

# THE DO'S AND DON'TS OF HOUSING POLICY



## The Case of British Columbia

**Raymond Heung**

Copyright © The Fraser Institute  
**THE FRASER INSTITUTE**



# **THE DO'S AND DON'TS OF HOUSING POLICY**

## **The Case of British Columbia**

**Raymond Heung**



**THE FRASER INSTITUTE**

Copyright © The Fraser Institute

Canadian Shared Cataloguing in Publication Data  
Heung, Raymond, 1947-  
The do's and don'ts of housing  
policy

Includes bibliographies.  
ISBN 0-88975-006-8 pa.

1. Housing—British Columbia.
  2. Housing policy—British Columbia.
- I. Title.  
HD7305.B7H48      301.5'4'09711

First published 1976 by The Fraser Institute.

Reprinted 1977 and 1979.

COPYRIGHT © BY THE FRASER INSTITUTE, 1976.

Printed in Canada.

# Contents

PREFACE	vii
THE AUTHOR	viii
INTRODUCTION AND SUMMARY	1
I. THE BACKGROUND: THE TWO B.C. HOUSING REPORTS	7
A. Mainly Background	7
B. A Brief Summary of the Recommendations of the two B.C. Housing Reports	7
NOTES	11
II. PROBLEMS IN THE HOUSING SECTOR OF B.C.	15
A. 'Images' of Problems in the Housing Sector: Perspectives from the two Housing Reports	16
B. Problems in the Housing Sector of B.C.	17
1. Housing Stock	17
2. Housing Supply and Demographic Changes	21
2.1 Stability	21
2.2 The Recent 'Anomalies' of Housing Supply	27
2.3 The Long-run Response of Housing Supply to Changes in Demand Pressures	33
3. Affordability of Housing Services	36
NOTES	46
APPENDIX A : AN ANALYTICAL FRAMEWORK FOR HOUSING MARKET ANALYSIS	49
A. The Characteristics of Housing: Immobility and Durability	49
B. Some Conceptual Problems	50
1. The Spatial Dimension	51
2. The Temporal Dimension	52
C. Utilization of Existing Stock	52
D. Stock and Flow Relationship	53
E. Factors that Affect Demand	54
F. Factors that Affect Supply	55
NOTES	56

APPENDIX B : HOUSEHOLD FORMATION AND HOUSING DEMAND IN BRITISH COLUMBIA, 1961 - 1971	59
NOTES	65
III. HOUSING POLICIES - THE TWO B.C. HOUSING REPORTS REVISITED	71
A. Rent Control Policy	71
1. Economic Efficiency	74
2. Equity	75
3. Rent Control and Demand-Side Subsidization	77
4. Some Concluding Remarks	77
B. Price Control on Land	78
C. Demand-Side Subsidies	80
D. Supply-Side Subsidies	82
E. The Role of Government in Housing	83
1. Externality, Private Ownership and Public Intervention	84
2. Re-examination of the Jaffary Report Views on Intervention	86
3. Intervention for Redistribution	88
NOTES	89
IV. AN ANALYTICAL FRAMEWORK FOR THE DESIGN OF RATIONAL HOUSING POLICIES	95
A. Relevant Parameters of the Housing Market for Policy Design	96
1. Responsiveness of Housing Demand	96
2. Responsiveness of Housing Supply	96
B. Housing Policy Objectives	97
C. Maldistribution of Housing Consumption	101
1. Decision-making Criteria	101
2. Target Efficiency	103
3. Some Other Benefits	104
4. Demand-side Subsidies - - Policy Delivery Mechanisms	105
D. Policy Alternatives to attain the Production Objective	108
1. Policies to Improve the Allocative Efficiency of Housing Production	109
2. Supply-side Subsidies: Policies to Increase the Accessible Supply of Housing	111
3. Demand-side Subsidies versus Supply-side Subsidies	111
NOTES	113

V. HOUSING ALLOWANCE AND INCOME SUPPLEMENT: PROGRAM COSTS AND BENEFITS	119
A. Introduction	119
B. Institutional Constraints Associated with Adoption of Demand-side Subsidies in B.C.	119
C. A Housing Allowance Scheme: Program Costs and Incidence of Benefits	120
1. The Scheme: General	120
2. The Scheme: Specifics	123
3. Data Sources	124
4. The Transfer Costs of the Housing Allowance Scheme	125
5. Incidence of Benefits	129
D. The Walker Income Supplement Scheme: Program Costs	130
1. The Scheme	130
2. Program Costs	132
E. Public Expenditure Related to Shelter in B.C.	132
NOTES	135
APPENDIX C : HOUSING ALLOWANCE AND INCOME SUPPLEMENT MODELS	137
APPENDIX D : TABLES ON THE ESTIMATIONS OF THE INCIDENCE OF BENEFITS UNDER THE HOUSING ALLOWANCE SCHEME	141





## Preface

In the fall of 1975, the Fraser Institute published a Report on housing in Canada entitled *Rent Control: A Popular Paradox*. That Report was an attempt to analyze systematically the nature of the housing problem that Canada was said to face and an attempt to provide a solution for the real problem. Subsequently, there appeared a number of housing reports relating to different areas of Canada.

For example, the Ontario Economic Council has released a study and a policy proposal on housing that broadly concurs with the Institute's position. On the other hand, a special Study Team, set up by the government of British Columbia in 1975, released several reports which in methodology, analysis and conclusions, disagree with the Fraser Institute's work. The present Study by Raymond Heung, of the Institute's staff, is designed to (a) provide an answer to the 'objections' raised by the two B.C. Studies; (b) to provide a more detailed framework for housing analysis; (c) to provide an indication of the costs of adopting a solution of the sort that the Institute recommends.

The Fraser Institute has been pleased to support Mr. Heung's research and is publishing it in the public interest. However, owing to the independence of his work, the views expressed may or may not conform severally or collectively with those of the members of the Institute.

November, 1976

M.A. WALKER

## THE AUTHOR

Raymond Heung was born in Hong Kong in 1947. He received his B. Com. at University of Ottawa in 1969; his M.A. in Economics at University of British Columbia in 1971; and his M.Sc. in Urban Land Economics at University of British Columbia in 1975. Mr. Heung participated in research in international trade, and in housing economics with the late Fred G. Pennance (who was on the Editorial Advisory Board of the Institute). He was also involved with property management with several real estate investment firms in Vancouver. Immediately prior to joining the Fraser Institute, Mr. Heung was Project leader (Statistical Analysis) to the B.C. Interdepartmental Study Team on Housing and Rents, a position from which he later resigned. Upon completion of his study with the Fraser Institute, he joined Pearson/Johnstone & Associates Ltd., as Land Economist.

## INTRODUCTION AND SUMMARY

This study has two objectives. The first is to review two B.C. housing Reports released by the government in 1975 - one done by the Interdepartmental Study Team on Housing and Rents<sup>1</sup> and the other by the staff who did the research for the Study Team.<sup>2</sup> The two housing Reports constitute a major endeavour in the pursuit of a housing policy for the Province of British Columbia. Unfortunately, they do not provide satisfactory guidance for the design of policies appropriate to the housing sector of B.C. Accordingly, the second objective of this study is to provide an alternative to the recommendations and analyses contained in the two Reports.

The two housing Reports do not share the same conclusions or recommendations (even though the divergence is superficial rather than substantial); but they do share the same shortcomings. These shortcomings can be classified into two types: analytical shortcomings and methodological shortcomings.

### Analytical Problems

Both Reports have two major kinds of 'analytical' deficiency: (1) unsatisfactory analysis of the shape and magnitude of problems in the B.C. housing sector, and (2) lack of rational basis for some of the crucial policies recommended. It is found in our study, that the sense of urgency conveyed by the two Reports that 'B.C. is in the throes of a housing crisis' is misdirected. The reason the two Reports have provided a distorted perspective of the problems in the housing sector can be traced to the failure to draw a distinction between problems pertaining to the whole housing market and those affecting particular aspects of the housing market.

In our study, we have clearly demonstrated that B.C. (in a country with the least crowded housing in the world) has enjoyed the least crowded housing among all the Canadian provinces. We have also indicated that over the last decade, the housebuilding industry in B.C. has responded adequately to the rather uncertain changes in demand pressures brought about by the particularly unpredictable demographic and socio-economic trends experienced in B.C. Moreover, all the available evidence leads us to conclude that the majority of households in B.C. have not experienced a reduction in their ability to pay for housing. If problems do exist in the B.C. housing sector, they are those that affect particular aspects of the housing market: the shelter requirements of particular socio-economic groups or production difficulties in particular local housing markets.

By casting the recent anomalies in the housing market as 'long-term, structural problems', the two Reports have avoided a clear and quantifiable statement of the housing problem. The problems in the B.C. housing sector do not lie in the whole of the market's performance and the problem is not to be found in the whole of its structure and operations.

An unsatisfactory definition of problems could only lead to inappropriate proposals for solutions. In order to deal with the alarm of a 'housing crisis' (which is after all an 'imaginary dragon'), draconian policy measures have been recommended by the two Reports. These policy measures encompass rent control, price controls on land and public provision of housing on a large scale. These are drastic measures that, for good or for bad, would have considerable impact on the operations of the private housing market in B.C. Even if they were effective (and that has not been demonstrated) these measures could only be justified in desperate circumstances. In our view, the two Reports provide strong evidence that there is a 'splinter' in the patient's foot and on that basis recommend amputation. Deft use of needle and tweezers and not blundering use of hammer and saw are indicated. All of these analytical shortcomings can be traced to a misconception of the role of government in the housing field, and the reluctance of the authors of the two Reports to spell out clearly the criteria that they have used in determining the proper function of government in the housing market.

### Methodological Problems

Not surprisingly, the analytical shortcomings of the two Reports stem from their 'methodological' shortcomings. The two Reports have committed three methodological errors: (1) lack of empirical research on the cause-effect relationships in the housing market, (2) recommendation of only one package of policies without exploring other more appropriate alternative packages, and (3) failure to specify clearly the costs and benefits of the recommended package of policies. Instances abound in the two Reports where a peripheral understanding of how the housing market operates dispenses with empirical evidence and where personal judgement and intuition seem to replace economic logic.

The nobility of purpose and the compassion for needy households that permeate the two Reports are above reproach. Yet concern for the poor and needy does not preclude the application of economic logic and must not be permitted to do so. In the end it is sound economic thinking that will improve the situation of the poor and not wishful thinking of the sort provided in these Reports.

The failure to investigate empirically or even to accept the cause-effect relationships in the housing market has precluded the clarification of options and the objective choice between policy alternatives. In the case of both housing Reports, an all-or-nothing proposition is offered and, ironically, the policies offered are basically quite similar. (The Runge Report, more accurately reflecting the nature of the 'analysis', is more extreme in its recommendations, but the analysis is the same in both Reports.)

### Matters of Principle

In order to amend the methodological shortcomings and to better isolate the principles involved, we have, in our study reviewed some policy-relevant empirical studies about housing in other areas. The resources that we have at our disposal did not permit us to undertake much new empirical research related to the B.C. housing market. Nevertheless, our review helps to pinpoint the kinds of research that are necessary to acquire the better understanding of the B.C. housing market that a more objective design of housing policies requires. We have also presented an analytical framework for the design of rational housing policies -- with the necessary criteria of choice among alternative housing policies and programs -- so as to facilitate rational decision-making without the reliance upon 'ideological assertions, political horse trading, and undocumented rhetoric'.

### A Policy Prospectus

We have also proposed a 'housing policy prospectus' for B.C. In order to attain the objective of maintaining stable growth of housing production so as to meet changes in housing demand, we have generally rejected the concept of supply-side subsidies. We suggest, however, various policies to improve efficiency in housing production. In order to attain the objective of assisting particular socio-economic groups who, because of an insufficient income, are experiencing hardship in their consumption of housing services, we have proposed the adoption of a Housing Allowance Scheme.

The estimated transfer costs of our Scheme for 1974 range (depending on the option selected) from \$70 million to \$175 million. The current cost of the various government assistance programs is estimated to be \$365.7 million -- the provincial share being \$280.7 million). We have suggested that the adoption of such a Scheme should be undertaken in conjunction with the abandonment (either gradually in various phases or permanently as

of a certain date) of the existing rent control policy in B.C.

Chapter I sets the background of the two B.C. housing Reports with a brief summary of their policy recommendations. In Chapter II an attempt is made to acquire an understanding of the housing situation in B.C. and the problems that have arisen. Perspectives on these problems from the two Reports are evaluated and our perspective is offered. Chapter III analyzes in detail the major policies recommended by the two Reports and the nature and extent of government intervention in the housing market that are implicit in those policies. This is followed by a discussion of the appropriate role of government in the housing field. Chapter IV presents a brief but comprehensive analytical framework for the design of housing policies. The criteria for the evaluation of public policies and programs in the housing field are discussed and the various forms of policy delivery mechanisms are examined. Chapter V provides our estimations of the transfer costs and the incidence of benefits of a housing allowance scheme and an income supplement scheme.

March, 1976

Raymond Heung

1. Housing and Rent Control in British Columbia, by Karl Jaffary, Chairman (B.C. : Interdepartmental Study Team on Housing and Rents, 1975).
2. A Comprehensive Social Housing Policy for British Columbia, by Dallard Runge, Study Director (B.C. : Interdepartmental Study Team on Housing and Rents, 1975).

## **CHAPTER I**

### **THE BACKGROUND: THE TWO B.C. HOUSING REPORTS**





# CHAPTER I

## THE BACKGROUND: THE TWO B.C. HOUSING REPORTS

### A. Mainly Background

In February, 1975, the Interdepartmental Study Team on Housing and Rents was commissioned by the Attorney-General and the Minister of Housing to 'document the magnitude of trends in the housing and rental markets, consider alternatives and recommend suitable policies.'<sup>1</sup> In September of the same year, Karl Jaffary (Chairman of the Study Team) submitted the report of the study team entitled Housing and Rent Control in British Columbia (hereafter the Jaffary Report). At the same time, Dallard Runge (Study Director for the Study Team) submitted the report prepared by the staff who did the research for the Study Team, entitled A Comprehensive Social Housing Policy for British Columbia (hereafter the Runge Report).

In order to understand why the Study Team was commissioned, it must be recognized that since early 1974, B.C. has had a system of rent control on residential premises.<sup>2</sup> In May, 1974 the annual rate of allowable rent increase was legislated not to exceed 8%. In the Fall of the same year, the 8% was increased to 10.6%. The Study Team was appointed in 1975 apparently to examine the future of rent control in B.C. and the implications of rent control in the housing sector. Its ultimate task seemed to be to recommend to the B.C. government a set of housing policies which would respond to the public outcry of a 'housing crisis' in B.C.<sup>3</sup>

### B. A Brief Summary of the Recommendations of the two B.C. Housing Reports

The Jaffary Report and the Runge Report are quite similar to one another: each contains a summary report followed by a series of background studies. With minor differences, the background studies in both Reports cover various aspects of housing in B.C.: statistical aspects, history of government activity in housing, existing housing programs, housing and taxation, shelter and

income, and rent control. However, in their summary reports there are some variations in conclusions drawn, alternative proposals examined, and policies recommended. The major recommendations presented can be summarized and compared as follows:

1. Price Control Policy

Both Reports recommend the indefinite continuation of rent control in B.C. The Jaffary Report would allow new rental buildings to be exempted from rent control for seven years. The Runge Report suggests that actions must be taken by the Government to control land prices, 'otherwise the housing problem can only get worse'.

2. Supply-side Policy

Both Reports recommend that production subsidies should be used to ensure an 'adequate' supply of housing. The Runge Report adds that 'over the next five years the Housing Department should expand its present delivery mechanism to be in a position to at least supply half the housing needed in the province'.<sup>4</sup>

3. Demand-side Policy

While both Reports recognize the benefits of a universal income supplementation program (i.e. guaranteed annual income), they opt for some program of shelter allowance in order to assist households in need. The Runge Report is more explicit in this regard. The suggested 'Guaranteed Shelter Supplement' would meet 75% of all shelter costs over and above 25% of gross basic income.<sup>5</sup> However, both Reports are firm in their belief that unless rent control is concurrently maintained, shelter assistance to tenants would simply be passed on to landlords.

4. Recommendations to modify or abolish existing housing programs

The preceding policy directions form the basis of the housing policies recommended by the two Reports. However, the two Reports also give considerable attention to existing housing programs, both federal and provincial, with suggestions for modification and, in some cases, abolition.

While this summary suggests a few differences in the policy recommendations of the two Reports, these differences are minor and technical, representing only slight variations in emphasis. Nothing separates the two Reports in their perspective upon housing market operations and in their approach to housing policy design.

The Jaffary Report is opened with words by Hugh Latimer, Bishop of Worcester of England (c.1539):

If the King's honour, as some men say, standeth in the great multitude of people, then these rent raisers are hinderers of the King's honour.<sup>6</sup>

It later becomes clear what is meant by the 'King's honour' and its 'hinderers'. The following comments of Sir Walter Essex (in the British House of Commons in 1915) in debate over a rent control bill were also quoted in the Jaffary Report:

The principle embodied in this Bill.... breaks through the whole of the rules governing private property. The sole reason for it .... a reason which, in my view, is adequate and sufficient .... is the interest of the people whom it is intended to help.<sup>7</sup>

Apparently, the 'King's honour' is synonymous with the 'public interest' while its 'hinderers' are the landlords, protected by the 'rules of private property'. More will be said later about the balance between public interest and private property rights for it seems that the Jaffary Report is based upon a radical view of this concept.

The Runge Report is not so explicit about social and political values but some of these are implied by the certitude with which policy recommendations are presented. A case in point is the Report's recommendation on price control:

A comprehensive housing policy should control housing costs. The two main areas that require control are rents and land.<sup>8</sup>

Why this should be the case is supported by some rather specious and untenable arguments:

Since existing stock outweighs new production by something like 40 to 1, it seems more reasonable and less expensive to society as a whole to subsidize the new construction down to the level of existing stock than to permit (price of) existing stock to rise to the level of new construction and then substantially subsidize peoples' income.<sup>9</sup>

Questions are inevitably triggered by these assertions: 'Reasonable' in terms of what criteria of equity? 'Less expensive' in terms of what costs and benefits, or economic efficiency in the housing market? These questions are left unanswered by the Report. Yet it is to the authors' credit to allow that the above propositions are only seemingly obvious to them on the basis of intuition and personal judgement.

Similarly, no rational basis is provided for the Runge Report's recommendation that the Provincial Government should supply at least 50% of the housing needed in the province over the next five years. How does the government finance this large scale of housing production? Why should the government intervene in the housing market to such a considerable extent? Is it because the housing market has failed to provide an adequate

quantity and quality of housing? If this is the case, then what are the causes of the market's failure? Nowhere in the Report can be found the necessary objective evidence and/or logical argument to support such a policy proposal.

These examples illustrate the several instances in both Reports where peripheral understanding of how the housing market operates dispenses with empirical evidence and where personal judgement and intuition seem to replace economic logic. The nobility of purpose and the compassion for needy households that permeate the Reports are above reproach. But concern for the poor and needy is not the preserve of social reformers and moral philosophers. The late F.G. Pennance, an eminent British housing economist, argued:

Humanity and sympathy for the homeless and poorly housed, the helpless, old, sick and needy are not the prerogative of the non-economist: altruism need not deny economic logic. On the contrary, although the objectives of housing policy may be "social", its mechanics are always economic.<sup>10</sup>

For this reason, the perennial debate as to whether housing is a social right or merely an economic commodity is both deceptive and useless. Economic reality is as real as ever: the resources in the economy are limited. The challenge in policy-making is to devise effective, efficient and equitable measures that achieve competing social objectives (and priorities) -- in housing, health, education and other fields -- with limited resources. It is thus disconcerting to see both Reports outline just one package of policies when the terms of reference of the Study Team sought an array of 'alternative' packages of policy, with the costs and benefits of each package properly specified so as to determine 'suitability'. Much can be learned from this observation by W.G. Grigsby and L. Rosenberg:

... housing policy must deal with what is and make it better. It cannot dream the impossible dream, while the poor endure the impossible life.<sup>11</sup>

The Jaffary Report and the Runge Report constitute a major endeavour in the pursuit of a housing policy for the Province of British Columbia. Unfortunately, much remains unsaid. Since the mid-sixties, there has been a rising concern in North America about the distribution of income and poverty, particularly in urban areas.<sup>12</sup> In the housing field, the concern has extended beyond the production of housing services in greater quantity and better quality, to the more equitable distribution of such services as a measure to remove urban poverty. In British Columbia, it is neither too late nor too soon for housing policy-makers and analysts to examine carefully what has happened and what is happening in the housing sector, and how to make it better without delay, if something has indeed gone awry in housing provision.

## Notes

1. Housing and Rent Control in British Columbia, Karl Jaffary, Chairman (B.C.: Interdepartmental Study Team on Housing and Rents, 1975), p. 5.
2. For a detailed documentation of the legislative background of the system of rent control in B.C., see S.W. Hamilton and David Baxter, Landlords and Tenants in Danger: Rent Control in Canada (Appraisal Institute of Canada, Oct. 1975), pp. 23-35.
3. Newspapers in B.C. since early 1974 have been full of accounts of: high increases of rents, gouging by landlords, low vacancy rates, rapid rise in prices of single-family houses, high interest rates, shortage of mortgage money, fall in housing starts, etc.
4. Runge Report, p. 15.
5. Ibid., p. 26.
6. Jaffary Report, p. xxii.
7. Ibid., p. 8.
8. Runge Report, p. 9.
9. Ibid., p. 9.
10. F.G. Pennance, Housing Market Analysis and Policy (London: Institute of Economic Affairs, Aug. 1969), p. 10.
11. William G. Grigsby and Louis Rosenberg, Urban Housing Policy (New York: APS Publication Inc., 1975), p. 210.
12. See, for example, Harry G. Johnson, 'Inequality of Income Distribution and the Poverty Problem,' reprinted in On Economics and Society; Rivlin, 'Income Distribution -- Can Economists Help?' American Economic Review, (May 1975), pp. 1-15; and Grigsby & Rosenberg, Urban Housing Policy.



## **CHAPTER II**

# **PROBLEMS IN THE HOUSING SECTOR OF B.C.**





## **CHAPTER II**

### **PROBLEMS IN THE HOUSING SECTOR OF B.C.**

The foundation upon which the development of a set of policy and program proposals should be based includes: (1) a definition and understanding of the prevailing problems to be alleviated; (2) a specification of measurable goals and objectives to be achieved; and (3) an identification and evaluation of all available problem-solving alternatives.

To identify and describe the shape and magnitude of 'problems' in the housing sector requires an understanding of what has happened, as well as the present state of affairs, in the housing sector (as manifested, for example, by the current condition of the housing stock, vacancy rate, prices and rents, and other aspects of housing). The cause-effect aspects of these should be identified, as well as the manner and extent to which manifested events are 'problematic'. Finally, the normative and positive aspects of the analysis must be distinguished so that rational argument and empirical evidence stand apart from assumption and opinion.

The two B.C. housing reports -- the Jaffary Report and the Runge Report -- will be examined with emphasis upon the following:

- (1) the nature and size of problems identified;
- (2) the range of potential solutions examined and those recommended.

In this chapter, we will examine the problems identified and in the next chapter, the policies recommended will be analysed.

A. 'Images' of Problems in the Housing Sector: Perspectives from the Two Housing Reports

Inexplicably, the Jaffary Report has failed to articulate clearly the problems encountered in B.C. housing -- though haphazard statements of the current situation lie scattered throughout the Summary Report. For example, it is stated that:

In 1974, when rent regulation was first introduced in British Columbia, there was general agreement that the province, along with most of the rest of Canada, was in the throes of a housing crisis. Some aspects of the crisis were readily apparent. Perhaps most notable was the rate of the increase in the price of housing in urban areas ... At the same time the rate of new building was falling off ... All these figures on housing starts somewhat exaggerate the problem because they do not include the dramatic increase in the use of mobile homes.<sup>1</sup>

It is then suggested that the decrease in rental apartment development was the consequence of tax changes affecting profitability and of cost inflation in land development.<sup>2</sup> Later in the Report, it is hinted that:

much of British Columbia's housing problem over the next six years will be a problem brought upon it by factors (immigration and migration) outside the province.<sup>3</sup>

The enumeration of various current aspects of housing in B.C., i.e. rising housing costs, decline in new construction, unprofitability of movement, is neither cohesive nor very well focused. Much more seriously, no attempt has been made to identify the cause-effect relationships in the housing market. The 'general agreement', as claimed by the Report, that the province 'was in the throes of a housing crisis' remains an elusive and unenlightening proposition.

The Runge Report has stated unambiguously that the 'three problems facing the provincial government today' are 'inflationary costs of existing and new housing, instability in housing production and excessive amounts of income that people have to spend on shelter.'<sup>4</sup> Since the 'inflationary costs of new housing' affect housing production (the second problem) and since 'inflationary costs of existing and new housing' in turn affect consumers' ability to pay for shelter (the third problem), the three problems listed by the Runge Report resolve into two -- problems related to housing production on the supply side and those related to housing consumption on the demand side of the housing market.

The Runge Report has also failed to properly and adequately identify the causes of these problems. It is suggested that 'since rents have not risen as rapidly as the cost of home ownership by (sic) the early 1970's, it is no longer economical to construct rental accommodation.'<sup>5</sup> It is also suggested that the 'excessive amounts of income that people must spend on shelter' is 'basically a problem of inadequate income.'<sup>6</sup> While some of the data and statistical analyses reported in the Runge Report tend to support its contentions, two significant questions remain unanswered:

- (1) To what extent is the housing situation in B.C. worse (or better) than in other provinces or in other countries, and in what respects do the situations differ?
- (2) To what extent are the identified problems general and fundamental ones (that pervade the housing market as a whole and affect the majority of B.C. households) or particular ones (encountered by limited or localized households)?

In the subsequent section, we attempt to answer these two questions. The analytical framework presented in appendix A provides a basis for this examination of B.C. housing. Data from the two Reports, and from other sources where necessary, are utilized. Occasional reference will be made to the analyses in the Runge Report and the more superficial efforts of the Jaffary Report in order to indicate the common grounds and areas of disagreement.

## B. Problems in the Housing Sector of B.C.

### 1. Housing Stock

How does the Canadian housing stock stand in the international context? The Economic Council of Canada has provided a crowding index based on the number of persons per room as a social indicator of housing welfare in Canada.<sup>7</sup> 'The crowding index is used not only because it is an important physical and social aspect of housing adequacy in itself, but also because it is highly correlated with other measures of quality and thus serves as a good proxy for them.'<sup>8</sup> The international comparison of the crowding index is presented in

Table 1. Even though the definition of what constitutes a room is not standardized over the countries in Table 1 (thus making strict international comparisons somewhat difficult at times) the Economic Council of Canada suggests that 'Canada appears to be among the countries with the least crowded housing.'<sup>9</sup>

TABLE 1

International Comparison of Crowding Index

	Year	Average Number of Persons per Room
United Kingdom	1961	0.63
United States	1970	0.63
Canada	1971	0.64
Australia	1971	0.66
Sweden	1970	0.72
New Zealand	1966	0.75
Demark	1965	0.80
France	1968	0.93
Japan	1970	0.97
Finland	1970	1.00

Source: Economic Council of Canada, Eleventh Annual Review: Economic Targets and Social Indicators (Ottawa: Information Canada, 1974), Table 4-2, p. 75.

