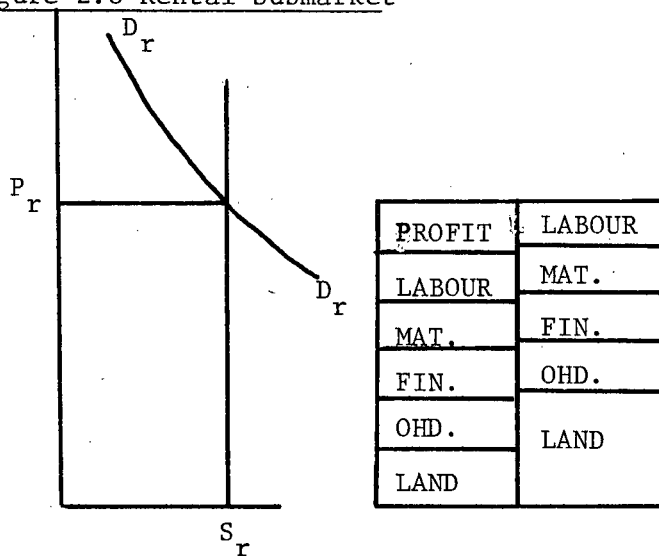
The interaction of the two submarkets is complicated by factor costs which are common to both. Figures 2.7 and 2.8 are used to demonstrate an example of this phenomena. Increasing demand for home ownership results in increased construction which in turn creates higher demand for the factors of production. This is indicated by the intersection of the new price ( $P_o$ ) with the marginal cost ( $MC_o MC_o$ ) curve in figure 2.7C. If the increased factor cost is due primarily to higher demand for building sites, the land component will be the cost which increases most dramatically (See Figure 2.7B). The land component is common to both submarkets and hence the

Figures 2.7 and 2.8 Demand and Changing Factor Costs

Figure 2.7 Ownership Submarket

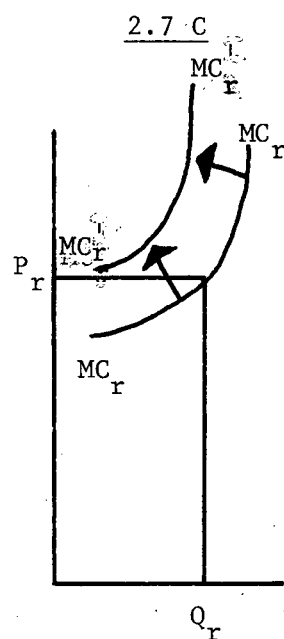


2.7 A  
Figure 2.8 Rental Submarket



2.7 B

2.8 B



2.8 C

KEY: Profit= Profit  
Labour= Labour  
Mat.= Materials

Fin.= Financing  
Ohd.= Overhead  
Land= Land

increased cost of land due to increased construction in the ownership sector will in fact shift the marginal cost ( $MC_r MC_r$ ) curve in the rental sector.

Clearly this is a unique example as current zoning designates that land which is suitable for multiple family use and that which is suitable for single family use. However land suitable for multiple family use is suitable for both condominium construction and rental apartment construction. When increased construction in the form of strata-title units takes place due to an increased demand for ownership the following situation is likely to occur. The movement along the marginal cost curve for condominium construction (represented by the intersection of  $P_o'$  and  $MC_o MC_o$  in Figure 2.7C) results in a shift in the marginal cost curve in the rental construction sector (represented by the movement of  $MC_r MC_r$  to  $MC_r' MC_r'$  in Figure 2.8C). The increased cost of land would erode the profit necessary to generate new construction in the rental sector (see Figure 2.8B). In the extreme case the new cost of construction in the rental sector as represented by  $MC_r' MC_r'$  in Figure 2.8C would fall above the marginal revenue curve ( $P_r$ ) and no new construction would be generated.

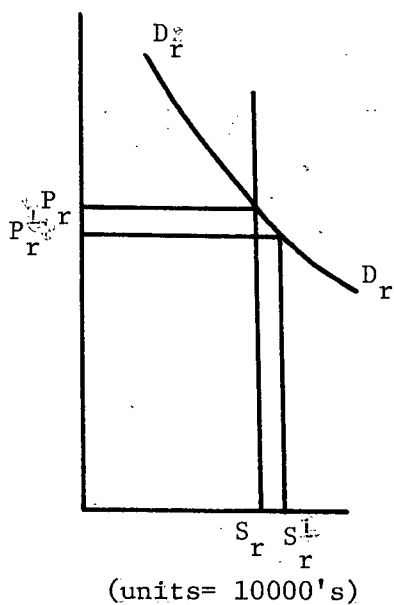
#### 2.43 Price Control

In view of the recurring popularity of price controls it would

be valuable to consider their impact on the model. Since the ownership market is not normally hindered by price controls this analysis will only consider the impact of controls on the rental submarket. Controls are not usually instituted except during periods of rapid rent escalation due to increasing demand. Consequently in the rental submarket it is likely that prices will ultimately be held at a level below equilibrium if controls are instituted with the result that price or marginal revenue in the flow sector is below what it might have been without controls. As previously described an upward shift in marginal revenue implies an increase in the rate of construction as the marginal revenue curve will intersect further along the marginal cost curve. With price below its equilibrium level the rate of construction will be less than it might have been and in the extreme may be curtailed altogether if the marginal cost curve in its entirety lies above the controlled price.

Figure 2.9 represents a rent controlled situation. The market rent where demand ( $D_r D_r$ ) intersects the stock ( $S_r$ ) is  $P_r$ . The controlled rent is  $P_r'$ . Two results are clear firstly in Figure 2.9A at the lower price ( $P_r'$ ) the quantity demanded increases; since the stock ( $S_r$ ) is fixed there exists an unsatisfied demand ( $S_r' - S_r$ ). This unsatisfied demand must either double-up with existing tenants or look in other markets for housing. Figure 2.9B and 2.9C indicate

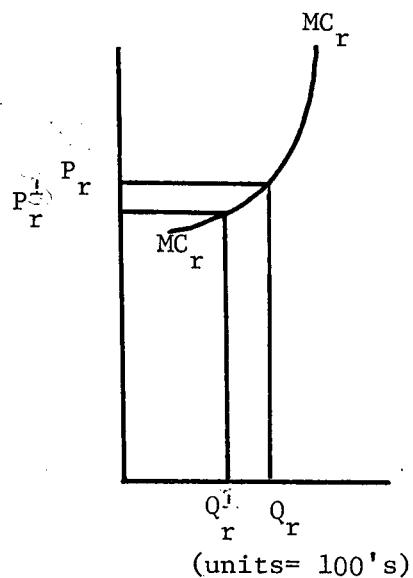
Figure 2.9 Rent Controlled Submarket



2.9 A

PROFIT	
LABOUR	LABOUR
MAT.	MAT.
FIN.	FIN.
OHD.	OHD.
LAND	LAND

2.9 B



2.9 C

that the incentive for providing new units is eliminated by the controlled price ( $P_r'$ ). As the return generated by investment in rental property is eliminated the number of new units constructed will decline to  $Q_r'$  or zero if better alternate investments exists. Moreover if rental units can be sold as strata-title units to yield a better return conversion may take place reducing the stock ( $S_r$ ) by shifting it to the left.

This chapter has provided an overview of the housing market. A basic discussion of supply and demand provided the groundwork for the construction of a model of the housing market. With this model extended to include the rental and ownership submarkets it could be manipulated in order to show the influence of changing variables. It is now important to look at ways of evaluating the housing market.

## FOOTNOTES - CHAPTER II

1. Paul A. Samuelson and Anthony Scott, Economics, An Introductory Analysis, (Toronto: McGraw-Hill, 1966), Chapter 22; and Douglas A. Stewart, Land Value Taxation: Some Effects on Land Speculation and the Burden of Municipal Taxation, Master's Thesis, University of British Columbia, May 1974, pp. 52-3.
2. This list of variables is provided by Lawrence B. Smith in The Postwar Canadian Housing and Residential Mortgage Markets and the Role of Government, (Toronto: University of Toronto Press, 1974), pp. 17-18.
3. Unimproved land is generally assumed to be in fixed supply. Except for cases of reclamation through landfill or the use of dykes or perhaps the use of airspace over freeways or railways, fixity of supply is a valid assumption.
4. Richard M. Hurd, Principles of City Land Values, 3rd edition, The Record and Guide, (New York, 1911), p.13.
5. Richard U. Ratcliff, Valuation for Real Estate Decisions, (Santa Cruz: Democrat Press, 1972), p. 308.
6. David Ricardo, "On the Principles of Political Economy and Taxation", Third edition, 1821, in Piero Sraffa (ed.), The Works and Correspondence of David Ricardo, (Cambridge: Cambridge University Press, 1951), Vol. 1, p. 74.
7. According to Statistics Canada, 1971 Census, there were 345,870 occupied dwellings in Greater Vancouver in 1971. Central Mortgage and Housing Statistics indicate 15,553 dwelling starts or 4.5% of the existing stock. This statistic does not account for demolition. See 1971 Census, Population and Housing Characteristics, (Ottawa: Statistics Canada, August 1974) and Central Mortgage and Housing Corporation, Canadian Housing Statistics, 1971, (Ottawa: C.M.H.C., March 1972).
8. A discussion of the local development process is available in more detail. See Edmond V. Price, The House Building Industry in Metropolitan Vancouver, Master's Thesis, University of British Columbia, April 1970; Gary A. Young, The Municipal Subdivision Process in Metropolitan Vancouver, Master's Thesis, University of British Columbia, April 1974; and Ian L. Beveridge, The Land Development Process as it affects the supply of new housing within The Greater Vancouver Regional District, (Vancouver: Report for the Real Estate Board of Greater Vancouver, May 1974).

9. David Baxter, Speculation in Land, Urban Land Economics Report No. 7, (Vancouver: Faculty of Commerce and Business Administration, University of British Columbia, 1974), p. 125. pp. 4-6.
10. J. Fred Weston and Eugene F. Brigham, Managerial Finance, 4th Edition, (New York: Holt Rinehart and Winston, 1972), P. 125.
11. The number of assumptions required to undertake econometric studies of the housing market have resulted in considerable variation in the estimation of price elasticity. For a summary of these studies see Lawrence B. Smith, The Post-war Canadian Housing and Mortgage Markets..., p. 31. He concludes that an overall (quality and quantity) price elasticity for the demand for housing services would be 0.8 to 1.0.
12. The model shows only the marginal cost curves as represented by  $MC_O$  and  $MC_r$  and marginal revenue as represented by  $P_O$  and  $P_r$ . A more detailed explanation of the equilibrium of the firm is included in Michael J. Brennan, Theory of Economic Statics, (Englewood Cliffs: Prentice-Hall, 1970), pp. 178-86.
13. Lawrence B. Smith, p. 18
14. Ibid, p. 19.
15. Province of British Columbia, Landlord and Tenant Act, 1974.
16. A yearly survey of apartment rents in the Vancouver area shows relatively stable increases in rents in 1973. Despite a vacancy rate of 0.6% in June of 1973 (indicating virtual complete occupancy) compared with 1.9% in June of 1972 rents did not increase on average any more than 5%. For documentation see Real Estate Board of Greater Vancouver, Real Estate Trends in Greater Vancouver, 1973-74, (Vancouver: R.E.B. of G.V., October 1973) and earlier issues.
17. See M.J. Brennan, pp. 193-195 for a digression on the modification of a firm's supply curve. It should be noted that the portion of a firm's marginal cost curve which lies above the firm's average variable cost curve in the short run is the firm's short run supply curve. Obviously in housing market analysis even the short run may be a year or more depending on the length of time to construct a new unit. This point is made by Richard Pollock in "Supply of Residential Construction: A cross-section examination of recent housing market behaviour", Land Economics, February, 1973, Volume XLIX, No. 1, p. 58.

## CHAPTER III

### EVALUATION OF THE HOUSING MARKET

The intention of this chapter is to provide some basis for evaluation of the housing market. Housing has in many respects become a political football. Few electioneering platforms ignore housing as an issue. Federal, Provincial, Regional, Municipal and even campus politicians beat the drum of the housing crisis but few manage to define what the problem is or how it came to be. It is questionable if any have suggested a rational solution.

#### 3.1 DISTRIBUTION AND ALLOCATION

An evaluation of any economic system requires an understanding of the concepts of distribution and allocation. Most simply the term distribution refers to the equity of the sharing of society's income and wealth while the term allocation refers to the efficiency of markets in allocating the product. It is the distribution of wealth and income which when exercised by individuals in the marketplace allows the pricing system to allocate goods in an efficient manner. Although the inequities

of distribution and the inefficiencies of allocation are distinct problems governments have generally found it difficult to deal with each problem separately with the result that policies have been blunt creating unanticipated side effects. Rawls argues that "the agenda of economics and politics have always featured policies whose effects on economic inequality and on efficiency of resource allocation are hopelessly intertwined."<sup>1</sup>

Increased government activity in the Western world is generally be attributed to the inadequacy of the market mechanism in meeting the preferences of society. While some of the blame for this deficiency is the result of imperfect competition which in turn results in allocational inefficiency it is clear that the greater cause of this deficiency is the inability of society to redistribute incomes and wealth such that the less fortunate can live above a standard which would be considered adequate.

