AN ECONOMIC EVALUATION OF RENT CONTROL
AND OTHER RENTAL HOUSING MARKET POLICIES
IN AUSTRALIA

by

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A thesis submitted for the degree of
Doctor of Philosophy
of the Australian National University

March 1981
In compliance with the requirements relating to Admission to Examination, and Submission of Theses, for the Degree of Doctor of Philosophy of the Australian National University, it is affirmed that, unless otherwise stated, the work that follows is my own.

[Signature]
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ACKNOWLEDGEMENTS

I am grateful to five persons who have been helpful at various stages of my work. They are Peter Swan (my supervisor), George Fane (who supervised in Peter Swan's absence), Ted Sieper, Tom Valentine and Neil Vousden.

In addition, there are some more specific debts of gratitude. Chapter 3 has been enhanced by discussions with Richard Cornes whose contribution is gratefully acknowledged. Part of the work in this chapter is based on a joint paper with Richard Cornes. Chapter 4 has benefited from discussions with Bruce Pollock, Barry Reece and Paul Volker. Myrna Antonio is thanked for her help with the regressions. Chapter 6 was improved by comments from Graeme Bethune, Owen Stanley and Bob Webster. Chapter 8 embodies a debt to Ross Parish and Chapter 10 was improved by discussions with Geoffrey Brennan. Participants at several seminars and conference sessions are thanked, as are some anonymous referees for the Economic Record, Australian Journal of Management, and Australian Economic Papers.

While working as a staff candidate has not been easy, the Australian National University's Faculty of Economics has been a stimulating environment in which to undertake a project of this kind. Monash University's Department of Economics generously allowed me a room while I was writing up the original version of the thesis in January 1980. This is also acknowledged with gratitude.

Finally, I would like to thank Elizabeth Kinloch for the preparation of the original manuscript and Heather Hamilton for preparation of the revision.
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This thesis is a study of the economic effects of rent control and other rental housing market policies.

The analysis is conducted in a neoclassical framework, although some peculiarities of the housing market are taken into account.

The case for government intervention is considered from both efficiency and equity points of view. The case for intervention on efficiency grounds is found to be very weak. If government has a redistributive objective, housing is one medium by which transfers can be effected.

Rent control is the alternative policy which receives most attention. No valid case for rent control exists and rent control is found to be inferior to properly implemented policies of housing allowances and public housing.

The apparent objective of rental housing market policies is the bestowal of tenant benefits at the most favourable ratio of benefits to costs. Considerable attention is given to the conceptualization and measurement of tenant benefits from various policies.

Another matter which receives considerable attention is the issue of supply response. Various methods of tackling this question are reviewed and time-series analysis of Australian Capital Territory data is undertaken.

The history of rent control in Australia is reviewed, beginning with New South Wales Fair Rents Act of 1915. Two rent control case studies are reported—Canberra, 1973-1976 and post-war New South Wales. The emphases of the two case studies differ.

Rental market regulation, a comprehensive form of intervention in the landlord-tenant contractual arrangement, is described and analysed, with special reference to Australian instances.
CHAPTER 1

INTRODUCTION

This thesis is concerned with analysing the economic implications of rent control. The enquiry has embraced several major concerns. Firstly, some conception of the operation of the rental housing market has had to be developed. Broadly speaking, the analytical approach has been "neoclassical" in character. However they might be disguised, demand and supply form the basis of all the analysis. These immensely powerful tools are found to be very useful in analysing the rental housing market. Secondly, the effects of rental housing market policies (in particular, rent control) have been explored in the context of the neoclassical type of model. Thirdly, actual cases have been investigated in order to test the predictions of the models. Case studies are drawn from Australia's vast and ongoing experiences with various kinds of rent control. A fourth concern is with the broad question of the government's role in the rental housing market. Are there efficiency and/or equity reasons for the government intervening in rental housing? Finally, if the government is intervening on the basis of equity considerations, in what manner should it intervene given certain efficiency criteria? How does rent control rank against alternative policies like housing allowances and public housing provision?

The major thesis is that rent control is a costly (inefficient) redistributive device, whether it is compared with other rental market policies or with more general means of redistributing income. The consideration of theoretical and empirical matters leads inescapably to this conclusion.
It may be protested that this is not a particularly novel thesis. However, this contention can be countered in several ways. Perhaps the most striking defence is the observation that rent control, in the guise of "rental market regulation," is making a significant come-back both in Australia and overseas. Furthermore, there are still advocates of old-fashioned rent control to be found. An objective assessment of the effects of rent controls may help prevent the adoption of this type of policy. It is contended that this thesis represents such an objective assessment.