How does the B.C. housing stock stand in the national context? Table 2 shows some of the regional and local differences in the crowding index in Canada from 1961 to 1974. In 1961 and 1971, only Ontario had a lower index than B.C. However, in 1974, B.C. enjoyed the lowest crowding index across the country, with a 6.6% decrease during the 1971-74 period unsurpassed by any other region. In the case of Vancouver, while the improvement in its crowding index has slowed down from 1971 to 1974, the index in 1974 remained on par with the provincial average. In the case of Victoria, its crowding index was well below the provincial average and thus substantially lower than the national average.

TABLE 2

Crowding Index, Canada, by Region and  
Major Metropolitan Areas, 1961 - 1974

	Crowding Index			Percentage Change	
	1961	1971	1974	1961-71	1971-74
Canada	.74	.64	.61	-13.5	-4.7
Atlantic Region	.74	.69	.67	- 6.8	-2.9
Quebec	.81	.70	.66	-13.6	-5.7
Ontario	.67	.60	.58	-10.4	-3.3
Prairie Region	.76	.63	.60	-17.1	-4.8
B.C.	.70	.61	.57	-12.9	-6.6
Vancouver	.66	.58	.57	-12.1	-1.7
Victoria	.62	.54	.50	-12.9	-7.4

Source: Economic of Canada, Eleventh Annual Review: Economic Targets and Social Indicators (Ottawa: Information Canada, 1974), Table 4-3, pp. 76-7.

Economic Council of Canada, Twelfth Annual Review: Options for Growth (Ottawa: Information Canada, 1975), Table 5-1, p. 95.

If the crowding index can be accepted as a useful indicator of adequate housing stock and as a measure of housing quality, it can be concluded that Canada is among the countries with the least crowded housing and that B.C. has the least crowded housing in Canada. It is surprising that the two Reports have made no reference whatsoever in their Summary either to the crowding index or to other favourable indicators of housing stock utilization, such as 'persons per household' and 'rooms per dwelling'. Nevertheless, in the statistical analysis appendix of both Reports, it is concluded that 'most people in British Columbia are living in spacious housing.'<sup>10</sup>

In addition to the crowding index, the vacancy rate is also a helpful indicator of the intensity of use of the housing stock, i.e. how much of the inventory is unused. Both Reports indicate that vacancy rates of rental stock in B.C. are very low today (0.2% in Vancouver and 0.3% in Victoria as of June 1975).<sup>11</sup> They observe, however, that the low vacancy rate is a national phenomenon. Undoubtedly, the present low vacancy situation in B.C. rental housing limits the mobility of households and reduces their effective locational and tenure choices.

The anomaly of a low vacancy rate on the one hand and of least crowded housing in the whole country on the other raises one important question: is the B.C. housing stock being efficiently utilized and is this anomaly a reflection of too low a price (rent) of housing in B.C.? If we accept the national average of housing space distribution per household as a standard for B.C., and if we allow market forces to operate freely in the rental housing market (i.e. removal of rent regulation), would the total housing stock be more efficiently utilized and more equally distributed among all households in B.C., with the concomitant benefit of a higher vacancy rate? Is rent regulation in B.C. the cause of this anomaly? These are some of the issues that supporters of a rent regulation policy for B.C. have to ponder.

## 2. Housing Supply and Demographic Changes - Pressure and Response

### 2.1 Stability

The Runge Report states that 'instability in housing production'<sup>12</sup> is one of the problems facing the provincial government -- without indicating the intended meaning of 'instability', and the magnitude and causes of such instability. Apparently, 'instability' is intended to be interpreted as 'cyclical instability', 'perceived as irregular recurring upswings and downswings (surges and slumps, or booms and busts) in the level of activity of the industry'.<sup>13</sup> Instability of residential construction -- and for that matter, of all construction (both residential and non-residential) -- is a dominant characteristic of that industry.<sup>14</sup> Whether such instability constitutes a 'problem', as alleged by the Runge Report, remains to be seen.

Recognizing the difficulties of devising a single statistical measure that will adequately describe all aspects of instability in the construction industry, the Economic Council of Canada suggests that a measure of 'deviations from the growth trend' is the preferred statistical tool:

Although annual percentage changes in construction expenditures are widely used indicators of construction activity, they have a shortcoming for measuring instability. There is no measurement problem if there is no growth and if construction output varies around some constant output level. But when there is growth and construction output reaches higher levels in later years, a given percentage change will represent a larger change in construction output in the later years than the same percentage change will represent in the earlier years. Furthermore, an average of annual percentage changes -- as a measure of growth -- will vary with the timing of construction expenditures. If the same construction output is added in the earlier years, the average annual percentage change will be greater than if it is added in later years. This problem can be avoided by measuring instability in terms of departures or deviations from the growth trend.<sup>15</sup>

Figure I employs this statistical measure to evaluate instability of residential construction in B.C. and Canada for the period 1962-1974. Since 1966, with the exception of 1974, residential construction in B.C. has been more stable than the national picture -- as the deviations from growth trend in B.C. have not been as erratic as is the case for Canada as a whole. Further evidence on this point is contained in Table 3 (which shows the regional contribution to instability of housing starts from 1951-1970).

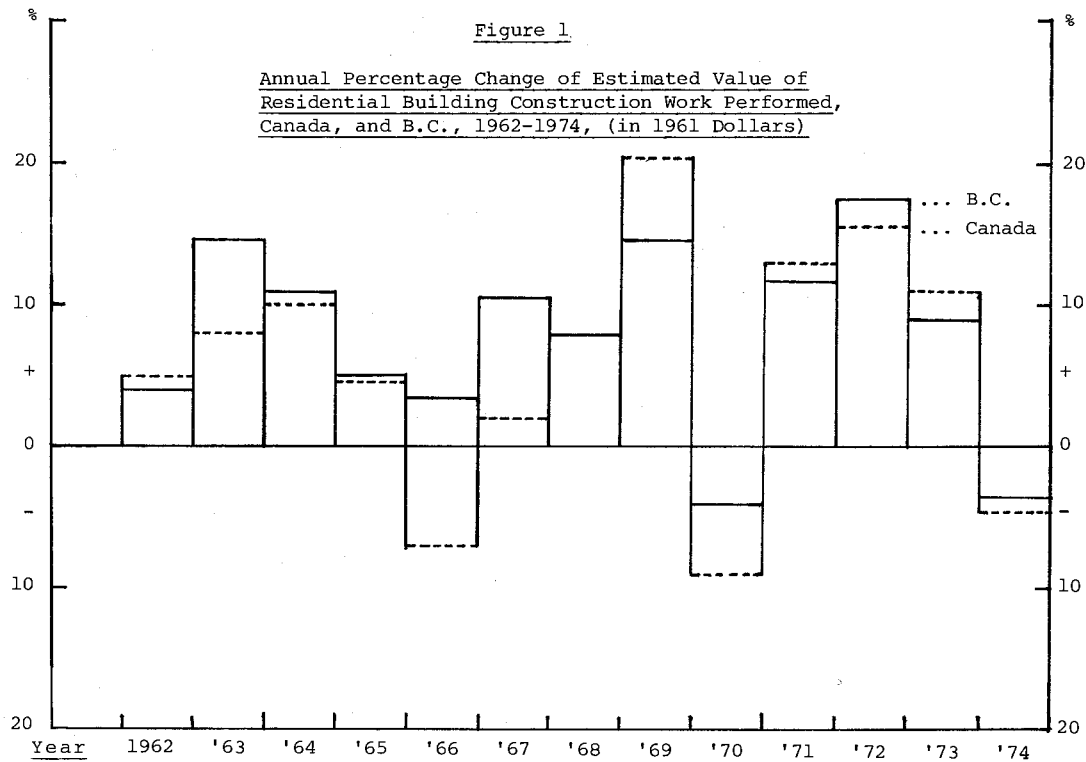




TABLE 3

Contribution to Instability of Housing Starts,  
by Region, 1951-70

	Contribution to Instability
	%
Atlantic Region	3
Quebec	19
Ontario	43
Prairie Region	20
British Columbia	<u>15</u>
Total	100

Source: Economic Council of Canada, Toward More Stable Growth in Construction (Ottawa: Information Canada, 1973), Table 6-8, p. 153.

As the data in Table 3 show, B.C.'s contribution to national construction instability was one of the lowest -- surpassed only by the Atlantic Region. This cursory analysis suggests that the Runge Report's assertion is unwarranted. The misguided assertion stems from the glaring omission of the Runge Report (and for that matter, the Jaffary Report as well) to undertake an in-depth study of the residential construction industry in B.C. The stability question in residential construction should be addressed in the light of the causes of instability, and the implications of instability in connection with public policies.

Residential construction activities should be evaluated in the context of: (1) the whole construction industry, and (2) the whole economy. In the first instance, let us examine residential construction in the context of the whole construction industry. The fixed supply of construction resources (i.e. land, materials, labour and capital) common to the three principal demand sectors of construction (i.e. residential, private non-residential and government) can be bid away from residential to non-residential construction activity during periods of rising fixed business investment (as the economy is in the upswing of a business cycle). The commonly accepted view that residential construction activity tends to act in a countercyclical fashion,<sup>16</sup> is due mainly to the fact that residential builders, in a crude sense, receive both residual credit and residual construction labour.<sup>17</sup> In other words, residential builders are at a disadvantage in their bids for the limited supply of construction resources -- they take (if prices are not out of line) whatever is left behind by the non-residential builders.

TABLE 4

Annual Deviations of Year-to-year Percentage Change of Value of Residential & Non-residential Construction (in 1961 \$) from Growth Trend, B.C., 1967-1974.

	Residential Construction	Non-residential Construction
	%	%
1967	+ 1.7	- 2.3
1968	- 0.7	-11.4
1969	+ 5.7	- 0.3
1970	-13.0	- 9.1
1971	+ 3.0	+26.4
1972	+ 9.5	-15.9
1973	- 0.3	+ 2.6
1974	-12.5	- 1.9

Note: Current value of residential and non-residential construction deflated by the Residential Implicit Price Index (1961=100) and the Non-residential Implicit Price Index (1961=100), respectively. The compound rate of growth (from 1961 to 1974) is estimated to be 9% for residential construction, and 5.6% for non-residential. Annual deviations of year-to-year percentage change of real value of construction from the compound growth rate are presented above. Since the Non-residential Implicit Index is not available for years 1962-65, only annual deviations for the period 1967-74 can be calculated.

Source: Based on data from: (1) Statistics Canada, Construction in Canada, 64-021; and (2) Statistics Canada, Construction Price Statistics, 62-008.

The preliminary analysis in Table 4 shows that the nature of residential construction activity in B.C. does not seem to be at variance with the general view. In Table 4, the same statistical measure of 'deviations from growth trend' is applied to

residential and non-residential construction. The reverse movements of residential and non-residential (especially in 1967, 1969 and 1972-74) are quite distinct. In its analysis of the construction industry in Canada, the Economic Council of Canada also observes that:

Indeed during the 1960's, slack periods in residential construction sometimes ran counter to peaks in non-residential and government construction, and thereby reduced the overall instability in total construction. This happened in 1966, 1967 and again 1969.<sup>18</sup>

The following table (Table 5) from the Economic Council of Canada indicates the contribution to instability of total construction by the three principal demand sectors of construction. In the 1960's, the countercyclical behaviour of residential construction helped to reduce the overall construction instability caused most significantly by government construction activity. Contribution to instability was dominated by non-residential construction activities. 'Their contribution to instability ranks high because their output is large and rapidly growing, their investment demands are large, and they rise and fall together.'<sup>19</sup>

TABLE 5

Contribution of Residential, Private Non-residential,  
and Government Construction to Instability of Total  
Construction Expenditures, 1951-70, in (1961 dollars)

	Contribution to Instability		
	1951-70	1951-60	1961-70
	%	%	%
Residential	33	45	-5
Private Non-residential	33	37	37
Government	34	18	68
Total	100	100	100

Source: Economic Council of Canada, Toward More Stable Growth in Construction (Ottawa: Information Canada, 1973) Table 5-2, p. 115.

Furthermore, federal monetary and fiscal policies in the past tended to increase rather than diminish instability. Again, it is estimated by the Economic Council of Canada that 'a more stable money supply could have reduced the instability of residential construction from 1955 to 1968 by 17% and of industrial construction by 5% ... a more stable trend in nominal income tax rates would have helped stabilize disposable incomes, and this in turn would have helped stabilize the demand for residential construction ... on the government side, a more stable growth trend of expenditures on highways and schools ... would have reduced considerably the instability in government construction.'<sup>20</sup>

If stability in residential construction is the primary goal to be pursued by society, the following conclusions based on the foregoing analysis can be drawn. To the extent that private non-residential and, in particular, government construction activities behave erratically, residential construction (because of its residual claim in both the factor and money markets) will encounter a greater degree of uncertainty and will find greater difficulties in adjusting to changes in housing demand conditions. To the extent that the past and recent pattern of federal monetary and fiscal policies and public expenditure programs (federal and provincial) will persist, such uncertainties and difficulties of adjustment in residential construction will be aggravated. To the extent that these pressures upon residential construction activity are not properly dealt with by appropriate policy measures, the short-run response of housing production to changing demand will be impeded.

However, it should readily be recognized that reduced instability in residential construction may have repercussions that would increase overall instability in the construction industry or in the economy as a whole. The reason is simply that residential construction activities are interrelated with all facets of economic activity to such an extent that the housing sector cannot be analysed in isolation from other sectors in the economy. If instability in the housing sector reduces general economic stability and does not have any undesirable effects -- e.g. increased bankruptcies of residential builders or increased costs of construction and higher housing prices -- then instability is not necessarily a bad thing.

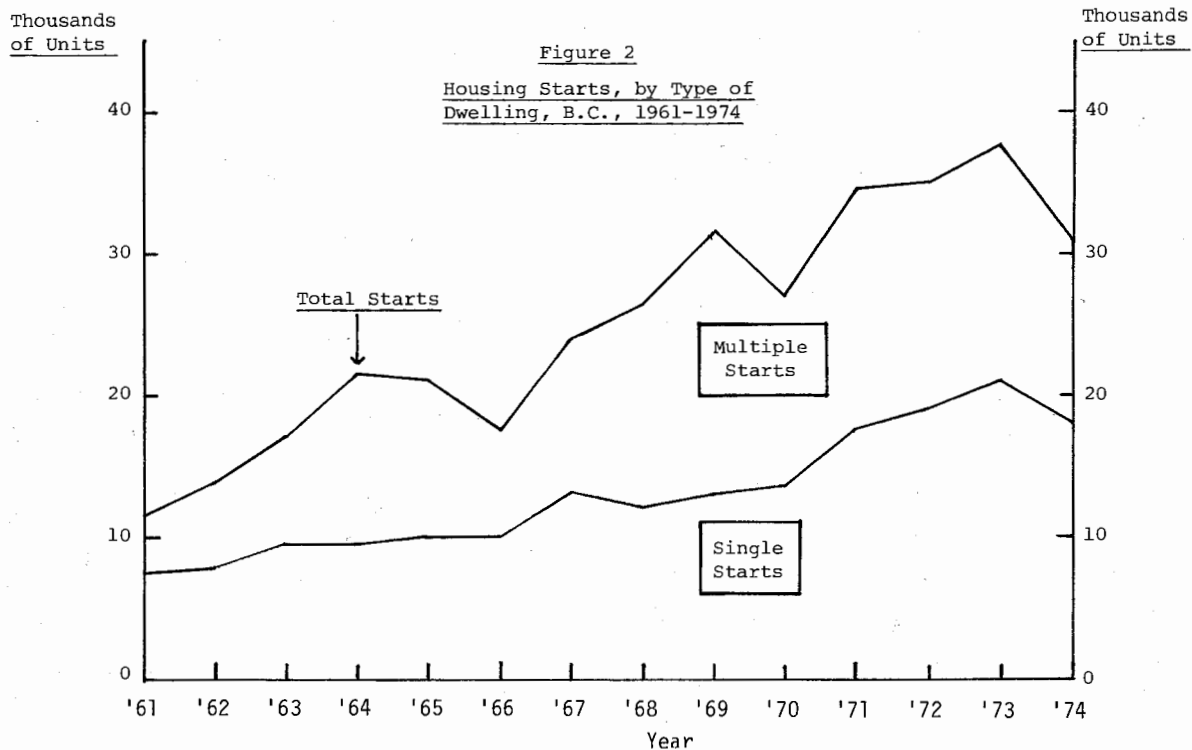
## 2.2 The Recent 'Anomalies' of Housing Supply

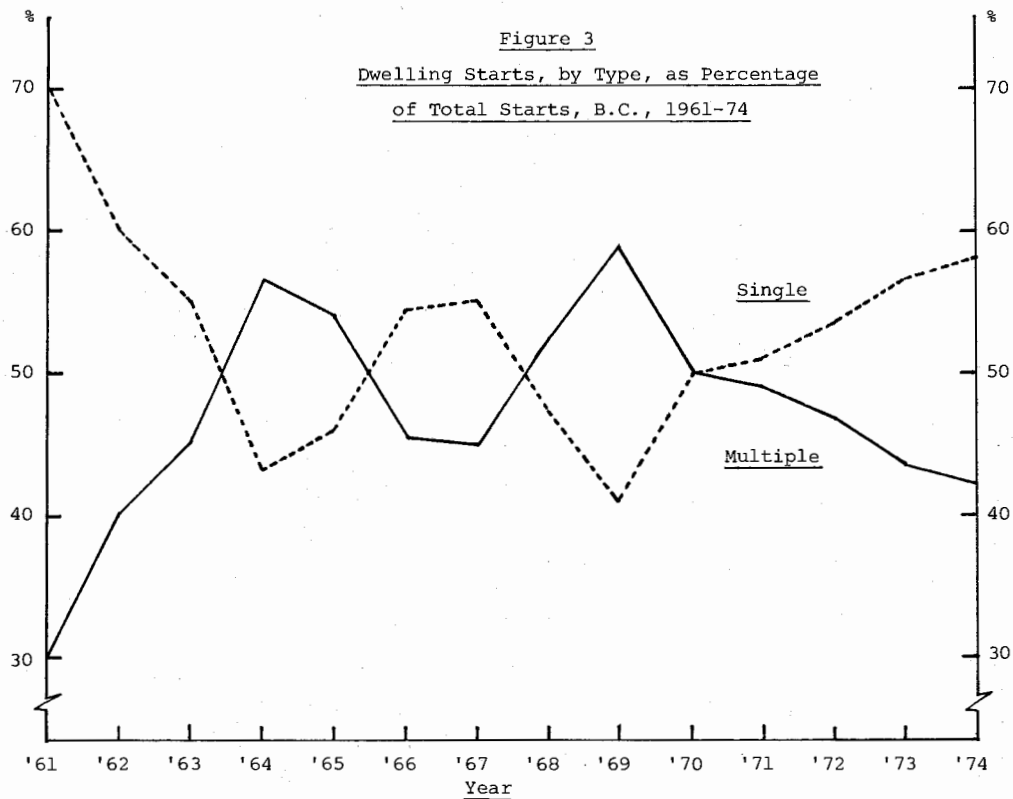
In B.C., housing production (especially rental housing production)<sup>21</sup> since the early 1970's requires some discussion. The salient features are as follows:

- (1) Multiple starts reached a peak in 1969 with 18,785 dwelling units. In 1974, multiple starts were at the lowest since the peak with 13,166 dwelling units. (See Figure 2).
- (2) Single starts reached a peak in 1973 with 21,313 dwelling units. In 1974, there was an absolute reduction in single starts to the level of 18,254 dwelling units. (See also Figure 2).
- (3) Since 1970, the proportion of multiple starts (largely apartments to rent) to total starts has declined dramatically every year. Correspondingly, the proportion of single starts (largely housing designed for owner-occupation) to total starts has increased. (See Figure 3).
- (4) Condominium dwelling units have increased significantly since 1970.

The absolute and relative reduction in rental (or multiple) housing starts in recent years, coupled with low vacancy rates and rising rent increases, has cast some doubts in the public mind as to the viability of private rental housing construction. The Runge Report observes that 'since rents have not risen as rapidly as the cost of home ownership by the early 1970's, it is no longer economical to construct rental accommodation.'<sup>22</sup> The Jaffary Report does not dispute this observation and in turn suggests that the tax changes in 1971 might be the principal reason for the drop in rental housing production. The two Reports further take the position that rent control (instituted in early 1974) was not responsible for the reduction in rental starts as the rent control system in B.C. was introduced long after the decline of multiple starts from the peak in 1969.

However, the two Reports do not adequately explain recent anomalies in the housing market. More empirical research would have been necessary to more fully identify the cause-effect relationship affecting rental housing production since the early 1970's. The following reasons, though not exhaustive, may provide possible explanation of the anomalies.





## SUPPLY CONSTRAINT

The absolute decline in single starts in 1974 and in multiple starts since 1969, in spite of increasing housing prices, and declining vacancy rates, may suggest constraints on the supply of construction resources in the factor and money markets for reasons discussed earlier.

## THE COST-EXPENSE-RENT SQUEEZE

As early as 1970, L.B. Smith observed that:

Recent events suggest that further housing problems may be facing us within the apartment market itself. Towards the end of 1969, there was a sharp reduction of multiple dwelling starts, and over the next few years, this can be expected to continue unless rents rise sharply. This distortion can be called a cost-expense-rent squeeze.<sup>23</sup>

Although Smith did not carry out a detailed analysis on the profitability of investment in new multiple construction, the preliminary figures (on new apartment buildings in Toronto) which he used for illustrative purposes showed that principal and interest payments, taxes and operating expenses took up a large percentage of rental revenue. Smith concluded that there was very little profit in terms of cash flow in new multiple construction, and that in order to obtain a satisfactory return, pressures to raise rents were tremendous -- failing that, new construction would be uneconomical.

Recent events in B.C. seem to support Smith's observations. According to information provided by a specialist in apartment construction (see Table 6), rents had to increase 38% from 1972 to 1974 in order to produce a 10% annual return. It is also noteworthy that while land cost went up 11%, the restrictive floor space ratio pushed up the land cost per square foot by 63%.

## TAX CHANGES IN 1971

The effects of tax changes in 1971 that affect rental housing investment (i.e. introduction of capital gains tax, removal of tax shelter and removal of 'pooling' of rental buildings over \$50,000) have also been examined in detail by L.B. Smith. Smith indicates that the tax change would reduce depreciable real estate values:



TABLE 6

Cost and Rent Figures for a New Vancouver  
Apartment, 1972 and 1974

	1972	1974	%change
<u>Land &amp; Construction Costs</u>			
Land (131 ft. deep) per front ft.	\$1,800	\$2,000	11%
Floor space ratio	3.1	2.1	
Land cost per sq. ft. of total building	\$4.43	\$7.26	64%
Construction per sq. ft.	\$15.00	\$20.00	33%
Other costs* per sq. ft.	\$2.50	\$3.00	20%
Equals cost per gross sq. ft.	\$21.93	\$30.26	38%
Cost per net sq. ft. of actual suites (80%)	\$27.40	\$37.82	38%
<u>Rent per Square Foot Required</u>			
Net annual rent per sq. ft. to produce 10% return	\$2.74	\$3.78	38%
Gross rent on above allowing 40% of gross for expenses & vacancies	\$4.56	\$6.30	38%
<u>Monthly Rent Required</u>			
Studio (450 sq. ft.)	\$171	\$236	38%
One-bedroom (550 sq. ft.)	207	289	40%
One-bedroom (650 sq. ft.)	247	341	38%
Two-bedroom (800 sq. ft.)	304	420	38%

\* Architect and engineer, interim finance, taxes, leasing, etc.

Source: Compiled from figures provided to Province (Feb. 2, 1974) by Dick Richards of MacKenzie Management Ltd.

... new construction, the cost of which would be basically unaffected by those proposals except for the reduced cost of land, would be less profitable and would be substantially curtailed initially. Eventually this reduced construction activity would cause higher rents as a consequence of the supply of depreciable real estate not keeping pace with user demand, and this would tend to partially restore real estate values. Therefore, ultimately, the impact of the proposals would be to reduce the equilibrium stock of constructed real estate, raising actual and imputed rents.<sup>24</sup>

## RENT CONTROL

The Runge and Jaffary Reports both take the position that rent control introduced in B.C. in early 1974 was not responsible for the absolute decline in multiple dwelling starts (even though the decline between 1971-73 was not as dramatic as that in 1970 and 1974, as Table 7 shows) and their relative decline in relation to total starts (see Figure 3) since the peak in 1969. Their basic argument is simply as follows: the decline had begun in 1970 long before rent control was implemented in early 1974. However, while the effects of rent control on rental housing supply remain to be felt, it is too early at this stage to determine conclusively the extent to which rent control in B.C. will affect supply of rental housing in the future. (The total of 13,166 rental starts in 1974, lowest since the peak of 1969, was not encouraging.) What we know for sure is: that rent control would aggravate the 'cost-expense-rent squeeze' (as rents are not allowed to rise to the market levels); that rent control would worsen the profitability of rental housing investment which has already been impaired by the 1971 tax changes; and that rent control would heighten uncertainties in the residential construction industry (which has always been subjected to the disadvantage of competing resources from non-residential construction); and that rent control would lead to deterioration in the existing stock of rental housing.

The above four factors -- supply constraints in the factor and money markets, the cost-expense-rent squeeze, tax changes in 1971 and rent control in 1974 -- when combined together have seriously affected the investment and production of rental housing in B.C., and may very well explain the absolute decline in multiple starts as well as their relative decline in relation to total starts. Thus, it is not surprising that new construction has shifted to the ownership sector -- not only in single-detached dwelling units but, more significantly, to multiple dwelling condominiums. Federal and provincial subsidies providing home ownership assistance in various forms also may have affected the shift of consumer preference from rental tenure to ownership tenure.

TABLE 7

Multiple Starts, B.C., 1968-74

Year	Multiple Starts*
1968	13,708
1969	18,785
1970	13,625
1971	17,058
1972	16,427
1973	16,314
1974	13,166

\* Multiple starts include all starts that are not single-detached (i.e. semi-detached, duplex, row and apartments) excluding condominiums.

Source: Compiled from CMHC, Canadian Housing Statistics

### 2.3 The Long-run Response of Housing Supply to Changes in Demand Pressures

In no small way, the Runge Report rests its policy thrusts upon a rather tenuous perception of the housing problem. That is, 'significantly increased levels of government involvement to meet housing needs' are required in response to 'long-term, structural problems' in meeting housing needs.<sup>25</sup> The central proposition is that housing supply is unresponsive (or inelastic), not just in the short-run as conventionally accepted, but also in the long-run. The Runge Report puts it quite simply:

Housing supply is not readily adaptable to demand pressures ... (and) housing shortages, once they develop, are difficult to fill.<sup>26</sup>

E.P. Achtenberg, author of the background study on rent control in the two Reports, states the proposition more clearly:

While shortages in other sectors of the economy may lead to temporarily excessive price increases until the supply of goods can be expanded, the limited elasticity of housing supply results in longer term imbalance.<sup>27</sup>

The proposition that housing supply is unresponsive to changes in demand over the long-term is not supported by any empirical analysis. As a first step in the evaluation of this proposition in the context of B.C., we can examine changes in household size in the last decade as an indicator of supply response to changes in demand over the long term. (Average household size is the ratio of population to number of households. Since there is a one-to-one relationship between households and dwelling units in census data, average household size is equivalent to a measure of average number of persons per dwelling unit. Changes in average household size over the long-run would therefore indicate the general adaptability of the supply of dwelling units to changes in demand pressures.)

Table 8 shows the average household size in B.C. and Canada. Average household size in Canada and B.C. diminished from 1961 to 1971. However, average household size in B.C. was lower than the national average in all the census years. Thus, in general terms, the supply response to meet changes in household formation was more favourable in B.C. than nationally in the last decade.