To demonstrate the need for considering distributional and allocational processes it would be helpful to trace through the role of governments in these areas of the economic system. Government activities of a direct redistributive nature are primarily welfare programs such as old age assistance, family allowances and direct relief, and progressive income taxes, all of which have the intent of increasing the real incomes of the

recipients. These should be the major areas where policies are directed toward distributing income and wealth optimally such that group welfare is maximized. The knotty problem of maximizing group welfare in a system where the individual is not indifferent to the benefits he receives has no simple solution and is the prime concern of welfare economists. Their concern is to move toward an optimum where in addition to maximizing group welfare or 'efficiency' of the economic system an equitable distribution among individuals is incorporated into the objective.<sup>2</sup> It is not the concern of this paper to suggest what should be an ideal distribution. However it is the concern of this paper to discuss the implications of augmenting direct redistribution (welfare programs and progressive income tax) with indirect redistribution which may alter the processes of allocation.

For the purposes of this analysis indirect redistribution is any process which through tax or subsidy alters the relative prices of various goods. This process is redistributive in that real income of consumers of taxed commodities is decreased while the real income of consumers of non-taxed or subsidized commodities is increased.<sup>3</sup> However the uses of such means to redistribute income has allocational effects in that the redistribution affects not only the individual but the relative production processes of different commodities.

Before proceeding with the interdependence of indirect redistribution and allocation the nature of allocational activities should be explored. Reallocational policies adjust the output of various goods. Such policies are used to establish an optimum level of production of various goods given the distribution of income. The characteristics of an optimum adjustment are: 1) There are no externalities in production or consumption, that is, all costs and benefits of production and consumption accrue individually to producers and consumers; and 2) prices of all commodities reflect the real costs of production hence prices equal marginal costs and factor prices equate supply and demand. Clearly such an optimum is inattainable where pure competition does not exist because of the existence of externalities and of public goods.<sup>4</sup> Hence reallocational processes are used to account for the real costs or benefits of externalities and the provision of public goods. For example the consumption of gasoline is taxed to provide for the construction of roads which are a public good. Automobiles with large displacement engines may be taxed to a greater extent than those with small displacement engines in order to offset the externalities of pollution and excessive fuel consumption. The advantage of such reallocational policies are clear, costs and benefits not measured in the marketplace are accounted for.

### 3.2 DISTRIBUTION AND ALLOCATION IN THE HOUSING MARKETS

Returning again to the interdependence of indirect redistribution and allocation it should be clear that reallocational policies which extend beyond the real costs and benefits of production and consumption become redistributive in nature. Why is there a need to explore distributional and allocational policies with respect to the analysis of the housing market? Housing markets throughout the world are subject to innumerable forms of taxation and subsidy and the intent of the paper will be to demonstrate that in Canada many of these infringements are without regard to the distributional and allocational consequences. The resulting redistribution and reallocation influences consumer preference and expenditure since consumers have limited incomes, seek to maximize satisfaction and have preference schedules such that commodities are substitutable. When taxes or subsidies alter the price of one commodity with respect to that of another the consumer will alter his purchase pattern. Accordingly the pattern of production will change increasing the output of the product which has increased in price and decreasing the output of the product which has fallen in price.<sup>5</sup> Within the housing market and particularly within the tenure submarkets indirect redistribution through reallocative policies, the resulting changes in consumer expenditure and the ultimate change in production patterns have far reaching implications.

With respect to the housing market the most important difference

between redistributinal policies and reallocational policies should be noted. Redistribution of income and wealth is ideally not associated with the consumption of a particular commodity. In other words the freedom of choice of the individual consumer is preserved. Reallocative policies, on the other hand, are more selective in their impact. Since their purpose is to account for the externalities of production and consumption of a specific good or for the cost of public good which is consumed by a specific consumers or producers. Hence, where a re-allocational policy has become redistributinal in nature but is still directed toward specific individuals or goods the freedom of consumer choice is undermined. In order to benefit from the redistribution, consumption patterns must be altered.

This discussion may be given some clarity by a hypothetical example from the housing market. If home owners are subsidized while renters are not the effect of such a policy would be to reallocate consumer expenditure away from rental housing and toward owned housing. In line with the theory described previously such a shift in expenditure will have a corresponding influence on prices. The price of owned housing would rise and the price of rented housing would fall. Such a price differential would alter the production process in that more units for sale than units for rent would be produced. Moreover prices of owned housing would reflect more than the real cost of production

while prices of rented housing would reflect less than the real cost of production had the subsidy not been implemented. The validity of altering consumer preferences and production processes with such a policy is questionable and clearly demonstrates a reallocational policy which does not serve to account for externalities or the provision of public goods but it is in fact a form of indirect redistribution.<sup>6</sup>

### 3.3 HOUSING STANDARDS, HOUSING NEEDS AND HOUSING DEMAND

An attempt is often made to define problems in the housing market with respect to a standard. The question of what standard can be called acceptable is as difficult to answer as the housing problem is to define. Professor Donnison considers this a problem of perception. "The (housing) problem cannot be explained or measured by an objective summary of housing conditions, it is a problem as perceived by someone, and thus it's meaning depends on the understanding, the interpretation and the perceived implications of housing conditions to be found in the minds of those concerned."<sup>7</sup> In other words, because households have unique tastes and preferences not only for housing but also for other goods any attempt to define a standard is likely to be at odds in many cases with what the individual consumer wants.

Secondly though most government housing agencies refer to such ideals as "adequate" housing or housing which meets "specified

minimum standards" at a price everyone can afford, this should be no assurance that the problem is about to be solved. It has already been pointed out that adequate housing is a subjective evaluation and hence immeasurable. As well Professor Donnison points out the folly of believing that the problem can be solved even if it can be defined.

It is technically feasible to produce about as much bread, bedding, or ballpoint pens as a nation can use. But even the best housed countries have found no limit to the quantity or quality of housing they want. Such a limit could only be found in an entirely static society in which people's consumption patterns, aspirations and relationships have been frozen forever.<sup>8</sup>

So even the most ambitious of housing programs could be set aside by the public as overly ambitious or totally inadequate before any goal is reached. Such is the behaviour of the consumer in the housing market.

Hence there is no such thing as 'perfection' in the housing market just as there is no such thing as a perfect environment. There is only better housing and a better environment and incremental changes are the only means of handling such goals so difficult to define. To demand massive changes requiring the redirection of the economic inputs of resources, capital and labour at the expense of other sectors of the economy is to run the risk of a supply totally at odds with changing consumer tastes and preferences. If the goal is to provide maximum freedom of choice and equal opportunity for consumers, their

preferences cannot be ignored. Moreover constraints in the marketplace must not restrict those preferences from being expressed.

An important distinction must be made at this time. That is, the distinction between needs and wants or between housing need and housing demand. Housing need is described as what ought to happen in the marketplace based on some standard or judgement independent of the marketplace. Hence the quantification of housing need like the definition of a minimum standard is likely to ignore real preferences at a given time and any changes in preference which occur over time. However attempts have been made to define need in terms of the following:

- 1) The physical condition of the unit
- 2) The provision of basic utilities
- 3) The size of the unit and the number of rooms it contains
- 4) Amenities - neighborhood, transportation, services, etc.

Where such standards are valuable is in accounting for externalities or in the provision of public goods. Society defines a standard which must be met or a service which must be offered, both of which would not be provided by the private sector. The provision of basic utilities and amenities such as public transportation and parks can be subject to such standards. In addition safety factors for construction are standards which can be set. Past such general guidelines, any

standards defining housing need simply avoid the problem of poverty or income distribution. Such a statement does not imply that if income distribution is equitable housing demand will be met. As Professor Donnison pointed out, such a situation would only be found in a "static society in which people's consumption patterns, aspirations and relationships have been frozen forever."<sup>9</sup>

Housing demand or effective housing demand is the concept which is most closely studied by economists. "Effective demand is market-place demand, purchases which consumers have both the desire and the economic means to make."<sup>10</sup> Effective demand is a function of consumer preferences based on their income and the fact that they will spend that income so as to increase their satisfaction.

### 3.4 MARKET INDICATORS

There are three market indicators which can be useful in determining the direction and rate of change in the housing market. The three indicators are vacancy rates, utilization rates, and the stability of rents and prices. The three are very much interrelated and together they can provide valuable insight into the marketplace.

Generally the analysis of vacancy rates has been limited to the proposition that high or rising vacancy rates indicate over

production, a decline in demand or perhaps a shift in demand to another housing submarket. Low or falling vacancy rates imply the opposite. There is considered to be a normal stock of vacant units if a vacancy rate<sup>11</sup> of 3.5 to 4% exists. Such a rate would provide flexibility in the housing market. Such flexibility is to provide for mobility and changing preferences of the consumer, just as a certain level of unemployment provides for worker mobility.

In an unregulated market, movement of the vacancy rate below normal serves as an indicator to the builder or investor that there is a demand for new units. Clearly, in a regulated market the vacancy rate loses any meaning because usually few vacancies exist and excessive demand created by below market prices results in queuing or "key money". However in the unregulated market movements in vacancy rates can generate new building to meet the indicated demand.

A normal vacancy rate may vary from city to city. A city characterized by rapid growth, seasonal employment or perhaps even a university town will likely have large fluctuations in the vacancy rate. On the other hand a stable slow growth community would probably have a steady and generally lower vacancy rate. The nature of the community, the composition of its housing inventory and the state of the local economy are essential to any analysis of vacancy rates.

Utilization rate is a collective term referring to the distribution of families or households among the occupied dwelling units, the distribution of persons per room or of children per bedroom. Perhaps the most common form of this indicator is the family~~ly~~ld per dwelling ratio and while unity is purported to be the ideal of such a statistic it gives no indication of the quality of housing or the efficiency of usage. Such a criticism could also be leveled at vacancy rates.

The stability of prices and rents is another elusive goal in the housing market. It has been argued that with demand the predominate factor in price determination, it is impossible to expect stable prices when large changes in demand take place.<sup>12</sup> Unstable housing prices and rents, just one aspect of inflation, causes those on fixed incomes suffer. If incomes were to rise at the same rate as prices and if changes were regular and could be forecast rising prices would not be a problem. However changes are not stable and hence the situation arises which most housing authorities would rather not live with, a market characterized by instability where expectations play a greater role in price determination than the normal demand variables.

As in the case of vacancy rates, the movement of prices is a valuable indicator to the production sector. When prices are regulated or even when periods between price adjustment are restricted the production sector does not receive indicators of true demand.

Stability of prices and rents is an indicator closely tied to vacancy and utilization rates. For example a low vacancy rate and high utilization rate implies pressure on supply and prices should tend to rise. However a high vacancy rate and a high utilization rate implies a reduction of pressure on supply which should result in falling prices. As these two cases demonstrate, the three market indicators when used together and when the statistics are considered relative to past data, are the best measure of the markets incremental response to changes in demand. The statistics however must be defined by submarket in order that results indicate trends in specific submarkets as opposed to summations over the whole market.

### 3.5 THE DEFINITION OF A HOUSING SHORTAGE

Perhaps it is possible at this time to conclude whether or not a housing crisis can exist and if the present circumstances warrant such a doomsday title. It is common today for every problem to be described in crisis proportions. The environmental crisis, the energy crisis, the population explosion and of course the housing crisis. Anyone who chooses to describe the current housing market in crisis proportions probably does so because he feels that a shortage exists. So perhaps the best approach to reaching a conclusion regarding the existence of a crisis is to determine if a shortage exists.

Professor Pennance and Professor Gray describe three ways

of defining a housing shortage. The first refers to a 'technical' shortage, a situation in which the alternatives which would have to be sacrificed in order to alleviate the shortage are deemed too high by the consumer. Here the price rationing mechanism is at work allocating the housing product but the allocation depends for its equity upon the distribution of income and wealth. The existing distribution may have determined that not everyone can have a villa on the French Riviera hence there is a 'technical' shortage of villas but certainly no housing crisis. If however the poor do not have adequate income to bargain their way into housing to meet their need there is a problem but the problem is not a housing shortage but an inequitable distribution of wealth. There is nothing wrong with the housing market, the political process has simply failed to distribute income and wealth in proportions which would allow the poor to buy housing meeting the minimum standard or need as defined by society.

A 'technical' shortage can be described through the use of non-economic terms such as the ratio of houses to households or the percentage of houses in an area that are unfit. Professors Pennance and Gray argue that such statistics are based on non-economic assumptions about desired housing standards and by ignoring the importance of incomes, consumers preferences, prices and costs, provide an unreliable indicator of what is actually happening in the housing market. They are a measure

of need not demand. This approach is invalid as it implies a distributional problem and demands a non-economic standard which undermines the processes of consumer choice and price rationing.

Professors Pennance and Gray describe two methods of defining a housing shortage which are valid for economic analysis. They refer now to economic shortages rather than 'technical' shortages.

Economic shortages are quite different. They are always relative to some level of costs and prices and refer to situations of market imbalance in which effective demand outruns supplies forthcoming at the prevailing price, but something prevents price rising to balance things out. Alternatively they can be regarded as market situations in which although price has moved up to achieve a temporary balance between demand and supply, it is regarded as high when referred to a 'normal' price which would prevail when supplies had been able to adjust over a longer period. One can then speak of a 'shortage', using a normal price as a benchmark. Obviously, where supplies are slow to respond to changes in demand (as they are in housing) such shortages may persist over quite long periods.<sup>13</sup>

It is in this context that the present housing market must be evaluated. The submarket for homes in fee and for residential leaseholds will be examined as their interrelationship is key to this study.