Hopefully, the thesis is not devoid of other contributions. In Chapter 2 the analytical literature on rent control is reviewed and attempts have been made to evaluate, elaborate and extend the analysis of others. Chapter 3 explores the conceptualization and measurement of tenant benefits, extending a basic procedure to new situations and providing an alternative exposition of consumer's surplus where quantity constraints operate. Some of the material in that chapter is based on work done jointly with a colleague, Richard Cornes. Chapter 4 grapples with the difficult but crucial question of supply response in the rental housing market. The chapter reviews the Australian and overseas literature on supply response and presents some results of regression analysis of Australian Capital Territory data. The fifth chapter summarizes the history of rent control legislation in the Australian States and Territories. In addition, there is a review of the attitudes of Australian economists towards rent control. This chapter acts as a background to three case studies of Australian experiences with "rent control" legislation. The first of these, Chapter 6, looks at the situation created by rent control in post-war New South Wales. The major concern is with conceptualizing and measuring the value of a tenancy. The exploration of this question required grappling with some very interesting puzzles. Chapter 7 is an analysis of the effects of rent control in the Australian Capital Territory over the period 1973-1976. The major
analytical problems encountered were the estimation of market rent and the estimation of tenant benefits. Hopefully the solutions found have some meritorious aspects. Chapter 8 examines the whole question of "rental market regulation", a watered-down version of rent control which is proving popular in this era of "consumer protection". Different schemes of regulation are described and their likely effects on the rental housing market are suggested. A little empirical information is brought to bear on the question. Chapters 9 and 10 are the most policy-oriented in the thesis. Largely on the basis of the preceding material, these chapters examine the case for and against rent control and discuss alternative policies (like housing allowances and public housing). In line with the overall thesis, rent control does not emerge as a policy which can be recommended. Chapter 11 summarizes some of the more important findings and sets out the thesis in more detail.

1. Rental Market Analysis

The whole analysis is based on a market where housing services are demanded and supplied. In the rental housing market, housing services are traded on a lease basis. The major difference between rental and owner-occupancy is one of property rights. In the rental market, landlords transfer certain property rights to tenants via a contractual arrangement. This contract involves payment of a rent by the tenant and may involve the tenant agreeing to meet other obligations. In return the tenant enjoys certain rights to the use of the landlord's property.

Demand for housing services will be related to a number of factors other than rent. These factors will include the prices of other ways
of procuring housing services - namely owner-occupancy and possibly renting from a public authority. The level of income will also influence the demand for rental housing services. Other factors like, for example, attitudes to marriage, will also be important. In Chapter 2 the demand curve features prominently in the discussion of rent control models. As portrayed there, the demand curve has all the usual properties. In Chapter 3 we analyse the reaction of the consumer to various rental market housing policies. This is in order to concentrate on the conceptualization of tenant benefits. However it doubles as a means of understanding factors underlying the demand for rental housing (assuming the individual confines himself to the rental market).

There are some special factors in relation to demand for rental housing. One of these has already been alluded to - services are traded in this market, not stock. This aspect is easily handled. However, a second difference is a bit more difficult to handle. Demand for housing is influenced by high transaction costs. In the case of rental housing we can concentrate on moving costs. The existence of positive moving costs will mean that some adjustments that would have occurred otherwise will not take place. The higher are these costs, the more adjustments will be deferred. Moving costs will comprise physical costs of moving plus the "psychic" costs attached to a move. Moving costs will be important in some circumstances (e.g. in specifying the housing demand function and in analysing the effects of housing allowances) but are probably not all that important in dealing with rent control. They must always be kept in mind.

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1 In a paper on the response of U.S. public housing tenants to housing allowances, Murray (1977) sees a "potential hazard" in emigration from Government housing to private housing due to the availability of housing allowances. Not only is it difficult to see this as a "hazard", but also Murray neglects to consider the impact of moving costs on the extent of emigration. This is an important omission.

2 For a rather curious analysis of the effects of moving costs see Robinson (1979, pp.7-9).
Another special factor relates to location. Urban economists have made much of the idea of a "rent profile" where observed rents decline with distance from the city centre. Travelling times (and costs) increase with distance from the city so that rents in inner-urban areas can be bid up as the city expands. This phenomenon has implications for the supply relationship so will be discussed in relation to that issue (Chapter 4).