TABLE 8

Average Household Size, Canada, B.C.  
and other areas, 1961-1971

	1961	1966	1971
Canada	3.9	3.7	3.5
B.C.	3.5	3.4	3.3
Vancouver	3.3	3.2	3.1
Victoria	3.1	3.0	2.9
Rest of B.C.	3.7	3.5	3.5

Source: Statistics Canada, 1961, 1966, & 1971, Census of Canada.

In the long-run, the viability of the housing market can also be evaluated by determining the extent to which housing supply has responded adequately to changes in net household formation, which is the basic force underlying the long-run demand for housing services. Basically, two types of factors affect net household formation:

- (1) Demographic factors -- population increase (including national increase, international immigration, and inter-provincial migration), and the life-cycle of the population (i.e. aging of the population).
- (2) Socio-economic factors -- such as marital status, income, and housing costs that affect the tendency (or preferences) of the population to form independent households.

In terms of the population increase in B.C., the Jaffary and Runge Reports have established the following facts:<sup>28</sup>

1. Between 1961 and 1971, B.C. population grew by 34.1% while growth in the Canadian population was only 18.3%;
2. B.C.'s share of the national population increased from 8.91% in 1961 to 10.11% in 1971;
3. Half of the B.C. population lived in metropolitan Vancouver, while 52.6% of the provincial population growth took place there;
4. Much of the population increase in B.C. was due to migration -- 32% of the population growth was attributable to international immigration, 33% to inter-provincial net migration, and 35% to natural increase.

By translating the B.C. population (and its changes) to household formation, our detailed analysis in Appendix B allows us to draw the following conclusions:

1. Demographic trends in B.C. contributed 72.8% of net household formation over the last decade.
2. Socio-economic trends in B.C. contributed the remaining 27.2% of net household formation.
3. 52.95% of total household formation in B.C. over the last decade could also be attributed to external forces (i.e. international immigration and inter-provincial migration), while the remaining 47.1% was attributable to internal sources, (i.e. the natural growth of the original population in 1961).

The above analysis has presented the salient features of the dynamics of household formation in B.C. -- and it is these kinds of demand pressures generated by the dynamics of household formation that the housebuilding industry responded to in the last decade. We should be able to recognize at this point that external factors (or net in-migration to the province affecting demographic trends) and socio-economic factors were the major elements determining household formation, and ultimately long-run housing demand, in B.C. And it is also these factors that are most difficult to predict and anticipate. In spite of these uncertainties, the B.C. private housing industry not only provided the necessary housing to meet the demand pressures, but also enabled the B.C. population to enjoy the lowest average household size and the least crowded housing in the whole country. The B.C. housebuilding industry has thus demonstrated uncommon adaptability and the ability to respond quickly to uncertain changes in demand pressures.

Our previous analysis clearly shows that there is ample ground to conclude that B.C.'s housing demand and supply are in relative equilibrium over the long term. This conclusion contrasts sharply with the view presented by the Jaffary and Runge Reports, and severely undercuts the alarm characteristic of both Reports. Their sense of urgency is clearly misdirected, since the problems in the housing sector do not lie in the whole of the market's performance and the problem is not to be found in the whole of its structure and operations.

### 3. Affordability of Housing Services

In our examination of the problems in the B.C. housing sector, we have so far focussed only on the supply of housing services and its response to changes in demand pressures over the long term. One area that remains to be investigated is the ability (or inability) of households to pay for such housing services produced in B.C.

In the outset, the meaning of 'affordability' of housing services has to be clarified. Housing requirements include two major components: housing demand (or effective demand) and housing need (or ineffective demand). Ability and willingness to pay for housing (or the affordability of housing services) distinguish the effective demand from the social or personal need or desire for housing, and make the former economically significant. The ability to pay for housing services is affected by:

- (1) income and financial assets of households,
- (2) costs and terms of mortgage credit,
- (3) prices (or rents) of housing services, and
- (4) prices of other goods and services;

while the willingness to pay for housing services and the choice of services made are affected by tastes and preferences of households.

In order to determine whether the 'affordability' issue is a problem or not, the following questions are in order:

- (1) To what extent have households in B.C. experienced inability to pay for housing services?
- (2) Is the whole spectrum of households in B.C. limited in its ability to purchase housing services? Or do certain socio-economic groups in particular have special problems in making their basic housing needs economically significant? Who are those groups with housing deprivation?

The Jaffary Summary Report does not suggest any answers to these questions. However, the Runge Summary Report, and its appended statistical analysis, does provide relatively adequate answers which are in accord with observations on the question of shelter and income in the Canadian context made in the Institute's earlier study.<sup>29</sup> The Runge Report makes the following observations about income and its distribution in B.C.:

Based on per capita disposable income, people in British Columbia are better off than people in Canada as a whole .... There was a real growth in incomes for all people in the province in the sixties. But the incomes of lower income households have increased at slower rates than those of higher income persons ... The incomes of non-family persons increased much more slowly than family incomes ...<sup>30</sup>

Was the general increase in real income outpaced by the increase in general cost of living and of shelter in particular? The answer from the Runge Report is in the negative, as it observes further:

During the sixties the incomes of all income groups kept pace with the general cost of living. That is to say, inflation did not erode the real value of incomes, even for the low-income, non-family group whose income increased least. From indicators of the rising prices of shelter, it seems that income growth kept pace with rising costs in existing housing, both rental and ownership ... while rents have not increased as fast as ownership (costs), they did increase significantly in the 1960's and accelerated in the 1970's.<sup>31</sup>

The situation in B.C. follows the general pattern in Canada as a whole. In the Institute's earlier study on the housing market in Canada, M.A. Walker makes the following observations:

The relatively smaller increase in the growth in income, combined with a faster rate of growth of prices, has meant that the rate of growth of the real standard of living of Canadians has been slower in the past five years.... Although the standard of living of Canadians has improved more slowly in recent times than in the past, there appears to have been a relative reduction in the cost of accommodation -- at least for tenants .... The most recently available information (1972) indicates that the net effect of rising incomes and rising costs of accommodation has been to stabilize the percentage of income spent on shelter.<sup>32</sup>

From available evidence it can be argued that households in B.C., as households in Canada generally, have not been increasingly unable to pay for housing services. As a matter of fact, the reverse is true, even though the rapid rate of inflation since the early seventies should be a matter of concern. There is no evidence to support either (a) the view that the majority of households in B.C. have a general problem of being unable to pay for housing services they want and need, or (b) the false alarm that B.C. is in the 'throes of a housing crisis'.

However, certain socio-economic groups (in particular, the low income and non-family households) do pay a substantial portion of their income on rents or ownership costs. The 25% rent-to-income ratio can be used as an indication of hardship. It is a rule of thumb commonly accepted as the ratio beyond which households are judged to endure housing deprivation in terms of costs. In terms of this ratio, the 1971 census reveals the following:

- (1) in Vancouver, 51% of all renter households in 1971 paid 25% or more of their income on rent;
- (2) in Vancouver, 75% of all the renter households 65 years of age and over paid 25% or more of their income on rent; and
- (3) the situation in Victoria was similar to Vancouver's.

Vancouver and Victoria households, paying 25% or more of their income as rent, are presented by income classes in Tables 9 and 10. In these two urban areas, most of the renter households paying more than 25% of their income as rent belonged to the income class of \$6,000 and less -- and most of them were non-family households. Elderly households constituted a significant proportion -- 27.0% in the case of Vancouver and 43% in the case of Victoria.



TABLE 9

Renter Households with Rent-Income Ratio of 25%+  
by Income Classes, Vancouver, 1971

Income Classes	All Renters			Renters 65+		
	Family	Non-Family	Total	Family	Non-Family	Total
	%	%	%	%	%	%
< 3,000	28.0	53.0	42.0	34.0	75.0	65.0
3 - 6,000	41.0	36.0	39.0	48.0	22.0	28.0
6 - 9,000	24.0	9.0	13.0	14.0	2.0	6.0
9,000 +	7.0	2.0	6.0	4.0	1.0	1.0
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0
Households (#)	32,000	41,000	73,000	5,000	15,000	20,000
(%)	44.0	56.0	100.0	6.0	21.0	27.0

All Renter Households: 142,000  
51% paid 25+ : 73,000

All Renter Households 65 years and over: 26,000  
75% paid 25+ : 20,000

Source: Compiled from Statistics Canada special tabulations (of 1971 Census of Canada)  
for CMHC.

TABLE 10

Renter Households with Rent-Income Ratio of 25%+  
by Income Classes, Victoria, 1971

Income Classes	All Renters			Renters 65+		
	Family	Non-Family	Total	Family	Non-Family	Total
	%	%	%	%	%	%
< 3,000	24.0	61.0	45.0	20.0	68.0	55.0
3 - 6,000	48.0	33.0	40.0	54.0	28.0	35.0
6 - 9,000	24.0	5.0	13.0	23.0	3.0	8.0
9,000 +	4.0	1.0	2.0	3.0	1.0	2.0
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0
Households (#)	6,000	8,000	14,000	2,000	4,000	6,000
(%)	43.0	57.0	100.0	14.0	29.0	43.0

All Renter Households: 26,000

53% paid 25+ : 14,000

All Renter Households 65 and over: 8,000

75% paid 25+ : 6,000

Source: Compiled from Statistics Canada special tabulations (of 1971 Census of Canada) for CMHC.

The 1972 Consumer Finance Survey revealed the following salient factors of further interest:

- (1) 29% of all urban family renters in B.C. paid more than 25% of their income as rent;
- (2) 59% of all urban non-family renters in B.C. paid more than 25% of their income as rent; and
- (3) 15% of all urban family owners in B.C. paid more than 25% of their income in mortgage principal and interest payments and in property taxes (altogether known as P.I.T.).

These families and non-family persons are presented by various income classes in Table 11. With the exception of owners, the majority of renters with a shelter-income ratio of 25% and over had an income of \$6,000 or less. However, in the case of owners with an income of \$6,000 or more, the high proportion of their income spent on housing may only indicate that housing is being acquired as an investment good (i.e. for the purpose of hedging against inflation) and may not necessarily mean that the consumption component of their expenditure is high relative to their income.

TABLE 11

Urban Families and Non-Family Persons  
with Shelter-Income Ratio of 25% + by  
Income Classes, B.C., 1972

Income Classes	Renters		Owners
	Family	Non-Family	
	%	%	%
3,000	29.0	63.0	14.0
3 - 6,000	51.0	33.0	27.0
6 - 9,000	14.0	3.0	38.0
9,000 +	6.0	1.0	21.0
Total	100.0	100.0	100.0

Source: Statistics Canada, Consumer Finance Survey, 1972.

Special tabulations of the 1971 census data also identified those households in B.C. that had housing 'problems' defined as follows:

1. Renter households were regarded as in 'need' if they had either one or both of the following two problems: (1) Sharing facilities -- sharing or lacking bath and toilet; (2) Rent-income ratio greater than 25%.
2. Owner households were regarded as in 'need' if they had either one or both of the following two problems: (1) Sharing facilities (2) Crowding - with more than 1.1 persons per room.

Tables 12 and 13 show the percentage of total non-farm households who had either one or both of the above problems for B.C., Vancouver and Victoria in 1971.

For renter households in B.C., high housing cost (i.e. rent) was a far more significant problem than inadequate quality of housing (if the lack of facilities was a good measure of quality) -- 17.6% of all households in B.C. had a rent-income ratio of 25% and over while only 2.9% of all households shared facilities. Furthermore, there were more non-family households shared facilities. Furthermore, there were more non-family households (9.4%) than family households (8.2%) paying more than 25% of their income as rent. (The large number of non-family households that were paying more than 25% of their income as rent suggests that considerable savings -- savings in terms of the budget of non-family households and in terms of dwelling space as a whole -- could be made if many of these non-family households were to double up. This raises an interesting question: why do we always set a housing standard that precludes doubling up or in fact seems to imply that any one over 18, or some age, should be entitled to their own dwellings?)

The percentage of renter households having both housing 'problems' was rather insignificant. The situations in Vancouver and Victoria were similar to the overall situation in B.C. -- except that the proportion of households in Vancouver and Victoria with a rent-income ratio of 25% or over was substantially higher (i.e. 52.2%) than in B.C. (i.e. 17.6%). Owner households in B.C. did not appear to be particularly affected by the lack of facilities or overcrowding.

From the preceding analysis, the following conclusions can be drawn:

- (1) In terms of per capita disposable income, British Columbians are better off than people in Canada as a whole.
- (2) The majority of households in B.C. are not generally unable to pay for their housing services, as the real growth of incomes has outpaced both the increase in the general cost of living and in shelter costs.

TABLE 12

Percentage of Total Non-farm Households Having Housing Problem(s)  
by Tenure, Family Types and Age Groups, B.C., 1971

	Household Types		Age Groups		Total
	Family	Non-Family	<65	65	
	%	%	%	%	%
<u>I. Renter Households</u>					
<u>One Housing Problem</u>					
1. Sharing facilities	0.9	2.0	2.2	0.7	2.9
2. Rent-income ratio 25%+	8.2	9.4	12.8	4.8	17.6
<u>Two Housing Problems</u>					
1. Sharing facilities & rent-income ratio 25%+	0.4	1.1	1.0	0.5	1.5
<u>II. Owner Households</u>					
<u>One Housing Problem</u>					
1. Sharing facilities	1.3	0.7	1.5	0.5	2.0
2. Crowding	3.8	0.0	3.7	0.1	3.8
<u>Two Housing Problems</u>					
1. Sharing facilities & crowding	0.5	0.0	0.5	0.0	0.5

Total Non-farm Households: 647,405 (100%)

Total Renter Non-farm Households: 242,600 ( 37%)

Total Owner Non-farm Households: 404,805 ( 63%)

Source: Compiled from Statistics Canada special tabulations (of 1971  
Census of Canada) for CMHC.

TABLE 13

Percentage of Total Non-farm Households Having Housing Problem(s)  
by Tenure, Family Types and Age Groups, Vancouver, Victoria, 1971

	Household Types		Age Groups		Total
	Family	Non-Family	65	65+	
I. <u>Renter Households, Vancouver</u>	%	%	%	%	%
<u>One Housing Problem</u>					
1. Sharing facilities	1.5	5.1	5.0	1.6	6.6
2. Rent-income ratio 25%+	22.7	29.5	38.4	13.8	52.2
<u>Two Housing Problems</u>					
1. Sharing facilities & rent-income ratio 25%+	0.7	3.1	2.6	1.2	3.8
II. <u>Renter Households, Victoria</u>					
<u>One Housing Problem</u>					
1. Sharing Facilities	1.0	6.1	4.1	3.0	7.1
2. Rent-income ratio 25%+	22.1	30.7	30.0	22.8	52.8
<u>Two Housing Problems</u>					
1. Sharing facilities & rent-income ratio 25%+	0.3	3.9	2.0	2.2	4.2

Total Non-farm Renter Households, Vancouver: 141,720

Total Non-farm Renter Households, Victoria: 25,550

Source: Compiled from Statistics Canada special tabulations (of 1971 Census of Canada)  
for CMHC.

- (3) However, certain socio-economic groups in B.C. are particularly unable to make their housing demand economically effective. These groups include low income, non-family and elderly households. But the lack of facilities or overcrowding is relatively insignificant as compared to the proportion of income they have to pay for housing services.
- (4) The preceding phenomenon is far more serious in B.C.'s two major urban areas.
- (5) It appears that the problems encountered by particular socio-economic groups are caused by inadequate incomes and by the slower rate of growth in income as compared to what characterizes households at the upper end of the income distribution.
- (6) To the extent that inflation will persist and to the extent that low income households continue to experience a lower rate of growth in their incomes as compared to higher income households, the particular problems of those socio-economic groups will be aggravated.

With the foregoing analysis, we are in the position to address the 'affordability' issue with perspective. M.A. Walker, in the Institute's earlier study, observes that:

There is no housing problem -- but there is a problem ... The problem quite simply, is that some Canadians do not have sufficient income ... There is still a fairly substantial number of Canadians for whom the provision of basic necessities is a problem.<sup>33</sup>

The Jaffary Report alleges that B.C. is in the 'throes of a housing crisis'. Yet, by neglecting to indicate its norms and standards, as well as supporting evidence, it exaggerates the issues and arouses troublesome agitation in a field that has always been long on emotional content and short in economic logic. The Runge Report, on the other hand, concludes that the inability of certain households to pay for housing services is basically a problem of inadequate income. The Runge Report observes:

This is basically a problem of inadequate income ... Inequalities in the distribution income have increased since 1961. The poor are relatively worse off.<sup>34</sup>

While this was a valid and far more appropriate conclusion at the time it was written, the Runge Report proceeded to commit a methodological blunder. (Since the Runge Report was written, new and important measures of income distribution in Canada have been

and are currently being produced at McGill University and will be released in a Fraser Institute publication early next year. These new measures correct a serious error contained in conventional income distribution analysis and show that income distribution has become progressively more 'equal' since 1961.) In its transition from problems to policy, it failed to sustain perspective and proportion. If households in B.C. can generally afford housing while only particular groups of households cannot keep up with rising prices, why is it necessary to perpetuate a system of general rent regulation? That the Runge Report has not provided the connection only serves to illustrate a far more pervasive disjointedness of problems and solutions, of means and ends.

## Notes

1. Jaffary Report, pp. 12-13.
2. Ibid., p. 16.
3. Ibid., p. 22.
4. Runge Report, p. 1.
5. Ibid., p. 6.
6. Ibid., p. 5.
7. The crowding index (i.e. number of persons per room) is the ratio of (1) number of persons per household (i.e. average household size) and (2) number of rooms per dwelling.
8. Economic Council of Canada, Eleventh Annual Review: Economic Targets and Social Indicators (Ottawa: Information Canada, 1974), p. 74.
9. Ibid., p. 75.
10. Jaffary Report, p. 80; Runge Report, p. 34.
11. Runge Report, p. 3.
12. Ibid., p. 1.



13. Economic Council of Canada, Toward More Stable Growth in Construction (Ottawa: Information Canada, 1973), p. 91.
14. See, for example, Michael K. Evans, Macroeconomic Activity (New York: Harper & Row, 1969), Ch. 7; and Richard Pollock, 'Supply of Residential Construction: A Cross-Section Examination of Recent Housing Market Behavior,' Land Economics, Vol. XLIX (Feb. 1973), pp. 57-66.
15. Economic Council of Canada, Toward More Stable Growth, pp. 94-5.
16. The countercyclical behaviour of residential construction activity means that residential construction always moves in the opposite direction from aggregate economic activity.
17. Evans, Macroeconomic Activity, p. 194.
18. Economic Council of Canada, Toward More Stable Growth, p. 115.
19. Ibid., p. 115.
20. Ibid., pp. 119-20.
21. It is defined here that multiple dwelling units are those that are not single-detached, excluding condominiums. They include semi-duplex row and apartments. It is further assumed that all multiple dwelling units are renter-occupied, while single-detached dwelling units are owner-occupied.
22. Runge Report, p. 6.
23. Lawrence B. Smith, Housing In Canada (1971), p. 16.
24. Lawrence B. Smith, 'Effects of the White Paper on Demand for and Price of Real Estate.' (1970), p. 381.
25. Runge Report, pp. 308, 310.
26. Ibid., p. 306.
27. Emily P. Achtenberg, 'The Social Utility of Rent Control,' in Housing Urban America, John Pynoos et al., eds. (Chicago: Aldine Publishing, 1973), p. 435.
28. Jaffary Report, p. 76; Runge Report, p. 30.
29. F.A. Hayek et al., Rent Control: A Popular Paradox (Vancouver: The Fraser Institute, 1975).
30. Runge Report, p. 5.

31. Ibid., pp. 5-6.
32. Hayek, Rent Control, pp. 13-15.
33. Ibid., p. 24.
34. Runge Report, p. 5.

## APPENDIX A

### AN ANALYTICAL FRAMEWORK FOR HOUSING MARKET ANALYSIS

The following conceptual framework presents a schematic way of analysing the operations of, and the cause-effect relationships in, the housing market. This framework will assist us in the understanding of the housing situation in B.C. and in the identification of problems that may have arisen.

#### A. The Characteristics of Housing: Immobility and Durability

'Housing' is different from most goods and services because of its inherent characteristics. In housing market analysis -- a 'process that attempts to identify and measure the forces that produce changes in the size and utilization of the housing inventory and thus influence the distribution of dwelling units among the population'<sup>1</sup> -- the peculiar characteristics of housing should be adequately recognized at the outset.

The use of housing services cannot be separated from the spatial use of land. This emphasizes the importance of locational factors in relation to the production and distribution of housing. Commuting time and transportation costs restrict the geographic substitutability of housing, as the services of each dwelling unit must be consumed on the spot. The surplus capacity of the housing stock available in one area (as, say, demand has declined) cannot be shipped elsewhere and be used to satisfy the increased demand in other areas. (Mobile homes possibly form the only exception.)

The durability of dwelling units gives them a long physical life. Structural considerations (that determine physical life) and economic considerations (that determine economic life) combine to produce relatively long lives for housing units as compared with other non-durable goods, such as clothing and foodstuffs.

The relative immobility and durability of housing have some important implications. 'Since inventory units are durable, few of them can be adapted easily to changing demands in different kinds of services at the location where they stand. Without extensive alteration, each unit has a relatively fixed use and can offer only a restricted range of services ... thus the units in the inventory tend to be inflexible in their potential use and service capabilities.'<sup>2</sup> The established patterns of different types of dwelling units tend to persist rather than change. Net additions to stock (i.e. new construction plus conversions less demolitions) average 3 or 4 per cent of total stock annually. New units tend to supplement rather than replace old ones.

The implications of the peculiar characteristics of housing are as follows:

- (1) The standing stock or inventory is the basic element in housing market analysis. Greater emphasis must be placed on the economics of the housing stock. A comprehensive theory of market behaviour must begin with the existing stock and its utilization.
- (2) The dominant role of existing stock and its relationship with additions to stock is best explained by a typical stock-flow analytical model.<sup>3</sup> The distinction between the housing stock existing at any moment in time and the flow of housing services that this stock yields per period of time should be recognized.
- (3) The nature of the cost-price-output relationships between the standing stock and new construction should be evaluated with due recognition of the dominant role played by the standing stock.

## B. Some Conceptual Problems

In housing market analysis, housing can be considered as (1) the physical things comprising land, structures and dwelling units, or (2) the services rendered by these things, or (3) bundles of legal rights to the use of residential facilities.<sup>4</sup> Since 'the dwelling unit is the unit traded in the market in which rights to the use of houses or parts thereof are exchanged through lease or purchase',<sup>5</sup> housing stock is defined here, for the sake of convenience, as the aggregate of all dwelling units existing at a point in time.

Within any housing market area, all dwelling units may be considered as being linked to each other. There are broad economic forces which impinge upon dwelling units of different kinds and which affect price-quantity relationships in more or less parallel fashion. However, refinements are necessary. Dwelling units can be differentiated by different characteristics: location, age, quality, size, tenure, neighbourhood, number of rooms and so forth.<sup>6</sup> The criterion of

differentiation depends basically on the degree of substitutability (which is explained later) between dwelling units that possess different kinds of characteristics.<sup>7</sup> The conventional approach is to adopt a two-fold classification: (1) by tenure, i.e. ownership or rental, and (2) by type of structure, i.e. single-detached, multiple, etc. This approach will be followed here.

## 1. The Spatial Dimension

Another conceptual problem encountered in housing market analysis relates to the definition of 'housing market' and of 'housing market areas'.

A market ... is the area within which the price of a commodity tends to uniformity, allowance being made for transportation costs.<sup>8</sup>

In other words, a market is said to exist whenever buyers and sellers are in such free communication that the same commodity or service commands the same price, or prices tend toward equality easily or quickly. As compared with other markets, it is more difficult to find the same commodity or service in the housing market. However, the concept of substitutability of goods and services helps to throw some light on the understanding of the nature of a housing market. We may regard markets for housing as clusters of substitutes of varying degrees of closeness set off from other commodities (e.g. food and automobiles that compete with the consumer budget) by a gap in the chain of substitution.

The market area so far as buyers are involved, is the sum of the areas within which the mobility of consumers is sufficient to ensure the tendency to uniformity in price, allowance being made for transportation costs.<sup>9</sup>

A housing market area is the physical area within which all dwelling units are linked together in a chain of substitution or are in mutual competition. However, it is difficult to draw the boundary lines of any market area with any degree of precision.

While topography or transportation routes occasionally fix the boundaries of an area, the lines are fuzzy and subject to change in most instances. But there is no continuum of local housing markets that would tend to make them statewide, or regionwide, or nationwide. Dwelling units at the outer limits of a local market area become such weak substitutes in the aggregate scale of preferences by people living within the group of dwellings under observation; that is, they are not in the same market.<sup>10</sup>

The important point here is that any delineation of housing market areas should not be region-oriented -- it should be

community oriented. In the choice of a specific residential location, demanders (potential buyers or renters) are influenced by various considerations. But the most important considerations are the place of employment and commuting time. Thus, labour market areas (or the economic base of a community that generates the demand for labour) becomes an important determinant of a housing market area.

## 2. The Temporal Dimension

An important distinction should be drawn between two analytic time periods.<sup>11</sup> The 'standing stock period' relates to price determination in the market during which no new construction occurs. The existing housing stock remains constant while demand for housing is to be adjusted and accommodated by changes in prices (or rents) and by various degrees of stock utilization. The 'construction period' relates to price determination in the market during which the size of the housing stock can be changed via new construction, conversions and demolitions. This is the long-run in the housing market though it is relatively much longer than the long-run in the markets of other goods and services.

### C. Utilization of Existing Stock

At any given time, the rate of utilization of the existing stock depends on: (1) the capacity of the inventory to render services, and (2) the intensity of use of the inventory, so that:

$$\text{Rate of utilization} = \frac{\text{Intensity of use of the inventory}}{\text{Capacity of the inventory to render services}}$$

The 'capacity of the inventory to render services' at any moment is fixed by its size and composition which only changes in a slow process through alterations or net additions. The 'intensity of use' fluctuates considerably through time so that a varying portion of inventory capacity is utilized. 'For the standing stock, a measurement by aggregates of units of count and physical characteristics furnishes a rough indication of its capacity at a given time. For the intensity of use, two indicators are helpful. One is the net vacancy rate, which shows how much of the inventory is unused. The other is the density of occupancy, which indicates how intensively the services of occupied units are consumed'.<sup>12</sup>

Density of occupancy is indicated by the number of persons per room or the number of persons per dwelling unit. Since the number of dwelling units is statistically equivalent to the number of households, the smaller the average population per household (or average household size), the lower the density of occupancy per dwelling unit, and, correspondingly, the greater the demand for housing space per 1,000 population.

As the rate of utilization rises, prices and rents begin to rise concurrently. When prices and rents increase to a level that appears to be profitable to produce new units, new additions to stock will take place. Production of new units will be directed to those whose prices or rents are expected to exceed the cost of construction by the largest margin, subject to the availability of financing. This is the link between existing stock and new additions to stock through the cost-price-output mechanism which will be examined in detail in the following stock-flow adjustment model.

#### D. Stock and Flow Relationship

In the short-run or the 'standing stock period' when no new construction takes place, the existing stock of dwelling units plays a dominant role in price (or rent) determination. In particular, it is the demand for the existing stock of dwellings that determines prices and rents and the rate of utilization of the existing stock, as the supply of housing units remains fixed or perfectly inelastic. An incipient higher level of demand is adjusted and/or accommodated by either higher levels of price and rent or increasing rate of stock utilization or both. In the long-run or the 'construction period' when new construction occurs, prices and rents are determined by the interaction of owners of existing stock and builders of new stock on the one hand and by sitting and potential owners or renters on the other.