In the context just defined it can safely be argued that in Greater Vancouver there is not only a shortage of units to buy but also a shortage of units to let. The questions to ask

in each market are firstly 'are prices being held below the equilibrium level?' And secondly, 'is the price level above a 'normal' price which would be reached if supply was able to adjust quickly?' This paper will argue in response to the first question that prices in Greater Vancouver in the residential leasehold market are probably below equilibrium producing and perpetuating a shortage as defined above. In response to the second question it will argue that in Greater Vancouver the ownership market demand, the result of a number of factors not the least of which are the pro ownership policies of the various governments, has resulted in price levels above that which would be considered 'normal'. It will further be argued that the redistributational nature of the re-allocational policies in the housing market is the prime cause of these two phenomena.

### FOOTNOTES - CHAPTER III

1. J. Tobin, "On Limiting the Domain of Inequality", in E.S. Phelps, (ed.), Economic Justice, (Harmondsworth: Penguin, 1973), p. 447.
2. Ajit K. Dasgupta and D.W. Pearce, Cost Benefit Analysis: Theory and Practise, (London: MacMillan, 1972), pp. 54-59, Chapter Two on Pareto Optimality; compensation tests and equity contains a valuable discussion of the Pareto, Kaldor-Hicks and Scitovsky arguments about optimality.
3. The incidence of taxes and subsidies is a difficult question which should be dealt with in more depth. See Peter Mieszkowski, "Tax incidence theory: The effects of taxes on the distribution of income," Journal of Economic Literature, December 1969, pp. 1103-1124. Tax incidence aside, it is clear that the relative production of goods is still altered by reallocative policies.
4. John F. Due, Government Finance: Economics of the Public Sector, 4th edition, (Homewood, Illinois: Irwin, 1968), pp. 7-8.
5. Ibid, pp. 146-147.
6. Some clarity may be given to this discussion by referring to the latter part of Chapter Two of this paper. The impact of a subsidy preferential to ownership is represented by Figure 2.7 and 2.8.
7. David V. Donnison, The Government of Housing, (Harmondsworth: Penguin, 1967), p. 43.
8. David V. Donnison, "Housing Problems and Policies", in Michael Wheeler, (ed.), The Right to Housing, (Montreal: Harvest, 1969), p. 23.
9. Ibid, p. 23.
10. Wallace F. Smith, Aspects of Housing Demand-Absorption, Demolition and Differentiation, (Berkeley: Regents of the University of California, The Center for Real Estate and Urban Economics, 1966), p. 1.
11. Sherman J. Maisel, Financing Real Estate, (New York, McGraw-Hill, 1965), p. 335.

12. Demand as the dominant factor in the housing market is discussed in detail in Chapter II.
13. F.G. Pennance and Hamish Gray, "Housing Shortgage: Fact or Fiction", Building, March 17, 1967, p. 104.

## CHAPTER IV

### THE CHOICE BETWEEN RENTING AND OWNING

Two separate but closely related housing submarkets have been defined according to tenure, the market for residential leaseholds or rental units and the market for freehold or owner occupied units. It was suggested in the conclusion of Chapter III that a housing shortage can be defined in two ways. Firstly, a shortage can exist if demand outruns the supply forthcoming at the prevailing price and something prevents the price from rising to balance things out. Secondly, a shortage can exist if price has moved up to balance supply and demand but in so doing has settled at a level above what would be regarded as a normal price if supply has been allowed to adjust over a longer period of time. These theoretical approaches to the definition of a housing shortage appear to represent respectively the problems in the rental market and the ownership market in Greater Vancouver.

It has been argued successfully that rents are just not high enough to justify the construction of more rental units par-

particularly in the Lower Mainland.<sup>1</sup> This situation exists despite a low vacancy rate which indicates a high demand for existing units. In the face of this situation prices had not risen to a point high enough to justify construction of new rental units even prior to rent control legislation.<sup>2</sup> Hence a shortage of the first type exists in the rental sub-market. However the question remains to determine what prevented prices rising prior to rent control legislation.

It is apparent to most that prices of single family homes throughout the Province but particularly in the Lower Mainland have risen far above 'normal'. With the pressures of inflation, higher incomes and the relatively strong economy of 1972 and 1973 it would be ludicrous not to expect some upward pressure on housing prices but have they increased too much? Recent studies indicate that prices of homes for sale are certainly much higher than a level which would be considered 'normal'.<sup>3</sup> Hence a shortage of the second type exists in the market for houses for sale.

All of this has occurred in a market where construction at least of single family homes has reached record levels.

All provinces experienced very high if not record-breaking housing activity in 1973. British Columbia was among the provinces where previous records were broken in the year. In 1973 B.C. starts totalled 37,627 (up 6.5% from 1972), completions numbered 34,604 (up 11.3%), and a further 27,112 units were

under construction at the year end (9.0 per cent higher than in December 1972). As in most other provinces, the high level of 1973 starts in B.C. reflected a large increase in single dwellings (one and two family units) and almost as large a decrease in multiples (row and apartment units).<sup>4</sup>

So in spite of a very active construction industry any shortage in the ownership submarket has not been met. Since the multiple unit sector would include most units being constructed for rent and since construction of multiple units has decreased the shortage in the rental submarket is not about to be met either. This paper has stressed the dominance of the demand sector in the housing market. If this argument is realistic then a further analysis of the choice between renting and owning should be helpful in interpreting the 1973 and early 1974 market situation. The key question is why did the consumer continue to bid up the prices of houses for sale while rents remained at a level too low to encourage new building? By closely analyzing the comparative costs and benefits of rental versus ownership this chapter will provide the answer. First, it will be necessary to look at the theories of substitutability, utility and consumer decision-making which influence that choice in tenure.

#### 4.1 SUBSTITUTABILITY AND CONSUMER CHOICE AND UTILITY

The characteristic of heterogeneity in the housing market and the clustering of substitutes into submarkets has been discussed.<sup>5</sup> No matter how tenuous the frontiers between sub-

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markets it is essential when considering the choice in tenure that the submarkets be differentiated. There is no doubt that numerous other variables such as rent, price, quality, location, amenity, neighborhood, transportation and work opportunities come into play creating their own submarkets. Nonetheless it must be concluded that tenure, if only because of the different procedure of payment for services and the readily apparent classifications of tenant and home owner, is an obvious division between submarkets. Furthermore, the very different treatment afforded homeowners as compared to home renters is ample justification, at least in Canadian markets, to consider submarkets as defined by tenure.

Despite the difference between the "bundles of rights" provided the renter and the owner the flow of services from a rental unit is substitutable for the flow of services from an owned unit. In terms of the services provided by the physical characteristics of a rental unit and an owned unit they are economic substitutes for each other. As economic substitutes a situation of cross-demand exists. Holding the price of commodity "A" (a rental unit) fixed, an increase in the price of commodity "B" (a unit for sale) will result in increased demand for commodity "A".

$$q_a = f (P_b)$$

or

Quantity of "A" demanded = some function of price of "B"

The type of cross-demand relationship is defined by the relative change in the rate of purchase of one good divided by the relative change in the price of the other good.

$$\text{Cross elasticity} = \frac{\Delta q_a \div q_a}{\Delta p_b \div p_b}$$

Cross-elasticity is a measure of the degree of substitutability between goods and when positive indicates that "A" and "B" are substitutes and when negative indicates that they are complements.<sup>6</sup>

In simple terms, positive cross-elasticity implies the following in the rental and ownership submarkets. As the price of renting increases, the demand for ownership will increase while if the price of ownership increases, the demand for rental will increase and visa versa. What is not clear at this point are the non-economic factors which are difficult to measure in dollars but play a very important role in consumer choice. As well it is not clear what are the economic factors or costs which may or may not vary between renting and owning. In addition to the size of the monthly rent or mortgage payment there are numerous less obvious economic costs which may vary depending on tenure. To comprehend shifts in demand between submarkets it is essential that the economic factors be understood. It is unlikely that these factors can all be quantified but a greater understanding of their nature will allow some

conclusion with respect to shift in demand.

Having reconsidered the process of substitution as it applies to the rent or own dichotomy, it must now be tied in with the broader concepts of utility and consumer theory. Utility is the satisfaction derived from the consumption of a good or service during a given period of time.<sup>7</sup> In theory the rental and ownership submarkets would be in substitution equilibrium when the consumer is indifferent as to which submarket he participates in. That is given a budget constraint, the consumer utility derived from expenditure on a rental unit and whatever cash is left over is equal to the consumer utility derived from expenditure on a unit for sale and whatever cash is left over. If more utility could be enjoyed by substituting a rental unit for a unit for sale there would be a tendency to switch away from the unit for sale and substitute a unit for rent. Such trends may be given impetus by reallocational policies which alter the relative prices of the substitutes or changing preferences of the consumer.

Important to note is that equilibrium between submarkets should not be a goal of housing policy. Such a policy would restrict consumer choice. As well, the unimpeded market will always tend toward equilibrium. What is more important is that the equilibrium point as determined by the market should

generate the appropriate responses from the production sector. The provision of a unit for rent or a unit for sale requires an initial input of resources similar in type and quantity. To meet the criterion of efficient allocation the costs to the consumer should be approximately the same no matter what the choice in tenure. This will ensure the efficient use of resources.

#### 4.2 THE REAL COSTS OF OWNING AND RENTING

The intent of this section is to compare the real costs of owning and renting.<sup>8</sup> The term "real costs" refers to the costs which would be borne by the tenant and those costs which would be borne by the owner in an unconstrained market. In other words, ignoring taxes and subsidies, would there be any long run difference in cost between renting and owning? Clearly, in the short run consumer preference may shift the demand from one submarket to the other and the inelasticity of supply and institutional constraints on conversion of tenure-type will result in a short term price differential. However over the long run, conversion of units from one form of tenancy to the other and new construction by the production sector should return price equilibrium to the two submarkets if the cost of providing either unit is equal.

It should be noted that there is no difficulty in comparing prices. It has already been recognized that rents (although usually paid monthly) can be capitalized to arrive at a lump

sum value for a rental unit and similarly a rental value can be imputed from the lump sum value of an owned unit. It should also be noted that the comparison is between the real costs which should accrue to the owner and the renter. However in a rental situation most costs in fact accrue to the landlord and it must be determined if they are passed on to the tenant. From the discussion in Chapter Two, it is clear that in the long run all costs which accrue to the landlord will be passed on. Hence it is possible to regard costs to the landlord as costs ultimately accruing to the tenant.

#### 4.21 Capital Costs

There are two kinds of costs which are entailed in the provision of housing. They are capital costs and ongoing costs. Dealing first with capital costs the following factors must be considered:

1. Land
2. Materials
3. Labour

The cost of land is the easiest to deal with. Since land is the residual<sup>9</sup> the cost of land as an input to rented or owned units will only differ to the extent that the market price of owned units minus the non-land factor costs of owned units differs from the market price of rented units minus the non-land

factor costs of rented units. Materials costs do not differ depending on the type of tenure. Materials costs may differ to the extent that owned units have a different structural form than rented units but such a statement cannot hold for a general case because tenure type does not imply any particular structural form. The inception of strata-title ownership allows complete flexibility in structural form. Labour costs do not differ depending on the type of tenure. Although it may be argued that non-union labour is often employed for the construction of single-family homes and that union labour is usually employed for the construction of high-rises no labour cost difference according to tenure can be established. Hence apart from the question of land as a residual the capital cost do not differ depending on the type of tenure anticipated in the structure.

#### 4.22 Ongoing Costs

The ongoing costs of providing housing are the following:

1. Maintenance
2. Depreciation
3. Vacancies
4. Management
5. Financing
6. Transfer Costs
7. Rate of Return
8. Property Taxes

Although a number of these ongoing costs would seem to apply only to landlords and hence in the long run only to renters, a more careful analysis reveals that all of these costs are borne by both renters and owners. However it must still be determined if the cost varies depending on the form of tenure. Real costs were initially defined as excluding taxes and subsidies, but property taxes are included here as they are usually considered an ongoing operating cost of both renting and owning.

It is often argued that owners have more pride in their dwelling units than renters and hence take better care of them. Such statements have not been substantiated hence any difference in either maintenance or depreciation between buildings cannot be attributed to the type of tenancy. Rising land values should perhaps be considered here as they often offset the losses at the time of sale due to depreciation of the improvements. Clearly this is a benefit which accrues to the homeowner and also to the landlord. Since it is a benefit which does accrue to the landlord it must over a period of time be passed on to renters.

Vacancies would appear to be a cost which only a landlord would have to face which in turn would be passed on in the long run. However two additional factors must be considered. Firstly when a homeowner sells one dwelling unit in order to buy

another there are costs other than the transfer costs. The sale of the old unit and the purchase of the new may not coincide hence there may be costs of alternate accommodation or perhaps double costs incurred by the ownership of two units at the same time. Secondly, in an unconstrained market vacancies provide the renter with considerable flexibility which is a benefit to which a price could be attached. So, although vacancy is not a cost specifically borne by the owner it is not clear that he is any better off than the renter when other factors are accounted for.

Management may also be considered as a cost borne ultimately only by the renter. Such a conclusion cannot be made if the opportunity cost of the home owner is recognized. The time required for the owner to operate his own dwelling must be taken into account eliminating management as a significant cost difference.

Financing and property taxes do not differ according to the type of tenure. Property taxes may only differ to the extent that the prices of owned units differ from the prices of rented units because in British Columbia the property tax is a single rate applied to the assessed value of the property.<sup>10</sup> Hence assuming other costs do not differ the long run equilibrium price could not differ and it follows that property taxes would not differ according to tenure.