Finally, some might argue that the consumption of housing is "special". Shelter is a fundamental human requirement, more akin to "need" than "demand". Stretton (1974) seems to be an adherent to this point of view. We will return to this question in the next section of this chapter.

On the supply side there are also some special factors. The amount of housing services supplied can be altered by modifying existing stock and by changing the amount of stock. It is crucial to appreciate that new building is not the only source of increased housing services. However, the degree to which housing services can be increased in the short-run is severely limited. New building in any one year may only represent at most about 3 or 4 per cent of the total stock. As supply response in the short-run is very limited, this must be reflected in the way the rental housing market is modelled. It must also be recognized that as we are only concerned with rental housing there is another source of rental housing - conversion from owner-occupancy.

Capital gains are also fundamental to the consideration of supply. The landlord's rate of return has two components - a rent received from the tenant plus the change in the value of his property. One way of interpreting a "supply curve" relating housing services and rent would be to assume a constancy of changes in capital value. A change in expectations would shift the supply curve, as would a change in factor prices. A fuller discussion is postponed until Chapter 4. Here we have
Finally, something must be said about another favourite idea of urban economists - "filtering". Filtering has been defined as a change in the real value of an existing dwelling unit. Dwellings can filter up or down. Such movements are associated with changes in the amount of housing services yielded by a dwelling. The importance of filtering has arisen because some economists have seen it as a "natural" means of improving the housing standards of the poor. Housing purchased by the more wealthy would eventually filter down to the poor. The government would not have to make special efforts to provide higher quality housing for the poor. The role of filtering is a controversial issue.

2. The Role of Government in the Rental Housing Market

Traditionally economics has drawn a sharp distinction between "efficiency" and "equity" considerations. Economists have been far more at home with efficiency considerations than with those relating to distribution. The market has been given a hallowed place but certain market failures have been recognized. Market failure presents a prima facie case for government intervention. Identification of a market failure is the usual starting point to find a role for government.

The distribution of income has been seen as a matter for social ("collective") decision. Once decided, the economist has a role in determining the most efficient means of bringing about the desired distribution of income. The role is again one of positive economic analysis. There is no reason why the economist's opinion about income distribution is any more authoritative than that of anyone else.

1 As with so many aspects of the approach taken in this thesis, Olsen (1969a) is a good reference on "filtering".
Economists who make normative pronouncements about government's role in relation to distribution should be treated with some suspicion.

More recently, two attempts have been made to marry equity and efficiency. One such attempt has revolved around the idea of "merit goods". The other, associated with Hochman and Rodgers (1969), has placed equity in the efficiency framework. The concept of "Pareto-optimal redistribution" has sustained a considerable debate and may constitute an argument for redistribution.

We will initially look for a case for government intervention due to market failure. The concept of market failure is discussed by Bator (1958) and Arrow (1970). It arises where the competitive market system operates but fails to achieve Pareto-efficiency and where the competitive system simply cannot operate. The usual categories of market failure are public goods, externalities, natural monopoly and information problems. Let us examine each of these in the context of the rental housing market.

Natural monopoly is basically associated with increasing returns (decreasing costs). Proponents of intervention in the rental housing market have never put up this case for action. To the contrary, costs have usually been seen as increasing, very rapidly.1 This is the "supply pessimism" theme running through so much of the literature. Because of inelastic supply, landlords are seen as possessing quasi-monopoly power (see Drane (1961a) and Whitman (1925)). Increases in demand will lead to landlords earning "monopoly profits" (although most economists would prefer the term, "quasi-rents"), unless rent control is imposed. Subsidies to tenants are not recommended as they result

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1 Some writers assert that both supply and demand are very inelastic where rental housing is concerned. Taken to an extreme, this implies there is no market. However, more often this belief is used to prop up an argument that rent control is not all that bad or that housing allowances are useless. The "inelastic supply and demand school" seems to thrive in New Zealand - see Easton (1976) and Stephens (1976).
only in greater profits for landlords. This monopoly argument denies competitive market adjustment. Above-normal returns will attract new entry in the form of new building, structural conversion of existing dwellings, purchase of existing dwellings for purposes of rental and owner-occupiers making available part of their dwellings for renters. Only government intervention could impede such new entry. If this were done via severe building and planning regulations, existing landlords could be granted monopoly power via government fiat. At the very least these regulations will shift the supply curve to the left. New entry could, of course, also be impeded by rent control. As can be seen, "monopoly" problems in rental housing are a consequence of "government failure", not "market failure".