As the rate of utilization rises, prices and rents begin to rise concurrently. When prices and rents increase to a level that appears to be profitable to produce new units, new additions to stock will take place. The new level of prices and rents and vacancies are then compared with construction, land and financing costs to determine the profitable volume of new residential construction. It is important to note here that the new level of rents and prices that brings about incentive for new construction is determined by upward movements of the demand for existing stock. 'Because new construction ... augments the existing stock very little, this price (or rent) can be considered to be independent of the volume of new construction.'<sup>13</sup> It is the 'dog that wags the tail' instead of the other way round. Of course, once the additions to the stock of housing units have been made, they will affect the market price (or rent) because they increase the supply of housing services.

During the entire period that the rate of utilization is high, price levels are not dictated by construction costs. On the contrary, building occurs only when prices or rents of existing units are high enough to support the expectation that additions can be made profitably. Current construction costs are significant only to the extent that they indicate the minimum level to which prices or rents must rise before any general increase in the standing stock takes place ... Hence, the belief that fluctuations in building activity and prices and rents are dependant upon construction costs is unwarranted.<sup>14</sup>



It is not suggested here that the above stock-flow model would adjust smoothly, without friction, as demand and supply conditions change. There are certain imperfections in the housing market that prevent quick adjustment towards equilibrium. The types of imperfection are:

- (1) The adjustment lag on the demand side  
Consumer reaction is slow because of the enormity of the housing decision (a house purchase being the largest expenditure most families ever make), fixed tenancies, transaction costs (in time, commissions, and possibly inappropriate furnishings), and inertia.<sup>15</sup>
- (2) The adjustment lag on the supply side  
The gestation period of planning and the actual bringing forward of newly constructed dwelling units to the market is usually a long and slow process.
- (3) Imperfections in the capital market  
New construction depends on the availability of mortgage credit. The imperfections in the capital market<sup>16</sup> impose additional constraints on the adjustment mechanism of the housing market.

#### E. Factors that Affect Demand

Up to this point, a schematic framework with respect to the stock-flow relationship and the adjustment mechanism in the housing market has been presented. The forces that underlie the demand and supply of residential housing to which the housing market has to adjust, adapt and respond are analysed in this section.

Factors that affect demand for residential housing can be generalized into the following categories:

- (1) Demographic variables
- (2) Income
- (3) Price and rents
- (4) Financial variables.

In the long-run (or the construction period), demographic changes<sup>17</sup> and rising real incomes are the strategic factors that shape the demand for housing services. In the short-run (or the standing stock period), changes in household formation can be adapted to the existing stock of housing by increasing the rate of utilization.

To determine the impact of demographic changes on housing demand is to translate the growth of population (through natural increase, net migration and international immigration) to net household formation. Of particular importance are the changes in



the structural elements of population through time, i.e. changes in age-sex composition and headship rates (or average household size). 'The major forces are usually categorized as net family formation (the net sum of marriages, divorces, deaths of married persons, and net migration of families), net non-family household formation (net sum of individuals and groups of persons occupying separate dwellings), and net undoubling.'<sup>18</sup> Changes in those major forces lead to shifts in demand among dwelling units of different structural types and of different tenure types.

Increase in real income raises the demand for housing in terms of greater quantity or better quality of housing. Statistical evaluation and definition of income (e.g. census definition) in general underestimates the ability of families and households to pay for housing services. The reasons are twofold. First, statistical evaluation of income is a snapshot estimation of income at a particular point in time that obscures the life-cycle pattern of income (or permanent income).<sup>19</sup> Secondly, ability to pay for housing cannot be adequately evaluated unless accumulation of assets and savings (or wealth in general) has been taken into consideration. Analysis of the trend of changes in real income should also be supplemented by an analysis of how income is distributed among families and households. It is apparent that households and families in different income classes have different ability to pay for housing services and consequently different consumption patterns in terms of dwelling units of different structural and tenure types.

Prices (or rents) and financial (or credit) variables affect the demand for housing in similar fashion as those that apply to other goods and services. Changes in the level of housing prices and rents affect aggregate demand for housing, while different rates of change in housing prices and rents tend to shift the demand among the different housing submarkets (e.g. from rental apartment to single-family dwelling, or vice versa).

#### F. Factors that Affect Supply

The major factor inputs in the production of housing include land, building materials, labour, financing, technology and entrepreneurship. The first four are 'physical' inputs in the housing production process while the latter two determine how much housing will be produced for a given quantity of the 'physical' inputs. In the long-run, the trends of relative price changes amongst the physical factor inputs are important in the evaluation of the possibilities and desirability of factor substitution. (Higher priced land may lead to highrise apartments which may be more expensive to build than lowrise apartments.) In the short-run, the possibilities of supply constraints in those factor inputs are of particular importance in terms of judging whether the construction industry can respond adequately to changes in demand. Furthermore, certain factors that are difficult to quantify, e.g. zoning regulations, minimum building standards, also impose constraints on the land development process.

## Notes

1. Chester Rapkin, Louis Winnick and David M. Blank, Housing Market Analysis: A Study of Theory and Methods, (Washington, D.C.: Housing and Home Finance Agency, 1953), p. 1.
2. E.M. Fisher and R.M. Fisher, Urban Real Estate, (New York: Henry Holt & Co., 1954), p. 162.
3. See, for example, Lawrence B. Smith, The Postwar Canadian Housing and Residential Mortgage Markets and the Role of Government (Toronto: University of Toronto Press, 1974), Ch. 2.
4. See Rapkin, Housing Market Analysis, p. 7.
5. Leo Grebler, 'The Housing Inventory: Analytic Concept and Quantitative Change,' American Economic Review, Vol. XLI, (May 1951), p. 557.
6. David M. Blank and Louis Winnick, 'The Structure of the Housing Market,' Quarterly Journal of Economics, Vol. LXVII (1953), pp. 181-208.
7. Kelvin J. Lancaster, 'A New Approach to Consumer Theory,' Journal of Political Economy, Vol. 74 (1966), pp. 132-57.
8. George J. Stigler, The Theory of Price, 3rd ed. (New York: Macmillan Company, 1966), p. 85.
9. Ibid.
10. Rapkin, Housing Market Analysis, pp. 9-10.
11. See Blank, 'The Structure of the Housing Market,' pp. 186-87; Grebler, 'The Housing Inventory,' pp. 558-59.
12. Fisher, Urban Real Estate, Ch. 10.
13. Smith, The Postwar Canadian Housing, p. 18.
14. Fisher, Urban Real Estate, pp. 209-10.
15. Smith, The Postwar Canadian Housing, p. 19.
16. Ibid., pp. 20-1.
17. See, for example, Leo Grebler, David M. Blank and Louis Winnick, Capital Formation in Residential Real Estate: Trends and Prospects (Princeton, N.J.: Princeton University Press for NBER, 1956), Ch. V.

18. Smith, The Postwar Canadian Housing, pp. 27-8.
19. James S. Duesenberry, Income, Saving, and the Theory of Consumer Behavior (Cambridge, Mass.: Harvard University Press, 1949), and Milton Friedman, A Theory of the Consumption Function (Princeton, N.J.: Princeton University Press for NBER, 1957).



## APPENDIX B

### HOUSEHOLD FORMATION AND HOUSING DEMAND IN BRITISH COLUMBIA, 1961-1971

Census of Canada figures indicate that British Columbia's population rose by 34.1% in the ten years between mid-1961 and mid-1971, while the number of households<sup>2</sup> increased 45.22%. As a result of this divergence, average household size (total population divided by number of households) declined from 3.5 to 3.3 persons per household.

Corresponding to the decline in household size was the increase in the ratio of occupied dwellings to population. This ratio is simply the reciprocal of average household size. It can also be referred to as the aggregate headship rate -- the number of household heads divided by population. This rate increased from 0.282 to 0.306. Of itself, the aggregate headship rate is of little analytic interest. However, it does provide prima facie evidence that there was not a general imbalance between housing demand and supply in British Columbia between 1961 and 1971. Since household size declined markedly (and aggregate headship rate rose significantly) it can be generally stated that housing production took place at rates adequate to meet both replacement demand and new household formation.

The aggregate headship rate can be segregated into age-group specific headship rates<sup>3</sup> -- the proportion of persons in any age-group who are household heads.<sup>4</sup> The Table below shows the age distribution and headship rates by age-groups for British Columbia in 1961 and 1971.<sup>5</sup>

TABLE B-1

Age Distribution and Headship Rate	Under 15 years	15 to 24 yrs	25 to 34 yrs	35 to 44 yrs	45 to 54 yrs	55 to 64 yrs	65 yrs & over	Total
1961								
Age Distribution	31.26%	12.76%	13.15%	13.73%	11.34%	7.58%	10.16%	100.0%
Headship Rates	---	8.40%	40.53%	45.79%	50.97%	53.94%	55.49%	28.2%
1971								
Age Distribution	27.92%	17.68%	13.41%	11.70%	11.13%	8.75%	9.38%	100.0%
Headship Rates	---	12.55%	45.76%	51.69%	51.61%	55.41%	59.48%	30.6%

Source: Compiled from Tables I-3 and I-5, pp. 77-78 in Housing and Rent Control in British Columbia (B.C.: Inter-departmental Study Team on Housing and Rents, 1975). Original data from 1961 and 1971 Census of Canada.

Change in the aggregate headship rate between 1961 and 1971 was affected by the change that occurred in those ten years in the age distribution or relative size of age groups, and in the tendency within age groups to form households or become household heads. As Smith states: 'The number of social households in the population depends primarily upon the age distribution of the population and customs regarding household formation.'<sup>6</sup> Age distribution is a demographic factor affected by population movement into and out of the province as well as by the aging of the remaining original population and deaths. To the extent that population migration involves particular age groups, to that extent will the age distribution of the total population be affected, especially if migration occurs in large numbers (even though the net effect may be slight -- which it isn't in B.C.).

The second factor shaping the aggregate headship rate is the shift in the headship rates of particular age groups. This is a socio-economic factor since the household formation decision reflects individual tastes and preferences, incomes, wealth, marital status, and to some extent, education and occupation. It is also closely related to stage in life-cycle or age.<sup>7</sup>

What influence do changing age distribution and shifting headship rates have on increased overall household formation and decreasing household size? Is the increased level of household formation a demographic phenomenon or an economic one?

The following analysis clearly reveals that change in age-group specific headship rates was the major factor prompting increased household formation. This contrasts sharply with the situation observed by Winnick in the United States for the period 1890-1950.<sup>8</sup> In British Columbia the tendency to form independent households increased in all age-groups. In addition, however, the relative size or weight of three of five household-forming age-groups with high headship rates decreased (all ten-year age cohorts 25 years of age and over). Thus, the changing age distribution of the population countered some of the impact of increasing age-group specific headship rates.

The figures in Table B-2 approximate the components of household formation in B.C. for the period 1961-1971 while Table B-3 summarizes the approximations by outlining the relative importance of the various sources of components of net new household formation.<sup>9</sup>

This summary indicates how, on the one hand, population increase (of 34.1%) accounted for 75% of new household formation (at 1961 headship rates and age distribution). The additional 25% can be divided between higher age-group specific headship rates (+27.2%) and the counteracting effect of change in the age distribution (2.2%). Alternatively, demographic factors (population growth and age distribution) account for 72.8% of the increase in absolute numbers of households, while socio-economic factors (i.e., headship rates) explain 27.2%.

On the other hand, the sources of increase in household numbers can be contrasted in terms of internal and external components. The net effect of aging, dying, out-migration, higher headship rates and compensating in-migration in the

TABLE B-2

	1961	Natural Increase	1971 Subtotal	Net In- Migration	Total Increase	1971
Total Population	1629,000	194,400	1823,500	361,000	555,500	2184,600
Households:						
a) 61 weights & rates	459,000	54,800	514,300	101,900	156,700	616,100
b) 71 rates	501,900	59,900	561,800	111,200	171,100	673,000
c) 71 weights & rates	498,500	59,500	558,000	110,500	170,000	668,500
Household Increase:						
due to rates (b-a)	42,500	5,100	47,500	9,300	14,400	56,900
actual increase (c-a)	39,000	4,700	43,700	8,600	13,300	52,300
due to weights (-b-c)	(-3,400)	(-400)	(-3,800)	(-700)	(-1,000)	(-4,600)

Source: Age distribution factors and age-group specific headship rates are applied to 1961 and 1971 population figures to produce these estimates. The aggregate headship rate for (a) is 28.2% (reported earlier), for (b) is 30.81%, by calculation, and for (c) 30.6% (reported earlier).



TABLE B-3

Sources of net new household formation	1961 Population	Natural Increase	Sub-Total	Net In-Migration	Total
Population increase	---	26.2%	26.2%	48.8%	75.0%
natural increase	---	26.2%	26.2%	---	26.2% (35%)
net in-migration	---	---	---	48.8%	48.8% (65%)
Household formation factors	18.7%	2.2%	20.9%	4.1%	25.0%
age distribution	- 1.6%	-0.2%	- 1.8%	- 0.3%	- 2.2% (-9%)
headship rates	20.3%	2.4%	22.7%	4.4%	27.2% (109%)
Total (net)	18.7%	28.4%	47.1%	52.9%	100.0%

'original' 1961 population added 18.7% while natural increase added a further 28.4% for a total of 47.1% increase in number of households due to internal factors. The net in-migration population, both international and inter-provincial, contributed the remaining 52.9%.

This analysis has examined the components of total, absolute increase in household numbers. It was found that 25% of this increase contributed to the decline in average household size (or to the increase in the aggregate headship rate). Declining household size is to be entirely explained by increasing age-group specific headship rates while the changing age distribution had the effect of countering the trend somewhat.

From the analysis it can be concluded:

- (1) socio-economic factors contributed 27.2% of the net new household formation, while demographic trends (i.e., age distribution and population increase) generated a demand for a 72.8% increase in household numbers; and
- (2) socio-economic factors contributed 109% of the decrease in average household size, while demographic factors (i.e., age distribution) countered the effect of increasing consumer preference for housing.

Socio-economic trends affecting housing are reflected in changed headship rates of age-groups. These rates in turn reflect consumer preferences, incomes, wealth, marital status, and related socio-economic factors. Preferences and incomes are the significant variables, for they generate the effective demand -- the willingness and ability to pay -- for more housing services than were previously consumed per capita.

This significant increase in effective demand demonstrates the stock adjustment or the responsiveness of housing supply to demand. When this conclusion is joined to observations of housing stock utilization (e.g. crowding index), it becomes still more obvious that housebuilding was able to accommodate the upward shift in consumer preferences.

The general conclusion has serious implications for housing policy. On the one hand, if the 1961-1971 evidence serves as a reliable indication, there doesn't seem to be any long-run, persistent economic shortage of housing. Housing costs have increased but housing stock incomes and preferences have risen too -- in such magnitudes as to maintain relative and long-run equilibrium between demand and supply.<sup>10</sup> There is not the slightest evidence to the contrary.

On the other hand, there is also no general or aggregate 'social' shortage of housing. The trend indicates per capita housing consumption considerably over and above the level prevailing in 1961. Optimum headship rates are a subjective matter even though 'they represent fundamental patterns of social behaviour which are not hard to identify'.<sup>11</sup> Yet the dramatic improvement in the aggregate headship rate as well as age-group specific headship rates are objective evidence that prevent a general indictment against recent rates of housing provision.

None of this is to deny that at disaggregated levels, whether presently structured can and may have failed to meet particular housing needs.

Policy-making ought to be attuned to these realities.<sup>12</sup> This analysis leads to cynicism and alarm about any proposal for large-scale and long-run restructuring of the housing market. Confirmation and consensus should, for reasons of equity and efficiency in the use of public funds, precede further regulatory and fiscal measures in the pursuit of general housing goals.

## Notes

1. Paper prepared and contributed by Phil Mondor.
2. A 'household' is defined in the Census of Canada as 'a person or group of persons occupying one dwelling unit,' where 'dwelling unit' is defined as 'a structurally separate set of living quarters with a private entrance.'
3. Discussion and application of the concept of headship rates is found in Winnick (1957), Smith (1970), Seigel (1972), Johansson (1973), Telplitz (1973) and others. The analysis undertaken in this paper draws largely from Winnick's framework (1955-1957).
4. By 'household heads' is meant the one person in a household who 'heads' that household as major breadwinner, owner or lessee. It is conventionally assumed that there is one head per household, in spite of new partnership-type (marital or communal) arrangements.
5. The aggregate headship rate for the total population is not only the total number of households divided by total population. It is also equal to the average of age-group specific headship rates weighted by the relative size of age groups.
6. Smith, Wallace, F., Housing (1970), p. 140.
7. The distinction between demographic and socio-economic factors may be somewhat strained since the distinction, in effect, is simply between age and all other related factors.

8. Louis Winnick, American Housing and Its Uses (1957), chapter 8. Winnick did observe that headship rates for all age groups would likely rise in future even though historically age distribution has been the dominant factor.
9. All percentages are calculated from the preceding table. The same 'weights' and 'rates' are assumed to prevail in the original population, the natural increase component, and the net in-migration component. This is necessary in the absence of more specific data. The analysis is thus highly generalized with the disaggregation being somewhat artificial but nevertheless informative.
10. On these subjects see, for example, Pennance (1967), Whitehead and Odling-Smee (1975), and de Leeuw and Ekanem (1973).
11. Smith (1970), p. 173.
12. Reality includes a large dose of uncertainty. The portrait of reality produced by this analysis ought to be brought up to date by incorporating institutional events and market performance since 1971. Perhaps only the 1976 Census of Canada will enable completion of that exercise.

#### References

1. de Leeuw, Frank and Nkanta F. Ekanem. 'Time Lags in the Rental Housing Market.' Urban Studies (1973): pp 39-68.
2. Johansson, Ralph. 'Methods and Techniques in Computing the Future Number of Households with the Application of Headship Rates,' in Housing Requirements and Demand: Current Methods of Assessment and Problems of Estimation, by Economic Commission for Europe, (Geneva: United Nations, 1973).
3. Pennance, Fred and Hamish Gray. 'Housing Shortage: Fact or Fiction?' Building (March 17, 1967).
4. Seigel, Jacob S. 'Development and Accuracy of Projections of Population and Households in the United States.' Demography 9 (Feb. 1972): pp 51-68.
5. Smith, Wallace F. Housing: The Social and Economic Elements, (Berkeley: University of California Press, 1970). Chapter 9, 'The Optimum Size of the Housing Stock.'
6. Teplitz, Paul, David Birch and Bernard J. Frieden. Forecasting Metropolitan Housing Needs. Working Paper No. 19, (Joint Center for Urban Studies of M.I.T. and Harvard University, Feb. 1973).

7. U.S. Bureau of the Census. Projections of the Number of Households and Families: 1967 to 1985. Current Population Reports Series, p. 25, no. 394. (Washington, D.C.: U.S. Department of Commerce, June 6, 1968).
8. Whitehead, C.M.E. and J.C. Odling-Smee. 'Long-run Equilibrium in Urban Housing -- a Note.' Urban Studies 12 (Dec. 1975): 315-318.
9. Winnick, Louis. 'Housing: Has there been a Downward Shift in Consumers' Preferences?' Quarterly Journal of Economics (Feb. 1955): pp. 55-98.
10. Winnick, Louis. American Housing and its Uses: The Demand for Shelter Space. (New York: John Wiley & Sons, 1957). Chapter 8, 'The Changing Household.'



## **CHAPTER III**

# **HOUSING POLICIES - THE TWO B.C. HOUSING REPORTS REVISITED**





## CHAPTER III

# HOUSING POLICIES - THE TWO B.C. HOUSING REPORTS REVISITED

From an unsatisfactory definition of the problems in the housing sector, each Report has recommended one package of policies. With slight variations, policies recommended by each Report are quite similar, and they have already been summarized in Chapter I. In this chapter, the major policies recommended by the two Reports will be examined in detail, with emphasis on their rational basis and their implications.

### A. Rent Control Policy

The 'rational basis' for the continuation of the rent control system in B.C. is quite similar in the two Reports.<sup>1</sup> In the subsequent discussion we will quote from the more articulate Runge Report.

The diagnosis of the problem in rental housing and a prescription for its remedy are stated in the Runge Report as follows:

The present crisis in rental housing production results from the difference between the economic price of newly produced housing and the market price of existing housing. Two approaches are possible to deal with this situation. One approach would put controls on the price of existing rental accommodation and subsidize new construction to the extent that its price would approach that of existing rental stock. The other approach is to let the housing shortage develop sufficiently to pull the price of existing rental housing up to the level required to make new construction economically feasible. Since existing stock outweighs new production by something like 40 to 1, it seems more reasonable and less expensive to society as a whole to subsidize the new construction down to the level of existing stock than to permit existing stock to rise to the level of new construction and then substantially subsidize peoples' incomes.<sup>2</sup>

This view of the housing 'problem' seems, on first reading, to make a lot of sense. However, it ignores a fundamental fact about housing and that is that the amount and quality of housing that people occupy depends on the price or rent that they have to pay to acquire it. If the rents on all existing housing units are fixed or controlled, in the face of generally rising incomes and generally rising prices, housing will become a relative bargain. In other words, it will be selling at a relatively lower price than it should given the resources required to produce it. The consequences of this are easy to predict on the basis of common sense and on the basis of experience in other countries - New York is a particularly good example.

Bargain prices lead to increased demand in housing just like they do in clothing, or appliances or automobiles. The low price encourages families and single people to occupy much more space than they need. The perceived 'shortage' will increase and the burden on new construction to 'fill the gap' will correspondingly be increased. Meanwhile, the low rents cause an increased rate of demolition, conversion to condominiums and a general dilapidation of the existing housing units. So, in the face of artificially increased demand for rental housing, the rental housing stock itself begins to shrink leading to an even larger 'perceived shortage' and further burdens on new construction to fill an even larger 'gap'.

Of course, the end consequence of 'subsidizing the new construction down to the level of existing stock' is that no construction will occur unless it is subsidized and the amount of construction and subsidy required will escalate to keep pace with population and/or income growth and the rate of demolition or conversion. The short-run policy of temporarily subsidizing the new additions to the housing stock leads ultimately to the permanent subsidization of the whole housing stock. Since in the long term, society as a whole faces the same costs for resources as an individual landlord (the cost being measured in terms of the other things that have to be foregone) it is difficult to see how this policy would be 'less expensive to society as a whole'. This policy might be less expensive if government provision of housing were more efficient than private provision of housing. However, given that the only evidence available suggests the opposite and given that neither the Runge nor Jaffary Report introduces this argument, we can safely assume that this was not what they had in mind.

It is one of the central features of the market system that price behaviour, by quantifying values and consumer and producer preferences through prices, allocates scarce resources, rewards resource owners, determines production, and distributes goods and services. The reaction of landlords to a housing shortage cannot be condemned as exploitative without at the same time condemning the market system.<sup>3</sup> However, the proposal to restrain landlords' price behaviour during the present 'housing shortage' in B.C. is not based upon such a general condemnation -- since the supporting analysis is not reported. Rather, housing is treated as a unique commodity:

While shortages in other sectors of the economy may lead to temporarily excessive price increases until the supply of goods can be expanded, the limited elasticity of the housing supply results in longer term imbalances. This situation allows landlords to sustain excess profits which are passed on to the tenants in the form of exploitative rent increases.<sup>4</sup>

In the Runge Report, the situation is characterized in this manner:

Housing supply is not readily adaptable to demand pressures. In the theoretical competitive market, an increase in demand brings about a rise in price which stimulates increased production, thus returning prices to a more 'normal' level. However, housing shortages, once they develop, are difficult to fill. And even if new units can be produced, they are considerably more expensive than units of similar quality constructed several years ago. To insure a very small expansion in the supply, rents in the existing stock may be bid up to levels where they virtually compete with newer units.<sup>5</sup>

In addition to the inelastic supply response to demand pressures, durability of housing, housing as a necessity, and consumer preferences for fixed location are cited as unique characteristics of the rental housing market 'which prevent it from functioning according to the theoretical comprehensive scheme'<sup>6</sup> and make it an imperfect market.

These 'imperfections' are all too obvious when a housing shortage develops. Owners of existing units are able to maintain artificially high prices by incorporating the 'scarcity factor' created by excess demand. Opportunities for windfall gains exist as these higher prices are capitalized into the values of existing structures. Tenants, in turn, are forced to bear the burden of higher rents for apartments of the same or worse quality. The result, over time, is an income transfer of significant proportions from the tenant population to landlords as a group. This process is quite distinct from the normal rise in rents which reflects the increased cost of rental housing operations.<sup>7</sup>

The above statement exemplifies the kind of economic principles and the manner with which they are brought to bear on the problem definition and policy analysis. The indicated line of reasoning is the basis for the proposal to prevent 'unreasonable' income transfer from tenants to landlords that occurs not only under scarcity conditions in the short-run, but maladjustments in the long-run, as the Runge Report suggests further:

To the extent that the current problem appears to be structural or systemic in nature, any attempt to return to the 'stable' free market in housing will be less than satisfactory. The cost of producing a very small volume of new units will be continual escalation of rents in the existing stock, to the benefit of existing housing owners and at the expense of tenants.<sup>8</sup>

Rent control is proposed as a solution not simply for the supposed short-run inequities but also for 'structural and systemic problems' over the long term. The persistence of a 'serious scarcity situation' for a number of years (as indicated to the authors by low vacancy rates) is viewed as the problem. It is said to result from ownership and production patterns that apparently make the unassisted private sector produce rental units unaffordable by most of the population. It is thus proposed to restructure the patterns of ownership and production. Rent control, in conjunction with public provision and ownership, is viewed as the vehicle for this.

Neither the form of rent control nor the analysis undertaken in the selection need be discussed here since the specific system adopted is not at issue. The important issues are equity and economic efficiency in housing provision. The 'rational basis' to institute (maintain) a system of rent control in B.C. will be evaluated in terms of equity and economic efficiency in the rental housing market.

## 1. Economic Efficiency

The Runge Report suggests that the short-run disequilibrium and instabilities in rental housing production 'result from the difference between the economic price of newly produced housing and the market price of existing housing'. This description of the state of affairs of rental housing production appears to be valid, and our previous analysis of the recent anomalies of rental housing supply in B.C. is not in conflict with such description. While failing to recognize that short-run instability is the fact-of-life in residential construction, the Runge Report feels the necessity of recommending rent control to counteract the effects manifested under short-run 'scarcity conditions' (i.e. rent increases and low vacancy rates). Though over the long term the Runge Report suggests public provision of housing (directly or indirectly through production subsidies) on a large scale, it has not demonstrated the necessity of and justification for such provision. First, the argument of the presence of 'structural and systemic problems' in rental housing production over the long term is pure speculation (as no relevant evidence has been brought forward by the Runge Report) and is not supported by our analysis in Chapter II. Secondly, the Runge Report has not presented a case as to how the public sector has the omniscience to determine the appropriate quantity of rental

housing preferred by consumers or how the public sector is in a better position than the private sector to overcome the so-called 'structural and systemic problems'. In conclusion, the Runge Report has failed to identify other alternatives to improve allocative efficiency in rental housing production. It assumes that rent control, coupled with government intervention in production, is the appropriate prescription to problems of short-run instability and to the unsubstantiated problem of long-run disequilibrium.