Transfer costs include legal fees and agent fees charged at the time of a transfer of title. Shelton argues that this is a cost borne only by the home owner.<sup>11</sup> Since the landlord would in the long run pass on all costs to the tenant Shelton's argument is not valid. The possibility that the ownership of rental units would transfer hands at a lower rate than self-owned units cannot be substantiated either hence it would appear that transfer costs do not differ according to tenure.

Rate of return is the final cost which indeed is passed on to the tenant in the long run. Since the home owner has an opportunity cost of the funds invested in his own dwelling, rate of return is a cost borne by the owner as well.

In summary, there appears no significant cost differential according to tenure. The real capital costs and the real operating costs cannot be differentiated according to tenure. The only two possibilities, land costs and property taxes, would in theory be identical because none of the other costs differ.<sup>12</sup> Hence, in the long run, in an unconstrained market the real costs of rental units and owned units would be identical and prices could therefore vary only as demand shifted from one form of tenure to the other. However, as the production sector responded to differential prices and conversion of units from one form of tenure to the other took place, the price differential would be eliminated.

#### 4.3 THE INFLUENCE OF REALLOCATIVE POLICIES

There is, however, a significant price differential between renting and owning. There are taxes and subsidies which are ultimately directed toward renters or owners. Chapter III (Sections 3.1 and 3.2) dealt with the theory and the effects of such reallocative policies. Unless the purpose is to account for the costs or benefits of externalities or the provision of a public good related to the consumption or production of the commodities in question the commodity prices will not represent the real cost to society of producing those commodities. The following is a discussion of those taxes and subsidies which are re-allocational and hence influence the price of renting and owning and ultimately tenure choice in Greater Vancouver.

##### 4.31 Non-taxation of the Imputed Income of Owned Homes

Some of the taxes imposed by the Federal Government are re-allocational because they are tied to the consumption and production of specific goods and in particular, specific types of housing. The first is with respect to the income derived from the ownership of rental units and the imputed income of home ownership.

The real tax advantage of home ownership is that the landlord has to pay personal income taxes on that part of rent which represents return on his investment while the homeowner collects this imputed income free of taxes.<sup>13</sup>

Shelton correctly notes that while the landlord must pay income tax on the portion of rent which is income the home owner does not. This is a significant subsidy to the home-owner because in effect it reduced the opportunity cost of the capital invested in his home by his marginal tax rate.

Recent Canadian research has attempted to quantify the extent of the home owner income tax subsidy.<sup>14</sup> Imputed gross rental income was determined to be 10.3%. If it is assumed that the average homeowner was in the 28.66% tax bracket then the subsidy from the non taxation of that imputed rental income in terms of the reduction of gross rental income is 16.7%.

A home owner with no taxable income would receive no effective subsidy while a homeowner with a 50% marginal tax rate would have his housing costs reduced by 29.2%. The following table summarizes the effect of the subsidy.

Table 4.1

Tax subsidy to home ownership due to non-taxation of imputed rental income

Homeowners Marginal Tax Rate (%)	Subsidy (%)
0	0
14.6	8.6
20.0	11.7
30.9	18.0
41.2	24.0
51.5	30.0
61.8	36.0
72.1	42.0

Source: Frank A. Clayton, "Income Taxes and subsidies to home owners and renters: A comparison of U.S. and Canadian experience," Canadian Tax Journal, Volume XXII, No. 3, May-June 1974, p. 302.

Research has further argued that the exclusion from taxable income of the imputed net rent of owner-occupied dwellings favours high-income home-owners compare with low income home-owners in addition to discrimination against renters.<sup>15</sup> This argument is valid because the size of the effective subsidy is proportional to the marginal tax rate and the income elasticity of demand is well in excess of unity.<sup>16</sup> Therefore the failure to tax the imputed net rent lessens the progressivity of the income tax structure.

In his recent article Frank A. Clayton argues that the renter is the effective recipient of a subsidy because of the depreciation provisions of the Income Tax Act.<sup>17</sup> This would have been true prior to the 1971 revisions which eliminated the tax shelter provisions for investors in residential rental accommodation.<sup>18</sup> Current legislation allows tax shelter only to the extent that the investor can defer income tax on the accumulated capital cost allowance until recapture at the time of sale of the property. The latest federal budget of November 18, 1974 allows taxpayers to charge against income from other sources capital cost allowances on multiple-unit residential buildings for rent started between November 18, 1974 and December 31, 1975.<sup>19</sup> This is a partial reinstatement of the

pre-1971 provisions but being of such duration it is unlikely to have a significant enough effect on supply for tenants to receive the benefit of the tax saving.

#### 4.32 Exemption from Capital Gains Tax on Owned Houses

The homeowner has been the benefactor of a further subsidy following the 1971 amendments to the Income Tax Act.<sup>20</sup> Under the new law, landlords are subject to a tax on the capital gain at the time of sale of a property. At the same time the homeowner is not subject to any capital gains tax on his principal residence. Since the capital gains tax is now applied to most personal investments the exemption of a capital gains tax on the principal residence is likely to promote greater investment in this area than prior and result in further negation of the progressivity of the tax structure.

Henry Aaron in a recent article outlines the results of such preferential taxes.

To the extent that favourable tax treatment of homeowners causes demand for housing units "to buy" to rise at the expense of housing units "to rent" the following effects will occur: 1) rents will tend to decline; 2) prices of housing units for sale to owner-occupants will tend to rise; 3) housing units, previously rented will be sold to owner occupants; 4) construction of new rental units will fall and that of units for sale to owner occupants will rise.<sup>21</sup>

It is clear certainly from the taxation policies discussed that the Federal Government is intentionally or unintentionally stimulating homeownership. Unfortunately it appears that the government is not fully cognizant of the effects of such taxation policy. In fact the Federal Government and other levels of government have seen fit to bolster home ownership even further with more direct subsidies.

#### 4.33 Other Federal Policies

A review of government policies specifically related to homeownership should help assess the degree of their commitment. It is difficult to quantify the subsidies as the form of subsidy ranges from cash to preferential mortgage rates to non-subsidies such as changes in required loan to value ratios, debt service ratios, length of mortgage term and so on.

From a limited beginning prior to 1935 the federal role has grown to a point where much residential financing<sup>22</sup> is aided in some manner by the participation of the Federal Government. This evolution is clear if the history of the legislation is reviewed.<sup>23</sup> The federal involvement has been primarily through mortgage lending directed primarily toward residential real estate, including new and existing single and multi-family units for owner occupancy or rental; hostels and student residences; co-operatives, limited dividend and public housing

projects; and land assembly and urban renewal. Though the scope of their involvement is wide the governments general objectives have stressed homeownership and Albert Rose argues:

The best conclusion concerning national housing policy from 1945 through 1964 is that the government of Canada was strongly in favour of the attainment of home ownership for every family....every effort was made to provide adequate supplies of mortgage money, to manipulate the interest rate and to set forth appropriate terms to encourage individual home ownership. Not only was mortgage money made available through the National Housing Act at rates lower than those prevailing in the money markets but down payments were successively reduced as loan amounts were increased. The period of amortization increased from 15 years in 1946 to 20, 25 and now 30 years or more to enable lower income families to acquire a home of their own. If anything, this was the heart of our housing policy during the past 25 years.<sup>24</sup>

Credit conditions as a factor in housing demand will be the subject of further analysis in Chapter V. Suffice to say at this time that easier credit and preferential terms for home purchasers is just as much a subsidy as a cash grant.

Even further subsidies directed toward homeownership have been proposed and instituted recently. Central Mortgage and Housing is now providing \$500 cash grants for a one year period to those purchasing new moderately-priced housing for the first time. The purpose of this policy is to give immediate stimulus to the construction industry but it is not clear why home purchasers should be the only benefactor.<sup>25</sup> The Minister of Finance, the Honourable John N. Turner introduced a further

bonus for the homeowner in the Budget Speech of November 18, 1974. He introduced the Registered Home Ownership Savings Plan which allows prospective homeowners deductible contributions of \$1,000 per year to a maximum of \$10,000. Payment out of the plan is to be tax free if applied toward the purchase of a home or furnishings such as essential appliances or furniture.<sup>26</sup> Both of these policies will tend to reallocate consumer expenditure toward home ownership as do preferential lending rates and terms.

#### 4.34 Policies in the Province of British Columbia

The Federal Government is not alone in its apparent quest for universal home ownership. Since 1968 the Province of British Columbia has assisted home owners with direct grants or second mortgages and since 1957 has provided annual homeowner grants in the form of property tax rebates. The first program is administered under the Provincial Home Acquisition Act and provides for: a) A \$1,000 building or acquisition grant or a \$5,000 second mortgage for the purchase of a new house; and b) a \$500 acquisition grant or \$2,500 second mortgage for the purchase of an older home.<sup>27</sup> The second program provides a fixed grant available to all homeowners which is applied against the homeowners municipal taxes and grew from \$28 in 1957 to \$200 in 1973.<sup>28</sup> In 1972 and 1973 the homeowner if the principal supporter of the household and over the age of

65 received an additional \$50.00. Compare this with the relatively meagre \$30 yearly grant offered the renter under the recent British Columbia scheme.<sup>29</sup> Clearly considerable preference is shown the home owner by both federal and provincial governments in Canada.

#### 4.4 THE IMPLICATIONS

The discussion of this chapter has demonstrated two major points. Firstly the real costs of renting and owning do not differ. Shifts in demand from submarket to submarket would cause short run price differentials but in the long run relative prices would be equivalent just as are real costs. It is possible to argue that since the market is not unconstrained perhaps some of the costs and benefits are not so readily passed on to the tenant. This may be so in the short run but in the long run price differentials should generate suitable production responses to eliminate any inequalities.

Secondly numerous policies by both the federal and provincial governments tend to reallocate consumer expenditures away from rented units and toward owned units. Although the extent of the reallocation is difficult to quantify the dollar value of some of the specific policies is sizeable. As became apparent in the earlier discussion on distribution and

allocation, such policies are only justifiable if they account for an externality or the provision of a public good related specifically to the consumption or production of the commodity in question.

The commodities in question are the services provided by rented units and the services provided by owned units. The only possible externality which may be unique to one of these commodities is the possibility that home owners may be better citizens than home renters. This has never been demonstrated and is hardly adequate justification for the extensive reallocational policies in existence.

In summary an attempt should be made to appraise the economic significance of the differences in costs and benefits of renting versus owning. Preferential tax policies and government subsidies, apparently with the objective of promoting home-ownership and stimulating housing consumption have resulted in a trend toward home ownership. Although the argument has been put forward that some policies in the past have promoted the construction by private enterprise of rental dwelling units, resulting in benefits to the tenant, it must be concluded that on balance most government policy in Canada has heavily favoured home ownership.<sup>30</sup>

It must be determined whether the promotion of home owner-

ship is a laudable aim and if the means used to promote it is suitable. Apart from the unsubstantiated benefits which supposedly accrue to a community when homeowners predominate there appears little to support such a goal. In fact Henry Aaron argues that even if homeownership is a goal to be promoted then "the pattern of tax benefits is ill-suited to that objective" primarily because the benefits do not accrue equally to all sectors of the population.<sup>31</sup>

In Canada there has been fostered a preference for the ownership of real property. It is unfortunate that the federal and provincial governments perpetuate this preference through various subsidies. What is more unfortunate is that a strange circular reasoning has served to justify this government commitment in that the government subsidizes homeownership because Canadians prefer to own and Canadians prefer to own because the government subsidizes homeownership. This is obviously an oversimplification of governmental rationale for pro-home-ownership policies but it has in fact been the major impetus for an overwhelming demand for home ownership. Efficient allocation of resources should be the goal of housing policies if home-ownership is not the goal and there seems no reason for such a goal for all Canadians. The current policies have brought about changes in consumption

and ownership patterns which frustrate the efficiency of resource allocation and as a result do not maximize the benefit to be gained from those resources.

## FOOTNOTES - CHAPTER IV

1. Robert C. Levine, The Economic Reasons for the Shortage of Residential Rental Accommodation in Greater Vancouver, Master's Thesis, University of British Columbia, 1974, p. 159.
2. Province of British Columbia, Residential Premises Interim Rent Stabilization Act. Although the imposition of rent control has far reaching implications for the housing market, the purpose of this paper is to look primarily at the factors which established the market conditions which resulted in the rent control legislation.
3. United Community Services of Greater Vancouver, Trends in Home Ownership Costs and Disposable Income over the Past Decade, (Vancouver: U.C.S. of Greater Vancouver, November, 1973).
4. Central Mortgage and Housing Corporation, Housing Statistics British Columbia Region, December 1973, Year end Review, (Vancouver: CMHC, January 1974).
5. This paper, Chapter I.
6. Allan J. Braff, Microeconomic Analysis, (New York: Wiley and Sons, 1969), pp. 9-17.
7. This paper, Chapter II (2.11).
8. For another discussion on this subject see John P. Shelton, "The Cost of Renting versus Owning a Home", Land Economics, February 1968; and Alvin E. Coons and Bert T. Glaze, Housing Market Analysis and the Growth of Home Ownership, (Columbus, Ohio: The Ohio State University, 1963)
9. A discussion of considering land as a residual in the development process is included in Chapter II (2.2).
10. Philip H. White and S.W. Hamilton, The Real Property Tax in British Columbia - An Analysis, (Vancouver, B.C.: B.C. School Trustees Association, April 1972), p. 4. Property taxes are generally thought to be passed forward to the tenant by owners of rental properties. See Henry Aaron, "A new view of property tax incidence", and Richard A. Musgrave, "Is a property tax on housing regressive," American Economic Review (Papers and Proceedings), Volume LXIV, No. 2, May 1974.