## 2. Equity

It is amply clear from the Runge Report that its recommendation for the continuation of rent control in B.C. is motivated by equity rather than allocative efficiency considerations. The so-called 'income transfer from tenants to landlords' (regarded as 'unearned' and 'excessive' profits and thus inequitable) has been frequently referred to in the Report. However, the Report argues but fails to document and verify inequities that result from landlord behaviour and inefficiencies that result from present ownership and production patterns. Neither has it been demonstrated empirically by the Report that the recent experience of rent control in B.C. has actually improved inequality in income distribution. Empirical research done in the U.S. on the impact of rent control on the distribution of income has cast some doubts on the simple notion that all landlords are rich and that all tenants are deprived. In the report of his empirical research, D. Gale Johnson makes the following concluding remarks:

I do not want to argue that the evidence presented indicates that landlords are poorer than tenants. But the data certainly do not indicate the contrary -- that landlords have significantly higher incomes than tenants. Thus if one of the objectives of rent control is to aid low-income people -- and I can find no other important objective that rent control does achieve -- it does not achieve that objective. Undoubtedly there are relatively poor tenants renting from relatively rich landlords, but the converse must also exist.<sup>9</sup>

Evidence on the redistributive effects of rent control is not available for Canada; however, by examining Income Tax returns information published by Revenue Canada Taxation, we can discover the extent to which high and low income Canadians receive rental income. The results of this investigation, which are reported in Table I, are at variance with the common impression that landlords are rich and tenants are poor. However, these results are, at best, only indicative since much of the total rental income received in Canada is received by corporations. In order

to provide a complete analysis of the distribution of rental incomes by income class, it would be necessary to determine the income of each shareholder of the corporations (including those who hold shares indirectly through their pension funds) that receive rental income and distribute the total rental income of the corporations to the shareholders.

Table I shows the percentage of total rental income reported that was received by each income class for the years 1972 and 1973. (1973 is the most recent year for which the data is available.) In 1973, fully half of total rents reported were received by landlords whose total assessed income was less than \$13,000, while two thirds of total rental income was received by landlords whose income was less than \$20,000.

TABLE I  
Percentage  
of Total Rental Income received  
by landlords in each income class

Landlord's Total Income	1972 Percentage of total rental income received	1973 Percentage of total rental income received
0 - 4999	24.7%	18.8%
5000 - 8999	17.8%	16.4%
9000 - 12999	13.9%	14.6%
13000 - 24999	21.2%	23.4%
25000 and over	20.5%	27.1%

Source: Taxation Statistics, 1974 - 1975, Revenue Canada Taxation.

At the very least, this information casts doubt on the claim that rent control serves the interests of equity and raises the distinct possibility that it is totally inequitable.

The Runge Report has come to recommend a policy motivated primarily on equity consideration. Surprisingly, it does not indicate either the criteria of equity considered or demonstrate empirically the income redistribution impact of such a policy in the past and in the future.



If it is the general concern of society to assist tenants who are in need, it is not equitable to selectively enforce a burden on one group (i.e. the landlords). (If it is argued -- as it is in several places of the Report -- that some of the gains of landlords are unearned and in some sense unjustified, this only calls for a more equitable general system of taxation). The concern of society at large should be translated into action by an explicit transfer of funds from general tax revenue to tenants who are in need. 'Manna from heaven' -- either in terms of scattering costs or distributing benefits -- is not an equitable approach.

### 3. Rent Control and Demand-side Subsidization

Rent control is also considered by the Runge Report as a necessary component in its recommended package of comprehensive policies. It is assumed that without rent control, much of the income or rent subsidization to tenants (i.e. demand-side subsidies of some form) will be dissipated as soon as landlords react by increasing rents.

Unquestionably, the incidence of demand-side subsidies is an important concern in the design of a shelter allowance or income supplementation program. Theoretically, incidence of subsidies depends on the elasticity of rental housing demand and supply.<sup>10</sup> It has been argued that in the short-run, considerable dissipation of subsidies by rent increase is more likely to happen, but in the long-run the dissipation is not likely to happen in a competitive market.<sup>11</sup> Since the Runge Report has not undertaken empirical research to establish the elasticity of rental housing supply and demand in B.C., the unquestioning acceptance of the view that rent control should be a necessary compliment to demand-side subsidies leaves much to be desired.

### 4. Some Concluding Remarks

The diagnosis of the problem in rental housing (i.e. 'the difference between the economic price of newly produced housing and the market price of existing housing') and the suggestion of two approaches to deal with this situation, form the 'key' to the Runge Report.<sup>12</sup> Public policy choice presented is quite simple: only two approaches are possible. There is no investigation of production subsidies without rent control, shelter allowances without rent control, and measures to improve the allocative efficiency of the market. The approach incorporating rent control with production subsidies, public provision of housing and shelter allowances is adopted, for the simple reason that:

Since existing stock outweighs new production by something like 40 to 1, it seems more reasonable and less expensive to society as a whole to subsidize the new construction down to the level of existing stock than to permit existing stock to rise to the level of new construction and then substantially subsidize peoples' income.<sup>13</sup>

It has not been indicated by the Report how the line is drawn between reasonableness and unreasonableness, as the Report does not provide any criteria of equity or distributive justice. Neither are we informed of the social costs and benefits involved in the adopted approach. Whether this approach is 'less expensive to society' or not is open to question. The 'cornerstone' of the Runge Report has raised more questions than answers. Its major conceptual blunder is the failure to make the distinction between allocative and distributional functions of the housing market. As a consequence the Report proposes methods that are not justified to achieve ends that are not specified.

## B. Price Control on Land

The Jaffary Report has not recommended a land policy. The Summary of the Runge Report provides a policy related to land and can be summarized as follows:

A comprehensive housing policy should control housing costs. The two main areas that require control are rents and land ... land costs are increasing more rapidly than any other component of housing cost increase ... unless the government takes some action to control land costs, the housing problem can only get worse. There are two principal ways of controlling land costs. The government should acquire large quantities of land for development at prices which reflect current use value rates, and ... a land development tax on gains resulting from a change in use or density be implemented to recapture publicly created value for the public.<sup>14</sup>

The recommended land policy raises the following issues, which have not been dealt with at all by the Runge Report:

- (1) Would controlling land costs lower the prices (or costs) of housing services?
- (2) What are the allocational and distributional impacts on the land market of (a) public acquisition of land in large quantities at existing use value and of (b) imposing a land development tax in addition to the existing capital gains tax?

In commenting on these issues, it has to be established at the outset that house prices determine land prices, not the other way around. Paul A. Samuelson, in his popular economics text, illustrates the relevant economic principles as follows:

It is not really true that the price of corn is high because the price of corn land is high. Actually the reverse is more nearly the truth; the price of corn land is high



because the price of corn is high. Land's total supply being inelastic, it will always work for whatever is given to it by competition. Thus the value of the land is completely derived from the value of the product, and not vice versa.<sup>15</sup>

The above principle is equally applicable to housing market analysis: just translate 'corn' as 'housing'. Furthermore, it is the demand for the existing stock of dwellings that critically determines house prices (as has already been pointed out in Chapter II).<sup>16</sup>

Now that the basics have been established, it can easily be seen that controlling land prices without controlling housing prices would not lower housing prices. We can use the land development tax (recommended by the Runge Report but without any accompanying technical details as to how it is to be implemented) as an illustration. Assume in the first instance that the supply of land for development in the urban fringe is fixed or perfectly inelastic. (This appears to be the implicit assumption of the Runge Report.) A tax on the development value (or the so-called unearned increments) of land in transaction will force land owners (as owners of the factor in fixed supply) to absorb the total tax burden. As Samuelson puts it, 'The landowners will not like this. But under competition, there is nothing they can do about it since they cannot alter the total supply and the land must work for whatever it can get. Half a loaf is better than none, or even than one-fourth of a loaf.'<sup>17</sup> However, what the landowner receives in the disposal of land is what the developer is willing to pay for -- and the latter is determined by the level of house prices. Other things being equal, the developer is paying the same amount before or after the new development tax is adopted. (The only difference is that the landowner is worse off than before, as part of the proceeds above existing use value is being taxed by government.) And the developer is selling the same house for the same price before or after the new development tax is imposed. Thus, the tax does not have any impact on the price of housing. If, in the second instance, we relax the assumption that the supply of land for development in the urban fringe is fixed, the allocative impact of the development tax will not be neutral as production incentives or efficiency will be distorted.

But land for development is not a fixed quantity. Like the supply of any other commodity, more land will be forthcoming the higher the price offered, and conversely. In deciding whether or not to market land, owners will weigh developers' bid prices against their own preferences for sites or the values realised from their existing uses. It follows that a tax on development value in land will reduce the quantity forthcoming at any given price and/or raise the price level at which any given quantity would be made available to the market.<sup>18</sup>

The increased reluctance of landowners to bring forward development land on to the market will frustrate desired housing development. Over time, if housing demand trends continue as before, the decline in the net additions to the stock of housing will even lead to a higher level of housing prices.

The possible impact of a development tax on the land and housing market that we have discussed so far is not pure speculation. The British Town and Country Planning Act of 1947 legislated a 100% development charge on any development value (thus in effect nationalizing all development rights) with the intention of ensuring that land would change hands at existing use value. By 1954, the market was on the verge of collapse as landowners refused to sell their land at existing use value; and the Act was repealed in the same year.<sup>19</sup> The British experience with the land development tax has not been reviewed by the Runge Report, and the adoption of such a tax should be carefully reconsidered in the light of this omission.

With respect to the public acquisition of land in large quantities at existing use value, the Runge Report does not provide any specifications as to how this is to be implemented. Neither does it appear that the authors fully understand the implications of this policy recommendation. In the context of law in Canada, acquisition of land at existing use value is tantamount to compulsory acquisition of land without adequate compensation. Under the Land Clauses Act of B.C.<sup>20</sup> (the enabling act governing compulsory acquisition of land or land expropriation) 'value to the owner' is the formula for the assessment of compensation in the event of compulsory acquisition of land. The various B.C. commissions<sup>21</sup> that have attempted to bring the antiquated B.C. Act up-to-date have all recommended the 'market value' formula for the assessment of compensation. Legislations in other provinces in Canada as well as the federal legislation have already adopted the 'market value' formula.<sup>22</sup> Neither the 'value to the owner' formula nor the 'market value' formula provides compensation to the aggrieved landowner on the basis of a valuation of existing use value alone.

Not only would public acquisition of land at existing use value violate statutory law in B.C., it is also inequitable simply because the policy recommended does not provide adequate compensation. Landowners who have purchased land with development value would have such value liquidated with one stroke of the pen.

### C. Demand-Side Subsidies

Subsidies on the demand side are primarily aimed at improving the ability of needy households to pay for housing services. In order to reduce the proportion of income spent on housing for those households judged to be in need, demand-subsidies in various forms can be delivered to the recipients either by improving their incomes (i.e. some form of income supplementation) or by reducing their shelter costs (i.e.

some form of shelter allowance). More will be said about the various forms of demand-side subsidies in the next chapter.

In the exceptionally thorough background study on 'shelter and income' of the two Reports,<sup>23</sup> the drawbacks of the existing B.C. programs of shelter and income support have been critically examined. In the case of Mincome<sup>24</sup> recipients, it is observed that:

Actual shelter costs for both owners and renters are relatively low, but the ratios of shelter cost to income are quite high, particularly for those who rent. To the extent that Mincome recipients have a housing problem, it is due to their low incomes rather than high shelter costs. This problem could be solved by increasing the Mincome levels or by direct shelter supplements.<sup>25</sup>

In the case of the Social Allowance Program<sup>26</sup> and Public Housing Program,<sup>27</sup> it is concluded that:

Both of these shelter support approaches have their drawbacks, although on balance shelter support through social assistance seems to be doing a more effective job of assisting households to meet shelter costs. However, the case is frequently advocated that nothing short of a completely universal shelter allowance is an acceptable way of delivering shelter allowance.<sup>28</sup>

Recognizing the complexities of these transfer programs -- with the overlapping of benefits, inadequacy of benefits in some instances, and the inequities that often arise -- it is recommended that these programs be streamlined and that a more direct approach of delivering assistance to needy households be adopted.

The Jaffary Report is vague on the particulars of its recommended shelter support program. It is simply suggested that 'a major program of income supports for shelter should be embarked upon.'<sup>29</sup> The Runge Report has provided more particulars in connection with its recommended Guaranteed Shelter Supplement Program:

The shelter difficulties of low income families and individuals, including those in receipt of social allowances, the working poor, and Mincome recipients would be resolved by a generally available guaranteed shelter supplement. In order to provide shelter assistance on an equitable basis this supplement would meet 75% of all shelter costs over and above 25% of gross basic income. This approach is not as comprehensive as a guaranteed annual income; some of the discretionary power of the consumer is sacrificed in order to provide immediate shelter assistance in the existing housing related to actual shelter costs.<sup>30</sup>

Furthermore, it is recommended that the supplement be delivered through the Canada Assistance Plan, thus requiring the agreement of the federal government to absorb 50% of the cost of the program.

Since neither the Jaffary nor the Runge Report has clearly delineated the mechanics of the delivery of shelter assistance, i.e. the formula of determining shelter assistance, the incidence of benefits, and the cost of the program, there is nothing much we can comment on at this point. However, the idea of streamlining existing income and shelter support programs and the proposal for a general program of shelter allowance appears to be laudable. In the next chapter, we will examine in detail the criteria of choice between a purely income redistributive policy (e.g. a guaranteed annual income, rejected by both reports as infeasible at this stage) and a shelter allowance program. We will then examine the alternative ways of designing a shelter allowance program.

#### D. Supply-side Subsidies

Subsidies on the supply side are primarily aimed at reducing the costs of construction, thus affecting the price at which a newly completed dwelling unit can be sold or rented. Again, without providing any specifics, the Jaffary Report simply recommends that the government 'should support production subsidy programs sufficient to ensure an adequate supply of new housing.'<sup>31</sup> The Runge Report also adopts the view that production subsidies should be provided by government so as to 'bridge the gap between the cost of providing dwellings and their market price.'<sup>32</sup> In particular, it is recommended that the joint programs undertaken between the federal government and the provincial government (i.e. co-operatives, senior citizens non-profit rental housing, public non-profit housing, and public housing) should be subsidized further through the mechanisms of (1) a land lease with a variable rate and (2) a high impact grant.

A high impact grant, in simple terms, is an annual subsidy to the operating costs of public projects so as to enable those projects to be rented at a level that the target households can afford to pay. It is estimated that the grant will terminate in 7 to 9 years as incomes of households in the projects are expected to rise at a faster rate than operating costs. Furthermore, a land lease on those public projects is equivalent to additional financing provided by the government.

Since both Reports do not estimate either the costs or benefits of the production subsidies recommended, it is difficult to evaluate the efficiency and equity of such subsidies. If the incidence of such benefits will only accrue to particular

socio-economic groups that are judged to be in need, then their policy recommendation appears to be acceptable in principle. However, both Reports fail to analyse the possibility of overlapping of benefits when subsidies are available on both the demand side and the supply side. Furthermore, the two Reports do not indicate whether production subsidies are necessary if subsidies on the demand side are adequately provided.

#### E. The Role of Government in Housing

The two Reports have recommended a wide range of policies that, if implemented, would have considerable impact on the operations of the private housing market in B.C. On the one hand, there are those policies affecting the general operations of the housing market, i.e. rent control on the rental housing market, price control on the land market and the partial replacement of private production of housing by public provision. On the other hand, there are policies designed for those particular households subject to housing deprivations, i.e. shelter allowance and production subsidies. Some of the recommended policies (especially all those affecting the general operations of the market) are drastic interventions. Not that all drastic measures are inherently bad, but they should be involved (if at all) only when the need for them is clearly defined and acknowledged. However, as we have already documented, these drastic measures are designed to respond to a distorted view of the problems in the B.C. housing sector. In other words, the need for such interventionistic measures is suspect. Perhaps, at this point it is worthwhile to pose one basic question: what is the role of government in the housing market and when and why should government intervene in the operations of the market system?

Let us first review the view of the Jaffary Report on this basic question. (The view of the Runge Report has not been explicitly stated, even though its stand on this issue -- quite similar to the Jaffary Report's -- can be implicitly derived from its policy recommendations.) The only place in the Jaffary Report where the criteria for government intervention are more clearly laid down is to be found in the following passage:

Where industries manage to supply the public at reasonable cost and without complaint about supply, as is generally the case, for example, in the clothing industry, then there appears to be no need for regulation. Where either prices or supply become a problem, as in the food industry, then at least tentative steps toward regulation are taken. When the industry in question is large and closely controlled, as in the case of transportation, energy or communications, then regulating is comparatively simple. Where the industry is diversified, as is the case with housing, then regulation becomes more complex. However, if the need for regulation is apparent then we believe that it ought to be attempted.<sup>33</sup>

It appears from the above passage that the following occasions require government intervention in the market:

- (1) When the good or service is not supplied by industries at 'reasonable' cost and in 'appropriate' quantities;
- (2) When the firms in an industry are large and closely controlled; and
- (3) When the good or service in question is a public good.

Furthermore, if we recall the remarks of Hugh Latimer and of Sir Walter Essex apparently subscribed to by the Jaffary Report, no compensation will be available to aggrieved parties if the costs of breaking the rules of private property rights are determined to be outweighed by the benefits of serving public interest.

In the following section, we will examine in detail the grounds for intervention by introducing the most important concept of 'externality'. The position of the Jaffary Report on the issue of intervention will be re-examined in the context of the housing situation in B.C.

## 1. Externality, Private Ownership and Public Intervention

First, the concept of externality has to be introduced in order to better inform the subsequent discussion. Externalities can be explained as follows:

All economic activity in mobilising and utilising scarce resources necessarily involves both costs and benefits -- a truism embodied in the old saying that 'there ain't no such thing as a free lunch'. None the less, the spur to all economic activity, be it consumption or production, is the expectation of some net gain or benefit. Other things being equal, it denotes a gain to society if resources are shifted from lower-valued uses to higher-valued uses thus achieving more benefit in the new uses than the cost involved (in benefits forgone), and it is the role of the price mechanism (in a free society) to guide and promote such shifts. Other things, however, may not be equal. In particular, individual decisions relating to the undertaking of economic activities may, in assessing the costs and benefits of any action, fail to take into account any costs (or benefits) which the proposed activity may impose on others who were not party to the decision. When such 'external costs or benefits' ('spillovers', 'externalities') are brought into the reckoning, activities which would be considered worthwhile on any private assessment of costs and benefits may be considered not worthwhile, and conversely activities whose private costs exceeded private benefits may be considered worthwhile when the full social costs and benefits (including externalities) are assessed.<sup>34</sup>

The presence of externalities (i.e. when there is a divergence between social costs and benefits) brings into the forefront the question: what are the criteria that determine the choice between private and public ownership of property rights over scarce resources? As a general case, it has been argued that private ownership, with the recognition by the community (and expressed in law) of the right of the owner to exclude others from exercising his private rights, can generally count on realizing the rewards associated with husbanding his resources. The simultaneous determination of costs and benefits helps to 'internalize' most of the externalities, and allows the owner of private property to economize on the use of scarce resources, the use of which he has the right of exclusion.<sup>35</sup>

However, private ownership of property rights does not always bring about internalization of all externalities. In certain instances, public ownership may be justified. In general, there are two major types of externality situations that call for public intervention, with high 'transaction costs' in private internalization of externalities being the reason for foregoing the market mechanism.

One externality situation centers on the problem of 'indefinite property rights' over certain resources. Consider clear air and clean water. Air and water used to be of such abundance that they were considered as free goods. With environmental degradation (because of industrial growth) this is no longer true. Because of the ambiguity of the assignment of property rights over air and water (and as it stands now such rights are still mostly considered as belonging to 'everyone, but to no-one'), a pulp mill can pollute a river with its chemical refuse and a glue factory can contaminate the air -- and get away with it. Consequently, external costs are imposed on thousands. 'In cases such as these the sheer "transaction costs" of securing agreement among all the affected parties is likely to preclude any private market arrangement between offending and offended parties to deal with the problem, so that externalities and possible misallocation of resources tend to persist in the absence of some form of public regulation.'<sup>36</sup> Thus, when property rights are weakly defined, public intervention is often called for.

The second externality situation is related to the principle of exclusion. The problem is that the exclusivity of rights under a system of private property rights does not work all the time.

The other side of this coin refers to the fact that some activities are valuable to the community but tend not to be carried out (or carried out to a less than socially-desirable degree) if left to private decisions and the market place. The reason for this is that the benefits of particular kinds of activities tend to be available to all, regardless of payment because the 'transaction costs' of excluding non-payers would be too high to justify the



attempt. The provision of these 'common-access facilities', as they are sometimes called, produces the well-known situation in which most would like a particular service provided but would like others to pay for it while they take a 'free ride' (enjoying as external benefits what others have paid for). If everyone hangs back in this way, then desirable though the services may be, the marketplace is unlikely to provide it. In many such cases, the only solution is for government to provide the service and to levy taxation to pay for it. National defence and internal law and order are prime examples of such 'public goods'.<sup>37</sup>

We have seen that in certain instances, public ownership may be justified. When there is jointness of consumption in certain goods (i.e. public goods), when the principle of exclusion is not applicable, and when the costs of negotiation between diversified interests are too high, intervention in the free market is frequently called for.<sup>38</sup> However, one should note that the presence of an externality does not necessarily justify government action to eliminate it. Government provision has costs as well and such costs must be set off against costs in market provision. Gordon Tullock points out quite rightly that:

What should be controlled by the state and what should be controlled by private individuals either through contract or by themselves? In general, our method will be to contrast the externality cost to be expected through private action with the cost to be expected from government action. We will seek that combination of government and private action that optimizes the future discounted income stream of members of society.<sup>39</sup>

The presence of an externality is a necessary condition for government intervention, but this is not a sufficient condition. There is no prima facie case for intervention and for the modification of existing state of affairs in all situations when externality is seen to exist. The sufficient condition requires the justification that government intervention is the best alternative in terms of social costs minimization or social benefits maximization.

## 2. Re-examination of the Jaffary Report Views on Intervention

The Jaffary Report suggests that when a good or service is not supplied by industry at 'reasonable' cost, and in 'appropriate' quantities, then government should intervene in the market. The intended meanings of 'reasonable cost' and 'appropriate quantities' are not explained by the Jaffary Report. However, they can only be identified (in relation to a benchmark) in the context of provision in the private market. Thus, to determine 'reasonableness' and 'appropriateness', the costs of private provision of a good or service should be compared with that of public provision.



As it has been indicated earlier, government provision has costs as well and such costs must be set off against costs in market provision. In the case of housing provision in B.C., it remains to be seen whether the public sector is in a better position to produce the kind and quantity of housing services that have been provided by the private housing industry in B.C. Services that have, it should be remembered, successfully satisfied consumer preferences over the last decade. Even though supporters of public provision of housing may argue that the non-profit motive of the public sector may bring about 'cheaper' housing, yet it remains to be seen whether this cost-saving feature would be overshadowed by the costs of inefficiency with a large and closely controlled supplier (a situation that if it occurs in the private sector would be found objectionable in the Jaffary Report). The lack of omniscience in the public sector to anticipate changes in consumer preferences when the price-signalling feature of the market has been replaced would also impose unknown costs.

The Jaffary Report further argues that if the good or service in question is a public good, then this is also an occasion for government intervention. We have argued earlier that because of the inherent qualities of certain goods or services, desirable though they may be, if the marketplace is unlikely to provide it, then public production maybe required. In the case of housing in B.C., our previous analysis has clearly demonstrated that the marketplace has not only responded adequately to the relatively unpredictable demand pressures in B.C., but it has enabled households in B.C. to enjoy the least crowded housing in the whole country. If the marketplace has not provided the kind of housing required by certain socio-economic groups (e.g. low income households) then policy should be directed towards a certain form of income supplementation in order to allow them to translate their basic need for housing into effective demand.

The final argument in the Jaffary Report for government intervention relates to the existence of firms in an industry which are large and closely controlled. Whether the housebuilding industry in B.C. fits into the description of the Jaffary Report is an empirical question -- which can be resolved only by empirical evaluation. The Jaffary Report has not provided any empirical evidence. However, in a detailed study of the Canadian construction industry by the Economic Council of Canada, the following observations made do not seem to support the 'monopoly' argument:

Construction is a dispersed, compartmentalized and competitive industry .... Entry to the construction business is easy, even for smaller firms. The industry currently comprises about 80,000 firms, of which 25 per cent are corporate entities, the remainder being partnerships and proprietorships. The 20,000 incorporated firms, most of which are small, do two-thirds of the construction business

.... In the spectrum of industry structure that ranges from monopoly at one extreme to perfect competition at the other, the construction industry tends toward the competitive form, except for some highly specialized firms operating in localized markets.<sup>40</sup>

### 3. Intervention for Redistribution: The Balance of Public Benefits Against Private Losses

So far we have only discussed interventions for the purpose of improving efficiency of the market system. However, government frequently intervenes in the market system not purely and solely on the grounds of efficiency (by internalizing externalities); it is frequently motivated by the objectives of bringing about more equitable distributive shares among members of society. A progressive system of income taxation is a case in point. Higher income groups are taxed more heavily than lower income groups in order to allow government to transfer funds out of general revenue to assist individuals in need. This system has acquired general acceptance as western societies of today have come to recognize the dire adversity of certain socio-economic groups. However, when one group in society has been arbitrarily selected to assist another group, the question of equity (and if inequitable, the question of compensation) is often raised.

The view of the Jaffary Report (and for that matter, of Hugh Latimer and Sir Walter Essex) is that once public benefit is determined to be greater than private loss, collective action should be legitimized and legally invoked without compensation to the aggrieved parties. The implication of this 'balancing' act is that the interests of the losers somehow do not belong to the interests of society at large. Realizing the danger of the balancing of public benefits against private losses, Frank I. Michelman, in a legal commentary, cautions that:

A danger which seems to be common to balancing tests is that they traduce us into imagining that there are persons in society whose interest can somehow be excluded from, and counterpoised against, 'society's interest' .... But what, after all, can it mean, in a society professing the respect for persons which seems centrally implicit in liberal democratic institution, to 'weigh individual losses against social gains'? .... How can the 'individual loss' be extracted from the calculation of the 'social gain' so as to be 'weighed against' it? <sup>41</sup>

'An adequate theory of private property, however, should enable us to draw the line between justifiable and unjustifiable cases of confiscation.'<sup>42</sup> The 'balancing test' (subscribed to by the Jaffary Report) which counterpoises public benefits against the costs of breaking the rules of private property, does not draw the line between justifiable and unjustifiable cases of confiscation. The 'balancing test' is only a convenient apology to justify all cases of confiscation.

## Notes

1. Since the analysis of rent control in both Reports is authored by E.P. Achtenberg, the following article should be of interest: E.P. Achtenberg, 'The Social Utility of Rent Control', in Housing Urban America, John Pynoos et al., eds. (Chicago: Aldine Publishing, 1973), pp. 434-47.
2. Runge Report, p. 9. Summary analysis of rental housing market operations and of the costs and benefits of rent control are found in pp. 306-18. See also Jaffary Report, pp. 26-28.
3. See E.J. Mishan, 'Rent Controls are Necessary during a Housing Shortage', in 21 Popular Economic Fallacies, (London: The Penguin Press, 1969).
4. Achtenberg, 'Social Utility', p. 435.
5. Runge Report, p. 306.
6. Ibid., p. 307.
7. Ibid., p. 307.
8. Ibid., p. 310.
9. D. Gale Johnson, 'Rent Control and the Distribution of Income', American Economic Review, Papers and Proceedings, (Dec. 1950), p. 582.
10. Technically, the greater the elasticity of supply, the less landlords will be able to absorb the subsidies from tenants. Furthermore, the greater the elasticity of demand, the greater landlords will be able to absorb the subsidies from the tenants. Since supply is less elastic in the short-run than in the long-run, it is quite likely that subsidies to tenants will be dissipated by rent increases. In the long-run, as supply will be more responsive, the dissipation will be diminished. See also Frank de Leeuw and Nkanta F. Ekanem, 'The Supply of Rental Housing', American Economic Review (1971), pp. 806-17; and Daniel R. Mandelker, Housing Subsidies in the U.S. and England, (1973), p. 19.
11. Edgar O. Olsen, 'A Competitive Theory of the Housing Market', American Economic Review, Vol. 59 (Sept. 1969).
12. See p. 2, above.
13. Runge Report, p. 9.