It should be noted that with respect to both financing costs and property taxes the comments in the text assume no prejudice (according to tenure type) on the part of lenders or assessors. In fact this is not true. As will be discussed in Chapter V lenders have been encouraged by the Federal Government through various means to provide loans at preferable rates to owner-occupiers. In practise, assessors tend to value rental (income producing) properties higher than owner-occupied properties with the result that landlords (and hence tenants) probably pay higher property taxes than owner-occupiers.

11. Shelton, p. 65.
12. As pointed out land cost is a residual in the development process and since property tax is based on market value and not on tenure type there appears no reason that real costs should differ.
13. Shelton, p. 66.
14. Frank A. Clayton, "Income Taxes and subsidies to homeowners and renters: A comparison of U.S. and Canadian experience", Canadian Tax Journal, Volume XXII, Number 3, May-June 1974.
15. Richard Goode, "Imputed rent of owner-occupied dwellings under the income tax", Journal of Finance, December 1960, pp. 505-6; and Frank A. Clayton, p. 302.
16. David Laidler, "Income tax incentives for owner-occupied housing", in A. Harberger (ed.), Taxation of Income from Capital, (Washington: 1969), p. 52.
17. Frank A. Clayton, p. 303.
18. Robert C. Levine, The Economic Reasons for the Shortage of Residential Rental Accommodation in Greater Vancouver, Master's Thesis, University of British Columbia, 1974, pp. 56-71.
19. The Honourable John N. Turner, Minister of Finance, Budget Speech, November 18, 1974, p. 19.
20. H. Heward Stikeman, Income Tax Act, 2nd Tax Reform Edition, 1973, (Canada: Richard De Boo, 1973), pp. 91-92.
21. Henry Aaron, "Income Taxes and Housing", The American Economic Review, December 1970, p. 796.
22. Central Mortgage and Housing Corporation, Canadian Housing Statistics, 1973, (Ottawa: C.M.H.C., March, 1974) p. 27. Loans approved for new and existing housing under the housing acts amounted to \$1.7 billion on 89,138 units in 1973 alone.

23. For a summary of Canadian Housing policy to the late 1960's see Albert Rose, "Essential Elements of a Canadian Housing Policy", in M. Wheeler, (ed.), The Right to Housing, (Montreal: Harvest House, 1969), pp.63-96.
24. Albert Rose, p. 85.
25. The Honourable John N. Turner, p. 19.
26. Ibid, p. 18.
27. Province of British Columbia, Provincial Home Acquisition Act.
28. Province of British Columbia, Home Owner Assistance Act.
29. Province of British Columbia, Renters' Resource Grant Act. The Leasehold and Conversion Mortgage Loan Act does subsidize prospective landlords through preferred mortgage rates if he is prepared to undertake a conversion. Enough conversions could influence supply enough to ultimately benefit the tenant but the likelihood of conversions is small in view of rent controls. See Province of British Columbia, Residential Premises Rent Stabilization Act.
30. The tax advantages of apartment development are given as one of the reasons for the apartment boom of the late 1950's and early 1960's by W.F. Smith, The Low-Rise Speculative Apartment (Berkeley: University of California, 1964), pp. 31-35 and Max Neutze, The Suburban Apartment Boom, (Washington, D.C.: Resources for the Future, Inc.), pp. 31-34. Similar advantages existed for Canadian Investors and these tax benefits would ultimately have shifted to the tenant, all other things being equal. These benefits in the Vancouver market are discussed by F.R.A. Dale-Johnson, Returns on Apartment Properties for the Period 1960-70 in the Greater Vancouver Area, M.B.A. Thesis, University of British Columbia, May 1972 and Robert C. Levine, The Economic Reasons for the Shortage of Residential Rental Accommodation in Greater Vancouver, M.B.A. Thesis, University of British Columbia, May 1974. However, in the long run it seems that these benefits have been outweighed by subsidies directed toward home ownership as enumerated in this chapter.
31. Aaron, p. 803.

## APPENDIX - CHAPTER IV

### FURTHER COMMENTS ON THE COSTS OF RENTING AND OWNING

#### APPENDIX 4.1 A CASE COMPARISON

Section 4.2 - The Real Costs of Renting and Owning - demonstrates that in an unconstrained market, over the long run, there should be no significant variation between the costs of owning or renting similar housing units. This conclusion, however, assumes an unconstrained market. Hence it may be valuable to undertake this same comparison in the context of the current market.

The most appropriate methodology of comparing the situation of the renter and the owner would be to look at the costs according to tenure for an identical dwelling unit. Looking first at a condominium in a concrete hi-rise in Vancouver's West End, the purchase price under current market conditions might be about \$35,000.00. This would be for a one-bedroom unit. Assuming the purchaser had a \$10,000 downpayment he could acquire a \$25,000 mortgage for the balance. At 10½% with a 25 year mortgage the payments including principal interest and taxes would be \$3,185.08 (assuming yearly taxes of \$400.00).

That same unit might be rented under current market conditions for \$250.00 per month. To put the renter in a comparable

position to the owner, he must be provided an investment of identical risk to that which the owner makes when he invests in his own home. The only investment which would be identical would be for the renter to buy an identical unit and rent it out. While this approach will suffice for now it does have some drawbacks which will be pointed out later. A summary of the comparative costs of owning versus renting is included in Table I.

TABLE I

CASE COMPARISON OF THE COSTS OF OWNING VERSUS RENTING

<u>OWNER</u>		<u>RENTER</u>	
Down Payment	\$ 10,000.00	Rent (250.00/mo.) 3,000.00/yr.	
Mortgage*	25,000.00		
Payments	232.09/mo.		
(Principal & Interest)	2,785.08/yr.	<u>Invests</u>	
Taxes	400.00	Down Payment	\$ 10,000.00
		Mortgage*	25,000.00
		Payments	232.09/mo.
		(Principal & Interest)	2,785.08/yr.
Benefits		Taxes	400.00
Provincial Home			
Acquisition Grant	\$ 1,000.00		
(\$90.00 per yr. capitalized at 9% is equivalent to a lump sum of \$1,000.00)		Income	
Provincial Home		Rent (\$250.00/mo.)	\$ 3,000.00
Owner's Grant	235.00/yr.	- Property Taxes	400.00
		Net Operating Income	2,600.00
		- Interest	2,559.79
		- Capital Cost Allowance	40.21
		Taxable Income	0
		x Tax Rate (x%)	0
		Tax Paid	0
<u>Overall Cash Flow Summary</u>		Net Operating Income	2,600.00
Payments		- Principal	225.29
- Principal of Interest	- \$ 2,785.08	- Interest	2,559.79
- Taxes	- 400.00	- Tax Paid	0
	- 3,185.08	Cash Flow	- 185.08
Benefits	+ 90.00		
	+ 235.00	<u>Overall Cash Flow Summary</u>	
Total Yearly Cost	- 2,860.00	Rent	- 3,000.00
		Investment Cash Flow	- 185.08
			- 3,185.08

\*MORTGAGE: \$25,000.00 principal, 25 year amortization period, 10½% = nominal rate compounded semi-annually.

This comparison is based on the interest expense and capital cost allowance in the first year. Clearly these costs would adjust over time. This analysis is optimistic from the renter-landlords point of view as it assumes property taxes to be the only operating expense and it ignores the tax treatment at the time of disposition. It is likely that the renter-landlord would be subject to capital gains tax while the owner-occupier would not.

The drawback to using this approach of comparing costs to the owner and renter is clear. Because of the extent of subsidies to home ownership it is obvious that a home is worth more to the owner occupier than to a landlord, hence the nature of the investment changes depending on the point of view, that of the owner-occupier or that of a landlord.

#### APPENDIX 4.2 RHOSP: SUBSIDY TO RENTER OR OWNER?

Ignoring the structured comparison in Table I, one of the major inequities between owning and renting is that the home owner is sheltered from inflation while the renter must save after tax dollars for home purchase and still remains subject to inflation. Assuming the renter could afford to make the investment described above he does gain that protection but clearly his investment is worth more to him as an owner-occupier than as a landlord.

The Registered Home Ownership Savings Plan (RHOSP)<sup>1</sup> is an attempt by the Federal Government to allow the renter to save before tax dollars and put these dollars toward home purchase. While this has the impact of allowing the renter to make up for subsidies directed to owner-occupiers the RHOSP program is, in the final analysis, another subsidy encouraging home ownership rather than rental. An individual who chooses not to buy a home cannot benefit from the subsidy. The subsidy is, of course, the tax savings generated by the funds deposited in the plan.

FOOTNOTES - APPENDIX - CHAPTER IV

1. The Honourable John N. Turner, Minister of Finance, Budget Speech, Nov. 18, 1974, p. 18. The Registered Home Ownership Savings Plan (RHOSP) is simply a tax incentive for saving toward the purchase of a home. A summary of the main aspects of the RHOSP is included in Patrick Durrant, "New Deadline Under RHOSP's," The Vancouver Province, Saturday March 22, 1975, p.21. To be eligible to participate in an RHOSP, the taxpayer must be 18 years of age or over; resident in Canada; not have previously been a beneficiary under an RHOSP; not have owned at any time in the year of deduction any residential real estate in Canada; and not have lived in an owned housing unit in Canada at any time in the year of deduction.

If both husband and wife individually meet these requirements, each of them may establish a plan. The maximum individual contribution is \$1,000 for any year and \$10,000 total contributions. Contribution limits are not connected in any way to amount, or particular source, of income.

Each taxpayer is allowed only one RHOSP in his lifetime. If a plan is started and later terminated, he cannot begin another one. However, a person may enter into a plan and subsequently buy a home, but not use the money accumulated towards this purchase. He cannot contribute while owning the home, although if he later sells it he can resume contributions to the RHOSP and ultimately apply the total amount towards purchase of another home.

Any money contributed to an RHOSP that subsequently goes towards purchase of a house or home furnishings (which, incidentally, have not yet been completely defined) will be tax exempt.

## CHAPTER V

### OTHER DEMAND VARIABLES IN GREATER VANCOUVER

While the last chapter has shown the prejudice of policies which tend to favour the homeowner, the argument must be considered in the context of what might be called normal demand factors. These normal demand factors are difficult to consider alone due to the profusion of reallocative policies which tend to influence consumer preference. Nonetheless, factors such as demographic characteristics, income and income distribution, price and price expectations and credit conditions along with changing consumer tastes and preferences have a significant impact on housing demand and the mix of housing demanded. This chapter looks at the most significant of these factors and their impact on the Greater Vancouver housing market as distinct from the impact of the reallocative policies discussed in Chapter IV.

#### 5.1 HOUSEHOLD FORMATION AND HOUSING DEMAND

Demographic factors may justify not only overall changes in the demand for housing but also the demand for differentiation

in housing. In particular net-migration and household formation have clearly increased the demand for housing in Greater Vancouver. (See Table 5.1). It is argued that restrictive provincial and municipal laws, by-laws, development policies and procedures have restricted supply with the obvious consequence of high prices. In the context of the prior discussion on tenure choice, what is perhaps more significant is the nature of that increased demand.

Table 5.1

Housing Supply and Demand in the GVRD

1956-81

<u>Years</u>	<u>Dwelling Unit Starts</u>	<u>Family</u>	<u>Household Formation</u>	
			<u>Non-Family</u>	<u>Total</u>
1956-61	42,473	27,100	8,400	35,500
1961-66	46,391	23,900	19,700	43,600
1966-71	69,851	42,100	22,400	64,500
1971-76	98,280*	55,400	35,600	91,000
1976-81	114,804*	67,800	38,500	106,300

\*Projections based on household formation demands of 91,000 and 106,300 respectively. Considering demolition, this requires annual averages of 19,656 and 22,960 dwelling units starts for each of the years 1971-76 and 1976-81 respectively if the forecasting demand is to be met.

Source: Central Mortgage and Housing Corporation, Canadian Housing Statistics, yearly editions; and J.S. Kirkland, Demographic Aspects of Housing Demand to 1986, (Ottawa: CMHC, 1971). Cited by United Community Services of Greater Vancouver in Trends in Home Ownership Costs and Disposable Income over the past decade, (Vancouver: U.C.S., 1973), p. 2.

In the context of the choice between rented and owned housing it is valuable to consider the issue of providing households with units "normally" suited to their needs and preferences.<sup>1</sup> Factors such as age of head, size of household and income determine the type of unit which will best meet the needs of a household. Obviously through time the nature of individual households changes while the composition of all households grouped together changes as well. In other words, the life cycle influences the nature of individual households as a particular head marries, raises a family and watches his children grow up and start the same cycle.

Such cycles in the aggregate are greatly influenced by the general economic and social milieu of the nation. For example changing birthrates have implications regarding the number of individuals who will form households twenty to twenty-five years later. Changing ideals, tastes and economic circumstances have some bearing on not only birthrates but also the timing and frequency of marriage. Knowledge of the overall population growth rate along with the household formation rate and the types of households being formed is essential to interpret and anticipate changes in the housing demand function. Moreover if an attempt is made to break up demand according to tenure submarket, the knowledge of the nature of households is imperative.

A household may take any form ranging from two college students sharing an apartment to a large family living in their own home.<sup>2</sup> Obviously the type of household and its utility function will have a direct bearing on the size, structural form, tenure type and location of the dwelling unit demanded. Hence the composition of the households in aggregate will have implications for how the housing stock is used in the short run and how it changes in the long run.

#### 5.11 The War Babies

The baby boom in the post war years has provided probably the single most significant influence on the demand for dwelling units. The largest cohort in history produced by the post war baby boom has had to be absorbed by the housing market. This cohort or aggregate of persons born between 1945 and 1950 are not a new problem. Demographers have likened their assimilation into society "to the process by which a python digests a pig. As the pig moves along the snake's digestive tract, it makes a bulge, just as the boom babies are causing a traveling bulge in the economy and social life of the country".<sup>3</sup>

The existence of post war babies is not something new, in fact their presence has been felt over the years by different sectors of society. In the last half of the 1960s the capacity of the higher educational system was being taxed to the breaking

point. At the same time Wallace F. Smith and Max Neutze detailed the effects of this segment of the population on suburban apartment building.<sup>4</sup> In fact Neutze forecasts today's problem. "As the babies of the 1940's continue to come into the market they will maintain a strong demand for apartments. Toward the end of the decade they will begin to make their presence felt in the house market and in the 1970's will cause a very strong resurgence in the demand for houses."<sup>5</sup> Although the work of Smith and Neutze relates specifically to the American market there is no doubt that a parallel situation existed in Greater Vancouver. Consider the large number of wood-frame three floor walk-up apartments and high rise units constructed in Vancouver during the 1960s. Although it is argued that tax-incentives gave impetus to this construction<sup>6</sup> it is likely that builders and investors were responding as well to increased demand by young singles, the post war babies.

Pursuing this argument, these same households as forecast by Neutze have shifted into the market for owned homes. Given impetus by reallocation subsidies it is conceivable that this shift could take place much sooner and much more dramatically than under normal circumstances. A recent article indicates that in the United States where similar preferential subsidies exist fully 30% of the new condominiums are going to young unmarried buyers.<sup>7</sup>

The direct influence of the coming of age of the war baby cohort on the demand for rented or owned housing is not clear. This is due to two other factors. The first, one person households as an aspect of changing household formation and the second, immigration. Immigration is more correctly termed net migration, taking into account emigrants and immigrants from other parts of this Province and Canada and from outside Canada.

#### 5.12 The Formation of one Person Households

As the war baby cohort has contributed to a generally increased housing demand first in the rental market and shifting to the ownership market the increased prevalence of one person households backed by the prosperity of the 1960's and 1970's has also contributed to a general increase in demand. A recent article by Robert M. Fisher and John W. Graham outlines the growth of one person households in the United States; the number of one-person households as a portion of all households increased from 9.3% in 1950 to 17.6% in 1970 while the share of one person households in total household growth amounted to 16% in the 1940's, 30% in the 1950's and 39% in the 1960's. In 1970, 11 million of 52 million occupied dwellings were occupied by 11 million one person households, the remaining 41 million dwellings were occupied by 192 million people.<sup>8</sup>

Canadian data supports the American research in that the number

of one person households as a percentage of the total number of households has increased and that 29% of the new households formed in Greater Vancouver between 1960 and 1970 were one person households.

Table 5.II

Growth of one person households in Greater Vancouver

	1960	Change 1960-65	1965	Change 1965-70	1970
No. of one A= person households	30,080	17,237 57%	47,267	18,408 39%	65,675
B= Total households	228,598	43,358 19%	271,956	74,259 27%	346,216
$\frac{A}{B} \times 100$	13%		17%		19%
$\frac{\Delta A}{\Delta B} \times 100$		40%		25%	

Source: Statistics Canada, Population and Housing Characteristics by Census Tracts, Vancouver, Census of Canada, 1961, 1966, 1971.

While it is difficult to draw firm conclusions from such data it is apparent that changing social and economic factors have resulted in the rapid growth of a new household sector to add pressure to an already difficult market situation. A society which permits independence from the family unit at an early age, accepts unmarried life as a norm for many and demands independence and freedom for its elderly has given the impetus

to this growing sector of housing demand. That the number of one person households have mushroomed should not be condemned but their role as disproportionate consumers of shelter space must be recognized in a market where dramatic increases in demand are evident.

What are the implications of such changes in the aggregate make-up of households? Firstly if it can be assumed that the increased prevalence of one person households has not been offset by a corresponding drop in the number of family households then there has been increased competition for the existing housing units. In other words since by definition a household must occupy a dwelling unit then one person household must have in many cases outbid family households for the existing dwelling units. In other words the number of intended households has increased thereby intensifying the bidding for the existing dwelling units and the flow of new units.

A further characteristic of one person households which is a major factor in measuring their contribution to demand for housing is the consistency of their participation in the market. Louis Winnick is quoted as having noted as early as the 1950s that

"The one-person household may possibly be the most volatile sector of housing demand shifting from headship to other household status more readily than other groups. That is, the 'doubling' and 'undoubling' of

adult individuals may be characterized by wider cyclical swings than in the case for married couples or other types of families."9

Particularly the young adult is totally flexible in his ability to 'double' or 'undouble' or in fact to return to his family depending primarily on his economic circumstances. Essentially this means the elasticity of housing demand with respect to income may be considerably greater for the young single householder than for the relatively established family household.

#### 5.13 Net Migration

A final factor contributing to increased household formation and housing demand is net migration. Net migration is determined from the residual increase in population after natural increase (the number of births less the number of deaths) is accounted for. Obviously, any net influx of people will shift the demand curve for housing upward. In-migration has long been recognized as a major factor in the increased rates of household formation in Greater Vancouver.

Net migration accounted for 76.5% of the growth in population in the Greater Vancouver regional district between 1966 and 1971.

Table 5.III

<u>Migration to the GRVD</u>		
<u>Period</u>	<u>Net Migration</u>	<u>% of population increase</u>
1951-56	57,608	55.8%
1956-61	72,052	57.6
1961-66	63,054	61.6
1966-71	103,592	76.5

Source: Population forecast GVRD Planning Department, Vancouver, B.C., January 1973.

While these statistics are interesting because net migration gives some indication of additional housing requirements, a look at age distribution of the 1961 to 1966 group is even more helpful.

Table 5.IV

<u>Age and Sex Distribution</u> <u>of Migrants</u> <u>to the GVRD 1966-71</u>			
<u>Age</u>	<u>% Male</u>	<u>% Female</u>	<u>% Total</u>
0-9	16%	16%	16
10-19	14	15	14.5
20-29	33	33	33
30-39	16	12	14
40-49	9	6	7.5
50-59	5	5	5
60-69	4	7	5.5
70-79	1	3	2
80 +	2	3	2.5

Source: Population forecast GVRD Planning Department, Vancouver, B.C. January 1973.

The greatest proportion of migrants to the GVRD during this period were and still are in the household formation stage of their life cycle. Not only is the 20-30 age group contributing significantly to the general increase in housing demand but also their preference for homeownership has been given impetus by pro homeownership policies.

This analysis has shown that due to particular characteristics of demographic change such as the post war baby boom, the formation of one person households and the characteristics of in-migrants the increase in the rate of household formation has been dramatic during the last decade. It is argued that the reallocative policies that favour home ownership have tended to shift the burden of this growth to the home ownership sub-market. Consequently prices in the home ownership sector have seen a much more rapid increase than rents. A 1972 Greater Vancouver study supported this by concluding that younger childless couples preferred ownership of a single-detached dwelling and remained committed despite its high cost to them.<sup>10</sup>

The relationship between income, price and housing demand has been explored innumerable times in the past and a wide margin of uncertainty appears to exist regarding the response of housing expenditures to income and price variation. Most studies have looked specifically at changes in income and

changes in price and their respective influence on demand. Most significant with respect to the choice in tenure are the distribution of incomes with respect to the households bidding for dwelling units and the price expectations of the participants in the market place.

## 5.2 INCOME AND THE DISTRIBUTION OF INCOME

The view generally held until the mid-1950s was that the elasticity of housing consumption with respect to current income was less than one. In other words for any increase in income there was a less than proportionate increase in expenditure on housing. Since that time it has been argued that if consumption is related to current income results are downward biased because such factors as wealth and expectations of future income are ignored.<sup>11</sup> This more recent view of income in relation to housing demand was given impetus by Ando and Modigliani's life cycle hypothesis and Friedman's permanent income hypothesis. These theories of consumption behaviour should be considered in greater detail in order to throw some light on income as it influences housing demand.

Ando and Modigliani suggest a consumption function in which individual consumption depends on the resources available to the individual, the rate of return on capital, and the age of the consumer unit. The resources available to the individual

include existing net worth or wealth and the present value of all current and future non-property earnings.<sup>12</sup> Friedman asserted that measured income and measured consumption can each be regarded as the sum of two components: the permanent income component and the transitory component reflecting the influence of factors regarded as change or random by the consumer unit. The permanent income component is to be interpreted as reflecting those factors which the consumer unit regards as determining its capital value or wealth.<sup>13</sup> The transitory component can be either positive or negative and does not influence permanent consumption which is proportional to permanent income.

A comprehensive survey of housing and income research subsequent to consideration of the permanent income concept indicates an elasticity of income with respect to rental expenditure of between 0.80 and 1.0. For ownership expenditure the estimates fall between 1.0 and 1.5 except for one value of 0.7.<sup>14</sup> This new view on consumer decision making based on permanent or normal income hypothesis indicates a preference of renter to spend less of an income increment on housing than owners and has definite implications for the housing market.

The difference in demand elasticities suggests that any policy which tended to generate a specific tenure preference would have the following effect. If it were a policy which was preferential to home ownership it would ultimately generate

relatively more housing demand as income increased than if the policy were preferential to renters. The further implication is that the price rise generated by the increased demand would be relatively greater in the ownership sector than in the rental sector. This conclusion can be drawn due to the inelasticity of supply in both submarkets. It should be noted that it may be possible that the difference in observed elasticities is generated by the differential treatment of owner and renter hence this line of reasoning is circular.<sup>15</sup> Such a possibility still does not negate the fact that income increments will generate relatively more demand from home owners than renters.

Changes in income over time are important but with respect to the allocation of housing the changing characteristics of the recipients of that income must also be considered. Considering again the demographic changes recently described, increases in income in the hands of one person households and the 20 to 30 year old war babies are in the hands of that sector of society which is the most readily able to bargain its way into superior housing. By nature of the definition of households the existence of an increasing number of one person households and working couples has ensured that this consumer group has been in a position to outbid family households for living space. It is readily apparent that a one

person household or even a couple with an income of "x" dollars can afford to spend more income on housing than the family household with only one breadwinner and the same income.

Though the income elasticity of demand for shelter may be close to unity it may be argued that the income elasticity with respect to shelter space and quality may be greater than unity.<sup>15</sup> During periods of prosperity the proportion of income spent on shelter space and quality would increase at a greater rate than overall income. Intuitively this makes sense and in fact is supported by federal legislation which demands a certain size and quality of housing unit before financing will be provided.<sup>17</sup> The unfortunate implication of a higher income elasticity of demand for space and quality as opposed to shelter is that those who are recipients of the increments in income will bid away space and quality from those who are not. Where income distribution is equitable the results of such a phenomena are not a problem however if equity does not exist this process would tend to emphasize the disproportionate use of shelter space and quality. Referring back to the growth of one person and working couple households it is conceivable that if different income elasticities of demand exist for shelter and for shelter space and quality the demands of these household sectors would result in the disproportionate use of the housing stock.

### 5.3 PRICE AND PRICE EXPECTATIONS

Price is a significant factor in housing demand. Price will be discussed later in the context of credit conditions but at this point it would be valuable to explore the question of price expectations and how they relate to housing demand. Before doing so a look at increases in rents and increases in the prices of owned homes over the past ten years might be informative.

Table 5.V

<u>Apartment Rents in Greater Vancouver</u>								
<u>1964-1974</u>								
<u>West End High Rise</u>					<u>Marpole Frame</u>			
	<u>1 br.</u>	<u>% Change</u>	<u>2 br.</u>	<u>% Change</u>	<u>1 br.</u>	<u>% Change</u>	<u>2 br.</u>	<u>% Change</u>
1964	91		117		95.50		120	
1965	120	31.9	175	49.6	100	4.7		4.0
1966	120		175		100		125	
1967		4.1		2.9		15.0		24.0
1968	125		180		115		155	
1969	140	12.0	190	5.6	125	8.7	160	3.2
1970	150	7.1	200	5.4	130	11.5	175	9.4
1971	165	10.0	225	12.5	145	11.5	185	5.7
1972	170	3.0	230	2.2	155	6.9	185	0
1973	180	5.9	270	17.4	160	3.2	225	21.6
1974	185	2.8	295	9.3	175	9.4	250	11.1

Source: Greater Vancouver Real Estate Board. Real Estate trends in Greater Vancouver, (Vancouver: Greater Vancouver Real Estate Board, 1964-1974).