14. Ibid., pp. 1-10.
15. P.A. Samuelson & A. Scott, Economics: An Introductory Analysis, second Canadian ed., (Toronto: McGraw-Hill Co. of Canada Ltd., 1968), p. 613.
16. See also F.G. Pennance, 'Planning, Land Supply and Demand', in Government and the Land (London: Institute of Economic Affairs, 1974).
17. Samuelson, Economics, p. 617.
18. F.G. Pennance, Housing, Town Planning and the Land Commission, (London: Institute of Economic Affairs, 1967), p. 42.
19. For a review of the British experience with the land development charge, see Raymond Heung, The Principle of Compensation in Relation to Public Interference in the Real Property Market: An Interface of Law and Economics, M.Sc. Thesis, University of British Columbia, Jan. 1975.
20. British Columbia Lands Clauses Act, R.S.B.C. 1960, c. 209.
21. See Report of the Royal Commission on Expropriation, 1961-63 (1964); Law Reform Commission of B.C., Report on Expropriation, Project No. 5, (1971).
22. For a detailed review of Canadian legislation on compulsory acquisition of land, see Heung, Principle of Compensation.
23. Jaffary Report, Appendix V, pp. 203-90; Runge Report, Chapter V, pp. 205-90.
24. Mincome is an income supplement program designed for persons over 60 or handicapped. It guarantees a minimum income over and above the income support provided under the Federal programs of Old Age Security and Guaranteed Income Supplement.
25. Jaffary Report, p. 211.
26. Social Allowance is a B.C. program. The objective of the program is to provide a substitute income sufficient to maintain a basic standard of living for those unable to provide for themselves through employment or other resources. The basic rates include a support component for basic needs and a shelter component.
27. Public Housing program is a federal/provincial shared cost program. Annually, the federal and provincial governments both contribute towards the operating losses (including rental assistance) of public housing projects.

28. Jaffary Report, p. 275.
29. Ibid., p. 74.
30. Runge Report, p. 26.
31. Jaffary Report, p. 73.
32. Runge Report, p. 10.
33. Jaffary Report, p. 35.
34. F.G. Pennance, Residential Building Leases, with Special Reference to Recent Development in B.C., Research Project No. 12, Faculty of Commerce and Business Administration, University of British Columbia, 1975, p. 14. In technical terms externalities are those effects on the utility and production functions of others that are conveyed directly by an acting party, instead of indirectly via relative prices in a general interdependent economic system.
35. Harold Demsetz, 'Toward a Theory of Property Rights', American Economic Review, Papers and Proceedings, (May 1967), p. 347.
36. Pennance, Residential Building Leases, pp. 14-15. See also Neil H. Jacoby and F.G. Pennance, The Polluters: Industry or Government? (London: Institute of Economic Affairs, 1972).
37. Pennance, Residential Building Leases, p. 15.
38. Multiplicity of ownership in a slum area has sometimes been identified as one of the reasons that hinders private urban redevelopment. An individual owner in the slum may have no incentive to undertake redevelopment of his land alone (as the rest of the slum will impose external diseconomies on his contemplated new development) -- unless all owners follow suit simultaneously. If the costs of negotiation are too high and the process of private bargaining to bring all individual owners together does not work, we may have a case for the State to step in to acquire all lands involved and place them under single ownership. Similarly, costs of negotiation may be too prohibitive for the market to provide a freeway or other public works.
39. Gordon Tullock, Public Wants, Private Means (New York: Basic Books, Inc., 1970), pp. 53-54.
40. Economic Council of Canada, Toward More Stable Growth in Construction (Ottawa: Information Canada, 1974), p. s-7 and p. 19.

41. Frank I. Michelman, 'Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law', Harvard Law Review, Vol. 80, no. 6, (April 1967), p. 1194.
42. Morris R. Cohen, 'Property and Sovereignty', Cornell Law Quarterly, Vol. 13, no. 1 (Dec. 1927), p. 26.

## **CHAPTER IV**

# **AN ANALYTICAL FRAMEWORK FOR THE DESIGN OF RATIONAL HOUSING POLICIES**





## CHAPTER IV

# AN ANALYTICAL FRAMEWORK FOR THE DESIGN OF RATIONAL HOUSING POLICIES

While recognizing that political considerations will always influence, if not dominate, such choices (in housing policies), we can still move towards a more rational decision-making process; any gain in rationality brings its own compensation in the form of greater social benefits for a given dollar expenditure ... applying objective criteria to an evaluation of policy alternatives can clarify options and reduce reliance upon ideological assertions, political horse trading, and undocumented rhetoric.

Arthur P. Solomon, Housing the Urban Poor

The two B.C. housing reports have presented one alternative of policy design. The weakness of their package of policies stems not only from a failure to define the magnitude of problems in the housing market satisfactorily, but also from a failure to investigate empirically the cause-effect relationships in the housing market. Failure on the first count has severed the logical link between problems and proposals for solution; failure on the second count has precluded the clarification of options and thus the objective choice between policy alternatives.

In this chapter, we attempt to fill in some of the gaps in the two Reports, with particular emphasis on the objective criteria for the design of housing policies without reliance upon 'ideological assertion, political horse trading, and undocumented rhetoric'. The problems in the B.C. housing sector have already been restated in Chapter II. With respect to the 'gap' of insufficient empirical investigation of the cause-effect relationships (in particular, the behaviour of demand and supply) in the B.C. housing market, results of new empirical research

will not be offered here. However, relevant empirical studies done in other areas will be reviewed. This would help to pinpoint the kinds of research that are necessary in order to have a better understanding of the operations of the B.C. housing market, so as to facilitate a more objective design of housing policies appropriate for B.C. Subsequent to this, an analytical framework for the design of housing policies will be presented. This analytical framework, with its criteria of choice, is intended to evaluate alternative housing policies and programs.

## A. Relevant Parameters of the Housing Market for Policy Design

### 1. Responsiveness of Housing Demand

The question as to whether or not the demand for housing services is responsive to changes in income has important policy implications. If housing demand is responsive to income changes (that is, a 1 per cent change in income will result in more than a 1 per cent change in the quantity of housing services demanded), and if housing deprivations of certain socio-economic groups (e.g. low-income households) are due to inadequacy of income, then subsidization of housing consumption through income supplementation or housing allowance will be effective. The subsidies will enable and encourage households to either upgrade their existing housing conditions or to move to housing of better quality.

Traditionally, housing has been viewed as a necessity (in the economic sense) -- that is, consumption of housing, like some basic foodstuffs, remains the same irrespective of income level.<sup>1</sup> However, recent empirical investigations do not tend to support this view. Rather, the demand for housing is quite responsive to changes in income -- with the demand for rental housing services less responsive than ownership housing.<sup>2</sup>

### 2. Responsiveness of Housing Supply

The supply of housing services depends on:<sup>3</sup>

- (1) production possibilities;
- (2) supply of productive factors (i.e. land, labour, materials and capital) to the housing industry;
- (3) institutional constraints (i.e. building code regulations, labour union obstacles, planning and implementation of time lags).

Production possibilities refer to the state of technology of the residential construction industry. They refer to the 'substitutability of the different productive factors required for the development of the housing site, the construction of the dwelling and the financing, administration and marketing of the dwelling'.<sup>4</sup> In general, there may be more than one

technologically 'possible' way of producing a given product. The economically most efficient way is the one with the least cost -- and this in turn depends on the supply of productive factors to the industry producing that particular product. Productive factors that are abundant (thus the relative factor price is low) will be used more intensively, while factors in scarce supply will be economized in their use by firms in the industry -- subject to the existing state of technology. Furthermore, institutional constraints (i.e. stringent building code regulations, obstacles from labour unions, and the long land development approval process) impose additional costs upon the residential construction industry and cause a delayed response of supply to changing demand conditions.

The state of technology in the housebuilding industry, the supply of productive factors to the industry and the institutional constraints imposed on the industry all affect the responsiveness of the supply of housing services to changing demand conditions. With some preliminary analysis of Canada's construction industry, L.B. Smith suggests that:

... the supply curve for new housing is reasonably elastic because relatively faster cost increases of one factor of production generate technological changes to ameliorate its impact. However, this high degree of factor substitutability that exists in the long-run is not as strong in the short-run as a result of impediments such as building code regulations, labor union obstacles, planning and implementation of time lags, etc. Consequently, the short-run supply elasticity of housing depends, to some extent, upon the availability of individual factor inputs that, at certain times or in geographic areas, may be relatively fixed. Nevertheless, it appears that over any reasonable period of time the supply elasticity of new housing is quite high.<sup>5</sup>

With respect to the responsiveness of housing supply, the following conclusions can be drawn:

- (1) In the short-run, the supply of housing tends to be relatively inflexible. This is due to the supply constraints in the factor markets (for reasons we have already referred to in Chapter II) and institutional constraints.
- (2) In the long-run, the supply of housing tends to be quite responsive (and adaptable) to changes in demand.<sup>6</sup>

#### B. Housing Policy Objectives

Housing policy objectives depend on the identification and specification of the kinds of problems (and their magnitude) encountered in the housing market. Housing policy objectives are

goals to be achieved for the purpose of alleviating the array of properly defined housing deprivations. A set of housing objectives is appropriate only when it adequately reflects the problems to be solved. A set of housing objectives is operational only when it is cast in measurable terms.

... a set of measurable objectives should be viewed as benchmarks against which progress, or lack thereof, can be measured; and more importantly, as a basis for analyzing program alternatives. Some of these will complement programs designed to achieve another objective; others may hinder that achievement. Choices among programs -- which, again, is ultimately the point at which differences of opinion must be resolved -- can be facilitated and improved if the implications of various programs for each objective are more clearly recognized and if the severity of each element of need is better known.<sup>7</sup>

A commitment to 'a decent home and a suitable living environment for every British Columbian' is a non-measurable goal or objective. To be operational, this commitment not only has to be translated into specificities, but also transformed into measurable terms. For example, the objective to remove substandard housing is non-measurable. It is operational only after society (through political consensus) has defined the appropriate standard of housing, (i.e. in terms of space or facilities) -- subject to, of course, the existing resource constraints of our economy.

The present section only sets forth some general normative housing objectives. Depending on the problems encountered in the housing market and depending on the willingness of society to divert economic resources to achieve certain objectives in the housing sector, the following general housing objectives can be refined, modified and eventually cast into measurable terms.

1. Quality - maintaining certain 'appropriate' quality standards of the existing housing stock.
2. Production - maintaining stable growth of construction activity so as to meet changes in housing demand.
3. Consumption - if income increases have been outpaced by shelter costs and if certain socio-economic groups have experienced particular hardship, policy objectives can be:  
i. General: relieving poverty and alleviating insufficiency of income  
ii. Specific: improving housing consumption directly.

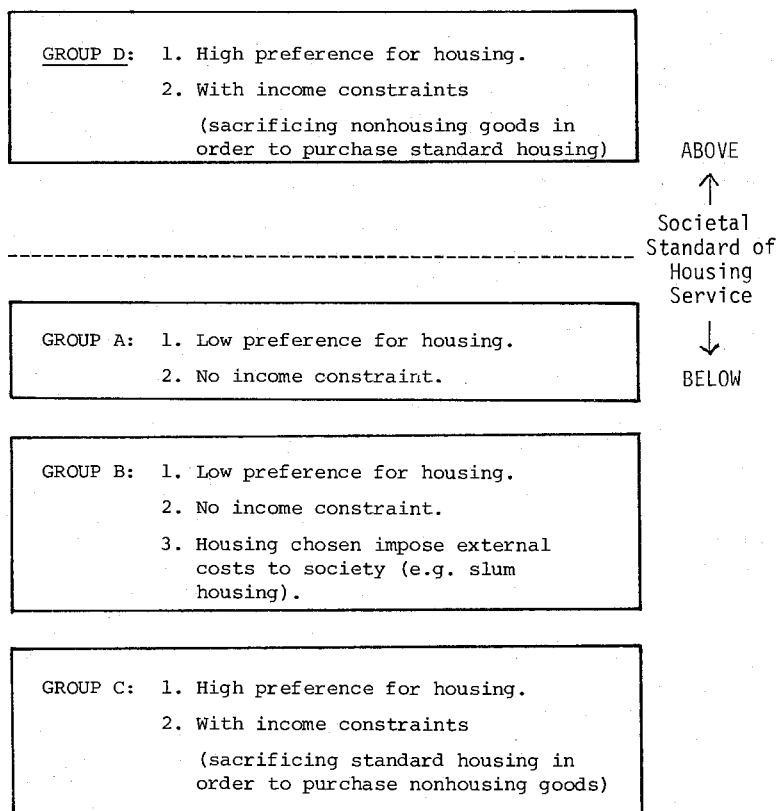
In terms of the housing situation in a particular housing market, objective 1 is directed towards the problem of 'bad housing', while objectives 2 and 3 are directed towards the problem of 'too little housing'.<sup>8</sup> In terms of the impact on the activities in the housing market, objective 2 is related to public policies to improve the allocative efficiency of the housing market and to enhance economic stabilization in the whole economy; objective 3 is directly related to the function of the public sector to redistribute income while objective 1 is primarily regulatory in nature.<sup>9</sup>

The interrelationship between objective 1 (quality) and objective 3 (consumption) requires some elaboration.<sup>10</sup> Assuming that society has transformed the 'quality' objective into measurable terms (some standards of basic accommodation expressed, for example, in terms of the space of a dwelling unit and its facilities), the following question may arise: do all households living in substandard units require assistance in their consumption of housing services, and do all households living in above-standard units not require assistance? Since the choice of housing consumption (how much and what kind) depends on the preferences for housing and other non-housing goods, as well as the ability to pay for such preferences, the answer to the preceding question can be determined by comparing these two considerations (i.e. preferences and ability to pay) with the societal standard of housing services. Figure 1 schematically presents four groups of households living either above or below the societal standard of housing services. Households in Group A -- those who have low preference for housing and who are able to pay for either standard housing or other non-housing goods and services -- are not in need of assistance. Their choice of sub-standard housing is made without any constraint. However, if the same group of households has moved to certain sub-standard housing (i.e. Group B in Figure 1), which imposes external costs to society (e.g. slum housing), society as a whole may be better off by eliminating such housing after these households have been enticed to move out from them by assistance (or subsidy) of some kind. Households in both Groups C and D have high preference for standard housing services. However, their ability to pay for standard housing services is constrained one way or another -- they can either sacrifice the consumption of standard housing in order to purchase non-housing goods or sacrifice the consumption of non-housing goods in order to purchase standard housing. This highlights the intertwined relationship between housing deprivation and poverty in general. I.R. Silver and L.B. Smith argue that:

... because some people may attach an unusually large weight to housing in their utility function and, as a result, live in housing that is of standard quality without crowding, we cannot assert that they are not in need of housing assistance if their consumption of non-housing good is below the socially acceptable level. Therefore, the housing

question cannot be viewed in isolation. It must be considered as part of the poverty question ... To be able to talk meaningfully about optimum housing assistance, society must define a minimum basket of consumption of commodities and services that should be obtainable for all persons ... Once such a basket is determined and priced in each area, persons with insufficient income to obtain this minimum social basket of goods can be said to be in need of assistance, and government programs should be designed to provide income assistance either in an unconstrained form or in kind.<sup>11</sup>

FIGURE 1



If housing deprivations are viewed as part and parcel of the general problem of poverty, the concern is primarily one of the prevailing distribution of income or standards of living. The policy objective that should be adopted is the 'general' version of objective 3: relieving poverty and alleviating insufficiency of income. However, the choice of the 'specific' version over the 'general' version is likely to be motivated by a stronger personal concern (of the donors) over the housing situations of the poor rather than over other symptoms of poverty.<sup>12</sup> More will be said in the next section about the rational basis of the choice between the 'general' and 'specific' version of objective 3, and the kinds of delivery mechanism to achieve such objectives.

### C. Maldistribution of Housing Consumption: Some Policy Alternatives

In this section, we examine policy alternatives which are redistributive in nature and which are aimed at counteracting maldistribution of housing consumption -- the third housing policy objective in the previous section. Policy or programs that are redistributive in nature would have either direct impact on the distribution of income (e.g. a program of income supplementation or guaranteed annual income) or indirect impact on the distribution of income through a redistribution of consumption of certain goods and services (e.g. housing with a housing allowance program, medical service with a medical care program, etc.). What kind (and how much) of a redistribution depends on some general economic and social objectives (which in turn govern housing policy objectives) determined by political consensus.<sup>13</sup> The choice between alternative policies and programs (i.e. the means) in order to achieve stated objectives depends on a set of economic decision-making criteria.<sup>14</sup> (It needs to be emphasized again here that even though the objective of housing policy may be social, its mechanics are always economic.) In this section, we will first examine the relevant economic decision-making criteria for the evaluation of policy alternatives and then review the types of policy delivery mechanisms (basically different forms of demand-side subsidies) that are aimed at improving the maldistribution of consumption in housing services.

#### 1. Decision-making criteria

The distributional impact of any housing policy and program (and for that matter, any public expenditure program) is always two-sided: the distribution of social benefits among the beneficiaries and the distribution of social costs among the burdened group. The general tendency of advocates of any program has always been the brandishing of the program benefits, while ignoring (either consciously or unconsciously) the other side of the coin. This approach would not only prohibit the comparison

of different alternatives with the same program objective, but would also preclude rational political acceptance of any recommended policy or program. The importance of a simultaneous evaluation of the distribution of costs and of benefits has been emphasized by K. Wicksell:

We must assume, then, that the planned state activity as such must be recognized as being of general usefulness. The next step is to weigh the expected utility against the necessary sacrifice. This is a matter on which the views of the different classes of citizens will be conditioned by their varying wealth and income and the consequent varying urgency of their private needs, as well as by their varying subjective evaluation of the particular collective need. For both reasons the proposed distribution of costs is obviously decisive for the citizens' judgment on the relative value of the utility and the cost of the public activity ... that No public expenditures should ever be voted upon without simultaneous determination of the means of covering their cost.<sup>15</sup>

In order to evaluate the costs and benefits (and their distributional impact) of any housing policy and program alternative, the following questions should be asked and answered:<sup>16</sup>

<u>Benefits</u>	<u>Costs</u>
1. Who should benefit?	1. Who should pay the program cost?
2. Who actually benefits?	2. Who actually pays?
3. What is the distribution of program benefits among beneficiaries?	3. What is the distribution of program costs among burdened group?
4. What is the total benefit of the program?	4. What is the total cost of the program?

Having evaluated the benefits and costs of each available alternative, the alternative which is most cost efficient (i.e. the one with the greatest margin of net benefits) can be determined.

There are some analytical considerations that would enable a proper evaluation of the several questions on the benefit-side of the preceding cost/benefit equation. They will be elaborated in the ensuing two sub-sections.



## 2. Target Efficiency<sup>17</sup>

Target efficiency is a measure of the degree to which the actual distribution coincides with the desired distribution of benefits. Target efficiency is an analytical tool which facilitates the evaluation of the first three questions on the benefit-side of the equation. It has two components: (1) vertical target efficiency and (2) horizontal target efficiency.

'Vertical target efficiency' is the ratio of benefits received by the intended beneficiaries to total benefits. It is a measure of the leakages of program benefits to beneficiaries who are not intended to be assisted in the first place. It is, therefore, a measure of the extent to which benefits have accrued to 'free-riders'. For example, if a rent aid program is intended to assist needy tenants, it is rather unlikely that this program will achieve vertical target efficiency if the aid is given to all tenants. The leakages of benefits will be considerable as a high-income earner living in a luxurious penthouse will receive the same amount of benefit as a low-income earner living in sub-standard housing.

'Horizontal target efficiency' is the ratio of (1) the number of beneficiaries in the target group to the total number of persons in that target group, and (2) the benefits going to the target group to the total benefits needed by that group. It is a measure of the adequacy of benefits of any program. Depending on the budgetary amount allocated to a program, benefits can be distributed to beneficiaries in any one of the following four ways:<sup>18</sup>

		<u>SCOPE OF BENEFITS (\$)</u>	
		Limited	vs Substantial
<u>BREADTH OF BENEFITS</u> (Number of beneficiaries)	Broad	<p>A.</p> <ul style="list-style-type: none"> <li>- limited</li> <li>- high proportion of target group served</li> </ul>	<p>B.</p> <ul style="list-style-type: none"> <li>- substantial</li> <li>- high proportion of target group served</li> </ul>
	Narrow	<p>C.</p> <ul style="list-style-type: none"> <li>- limited</li> <li>- low proportion of target group served</li> </ul>	<p>D.</p> <ul style="list-style-type: none"> <li>- substantial</li> <li>- low proportion of target group served</li> </ul>

If the budgetary amount for a program is enormous, it is most likely that the most adequate way of distributing benefits will be chosen, i.e. scheme B where adequate benefits are given to most of the persons in the target group. Conversely, with a very limited budgetary amount, scheme C is the only choice. When the budgetary amount lies somewhere between these two extremes, then a trade-off has to be made: benefits can be either spread thinly so that more will be served (i.e. scheme A) or spread heavily to a lucky few (i.e. scheme D).

### 3. Some other benefits

It has often been argued, especially in the debate over how welfare assistance should be delivered, that 'the benefits should not be provided in a manner that tends to stigmatize or to destroy self-respect.'<sup>19</sup> The criterion of 'nondemeaning benefit' can be said to 'reflect a concern not only about how much income people have, but also as to what they must do to qualify for a redistributational program, and in what manner the aid is provided.'<sup>20</sup> A case in point is the provision of rental subsidies through public housing projects. This mechanism of delivering assistance is less likely to fulfill the 'nondemeaning benefit' criterion than, say, an income supplementation program. The reason is simply that the recipients of benefits in the former case can be readily identifiable by the public once a public housing project has been identified. Thus, a choice between alternatives can be affected by whether such alternatives possess nondemeaning benefit or not. 'Nondemeaning benefit' is a kind of benefit that has to be taken into consideration when evaluating the total benefits of a particular program (question 4 on the benefit-side of the cost/benefit equation).

Another consideration in the evaluation of program benefits centers on the choice between 'consumer sovereignty' and 'taxpayer sovereignty'. Economists have long argued that recipients of benefits are better off (in terms of their economic welfare) with benefits delivered non-earmarked or unconstrained (thus in the form of cash grants even though not all cash transfers are necessarily unconstrained) than with benefits delivered with strings attached.<sup>21</sup> 'Some would argue that if the distribution of income is viewed as unsatisfactory, then ... transfers should be made in money form, thereby ... permitting each transfer recipient to decide for himself what to do with his added purchasing power. This is the principle of consumer sovereignty, embodying the liberal ethic of freedom of choice. Given the consumer's set of preferences he can maximize his economic welfare if ... the transfers he receives occur in an unconstrained form.'<sup>22</sup> Implicit in the principle of consumer sovereignty is the rejection of the presumption that an outsider (e.g. social planner, legislator) possesses omniscience of special insight with respect to individual preferences.<sup>23</sup> However, adherents to the principle of taxpayer sovereignty tend to argue that how the recipients (the donees) disburse their benefits are

of concern to the taxpayers (the donors). Programs that provide earmarked goods and services to the needy -- public housing, medical care -- suggest that the donors should insist on certain minimum standards in the donees' consumption of housing services and health services. This paternalistic approach in assisting the needy is criticized by Edward C. Banfield:

... the reformer wants to improve the situation of the poor, the black, the slum dweller, and so on, not so much to make them better off materially as to make himself and the whole society better off morally.<sup>24</sup>

However, a case can be made for constrained transfer of benefits when externalities<sup>25</sup> are involved. For example, 'taxpayers' interest in providing better housing for the poor may thus be explainable as a response to the external diseconomies that slum housing causes for outside parties -- fires, crimes, personal despair.'<sup>26</sup> If the consumption of 'bad' housing by certain households produces side effects affecting outsiders, then it is economically efficient to either encourage those households to consume 'good' housing (through subsidies) or to discourage them from consuming 'bad' housing (through taxes or regulation).

The debate over 'consumer sovereignty versus taxpayer sovereignty' and the related issue of 'unconstrained transfers versus constrained transfers' can be summarized as follows:

... the general economic case for cash transfers is strong enough that the burden of proof should always lie on those who advocate restricted transfers. It is their duty to show that the aid is motivated by specific good externalities, that it is part of our individual-societal social welfare function, that it is directed at groups with limited consumer sovereignty, or that it is necessary to the furtherance of some essential value.<sup>27</sup>

In the case of assistance in the housing sector, H.J. Aaron and G.M. Von Furstenberg conclude in their evaluation of the inefficiency of earmarked housing assistance as follows:

... housing subsidies by themselves are not the most efficient means of raising standards of living for the poor, unless external benefits from improved housing are present or taxpayers want the poor to be better housed rather than better clothed, entertained, or fed, and some weight is accorded to the preferences of donors.<sup>28</sup>

#### 4. Demand-side subsidies -- policy delivery mechanisms

Demand-side subsidies in various forms can be employed to improve the maldistribution of housing consumption. Subsidies on the demand-side are primarily aimed at improving the ability of needy households to pay for housing services. In order to reduce

the proportion of income spent on housing for those households judged to be in need, demand-side subsidies can be delivered to the recipients either by improving their incomes or by reducing their shelter costs. Such subsidies can be delivered to recipients as follows:

		Direct ( <u>earmarked</u> )	vs	Indirect ( <u>non-earmarked</u> )
<u>Cash</u> vs <u>Kind</u>		A. Direct-cash		B. Indirect-cash
		C. Direct-kind		D. Indirect-kind

The following examples illustrate the above four major schemes of delivering demand-side subsidies:

- A. Direct-cash : Housing allowance, e.g. rent certificate<sup>29</sup>
- B. Indirect-cash : Income supplementation, e.g. guaranteed annual income, negative income tax
- C. Direct-kind : Rental subsidies in public housing projects
- D. Indirect-kind : Programs to enhance earning power of the group to be aided, e.g. employment training programs.

The distinction between scheme D and the other three schemes is that the former is basically a 'structural' approach while the latter three are basically 'distributive' approaches to the battle against poverty.<sup>30</sup> Scheme D is 'structural' in the sense that its ultimate aim is 'to raise earning capacities, equipping the poor of this generation and the potential poor of the next with the means to earn above-poverty incomes through normal employment'.<sup>31</sup> This can be achieved by (1) removing imperfections in the labour market (e.g. restrictions on entry

into organized trades, minimum wage regulations, etc.) so as to enable individuals to exploit fully the earning capacities they have, and (2) building up human capital -- health, education, skill, etc. -- of individuals so as to improve the potential of their earning capacities in the future. If this 'structural' approach is pursued successfully, it would not only enable disadvantaged individuals to consume more and better housing, but it would also improve their standard of living generally.

However, this approach has certain weaknesses. In the first place, structural policy to improve earning capacities of individuals may not wholly remedy deprivations of certain socio-economic groups, e.g. the handicapped, the elderly, and those with obsolete skills. In the second place, structural policy does not offer an immediate avenue of relief (in housing needs as well as other basic needs) to those who are currently poor, as the effect of a structural policy can be realized only over the long term. This does not deny the long-run merits of the structural approach. It only suggests that the structural approach has to be complemented with various forms of the distributive approach.

Depending on the specific design of the scheme, and depending on the budgetary amount allocated for implementing the distributive approach, scheme B is preferred over A, and A over C in terms of the benefit-side of the cost/benefit equation for reasons we have touched on previously. Scheme B is the only scheme that adheres to the principle of consumer sovereignty. It has the additional advantage of being more likely to fulfil the criterion of nondemeaning benefit -- an advantage shared with scheme A only. In the case of scheme C, not only does it fail to adhere to the principle of consumer sovereignty, but the benefits delivered under this scheme are more likely to be demeaning.

Conceptually, all the three schemes can be designed in such a way that the criteria of target efficiency can be fulfilled. However, experience in the U.S. with scheme C (primarily with public housing projects) does not encourage optimism with this mechanism of delivering subsidies. The target inefficiency of public housing in the U.S. has been widely documented. In an economic evaluation of public housing in the U.S., R. Muth concludes:

... public housing tenants receive about four times more housing per dollar spent than lower income tenants purchasing housing on the private market ... Consequently, tenants of public housing consume about four times more housing than other lower income families who are eligible for, but unable to obtain, public housing. It is not at all surprising that waiting lists for admission to public housing developments are as long as the lists of occupied public housing units.<sup>32</sup>

In an evaluation of the distribution of benefits under public housing programs, Robert L. Bish concludes as follows:

... the analysis of this study indicates that direct benefits and changes in housing consumption due to public housing are very small -- both in relation to the proportion of eligible families supported and in relation to total income and housing consumption of eligible families.<sup>33</sup>

Experience in the U.S. seems to indicate that the delivery of benefits under scheme C has failed to fulfil the vertical target efficiency and horizontal target efficiency criteria. On the other hand, scheme B (some form of income supplementation) has the benefit of integrating and streamlining the existing social welfare system -- thus minimizing the overlapping and leakage of benefits. This benefit, however, is not shared with either scheme A or C. By adopting either scheme A or C, there is the likelihood of the presence of a parallel system of income supports (i.e. the existing social welfare system) which subsidizes housing costs along with all other family expenditures.<sup>34</sup> The need for integration, or at least coordination, is inevitable unless all earmarked transfer programs -- for food, health care, clothing, day care and so forth -- are replaced by a single unconditional income transfer.<sup>35</sup>

Turning to the cost-side of the benefit/cost equation, it would seem that the broad-based scheme B would be far more costly than either scheme A or C. However, implementation of scheme B to replace the existing hodge-podge welfare system of uncoordinated but interacting programs would possibly reduce the total costs of general welfare assistance. Even though this may not amount to significant cost-savings, the superior benefits of scheme B may perhaps compensate for the additional costs. Ultimately, the rational choice of an appropriate scheme would depend on the proper evaluation of the costs and benefits of each alternative.

#### D. Policy Alternatives to attain the Production Objective

In order to maintain a proper balance on the supply side of the demand/supply relationship in the housing market, the following two main classes of policies can be implemented:

- (1) Policies to improve the allocative efficiency of housing production. These policies are aimed at improving the performance of the private residential construction industry, thereby improving the responsiveness of housing supply in the long-run and the short-run.
- (2) Policies to increase the accessible supply of standard housing by offering supply-side subsidies. These policies are aimed at lowering the price at which housing is offered to consumers by offering special incentives to public or private builders of housing.

## 1. Policies to improve the allocative efficiency of housing production

Earlier in this chapter, we have indicated that the supply of housing (and its responsiveness to changing demand conditions) depends on: (1) production possibilities, (2) supply of productive factors to the housing industry, and (3) institutional constraints. The efficiency of housing production is affected by these three factors. If efficiency is judged to be sub-optimal, policies can be implemented to affect the three factors which determine the supply of housing.

Technological change enhances the range of production possibilities in the construction industry. In a study on the construction industry in Canada, the Economic Council of Canada indicates that 'over the past two decades, new machinery and equipment ... Capital investment in new construction machinery and equipment, as well as some of the improvements in new materials, constituted to greater labour productivity'.<sup>36</sup> Technological advance in construction is a slow and gradual process, and it depends primarily on new developments in the use of materials (e.g. plastic pipe), equipment (e.g. tower crane) and methods (e.g. prefabrication). All of these new developments tend to have cost-saving advantages. In order to facilitate the transfer of technological innovation in the construction industry, the Economic Council of Canada has also identified some of the major transfer impediments to be remedied. One major impediment is the lack of communication of new technology among those (e.g. engineers, developers, architects, etc.) associated with the construction industry. Secondly, since the use of new technology has to be approved by the numerous agencies that lay down codes and standards, the 'unnecessary inconsistencies that are seen to exist frequently from municipality to municipality and that are bothersome for the construction industry'<sup>37</sup> will prohibit the introduction and experimentation of new materials, methods and equipment. These impediments, however, are amenable to appropriate policies. For example, standardization of codes and standards would remove the impediments to the implementation of new techniques in construction: and greater coordination among participants in the construction industry would facilitate the transference of technological knowledge.

In Chapter II we have indicated that because of the residential construction industry's 'residual' claim on construction resources, it is subject to a greater degree of factor supply constraints than the non-residential construction industry. Short-run instability of the residential construction industry is aggravated further by federal monetary and fiscal policies and public expenditure programs. Within the provincial jurisdiction, it seems that greater coordination and scheduling of public expenditure programs<sup>38</sup> (i.e. construction of schools, dams, highways, etc.) can help to prevent the emergence of supply bottlenecks in the residential construction industry. To pursue this policy successfully requires continual consultation between



the various levels of government so as to minimize the competition of the limited pool of construction resources at any moment in time.

The third factor that affects the supply of housing is related to institutional constraints, especially at the municipal level. Stringent building code regulations and the prolonged land development approval process have been frequently cited as some of the major institutional obstacles in the house building industry.<sup>39</sup> The supply of housing is subject to strict and direct government controls, both qualitative and quantitative. The qualitative controls take the form of building codes and by-laws; the quantitative controls are implicit in land development controls, and particularly in the subdivision approval process.<sup>40</sup> The objective of qualitative controls is to maintain certain basic standards on existing and new housing. Stringent qualitative standards would be reflected in higher housing costs. In terms of policy, the issue is to maintain a proper balance between good quality of housing on the one hand and lower cost of housing on the other -- a line that can be drawn only after weighing contradictory objectives. In the case of quantitative controls, the reasons why they have been adopted by municipal governments are far more complex. The following passage from A. Derkowski will perhaps illustrate the general attitude of planners in municipal governments:

... the traditional physical planner, especially if he has an architectural background, will staunchly defend 'quality' against any philistine attack from grubby economists. He is of course all in favour of 'low-cost housing' ... provided, naturally, that it has 60 feet of frontage, an attached garage, two and a half bathrooms and a sunken living room -- or, even better, if it is located in the next municipality.<sup>41</sup>

The primary reason for the adoption of stringent quantitative controls by municipalities can be traced to the problem of urban growth and its concomitant costs. Since the tax base of a municipality, to a large extent, depends on the taxation of real property, and since municipalities have found greater difficulties in meeting the costs of greater urban growth (i.e. education, transportation, etc.) from the relatively limited tax base, municipalities have tended to discourage further influx of households by imposing stringent quantitative controls on the construction of new dwelling units. The allocation of the costs of urban growth and the alternative means of meeting these costs (e.g. revenue sharing) are areas in which further research is urgently required. The financial problem of urban growth has to be resolved (through an appropriate policy of containing urban growth and through a revision of property taxation policy) before we can meaningfully envisage ways to remove institutional constraints.



## 2. Supply-side subsidies: policies to increase the accessible supply of housing

Subsidies on the supply-side are primarily aimed at reducing the costs of construction, thus affecting the price at which a newly completed dwelling unit can be sold or rented. Subsidies can be delivered in either one of the following two ways:<sup>42</sup>

- (1) Subsidizing the initial outlay for land and/or construction of housing.
- (2) Making mortgage credit 'cheaper' and/or more readily available.

Examples from B.C. government housing programs would illustrate the above two mechanisms of delivering supply-side subsidies. The residential land lease program offers subsidies to the capital outlay for land by leasing land at cost (instead of market value) at a subsidized rate. Subsidies to the capital outlay for construction are also offered to cooperative and elderly citizens' housing in the form of a grant. The B.C. leasehold mortgage program provides mortgage financing at an interest rate below the market rate.

The objective of either subsidizing the initial capital outlay of housing construction or mortgage financing is to enable housing to be produced below market rate. The benefits of such supply-side subsidies will accrue to those households eligible for the publicly-assisted housing projects so that such households can purchase or rent at below the market rate. If the purpose of supply-side subsidies is to assist households in need such subsidies basically serve the same purpose as demand-side subsidies. The following question is in order: Which type of subsidies is more preferable to serve needy households: demand-side subsidies or supply-side subsidies?

## 3. Demand-side subsidies versus supply-side subsidies

The U.S. experience with supply-side subsidies has not been too encouraging. After a review of the major housing programs in the U.S., A.P. Solomon has reached the following conclusion:

With regard to vertical inequity -- that is, the diversion of subsidy dollars to the non-poor -- we found little difference among alternative production and consumer strategies .... Horizontal inequities emerge as far more serious. Instead of aiding the maximum number of poor households possible for a given federal appropriation, new construction programs allow a few families to occupy housing far in excess of minimum code standards, while leaving the vast majority of the poor without any relief whatsoever. An even more explosive aspect of the equity issue is that some poor families are provided with new housing of a quality beyond the financial means of many blue-collar workers

(whose earning power is only moderately higher but sufficient to disqualify them from participation in subsidy programs).<sup>43</sup>

Thus, the U.S. programs providing supply-side subsidies have failed to fulfil the 'horizontal target efficiency' criteria. On the other hand, demand-side subsidies would be better able to fulfil the consumer sovereignty principle than supply-side subsidies, as Solomon observes further:

A further virtue of demand-side strategies is that they offer tenants far more discretion than do production programs: the subsidy recipient, rather than the government chooses a home from among a wide range of neighborhoods, structural types and locations; he may remain in the same apartment unit at full market rent should his income rise above program ceilings; he enjoys a greater opportunity to achieve a normal landlord-tenant relationship, independent of public supervision and scrutiny.<sup>44</sup>

Moreover, demand-side subsidies usually possess the added advantage of 'nondemeaning benefit' since the 'subsidized family moves anonymously into a private dwelling unit, it is less conspicuous and hence less stigmatized and segregated than the tenants of public projects.<sup>45</sup> Judging from the U.S. experience, demand-side subsidies appear to be preferable to supply-side subsidies.

One final issue that remains to be resolved is whether or not demand-side subsidies should be implemented in conjunction with additional measures of (1) regulating rent increases, and (2) maintaining a proper balance on the supply side of the demand/supply relationship in the housing market, when demand for housing is expected to increase. The answer to this question lies in the responsiveness of housing demand and supply.

We have indicated earlier in this chapter that if housing demand is responsive to income changes, subsidization of housing consumption (through income supplementation or housing allowance) will be effective. The subsidies will enable households to either upgrade their existing housing conditions or to move to housing of better quality in the private sector. We have also argued in Chapter III that even if considerable dissipation of subsidies by rent increases in the private sector is more likely to happen in the short-run, in the long-run the dissipation is not likely to happen in a more competitive housing market.<sup>46</sup> (In a report by Frank de Leeuw, it is tentatively concluded that about 70% of the increased demand from a comprehensive system of housing allowance would lead to better housing, while the other 30% would go into higher rents.<sup>47</sup> Moreover, if the supply of housing is responsive in the long-run (there are sufficient reasons to believe this to be the case), increased demand for housing with the demand-side subsidies would be accommodated by additional housing supply. Any threat of increased rents could be minimized by phasing in a program of demand-side subsidy at a pace necessary to avoid such an eventuality.

Earlier, we have discussed the two main types of policies that are designed to maintain a proper balance on the supply side of the demand/supply relationship in the housing market. Policies that are designed to increase the accessible supply of standard housing by offering supply-side subsidies are rejected. Even though supply-side subsidies serve the same purpose as demand-side subsidies, they have less preferable qualities than demand-side subsidies. (Perhaps, supply-side subsidies should only play a residual role, i.e. that they should be offered only to housing projects that serve special needs, such as native housing and special care housing for the handicapped.) However, there is ample room for policies that are designed to improve the allocative efficiency of housing production. The array of imperfections in housing production that we have cited earlier could all be overcome by appropriate measures. The sooner supply imperfections are successfully overcome, the greater will be the responsiveness of housing supply in the short-run and in the long-run, and the better will all consumers of housing services -- assisted or unassisted by demand-side subsidies -- be served.

## Notes

1. See for example, Louis Winnick, 'Housing: Has there been a Downward Shift in Consumers' Preferences?', Quarterly Journal of Economics, Vol. 69 (Feb. 1955), pp. 85-95; and Sherman J. Maisel & Louis Winnick, 'Family Housing Expenditures: Elusive Laws and Intrusive Variances', in William L.C. Wheaton et al., (eds.), Urban Housing (New York: The Free Press, 1966), pp. 130-53.
2. Technically, the concept of 'elasticity' is a measure of the responsiveness of demand to changes in income or prices. Demand is elastic if elasticity is equal to or greater than one. Empirical research on the income elasticity of stock demand for housing tends to support the following conclusions: the elasticity of demand for rental housing has a range from 0.8 to 1.0; the elasticity for demand for ownership housing has a range from 0.7 to 1.5. See, for example, Frank de Leeuw, 'The Demand for Housing: A Review of Cross-section Evidence', Review of Economics and Statistics, Vol. 53, no. 2 (Feb. 1971).
3. This section is primarily based on Irving R. Silver & Lawrence B. Smith, 'Housing Needs of the Poor: A Reinterpretation', in Donald J. Reeb and James T. Kirk, Jr. (eds.), Housing the Poor, pp. 18-28.
4. Ibid., p. 22.

5. Ibid., p. 23. See also L.B. Smith, The Postwar Canadian Housing and Residential Mortgage Markets and the Role of Government, (Toronto: University of Toronto Press, 1974), pp. 40-44.
6. See also Richard F. Muth, 'Urban Residential Land and Housing Markets', in Harvey S. Perloff & Lowdon Wingo, Jr. (eds.), Issues in Urban Economics, (Baltimore: The John Hopkins Press, 1968), pp. 286-91. Referring to the U.S. construction industry, Muth observes that: 'Even for the nation as a whole, it appears that the long-run supply schedule for structures is highly elastic. .... I would expect the supply of structures to be even more elastic for any given urban area than for the nation as a whole, because, in the long-run, building materials and probably construction workers and firms would shift among urban areas in response to differential changes in their prices or earnings.'
7. William G. Grigsby & Louis Rosenburg, Urban Housing Policy, (New York: APS Publishing Inc., 1975), p. 36.
8. The terms 'bad housing' and 'too little housing' originate from Henry J. Aaron, Shelter and Subsidies: Who Benefits from Federal Housing Policies? (Washington D.C.: Brookings Institution, 1972), p. 2.
9. The traditional classification of the functions of the public sector is: allocative efficiency, economic stabilization and income redistribution. See Richard A. Musgrave, The Theory of Public Finance, (New York: McGraw-Hill Book Co., Inc., 1959), Ch. 1, pp. 3-27.
10. Except for some variations, the subsequent analysis on the interrelationship between objective 1 and 3 follows Silver and Smith, 'Housing Needs of the Poor', pp. 19-21.
11. Ibid., p. 21.
12. See, for example, Frank de Leeuw, Sam H. Leaman, & Helen Blank, The Design of a Housing Allowance, (Washington D.C.: The Urban Institute, 1970), pp. 6-8.
13. For an illuminating discussion on the relationship between social/economic choice and political process, see James M. Buchanan & Gordon Tullock, The Calculus of Consent, (Ann Arbor: University of Michigan Press, 1971).
14. These criteria originate primarily in welfare economics. For a demonstration of the application of welfare economics to the evaluation of housing policy alternatives, see Arthur P. Solomon, Housing the Urban Poor, Ch. 2.

15. Knut Wicksell, 'A New Principle of Just Taxation', in Richard E. Musgrave & Alan T. Peacock (eds.), Classics in the Theory of Public Finance (New York: St. Martin's Press, 1967), pp. 89-91.
16. For more detailed discussion, see James T. Bonnen, 'The Absence of Knowledge of Distributional Impacts: An Obstacle to Effective Policy Analysis and Decisions', in Robert H. Haveman & Julius Margolis (eds.), Public Expenditures and Policy Analysis, (Chicago: Markham Publishing Co., 1973), pp. 246-70; and generally Ajit K. Dasgupta & D.W. Pearce, Cost-Benefit Analysis: Theory and Practice, (London: Macmillan Press Ltd., 1972).
17. The discussion here is benefited from Rurton A. Weisbrod, 'Collective Action and the Distribution of Income: A Conceptual Approach', in Haveman & Margolis (eds.), Public Expenditures, pp. 124-28.
18. The analysis here is benefited from Daniel R. Mandelker, Housing Subsidies in the U.S. and England, (1973), pp. 5-7.
19. Weisbrod, 'Collective Action', p. 129.
20. Ibid.
21. See, for example, Lester C. Thurow, 'Cash versus In-kind Transfers', Henry J. Aaron & George M. von Furstenberg, 'The Inefficiency of Transfers in Kind: the Case of Housing Assistance', Western Economic Journal, Vol. 9, no. 2 (June, 1971).
22. Weisbrod, 'Collective Action', p. 130.
23. For an elaboration of this view, see J.M. Buchanan, 'Positive Economics, Welfare Economics and Political Economy', Journal of Law and Economics, Vol. 2, (Oct. 1959).
24. Edward C. Banfield, The Unheavenly City, (Boston: Little Brown, 1968), p. 251.
25. See Chapter IV, section E, above.
26. Weisbrod, 'Collective Action', p. 131.
27. Thurow, 'Cash versus Inkind Transfers', p. 195.
28. Aaron & von Furstenberg, 'The Inefficiency of Transfers in Kind', p. 188.
29. For the discussion of the 'rent certificate plan' see Edgar O. Olsen, 'A Competitive Theory of the Housing Market', American Economic Review, Vol. 59 (Sept. 1969) and de Leeuw et al., The Design of a Housing Allowance.

30. See James Tobin, 'Raising the Incomes of the Poor', in Kermit Gordon, 9th ed., Agenda for the Nation, (Washington D.C.: Brookings Institution, 1968), pp. 90-93; and Griesby & Rosenburg, Urban Housing Policy, pp. 221-23.
31. Tobin, 'Raising the Incomes of the Poor', p. 90.
32. Richard Muth, Public Housing: An Economic Evaluation, (Washington D.C.: American Enterprise Institute for Public Policy Research, 1973), p. 21.
33. Robert L. Bish, 'Public Housing: The Magnitude and Distribution of Indirect Benefits and Effects on Housing Consumption', Journal of Regional Science, Vol. 9, no. 3 (1969), p. 437.
34. See Mandelker, Housing Subsidies in the U.S. and England.
35. Solomon, Housing the Urban Poor, p. 1989.
36. Economic Council of Canada, Toward More Stable Growth in Construction, (Ottawa: Information Canada, 1974), pp. 45-6.
37. Ibid., p. 33.
38. See, for example, Ibid., pp. 200-205.
39. See, for example, A. Derkowski, 'The Toronto Housing Market in the Sixties', FRI/CPM Journal, Real Estate Institute of Canada, (Nov. 1971); and The Land Development Process as it Affects the Supply of New Housing within the Greater Vancouver Regional District, (The Real Estate Board of Greater Vancouver, May 1974).
40. Derkowski, 'The Toronto Housing Market', p. 1.
41. Ibid., p. 9.
42. Dick Netzer, Economics and Urban Problems, (New York: Basic Books, Inc., 1974), p. 109.
43. Solomon, Housing the Urban Poor, pp. 187-8.
44. Ibid., p. 188.
45. Ibid.
46. Chapter IV, p. 8, above.
47. See Frank de Leeuw, 'The Housing Allowance Approach', in papers submitted to Subcommittee on Housing Panels, Committee on Banking and Currency, House of Representatives, 92nd Congress, 1st Session, (June 1971).

## **CHAPTER V**

# **HOUSING ALLOWANCE AND INCOME SUPPLEMENT: PROGRAM COSTS AND BENEFITS**





## CHAPTER V

# HOUSING ALLOWANCE AND INCOME SUPPLEMENT: PROGRAM COSTS AND BENEFITS

### A. Introduction

In the preceding chapter it has been demonstrated that demand-side subsidies are preferable to supply-side subsidies. We also argued that demand-side subsidies in the form of 'indirect-cash' (i.e. income supplementation) are preferable to those in the form of 'direct-cash' (i.e. housing allowance). In this chapter we will examine the institutional constraints associated with the adoption of these two varieties of demand-side subsidies in B.C., their estimated program costs, and the incidence of benefits to beneficiaries under a program of income supplementation and a program of housing allowance. Finally, the costs of a housing allowance program will be compared with the estimated costs of all the programs in B.C. that are related (directly or indirectly) to housing.

### B. Institutional Constraints Associated with Adoption of Demand-side Subsidies in B.C.

A comprehensive program of income supplementation (e.g. guaranteed annual income, negative income tax)<sup>1</sup> has the benefit of integrating and streamlining the existing social security system (with its hodge-podge of uncoordinated but interacting programs), thus minimizing the overlapping and leakage of benefits. However, the adoption of a comprehensive program of income supplementation cannot be undertaken until the provincial governments and the federal government have reached a consensus

vis-a-vis the nature of the program, which level of government is to be given the responsibility of administering the program, and how program costs are to be shared between the two levels of government. The consensus is necessary as the 'jurisdiction over social security, as we all know, is divided by the Constitution between the Parliament of Canada and the Legislatures of the Provinces in a complicated, even bewildering, way'.<sup>2</sup> The search for a consensus among divergent views in the two levels of government -- divergences not only in the context of philosophical differences but also in terms of technicalities of implementation -- is not seen to be an easy task.<sup>3</sup> The endeavour to develop a rationalized social security system in Canada was initiated in 1972 with the Conference of Welfare Ministers, and has since then culminated in the recent Social Security Review in 1975.<sup>4</sup> As of now, the necessary consensus has not yet been reached. Furthermore, it has been observed recently that the 'current problem of rapid inflation (with considerable unemployment) is producing a period of fiscal restraint which may well postpone the introduction of a major new income security program for two or three years'.<sup>5</sup>

Institutional constraints and the stringent economic realities at this stage thus preclude the early adoption of an income supplementation program that would assist needy households in their consumption of basic necessities of life -- shelter being one of them. This being the case, the second-best approach would appear to be a housing allowance program of some form. This would provide an arrangement for delivering subsidies to needy households in their consumption of adequate housing services until the two levels of government have formally adopted an income supplementation program.

In Section C we will estimate the transfer cost and the incidence of benefits under a housing allowance program that subsidizes costs of 'basic accommodation' for B.C. in 1974.<sup>6</sup> For the purpose of comparison, in Section D we will also make an estimation of the transfer cost of an income supplement scheme suggested by Michael A. Walker (hereafter called the 'Walker Income Supplement Scheme') in the Institute's earlier study.<sup>7</sup> The algebraic formulae of the Housing Allowance Scheme and the Walker Income Supplement Scheme are given in Appendix C.

## C. A Housing Allowance Scheme: Program Costs and Incidence of Benefits

### 1. The Scheme: General

**Housing Gap:** Basically, a housing allowance scheme is designed to fill a certain definition of 'housing gap'. Conceptually, the 'housing gap' is determined by the measurement of (1) housing adequacy, i.e. some minimum or basic amount of housing which a family or household must obtain if it is to be considered decently housed, and (2) the amount that a family or household might reasonably be expected to pay for housing service given its general economic circumstances.<sup>8</sup> If the second

measurement is lower than the first measurement, then a housing gap is deemed to exist. A housing allowance is then provided to that particular family or household in order to fill its housing gap.

Adequate Housing: The measurement of 'adequate housing' or 'basic accommodation' faces some operational difficulties. Conceptually, we can measure adequacy in physical terms: either in relation to the quality of housing (i.e. housing characteristics such as location, amenities, type, etc.) or in relation to the quantity of housing services supplied by a 'standard' or 'typical' unit of housing. However, the problems of measurement involved are abundant. A more convenient approach is to measure adequacy in economic terms by choosing certain average rents or monthly housing expenses as an acceptable measure of housing service. If this approach is adopted, it is crucial to make a distinction between actual shelter expenditure and the shelter expenditure required to obtain adequate or basic accommodation. In his critique of the formulae of subsidization in programs that supplement a household's actual shelter expenditure, Walker observes that:

... these formulae do not protect people from the hardship caused by what they must spend on shelter but from the seeming hardship that occurs because of what they do spend. The amount they do spend could, of course, be greater or less than the amount that they must spend to acquire basic accommodation, since they may or may not inhabit accommodation that is regarded as basic.<sup>9</sup>

The shelter expenditure for basic accommodation (room, light and heat) is thus the determinant of the basic guarantee level of a housing allowance. Two considerations arise: (1) should this guarantee level be varied by size of family? (2) should homeowners be treated differently than renters in terms of the guarantee level? It is obvious that larger families require more living space than smaller families. Thus, the guarantee level of housing allowance should increase as family size increases. However, if we assume the existence of economies of scale in housing consumption as related to family size, then the rate of increase in the guarantee level of housing allowance should decrease as family size increases. This seems to be a plausible assumption, as larger families do jointly share the use of common basic facilities (i.e. kitchen, bathrooms) in an occupied housing unit. With respect to the second consideration, Heinberg observes:

From the standpoint of public policy, one might want to take the position that there is a social interest only in insuring that a household can pay for adequate housing, not in guaranteeing a particular form of tenure. If this perspective is adopted, the relevant adequacy line or guarantee level for each geographic area and household size

would be that computed for the least-cost form of tenure, normally rental housing. No attempt would be made to guarantee homeowners more; the presumption would be that they are enjoying a set of services higher than those additional services. This does not imply any bias against homeownership, it merely reflects the view that homeowner households should not receive a higher allowance than renter households.<sup>10</sup>

Economic Welfare: The amount that a family or household might reasonably be expected to pay for housing services depends on: (1) its economic welfare, and (2) the contribution rates (or in more familiar terms, the target shelter-to-income ratio). The traditional way of measuring economic welfare is to use the current income of a family or household. The weakness of the current income concept is its neglect of both life-cycle incomes and incomes derived from wealth.<sup>11</sup> The advantage of adopting the current income concept is merely the convenience in terms of measurement. However, the treatment of wealth accumulated by homeowners in the form of equity in their residences deserves some consideration. If this form of wealth accumulation is not taken into account, then 'the economic welfare of these families will be systematically understated and they will receive more housing assistance than is warranted. Although it is probably administratively unfeasible to undertake a full-blown estimate of net worth in carrying out a housing allowance, it does seem desirable to take account of an owner's equity in his housing. Estimates of home value and data on mortgage debt appear feasible to compile in the administration of a housing allowance.'<sup>12</sup>

Contribution Rate: The amount that a family or household might reasonably be expected to pay for housing services also depends on the contribution rates. The aim of a housing allowance is to assist households or families to purchase basic accommodation without them having to spend an 'inappropriate' amount of income for it. However, the determination of 'appropriate' contribution rates is a subjective matter. The familiar 25% shelter-to-income ratio is after all a rule of thumb. On a practical level, it would seem that the appropriate contribution rate to be adopted is a policy-determined parameter. In the choice of an appropriate contribution rate, an additional consideration is to have different rates for different family sizes. Presumably, larger families (with more dependents) have greater requirements than smaller families for necessities other than shelter, such as clothing and food. Thus, smaller families are better able to devote a greater share of their income to shelter.<sup>13</sup> Consequently, it seems appropriate that contribution rates should be inversely related to family sizes, i.e. smaller families have higher contribution rates than larger families.