Table 5.VI

Average Sales Price in the Greater Vancouver Area: Multiple Listing Sales

(1964-1974)

	<u>Average Sales Price</u>		<u>% Change from Prior Year</u>
1963	\$ 12,636		
1964	13,202	566	4.48%
1965	13,964	762	5.77
1966	15,200	1236	8.85
1967	17,836	2636	17.34
1968	20,595	2759	15.47
1969	23,939	3344	16.24
1970	24,239	300	1.25
1971	26,471	2232	9.21
1972	31,465	7994	18.87
1973	41,505	10040	31.91
1974(until June)	57,242	15737	37.92

Source: Greater Vancouver Real Estate Board. Multiple Listing Service, 1963-1974.

The concept of cross-elasticity is perhaps most important in this analysis, particularly because this study is attempting to look at the relationship of the rental and ownership sub-markets. As has been emphasized already the theory of cross elasticity suggests that as prices rise in one submarket there will be a tendency for consumers to shift to substitutes existing in another submarket and vice versa.<sup>19</sup> Under normal circumstances this relationship would exist between the rental market and the home ownership market.

However, if the consumer is convinced that prices of houses for sale will continue to escalate he will make every attempt to make his purchase now rather than wait. This results in the transfer of future demand to the present. The consumer however still does not react normally to increases in price if his expectations of further increases remain high. Ownership becomes a growing asset as the consumer recognizes the protection against inflation which it affords. In fact, higher prices will not deter buyers but will provide them with more and more impetus to establish a toe-hold in the marketplace. In this context any attempt to measure price elasticity with respect to housing demand or cross-elasticity with respect to price seems ludicrous. Higher prices do not deter but in fact fuel demand if higher price expectations are characteristic of the market.

Under normal circumstance where price changes have not and are not expected to be too great expectations would not be a consideration. However in a position where the rate of household formation is high and where subsidies are preferential to home ownership price increases would be greater in the ownership market than in the rental market simply because of the demand shift. Hence it is quite likely that expectations could begin to take hold resulting in an even greater shift in demand. This situation has no doubt occurred in Greater Vancouver during

the 1970 to 1974 period. Prospective home owners have argued that they cannot afford to wait.

#### 5.4 CREDIT AVAILABILITY, COST AND DEMAND

Cursury attention has already been paid to the question of credit availability and cost. Because the mortgage market has been used as a means of subsidizing home ownership, its role was discussed briefly in Chapter IV. Apart from the role of the mortgage market as a medium for housing subsidies, credit availability and cost are still significant factors influencing the demand for housing and choice in tenure.

While the availability of financing is not a prerequisite for the participation of the consumer in the rental market, it is a necessity for most to participate in the ownership market. For new housing in Vancouver financed under the National Housing Act in 1973 the average dwelling cost was \$33,653 while the average downpayment was only \$9,049.<sup>20</sup> 1971 census figures indicate that of 203,525 owner occupied dwellings in Greater Vancouver 115,060 or 57% were carrying mortgages.<sup>21</sup>

It is important to note that financing has a rather unique influence on the consumer. Firstly financing is a cost and hence could be defined as part of the price of a house for sale. However, as such it is a cost unique to each consumer depending

on the size of his downpayment and the terms he can negotiate with the lender. Secondly, in addition to cost there is the question of availability. In periods of high demand mortgage funds may not be available at any price or if available only on very demanding terms. Since financing is so important to many potential homeowners its availability and cost has proved a useful tool to government to check or give impetus to demand and in turn influence the economy.<sup>22</sup>

Unlike most other demand factors, financing costs and availability often prevent intended demand from becoming effective demand. Three credit terms fluctuate to influence effective housing demand and they are the mortgage maturity period, interest rate and the down payment requirement. A research project undertaken by Jack E. Gelfand<sup>23</sup> attempted to show the influence of liberalized credit terms on the lower middle-income housing market in three Pennsylvania cities: Philadelphia, Pittsburgh and Harrisburg. He concluded that the downpayment requirement was the most onerous for the prospective buyer. The percentage of respondents who were "financially capable" almost doubled as the downpayment requirement was reduced from one-third to one-tenth while decreases in the mortgage rate and increases in the mortgage maturity period resulted in only a marginal increase in the percentage "financially capable". An indication of the impact of these va-

riables in a Canadian milieu are provided by the Royal Commission on banking and finance "consumer survey" which indicated that 15% of the families who purchased homes in the 1957-62 period would have purchased no home (9%) or a cheaper home (6%) if down payments had been 10% higher. 32-40% would have purchased no home (20-25%) or a cheaper home (12-15%) if monthly payments had been 10% higher.

Needless to say price must be taken into account when considering credit terms and financing costs. No matter what the credit terms price can ultimately become the final determinant of whether a household can afford to buy or not. Even if the household feels that it can afford onerous monthly payments, mortgage lenders may not allow financing to take place due to the high debt service ratio, the ratio of monthly mortgage payments on principle, interest and taxes to the individuals monthly gross income.

What is clear from this discussion is that credit terms serve either to check or facilitate demand. In the past credit terms have been eased to give a greater proportion of the population access to homeownership. Adequate proof of this is provided by a record of Central Mortgage and Housing regulations over the past twenty years. See Tables 5.VII and 5.VIII for a summary.

NHA-INSURED MORTGAGE LOANS

TABLE 5.VII: Changes in Selected Terms, 1954 to 1972

YEAR	MAXIMUM INTEREST RATE	MAXIMUM LOAN TO VALUE RATIO	MAXIMUM LOAN	MAXIMUM AMORTIZATION PERIOD	MAXIMUM GROSS DEBT SERVICE RATIO
1954	5½	new single detached 90% of 1st \$8000 70% of rest	\$12,800	25 yrs	23%
1955	5¼				
1956	5½				
1957	6	new single detached 90% of 1st \$12,000 70% of rest	\$12,800		27%
1959	6 3/4	new single detached 95% of 1st \$12,000 70% of rest	\$14,200 if 3 bdrms, or less \$14,900 if 4 or more bdrms.	35 yrs	
1961	6½				
1963	6¼	new single detached 95% of 1st \$13,000 70% of rest	\$14,900 if 3 or less bdrms. \$15,600 if 4 or more bdrms.		
1965		new single detached	\$18,000		
1966	7¼	existing detached 95% of value	\$10,000		
1967	8¼	existing semi-detached 95% of value and duplex	\$10,000/unit		
1968	9 1/8	new single detached 95% of \$18,000 70% of rest			
1969	(9½) rate freed	new single detached, 95% of \$20,000 80% of rest " row or semi-detached 90% existing	\$25,000 \$25,000/unit \$18,000	40 yrs	
1970	(10½)				
1971	(9)				
1972	(9)	new single-detached, 95% of value " row or semi-detached 90% of ½ value 90% of rest existing	\$30,000 \$30,000/unit \$23,000		30% 30%

Table 5.VIII: NHA-Insured Mortgage Loans: Maximum Terms as of October 1973

- A. Insured Loans Maximum interest rate: Free to find its own level. The rate on NHA-insured loans by approved lenders is 10%. Maximum Gross Debt Service Ratio is 30% for single family units and 42% for duplex or semi-detached. Application fee is \$35.00.

	MAXIMUM LOAN TO VALUE RATIO	MAXIMUM LOAN (Excluding insurance)
(1) <u>Home-owner detached house</u>	95% of lending value	\$30,000.00
(2) <u>Home-owner duplex</u>	95% of lending value on owner's half. 90% of lending value on other half (rental)	\$30,000.00
(3) <u>Home-owner semi detached</u> (2 units side by side)	As for duplex	\$30,000.00 per unit
(4) <u>Home-owner row units</u>	95%	\$30,000.00
(5) <u>Home-owner apartment</u> (co-operative or condominium)	95%	\$23,000.00
(6) <u>Rental Properties</u>	90% of half the lending value <u>Detached house:</u> (Except owner's unit)	\$30,000.00 per unit
	<u>Duplex (up &amp; down)</u>	\$30,000.00 per unit
	<u>Semi-Detached(per unit)</u>	\$30,000.00 per unit
	<u>Row dwelling(per unit)</u> (maximum 2 storeys)	\$30,000.00 per unit
	<u>Multiple family(fully serviced)</u>	\$20,000/ unit
(7) <u>Existing Detached</u>	95% of lending value (House must be developed to minimum standards)	\$30,000.00

- B. Home Improvement Loans Maximum interest rate 10%

Maximum loan: single-family dwelling \$4,000  
two or more units \$4,000 for first unit, plus  
\$1,500 for each additional unit  
Maximum repayment period: 10 years Maximum (effective 5 years)

Eased credit terms tend to shift demand from the rental sector to the home ownership sector. While eased credit terms may provide access to more buyers, that increased access implies greater demand and hence higher house prices. For this reason the inception of easier credit terms when existing demand and prices already justify new construction seems a rather pointless policy. While increased prices may attract more builders it would not appear to serve any purpose if yearly production is close to the maximum 3-4% of stock which the industry is able to provide. Easier credit when demand is already increasing rapidly due to immigration, household formation, higher incomes and subsidies preferential to home-ownership only serves to aggravate demand and work at cross-purposes to its original intent.

In a market where housing prices are rising rapidly and easier credit implies a longer term, a smaller down payment and a higher debt service ratio, more onerous payments are not a deterrent to demand. If the buyer is consumption oriented he is not concerned with the total cost of the package but with the availability of financing. Even if monthly payments are high the consumer recognizes that rising prices will build his equity and he will always have the opportunity to refinance at a later date. In fact the equity provided by rising prices may provide the impetus to refinance in order to cash out and

and use that cash to invest in a second property. While this procedure if prevalent may add to the rental stock it serves to further aggravate the demand for owned housing.

This chapter has attempted to demonstrate by observation of the market how certain variables have given further force to housing demand and for home ownership in particular. The coming of age of the war baby cohort, the growth of one person households and a high rate of in-migration simultaneously have increased the number of households in the market place bidding for accommodation. Statistics show that production of new housing units in Vancouver is barely able to keep pace with the rate of in-migration let alone the growing demand for housing space and quality of current residents. Rising incomes have outstripped rent increases and fallen behind increases in house prices but serve to demonstrate the apparent shift in demand from renting to home-ownership.

What is most interesting to note is that the combination of rising incomes and prosperity along with the prevalence of working couples and one person households allows these household sectors to bid away shelter space and quality from those households with less disposable income. With regard to house prices it is valuable to recognize that higher prices do not necessarily deter demand if expectations play a role. Similarly,

high financing costs and onerous mortgage payments are not a deterrent to demand if expectations are characteristic of the market. Furthermore it would seem that liberal credit ostensibly to provide housing access to a greater portion of the population serves only to aggravate a market already working at capacity.

FOOTNOTES - CHAPTER V

1. The issue of normalcy is discussed by Wallace F. Smith, Aspects of Housing Demand - Absorption, Demolition and Differentiation, (Berkeley: University of California, 1966), p. 52.
2. Central Mortgage and Housing Corporation, Canadian Housing Statistics, 1973, (Ottawa: CMHC, March 1974), p. 108. Defines a household as follows:

"A household for census purposes, consists of a person or group of persons occupying one dwelling. It usually consists of a family group, with or without lodgers or employees. It may consist of a group of unrelated persons, of two or more families sharing a dwelling, or of one person living alone. Every person is a member of some household, and the number of households equals the number of occupied dwellings. A "non-family household" is one whose head is not the head of a family. A non family household may contain lodging families."
3. "Those Missing Babies", Time Magazine, September 16, 1974, p. 51. It is ironic that these war babies are participants in the reverse phenomenon involving declining birthrates which may suggest that households being currently formed will demand less housing space in the future as families will be smaller.
4. Wallace F. Smith, The Low-Rise Speculative Apartment, (Berkeley: University of California, 1964), p. 29 and Max Neutze, The Suburban Apartment Boom, (Washington, D.C.: Resources for the Future, Inc., 1968), p. 22-25.
5. Max Neutze, p. 23.
6. F.R.A. Dale-Johnson, Returns on Apartment Properties for the Period 1960-70 in the Greater Vancouver Area, M.B.A. Thesis, University of British Columbia, May 1972, p. 1.
7. The Urban Land Institute, Land Use Digest, (Washington: U.L.I., October 28, 1974), Volume 7, No. 8.
8. Robert Moore Fisher and John W. Graham, "Housing Demand by One Person Households", Land Economics, Volume L, Number 2 (May 1974).
9. Louis Winnick, American Housing and its Use, the Demand for Shelter Space, (New York: Wiley, 1957), p. 86. Cited by Fisher and Graham, "Housing Demand by One-Person Households," p. 166.

10. United Way of Greater Vancouver, The Housing Game, (Vancouver: United Way of Greater Vancouver, July 1974), p. 19.
11. Frank De Leeuw, "The Demand for Housing: A Review of Cross Section Evidence", The Review of Economics and Statistics, Volume LIII, Number 1 (February 1971), p. 1.
12. A. Ando and F. Modigliani, "The 'Life-Cycle' Hypothesis of Saving: Aggregate Implications and Tests", American Economic Review, Volume 53, Number 1 (March 1963), pp. 55-84.
13. Milton Friedman, A Theory of the Consumption Function, (Princeton: Princeton University Press, 1957) pp. 220-224.
14. De Leeuw, "The Demand for Housing...", p. 1.
15. Most analysis of income elasticity of housing demand has refrained from considering the income effects of housing subsidies preferential to home ownership. See for example Richard F. Muth, "The Demand for Non-Farm Housing", The Demand for Durable Goods, Ed. Arnold C. Harberger, (Chicago: University of Chicago Press, 1960); Tong Hun Lee, "The Stock Demand Elasticities of Non-Farm Housing", The Review of Economics and Statistics, Volume 46, (February 1964); Margaret Ried, Housing and Income, (Chicago: University of Chicago, 1962); and L.B. Smith, Research Monograph No. 2: Housing in Canada: Market Structure and Policy Performance, (Ottawa, C.N.H.C., January 1971). While this is a factor virtually impossible to quantify it may in part contribute to higher income elasticities for owned housing relative to rental housing.
16. Alfred Marshall, Principles of Economics, 8th ed. (London: Macmillan Co., 1952), p. 90.
17. It is argued by some that restrictions placed on housing types which could be financed through the National Housing Act contributed significantly to urban sprawl. See Albert Rose, "Housing Policy in Canada: 1940-1968," in M. Wheeler, (ed.), The Right to Housing, (Montreal: Harvest House, 1969), pp. 85-86.
18. These prices show trend only as multiple listing data does include a small proportion of business and commercial sales.
19. This paper, Chapter IV, Section 4.1.
20. Central Mortgage and Housing Corporation, Canadian Housing Statistics, 1973, (Ottawa, C.M.H.C., March 1974), p. 86.