An Illustration: The ensuing example serves to illustrate the mechanics of the Housing Allowance Scheme. (The algebraic equations of the Scheme are formally presented in Appendix C). Assume that the annual cost of basic accommodation or adequate

housing for a family of two is \$1,200. Assume that the economic welfare of this family, as measured by current family income, is \$3,000 a year. Assume further that the contribution rate for a family of two is 25%. The break-even income is therefore \$4,800 (i.e. cost of basic accommodation divided by the contribution rate). In other words, if the income of a family is greater than \$4,800, then the family is not eligible for housing allowance. Since the income of the family under consideration is lower than the break-even income, this family is eligible for allowance. The housing allowance (or the housing gap to be filled by the housing allowance) is the difference between the cost of basic accommodation and what the family might reasonably be expected to pay. Since the former is \$1,200 and the latter is \$750 (i.e. income multiplied by the contribution rate), the housing allowance to be received by the family is \$450.

## 2. The Scheme: Specifics

In the estimation of the transfer cost of the Housing Allowance Scheme, the following considerations have been taken into account:

- (1) The Scheme is intended to serve both eligible owners and eligible renters;
- (2) An eligible recipient unit is either an unattached individual<sup>14</sup> or a family<sup>15</sup> of various sizes (from 2 to 5+ persons);
- (3) The estimation is for the whole province of R.C. with no distinction between urban and rural situation;
- (4) The estimation is for the year of 1974;
- (5) The cost of basic accommodation by family size is derived from the 'shelter component' of the Social Assistance Act, which became effective in June 1974 (see discussion below). Separate estimations of transfer cost are made by varying this schedule of 'shelter component' by increases of 10% and 20%.
- (6) Family income<sup>16</sup> is adopted as the measure of economic welfare. Equity of residences, in the case of homeowners, is not included as a source of economic welfare.
- (7) Contribution rates by family size are arbitrarily chosen. In our estimation of total transfer cost, we have three Plans of the Housing Allowance Scheme with a different set of contribution rates for each Plan. Plan A has the highest contribution rates, while Plan C has lower contribution rates, with Plan B having a uniform set of contribution rates of 25%.

### 3. Data Sources

The cost of basic accommodation by family size is derived from the 'shelter component' of the Social Assistance Act which became effective in June 1974.<sup>17</sup> This is presented in Table 1. Social Assistance is a B.C. program with the objective of providing a substitute income sufficient to maintain a basic standard of living for those unable to provide for themselves through employment or other resources. The basic rates include a support component for basic needs and a shelter component. The shelter component includes the amount for both shelter and utilities. The Social Assistance program assists both eligible homeowners and eligible renters.

Table 1

Family Unit Size	Monthly Shelter Support Rates
(persons)	(\$)
1	75.0
2	120.0
3	135.0
4	150.0
5	160.0
6	170.0
7	180.0
8	190.0
9	200.0
10+	210.0

Source: *Social Assistance Act, Schedule A,  
"Social Assistance Rates".*

In our estimations of the transfer cost of a Housing Allowance Scheme, we have adopted the shelter support rates in Table 1 as the costs of basic accommodation (by family size) in 1974. Since the income data we use only have income by family size up to 5 persons and more, we take the average of the shelter support rates from family size of 5 to 10 and use this average as the cost of basic accommodation for families of 5 persons and more. Two separate estimations of transfer costs are also made with the assumption that the 'derived costs of basic accommodation' are increased by 10% and 20%. Table 2 presents the three sets of derived costs of basic accommodation.

Table 2  
Derived Costs of Basic Accommodation

Family Size	Cost of Basic Accommodation		
	Unadjusted	Adjusted By 10% Increase	Adjusted By 20% Increase
1	75	83	90
2	120	132	144
3	135	149	162
4	150	165	180
5+	185	204	222

Table 3 shows the contribution rates and the break-even incomes for the three Plans under the Housing Allowance Scheme on the basis of the cost of basic accommodation derived directly from the shelter support rates of the Social Assistance program. As it has already been indicated, Plan A has the highest set of contribution rates, while Plan C has lower contribution rates, with Plan B having a uniform set of contribution rates. The break-even incomes determine the eligibility of family units for a housing allowance. For example, under Plan A, if a family of two has income over \$4,800, it will not be eligible for a housing allowance.

Data on income distribution by family size is obtained from Statistics Canada.<sup>18</sup> Data on incomes received in 1973 is the most recent available source of information. Even though our estimations of transfer costs are for the year of 1974, the use of 1973 income data will not severely distort our estimations. In effect, we are assuming that B.C.'s income distribution (and the number of families and unattached individuals) in 1974 was the same as that in 1973.

#### 4. The Transfer Costs of the Housing Allowance Scheme

Table 4 presents the total transfer costs and the number of eligible recipients of the three Plans on the basis of unadjusted cost of basic accommodation. It is interesting to note that under all three Plans, a greater proportion of total transfer costs goes to families than to unattached individuals, while the proportion of eligible family units to total units is higher in the case of unattached individuals than in the case of families.

Table 5 presents the total transfer costs of the three Plans with the adjusted and the unadjusted cost of basic accommodation. Estimates of transfer costs range from the lowest estimate of \$70 million to the highest estimate of \$175 million.

TABLE 3

Cost of Basic Accommodation, Contribution Rates & Break-Even Incomes by Family Size,  
Housing Allowance Scheme

Family Size	Cost of basic Accommodation: Unadjusted		PLAN A		PLAN B		PLAN C	
	Monthly (\$)	Annually (\$)	Contribution Rates (%)	Break-Even Incomes (\$)	Contribution Rates (%)	Break-Even Incomes (\$)	Contribution Rates (%)	Break-Even Incomes (\$)
1	75	900	35	2,571	25	3,600	30	3,000
2	120	1,440	30	4,800	25	5,760	25	5,760
3	135	1,620	25	6,480	25	6,480	20	8,100
4	150	1,800	25	7,200	25	7,200	20	9,000
5+	185	2,220	25	8,880	25	8,880	20	11,100



Table 4

Transfer Costs and Eligible Recipients,  
Housing Allowance Scheme

	PLAN A		PLAN B		PLAN C	
	(thousands)	%	(thousands)	%	(thousands)	%
Transfer Costs to Families (\$)	44,736	64.3	53,470	55.4	68,785	67.1
Transfer Costs to Unattached Individuals (\$)	24,852	35.7	43,029	44.6	33,671	32.9
TOTAL TRANSFER COSTS	69,588	100.0	96,499	100.0	102,456	100.0
Number of Eligible Families	81		97		130	
% of Total Families Eligible		14.0		16.8		22.6
Number of Unattached Individuals Eligible	96		118		96	
% of Total Unattached Individuals Eligible		39.0		47.7		39.0

Table 5

Impact on Total Transfer Costs by Varying Cost of Basic Accommodation,  
Housing Allowance Scheme

Plans	Original Estimates	10% Increase in Cost of Basic Accommodation		20% Increase in Cost of Basic Accommodation	
		Total Transfer Costs	% Increase in Transfer Costs	Total Transfer Costs	% Increase in Transfer Costs
	\$(millions)	\$(millions)	%	\$(millions)	%
A	70	93	34	119	70
B	97	124	29	154	59
C	103	135	24	175	70

## 5. Incidence of Benefits

Tables A1, A2 and A3 in Appendix D show the incidence of the housing allowance benefits to eligible families and unattached individuals, with average amounts of benefits by size of family unit and by income. (These estimates of incidence of benefits for the three Plans are based on the unadjusted cost of basic accommodation only). The average annual benefit per family for the three Plans ranges from \$528 to \$552, while in the case of unattached individuals from \$259 to \$362. These average figures of course obscure the magnitude of benefits to beneficiaries in the lower income classes. The following Table summarizes the maximum annual benefits (received by all those in the lowest income class of less than \$2,000) under the three Plans.

Table 6  
Maximum Annual Benefits

Family Size	Plan A	Plan B	Plan C
	\$	\$	\$
1	725	774	749
2	1,140	1,190	1,190
3	1,370	1,370	1,420
4	1,550	1,550	1,600
5+	1,970	1,970	2,020
Average for Families	1,339	1,364	1,389

Source: Tables A2 and A3 in Appendix D and calculations by author.

It should also be noted, from Tables A2 and A3, that more than 50% of the total transfer to eligible families benefits families with incomes less than \$4,000; and that more than 50% of the total transfer cost to eligible unattached individuals benefits unattached individuals with incomes less than \$1,500.

As far as the percentage shares of recipients by tenure are concerned, there are more eligible owners than renters in the case of families, but more eligible renters than owners in the case of unattached individuals. (See Tables A1 and A3 in Appendix D).

#### D. The Walker Income Supplement Scheme: Program Costs

##### 1. The Scheme

The details of the Walker Income Supplement Scheme are fully described in the Institute's earlier study, Rent Control - A Popular Paradox.<sup>19</sup> Here we will only point out the main features of the Walker Income Supplement Scheme and compare this Scheme with the Housing Allowance Scheme.

The Walker Income Supplement Scheme is basically a version of the concept of guaranteed annual income. While the Housing Allowance Scheme attempts to fill the 'housing gap', the Walker Income Supplement Scheme attempts to fill the 'poverty gap' -- a measure of how much the income of families and individuals falling below the poverty line would have to be increased in order to bring them up to the poverty line. While the poverty line (i.e. a measure of the minimum annual income a family or individual must receive if he is to be considered non-poor) in a lot of poverty research is established by examining a minimum basket of necessities of life (food, clothing, shelter, etc.), the poverty line in the Walker Scheme (or 'target income' in Walker's terminology) is indirectly established by considering the cost of basic accommodation or shelter only. If the target shelter-to-income ratio is 25%, the Walker Scheme implies that a family or individual must spend 25% of the target income on basic accommodation while the remaining 75% is to be devoted to other basic necessities of life. The difference between target income (or the poverty line) and actual income constitutes the income supplement necessary to close the poverty gap. In other words, the Housing Allowance Scheme guarantees a level of consumption of basic accommodation, while the Walker Income Supplement Scheme guarantees a level of income determined indirectly from the cost of basic accommodation.

The earlier example we used to illustrate the Housing Allowance Scheme can be used to illustrate the Walker Income Supplement Scheme. The assumptions of the earlier example for a family of two are: annual cost of basic accommodation is \$1,200; family income is \$3,000; and target shelter-to-income ratio is 25%. The guaranteed level of income is therefore \$4,800 (i.e. cost of basic accommodation divided by the target shelter-to-income ratio). The income supplement to the family of two is the difference between the guaranteed level of income (\$4,800) and actual family income (\$3,000) and this is equal to \$1,800. In the earlier example, the amount of the housing allowance is determined to be \$450, which is only 25% of the income supplement determined here. This illustrates the fact that the Housing Allowance Scheme only guarantees basic accommodation, while the Walker Income Supplement Scheme guarantees other basic necessities of life besides basic accommodation.

Table 7

Impact on Total Transfer Costs by Varying Cost of Basic Accommodation,  
Housing Allowance Scheme

Plans	Estimates with Unadjusted Cost of Basic Accommodation	10% Increase in Cost of Basic Accommodation		20% Increase in Cost of Basic Accommodation	
		Total Transfer Costs	% Increase in Transfer Costs	Total Transfer Costs	% Increase in Transfer Costs
	\$(millions)	\$(millions)	%	\$(millions)	%
A	237	316	33	403	70
B	386	497	29	615	59
C	428	568	33	740	73

## 2. Program Costs

Table 7 presents the estimations of the transfer costs of the Walker Income Supplement Scheme. Similar to the estimations of the Housing Allowance Scheme, three different sets of target shelter-to-income ratios (or contribution rates) and three different sets of derived costs of basic accommodation are used. The estimations of the transfer cost range from the lowest estimation of \$237 million to the highest estimation of \$740 million.

### E. Public Expenditure Related to Shelter in B.C.

In this section, we will juxtapose our estimated transfer cost of the Housing Allowance Scheme with the estimated public expenditure related to shelter in B.C. for the year of 1974. The questions to be answered are: (1) How does the estimated transfer cost of the Scheme stand in relation to the total transfer costs related to shelter delivered through the various public programs existing in 1974? (2) What existing public programs related to shelter can be replaced by the Scheme in order to better integrate the existing system of delivering shelter assistance? Would the Scheme require net additional budgetary resources?

Table 8 presents the estimated public expenditure related to shelter in B.C. for the year of 1974. It should be noted that the figures in Table 8 are very crude estimates, given the rather incomplete (and frequently bewildering) information on public expenditures. Nevertheless, these figures do indicate the general magnitude of public expenditures related to shelter. In 1974, a total of \$366 million was spent on programs related to shelter, of which \$281 million came from the provincial coffers. Our earlier estimates of the transfer cost of the Housing Allowance Scheme range from the lowest estimate of \$70 million to the highest estimate of \$175 million. Thus, it would seem that the transfer cost of the Housing Allowance Scheme is not out of line with the budgetary resources of the provincial government, especially when the Housing Allowance Scheme can conceivably replace some of the existing programs related to shelter.

Table 8 shows that expenditures in the income support programs and programs that deliver grants and credits were in the order of \$300 million of which \$220 million came from the provincial coffers -- and these two figures are even higher than our highest estimate of the transfer cost of the Housing Allowance Scheme (i.e. \$175 million). Since the Housing Allowance Scheme serves the same basic functions as these existing programs, the latter programs can be replaced by the Housing Allowance Scheme. By replacing these existing programs with the Housing Allowance Scheme there is the added advantage of preventing the leakages of benefits (especially with the Homeowners Grants), a better integration of the mechanism of delivering shelter assistance, and non-discriminatory treatment

TABLE 8  
Public Expenditure Related to Shelter  
in B.C., 1974

(in \$ million)

	<u>Total</u>	<u>Provincial</u>	<u>Federal</u>
<b>A. <u>Grants and Credits</u></b>			
1. Homeowners Grants	107.0	107.0	
2. School Tax Removal & Resource Grants	25.0	25.0	
3. Renter's Tax Credits	12.0	12.0	
<b>Total</b>	<b>144.0</b>	<b>144.0</b>	
<b>B. <u>Income Support Programs</u></b>			
1. Social Assistance-Basic	71.3	35.7	35.7
2. Social Assistance-Overages	7.2	3.6	3.6
3. OAS/GIS/Mincome	76.0	38.0	38.0
<b>Total</b>	<b>154.5</b>	<b>77.3</b>	<b>77.3</b>
<b>C. <u>Others</u></b>			
1. Home Acquisition Program: Interest Subsidies & Grants	10.0	10.0	
2. Department of Housing			
- Grants in Aid, Elderly Citizen Homes	8.6	8.6	
- Grants in Aid, Special Care Homes	2.0	2.0	
- Housing and Development	38.8	38.8	
3. CMHC Cash Subsidies			
- Public Housing	3.3		3.3
- Assisted Home Ownership	0.4		0.4
- Forgiveness on Sewage Treatment Loans	4.1		4.1
	<b>67.2</b>	<b>59.4</b>	<b>7.8</b>
<b>TOTAL</b>	<b>365.7</b>	<b>280.7</b>	<b>85.1</b>

### Sources

A 1-3 : Runge Report, p. 28. These amounts were for the fiscal year ending March 31, 1975. Adjustments of these amounts on a calendar year basis have not been made.

- B 1-2 : Runge Report, pp. 215-16. The cost-sharing ratio for the two levels of government is assumed to be 50/50.
- B 3 : Runge Report, p. 208. The cost-sharing ratio for the two levels of government is assumed to be 50/50.
- C 1 : Runge Report, p. 9. This amount was for the fiscal year ending March 31, 1975. Adjustment of this amount on a calendar year basis has not been made.
- C 2 : Estimates of Revenue and Expenditure, Province of B.C., (fiscal year ending March 31, 1975), expenditure estimates of the Department of Housing, N85-6. Adjustments of these amounts on a calendar year basis are made by taking 3/4 of the estimated expenditure for the fiscal year ending March 31, 1974 and 1/4 of that of the following year.
- C 3 : Canadian Housing Statistics, C.M.H.C., (1974), Tables 63 and 66.

of owners and renters. Since the Homeowners Grants are not related to the income of the recipients, the leakage of benefits to those who are not in need of such assistance is expected to be significant. By assisting homeowners and renters under two different programs (the former through Homeowners Grants and the latter through Renter's Tax Credits) with different criteria of eligibility, it is unlikely that homeowners and renters would be treated alike -- especially when Homeowners Grants are not related to the ability-to-pay of potential recipients. In the case of the Housing Allowance Scheme, not only does it treat homeowners and renters alike but it is better able to fulfill the various considerations (discussed in Chapter IV) in the design of a delivery mechanism that aims at ameliorating the maldistribution of housing consumption.



## Notes

1. For the discussion of income supplementation in the forms of either a guaranteed annual income or negative income tax, see Milton Friedman, Capitalism and Freedom, (Chicago: University of Chicago Press, 1962); James Tobin, 'Raising the Incomes of the Poor' in Kermit Gordon (ed.), Agenda for the Nation, (Washington D.C.: The Brookings Institution, 1968), pp. 77-116; Christopher Green, Negative Taxes and the Poverty Problem, (Washington D.C.: The Brookings Institution 1967); Colin J. Hindle, 'Negative Income Taxes and the Poverty Problem in Ontario', Canadian Tax Journal, Vol. 19, no. 2, (March-April 1971); and Report of the Special Senate Committee, Poverty in Canada, (Ottawa: Information Canada, 1971).
2. A.W. Johnson, 'Canada's Social Security Review 1973-75: The Central Issues', Canadian Public Policy, Vol. I, no. 4, (Autumn, 1975), pp. 456-7.
3. In the U.S., the difficulties of the final adoption of a guaranteed income program under the Nixon Administration were described in Daniel P. Moynihan, The Politics of a Guaranteed Income, (New York: Random House, Inc., 1973).
4. For a discussion of the events leading to The Social Security Review of 1975, see Johnson, 'Canada's Social Security Review', pp. 456-72.
5. John Vanderkamp, 'Income Security: Introduction', Canadian Public Policy, Vol. I, no. 4, (Autumn, 1975), p. 449.
6. The techniques of estimations follow closely a study by John Heinberg, The Transfer Cost of a Housing Allowance: Conceptual Issues and Benefit Patterns, (Washington D.C.: The Urban Institute, 1971).
7. Michael A. Walker, 'An Income Supplement Program' in Rent Control - A Popular Paradox, F.A. Hayek et al., (Vancouver: the Fraser Institute, 1975), pp. 201-212.
8. See Heinberg, Transfer Cost of a Housing Allowance pp. 45.
9. Walker, 'Income Supplement Program', p. 207.
10. Heinberg, Transfer Cost of a Housing Allowance, pp. 12-13.
11. See James S. Duesenberry, Income, Saving and the Theory of Consumer Behavior, (Cambridge, Mass.: Harvard University Press, 1949); Milton Friedman, A Theory of the Consumption

Function, (Princeton, N.J.: Princeton University Press for NBER, 1957); and Burton A. Weisbrod and W. Lee Hansen, 'An Income - Net Worth Approach to Measuring Economic Welfare', American Economic Review, Vol. 58, (December 1968), pp. 1315-29.

12. Heinberg, Transfer Cost of a Housing Allowance, p. 16.
13. *Ibid.*, p. 34.
14. An unattached individual is a person living by himself or rooming in a household where he is not related to other household members. An unattached individual is treated as an economic family unit by himself.
15. A family is a group of individuals sharing a common dwelling unit and related by blood, marriage or adoption. Thus, all relatives living together are considered to comprise one family whatever the degree of family relationship. Family size refers to the total number of persons in the family, including both adults and children.
16. Family income includes wages and salaries, net income from self-employment, investment income and government transfer payments.
17. Social Assistance Act, R.S.B.C. 1961, c. 360.
18. Statistics Canada, Income Distributions by Size in Canada, 1973, Cat. 13-207.
19. F.A. Hayek et al., Rent Control - A Popular Paradox, (Vancouver: the Fraser Institute, 1975).

## APPENDIX C

### HOUSING ALLOWANCE AND INCOME SUPPLEMENT MODELS

#### A. Definition of Variables

$C_i$	=	annual cost of basic accommodation by family size
$X_i$	=	contribution rates by family size
$Y_i$	=	break-even income by family size in the case of a Housing Allowance Scheme; target income in the case of an Income Supplement Scheme.
$I_{ij}$	=	actual income by family size and by income classes. In each income class, the mid-point is taken as the actual income.
$S_{ij}$	=	income supplement at each income class by family size
$H_{ij}$	=	housing allowance at each income class by family size
$R_{ij}$	=	shelter expenditure each recipient unit (i.e. family and unattached individual) might reasonably be expected to pay
$N_{ij}$	=	number of eligible families/unattached individuals at each income class by family size
TS	=	total transfer cost of an Income Supplement Scheme
TH	=	total transfer cost of a Housing Allowance Scheme
$i$	=	family size where $i = 1, 2, \dots, 5 +$
$j$	=	income classes

## B. Housing Allowance Scheme

The break-even incomes for families of various sizes are determined by:

$$Y_i = C_i / X_i \quad (1)$$

The shelter expenditure each recipient unit (i.e. a family or an unattached individual might reasonably be expected to pay is:

$$R_{ij} = I_{ij} X_i \quad (2)$$

The housing allowance at each income class by each family size is the difference between the cost of basic accommodation and  $R_{ij}$ :

$$\begin{aligned} H_{ij} &= C_i - R_{ij} \\ &= C_i - I_{ij} X_i \end{aligned} \quad (3)$$

where  $H_{ij} = 0$  if  $I_{ij} \geq Y_i$

The total transfer cost of a Housing Allowance Scheme is the sum of the product of the number eligible recipient units and housing allowances at each income class for each type of recipient unit:

$$TH = \sum \sum N_{ij} H_{ij} \quad (4)$$

## C. The Walker Income Supplement Scheme<sup>1</sup>

The target incomes based on the target contribution rates by family size are determined by:

$$Y_i = C_i / X_i \quad (5)$$

---

<sup>1</sup>Michael A. Walker, "An Income Supplement Program" in Rent Control - A Popular Paradox, (Vancouver; The Fraser Institute, 1975), pp. 201-212.

The income supplement at each income class by each family size is the difference between the guaranteed level of income and actual income:

$$\begin{aligned} S_{ij} &= Y_i - I_{ij} \\ &= C_i/X_i - I_{ij} \end{aligned} \quad (6)$$

where 
$$S_{ij} = 0 \quad \text{if} \quad I_{ij} \geq Y_i$$

The total transfer cost of the Walker Income Supplement Scheme is the sum of the product of the number of eligible recipient units and income supplements at each income class for each type of recipient unit:

$$TS = \sum \sum N_{ij} S_{ij} \quad (7)$$

D. The Relationship between the Housing Allowance Scheme and the Walker Income Supplement Scheme

From Eq. (3), the housing allowance at each income class for each type of recipient unit is:

$$H_{ij} = C_i - I_{ij} X_i$$

From Eq. (6), the income supplement at each income class for each type of recipient unit is:

$$S_{ij} = C_i/X_i - I_{ij}$$

The relationship between  $H_{ij}$  and  $S_{ij}$  is as follows:

$$S_{ij} X_i = H_{ij} \quad (8)$$

as:

$$\begin{aligned} S_{ij} X_i &= (C_i/X_i - I_{ij}) X_i \\ &= C_i - I_{ij} X_i \\ &= H_{ij} \end{aligned}$$

The relationship of Eq. (8) can be interpreted as follows: since a Housing Allowance Scheme only guarantees a basic level of expenditure in accommodation, while the Income Supplement Scheme basically guarantees a certain level of income, thus  $H_{ij}$  is only a proportion of  $S_{ij}$  depending on the target shelter cost-to-income ratio or  $i_j$  the contribution rates (i.e.  $X_i$ ).

## **APPENDIX D**

### **TABLES ON THE ESTIMATIONS OF THE INCIDENCE OF BENEFITS UNDER THE HOUSING ALLOWANCE SCHEME**





Table A1

Percentage Shares of Recipients and Transfer Costs, Housing Allowance Scheme  
by Characteristics of Families

Family Character- istics	Plan A			Plan B			Plan C		
	Families (%)	Transfer Cost (%)	Average Benefit/ Family (\$)	Families (%)	Transfer Cost (%)	Average Benefit/ Family (\$)	Families (%)	Transfer Cost (%)	Average Benefit/ Family (\$)
By Size of Family									
2 - person	56.1	43.5	428	63.4	52.7	458	47.2	40.9	458
3 -	23.1	18.7	775	11.1	15.7	775	15.4	17.6	601
4 -	19.1	15.5	624	11.4	13.0	624	15.0	15.8	558
5+ person	27.1	22.4	736	14.0	18.7	736	22.5	25.7	603
	100.0	100.0		100.0	100.0		100.0	100.0	
By Tenure:									
Owners	63	NA	NA	63.2	NA	NA	65.2	NA	NA
Renters	37	NA	NA	36.8	NA	NA	34.8	NA	NA
TOTALS	# 000's	\$ 000's	552	# 000's	\$ 000's	551	# 000's	\$ 000's	528
	81	44,736		97	53,470		130	68,785	

Table A2

Percentage Shares of Recipients and Transfer Costs, Housing Allowance Scheme  
by Income Level of Families

Family Money Income	Plan A			Plan B			Plan C		
	Families	Transfer Cost	Average Benefit/ Family	Families	Transfer Cost	Average Benefit/ Family	Families	Transfer Cost	Average Benefit/ Family
	(%)	(%)	(\$)	(%)	(%)	(\$)	(%)	(%)	(\$)
< 2000	14.4	35.0	1,339	12.1	30.0	1,364	9.0	23.6	1,389
2 - 3	13.6	20.0	796	11.3	18.5	699	8.4	14.7	921
3 - 4	19.1	17.5	503	16.0	18.5	639	11.9	15.3	678
4 - 5	30.5	13.0	234	25.5	18.6	402	18.9	16.5	459
5 - 6	8.4	8.0	521	23.5	8.6	201	17.5	9.4	282
6 - 7	7.0	4.2	330	5.9	3.5	330	7.4	7.2	519
7 - 8	4.0	2.4	341	3.3	2.0	341	8.4	5.3	334
8 - 9	3.0	0.5	94	2.5	0.4	94	6.6	2.9	229
9 - 10							6.3	3.8	319
10 - 11							5.6	1.3	119
TOTALS	# 000's	\$ 000's	552	# 000's	\$ 000's	551	# 000's	\$ 000's	528
	81	44,736		97	53,470		130	68,785	

Table A3

Percentage Shares of Recipients and Transfer Costs, Housing Allowance Scheme  
by Tenure and by Income Level of Unattached Individuals

	Plan A			Plan B			Plan C		
	Unattached Individuals (%)	Transfer Cost (%)	Average Benefit/ Individual (\$)	Unattached Individuals (%)	Transfer Cost (%)	Average Benefit/ Individual (\$)	Unattached Individuals (%)	Transfer Cost (%)	Average Benefit/ Individual (\$)
By Income:									
< 1000	19.4	54.4	725	15.7	33.6	774	19.4	41.6	749
1000-1500	13.5	24.1	460	10.9	17.7	585	13.5	20.2	523
1500-2000	14.8	16.4	287	12.0	15.2	462	14.8	15.8	375
2000-3000	52.3	5.1	25	42.4	32.2	275	52.3	22.4	150
3000-4000				19.1	1.3	25			
	100.0	100.0		100.0	100.0		100.0	100.0	
By Tenure:									
Owners	49.1	NA	NA	46.7	NA	NA	49.1	NA	NA
Renters	50.9	NA	NA	53.3	NA	NA	50.9	NA	NA
TOTALS	# 000's	\$ 000's		# 000's	\$ 000's		# 000's	\$ 000's	
	96	24,852		118	43,029		96	33,671	