21. Statistics Canada, Population and Housing Characteristics by Census Tracts, Vancouver, Census of Canada, 1971.
22. Lawrence Berk Smith, Housing in Canada, Urban Canada: Problems and Prospects, Research Monograph No. 2, (Ottawa: CMHC, January 1971), pp. 81-83.
23. Jack E. Gelfand, "The Credit Elasticity of Lower-Middle Income Housing Demand", Land Economics, Volume XLII, No. 4, (November 1966).
24. Royal Commission on Banking and Finance, Appendix Volume, (Ottawa: Queens Printer, 1965), p. 100, Cited by L.B. Smith, Housing in Canada,..., p. 34

## CHAPTER VI

### CONCLUSION

Greater Vancouver is not unique in that her housing market is complicated by subsidies, taxes and controls, all of which tend to disable the housing market. Unfortunately Greater Vancouver is unique in that the pressures of growth have accentuated these influences in the housing market with the result that the housing problem has appeared more serious in Vancouver than in other Canadian cities. The problem is not a simple one.

#### 6.1 THE APPARENT PROBLEM

Professor Pennance's definition of two types of economic shortage seems to be representative of what has in fact happened in the Vancouver market.<sup>1</sup> In the ownership submarket prices have increased dramatically during the past four years. Although the price has moved up to achieve a balance between supply and demand the prices of houses for sale are considered high when referring to a normal price which would have occurred had supply adjusted over a longer period. This situation is common where inelasticity of supply coincides with a volatile

demand.

The second type of shortage exists in the rental submarket. In this submarket demand has outrun supply as evidenced by recent vacancy rates, but something has prevented prices from rising to balance things out. In fact even prior to the introduction of rent control prices were still too low to generate new building. This situation carried on despite there being no apparent controls on the market and very low vacancy rates. Strangely all the factors seemed to be present which would generate increases in rents which would in turn bring about new construction but this did not happen.

It was the existence of this paradox which gave impetus to this thesis. Why did rents not rise far enough to justify new construction in the rental submarket particularly when vacancy rates were low and prices of alternate accommodation (owned housing) were rising rapidly? Why also when prices in the rental sector were so obviously low relative to costs or relative to increases in income and in comparison to prices of alternate accommodation did landlords undergo such criticism in late 1973 and early 1974 as they began to adjust rent levels.

There is the argument that during inflationary periods the consumer constrained by a budget may protest to the landlord

simply because the landlord is the most visible representative of the production sector. It is far easier to protest to the landlord about a rent hike than to track down the individual responsible for higher food costs. Clearly the accessibility and visibility of the production sector (landlords and developers) made them an easy target for criticism regarding rising rents. This however avoids the issue. Why were rent levels even perceived as a problem and why did they become such an issue that rent controls were introduced?

## 6.2 THE INFLUENCE OF HOUSING POLICY ON DEMAND AND ON THE HOUSING MARKET.

The answers to these various questions lie in the kinds of government policies which have molded consumer preferences with respect to housing. Whether intentional or unintentional Canadian policy has tended to direct housing subsidies or taxation at specific kinds of dwellings. The implications of such reallocative policies should be explored in the context of current housing problems.

Ostensibly the goal of such policies should be to ease access to housing at the same time improving the quality of the housing stock and preserving the individuals freedom of choice in the market place. An analysis of redistributive and reallocative policy measures shows that unless specific costs or benefits (externalities) related to the commodity in question

are to be internalized, reallocative measures will result in indirect redistribution of income. While the redistribution through reallocative policies distorts consumer preferences, the more serious result is that prices of the commodities in question do not reflect the real sacrifice that was made to produce the goods.

With respect to policies which were preferential to home ownership and particularly single family detached home ownership, Albert Rose argued,

Although it occupied only one short part of Federal legislation, a consequence of this set of policies was clearly the expansion of vast suburban areas adjacent to every medium-sized and large urban centre. The problems that have ensued, both for the governments and the residents of central cities which did not directly benefit from this encouragement to home ownership, are immeasurable....It is not sufficient for those who have defended such policies to argue that, in the long run, a vast growth of urban population resulted in an expansion of metropolitan economic development inconceivable in the years immediately after the end of the war. It can surely be argued that this is a case where housing policy in effect took over the role of urban planning, in this case suburban planning...2

Rose clearly directs his criticisms toward the obvious problems associated with the rapid suburban expansion given impetus by federal housing policies. Two points should be made. Firstly, as Chapter Four has noted the Federal Government has not been the only contributor to this suburban home ownership boom. Secondly, although Rose emphasizes the most obvious result, the vast expansion of suburban areas

and the problems associated with providing services for that expansion, the underlying economic impact has serious implications on the effective operation of the housing market.

A summary of the numerous policies which have given preferential treatment to home ownership would include the following at the federal level. The non-taxation of the imputed rent on an owned home, the non-taxation of the capital gain on the sale of a principal residence, and in addition the various subsidies provided through the National Housing Act over the years ranging from direct lending of funds to the provision of such funds at an artificially reduced interest rate.<sup>3</sup> Further subsidies have been provided in the recent budget speech again showing a definite preference to home ownership.<sup>4</sup>

At the provincial level the most significant subsidies are the cash grants or second mortgages available for the purchase of the first home. In addition the home owners assistance provided through the refund of a portion of the property tax is a significant benefit to home ownership.<sup>5</sup> The list of subsidies is long and varied and what is perhaps most significant is the incredible complexity and variation of methods which provincial and federal governments use with the sole apparent purpose of reallocating consumer expenditure away from rented dwelling units and toward owned dwelling units.

Albert Rose has touched on some of the more obvious effects of such policies. Since earlier federal legislation preferred one product, the new single family detached home built on vacant land,<sup>6</sup> the result has been the shifting of consumer expenditure to new suburban homes with the coincident externalities created. The more obvious include expensive servicing, the provision of transportation facilities and in many cases the rapid expansion of municipal boundaries. It has become obvious that rather than subsidizing the rapid expansion of suburbia it would have been more à propos to tax the participants in suburban expansion in order to account for the externalities they created.

A less obvious but equally devastating result of the array of preferential subsidies is the economic impact of the shift in consumer preferences. Clearly subsidies preferential to home ownership have reallocated consumer expenditure to the ownership market from the rental market.

As noted in Chapter Three the ultimate result of such re-allocative policies is that prices no longer represent the real costs to society of providing the services. Prices in the ownership submarket are higher and prices in the rental submarket are lower than they would be if the policies did not give preference to one type of housing service (ownership) over another (rental).

In the context of the economic model presented in Figures 2.7 and 2.8 the implications in the production sectors are serious.<sup>7</sup> With a tendency for demand to shift to the ownership submarket, prices rise much more rapidly and much further than normal due to the inelasticity of the supply curve. Even if the resultant slack in demand in the rental submarket is taken up by in-migration and the formation of new households as has been the case in Greater Vancouver the problem is not eliminated. Due to the sharing of factors of production by the ownership and rental sectors rising costs due to the movement along the marginal cost curve in the ownership sector will be translated into a shift in the marginal cost curve in the rental sector. The result in Greater Vancouver was a drop in the construction of new rental units and the increasing tendency for conversion of rental units to strata-title or condominium units.

This shift was given emphasis by the two pronged effects of the 1971 income-tax revision. Firstly the tax-shelter for owners of apartments was removed resulting in a reduction of the flow of new rental units and emphasizing the advantages of converting existing units to strata-title or condominium units. Moreover the advantages of home ownership were emphasized further by the exemption from Capital Gains Tax of the gain on the sale of a principal residences.

Reallocative policies which do not account for externalities but instead indirectly redistribute income have a widespread unfavourable impact on the operation of housing markets. Not only is there an impact on the way in which the existing stock is used but also the response of the production sector may not be to the real needs of the community but to the demand given impetus by reallocative policies which influence consumer choice.

### 6.3 THE IMPLICATIONS

The long term result is more far reaching than Rose imagined. Not only do the preferential policies serve to promote suburban expansion and in so doing influence the form of urban growth but also the flexibility of markets to adapt to changing demands is undermined by shift of capital to the provision of dwelling units for ownership rather than rental. Where there is no apparent need for dwelling units to own rather than to rent except to meet the demands created by reallocative policies the retention of such policies limits the flexibility of the supply sector and could ultimately result in the death of the private rental housing industry. The only alternative to ensure adequate rental housing is massive public housing.

In view of continually changing consumer tastes and demographic characteristics, any policy which tends to undermine the

flexibility of existing markets seems foolhardy. In the context of the influence which the post war baby boom is currently having on the housing market it may be interesting to look ahead at the implications for the housing market twenty years from now. Coincidentally as the war babies reach retirement age the current declining birth rates will probably result in a drop in demand for single family homes. Fewer young families than today will be in the market and the retiring suburban dwellers will likely prefer a smaller more convenient dwelling demanding less upkeep. Since the contemporary ranch style home is particularly inflexible for uses other than that for which it was designed it is conceivable that today's single family home given impetus by current pro-home ownership policies will be the white elephant of tomorrow. Recognizing the extent of conversions of the more centrally located dwellings built twenty and thirty years ago which due to the simple centre hall design were easily convertible, it is conceivable that the preponderance of the contemporary suburban single family home may produce a housing stock at odds with the needs and preferences of the consumer of tomorrow and not readily convertible to meet that need.

As has been recognized at the outset the flexibility of the housing market is limited by the durability, immobility, high cost and heterogeneity of the existing stock. However different forms of tenure and methods of financing have evolved

and through the phenomenon of substitutability have added flexibility to a market which has successfully produced nearly 50% of today's stock over a twenty year period.<sup>9</sup>

Nonetheless, shifts in demand will take place due to changes in consumer preferences and tastes and at any time short term price fluctuations can be expected in order to maintain equality in supply and demand and preserve the price rationing process. At the same time however those prices will give the appropriate stimulus to the production sectors.

However when the shift in demand is given impetus by reallocative policies and the pressures of growth due to in-migration and new household formation add pressure to a production sector which is already working at capacity; and when municipalities have already been burdened by the costs of extensive suburban growth the consequences are readily apparent:

- 1) Prices of houses for sale will skyrocket.
- 2) The production of new rental units will all but cease. Even though in-migration and new household formation will take up the slack in the rental sector it is unlikely that prices even in an unconstrained market would reach a point where it was preferable to produce rental units rather than units for sale.
- 3) Expectations generated by the price movements in the ownership sector will act as further impetus to the consumer to stop renting and to buy.
- 4) Municipalities will attempt to restrict suburban development or else ensure that taxes lower the costs of rapid suburban expansion.
- 5) Ultimately the adaptability and efficiency of both the rental market and the ownership market in meeting the needs and demands of the community will be hindered.

The only way to prevent this kind of result in the housing submarkets is to ensure that all policies used by housing authorities preserve the choice of the individual as to tenure, location, building type and so on. In other words housing subsidies should not be commodity specific. In fact the real implication is that if people cannot afford the type of dwelling that society would like to see them occupy then there is a problem not with the housing market but with the distribution of income. The negative impact of policies which undertake to redistribute income while in fact reallocating consumer expenditures is clear. If the housing market is to maintain maximum flexibility policy must not influence the choice of the consumer; subsidies and taxes must not be tenure specific and in fact must not be specific to any goods unless they account for externalities of production or consumption of the particular good in question. While it may be argued that the direct redistribution of income through welfare schemes or the progressive income tax and negative income tax is not politically feasible it appears that to preserve an effective private residential rental industry some move must be made to eliminate the extensive program of reallocative measures which now exists.

## FOOTNOTES

1. This paper, Chapter III (Section 3.5)
2. Albert Rose, "Essential Elements of a Canadian Housing Policy", in M. Wheeler, (ed.), The Right to Housing, (Montreal: Harvest House, 1969), pp. 67-68.
3. This paper, Chapter IV (Sections 4.31, 4.32 and 4.33).
4. This paper, Chapter IV (Section 4.33)
5. This paper, Chapter IV (Section 4.34)
6. Albert Rose, "Housing Policy in Canada: 1940-1968" in M. Wheeler, (ed.), The Right to Housing, p. 86.
7. This paper, Chapter II (Section 2.42)
8. This paper, Chapter IV (Sections 4.31 and 4.32).
9. Michael Dennis and Susan Fish, Programs in Search of a Policy: Low Income Housing in Canada, (Toronto: Hakkert, 1972), pp. 77-78.

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