Another category of market failure relates to information deficiencies. The market's reaction to high search costs has been the advent of middle-men (estate agents, in particular). Estate agents bring together buyers and sellers of housing services in both rental and owner-occupancy markets. If information is privately supplied in insufficient amounts (that is, benefits of greater provision would exceed costs, at the margin), the government has a role in supplying information if the benefits of the intervention exceed the costs. A deficiency of information does not justify intervention such as rent control or public housing provision.

It is possible that there is an externality argument for government intervention in the rental housing market. Government housing provision is sometimes said to create beneficial externalities in addition to direct tenant benefits. De Salvo (1971) claims non-tenant benefits of two types arise. Firstly, the providers of the subsidy get satisfaction from seeing the recipients consume "standard" housing (whether the recei-

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1 More generally, local government building and planning regulations raise developers' costs, shifting the supply curve upwards. Only in extreme cases is development totally banned.
pients want to or not). Secondly there are "spillover effects,... [which]... encompass such things as elimination of blight and slums, mitigation of poverty, revival of downtown business areas of the central cities, achievement and/or maintenance of an adequate middle-income household component in the central city, etc." (p.179). Welfare housing proponents argue that total tenant and non-tenant benefits should be compared with programme cost in evaluating housing programmes. Non-tenant benefits are, of course, very difficult to quantify. Further, it is not clear that government housing is the most cost-effective way of achieving such benefits. Non-tenant benefits may arise due to the generation of consumption externalities. Without specifying an underlying theory of the political mechanism, it may be such that middle-class donors get utility from the herding of low-income recipients into segregated areas, away from middle-class suburbs. These non-tenant benefits might be measurable by determining how much providers are willing to pay purely to be able to segregate unwanted neighbours. It is not clear whether the other "non-tenant benefits" mentioned by De Salvo really are benefits. Public housing programmes often seem to actually create slums. (Witness the inner-Sydney and Melbourne high-rise developments.)

A policy like rent control clearly is associated with adverse externalities. Kiefer (1977) has examined the effect of rent control on housing deterioration and finds them undesirable (as would some casual empiricism). Deterioration of particular units leads to neighbourhood deterioration. However, Kiefer does praise the now-defunct Housing Allowance Experiment. This "has special merit because

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1 Robinson (1979) has considered the inter-relationship between owners' maintenance decisions in a "game-theoretic" context. He sees a requirement for "some form of intervention in the housing market to overcome or remove certain imperfections" (p.103). This argument for intervention (the externalities argument) is put quite independently of rent control considerations.
by concentrating the subsidy among poorer families who are the major consumers of older housing, maintenance is stimulated in older neighbourhoods which are most prone to rapid deterioration" (pp. 18-19).

To my knowledge no-one has attempted a "public good" argument for government intervention in the rental housing market. Some economists would, however, call an externality argument a "public good" argument but this is rather loose use of the term.

Where distributional value judgements are made to "justify" intervention in the rental housing market, very little more can be said. If given social objectives in relation to income distribution, the economist can point to the cost-effectiveness of alternative means of realizing these objectives.

Where redistribution is placed in an efficiency framework, positive economics comes to the fore. The questions of "merit wants", "Pareto-optimal redistribution" and "in-kind transfers" are treated at some length in Chapter 10. Consideration of these questions is not unrelated to the issue of "housing being special", to which we have already alluded. If a recipient's consumption of housing services enters a donor's utility function there may be a case for "in-kind" or "tied" transfers. But why is housing special in this sense? If it is because "shelter" is a basic human "need" for subsistence, then why stop there? Presumably food and clothing must also be in the same category of "basic level needs". If housing is "special" then it is not special in the usual (dictionary) meaning of that word.1

1 Browning (1975) points out that "in 1960 the poorest 20 per cent of all families in the United States devoted 72 per cent of their expenditures to food, housing and medical care alone ... [T]he quantitative advantage of even an ideal set of in-kind transfers over a cash transfer is likely to be slight simply because most of a cash transfer will be spent on ... external benefit producing goods" (p. 533, original italics).
This chapter reviews the bulk of the literature on rent control. Attention is confined to academic publications which are analytical in approach. The concern is with the positive economic analysis of the implications of rent (and eviction) controls. As such, we ignore all policy considerations which are dealt with in later chapters. Further, the empirical literature is not reviewed at this point. It too is held over to arise in ensuing chapters.

The approach is generally critical. Writings on the effects of rent control are put under considerable scrutiny and assessments of appropriateness are made. Of course, the "appropriateness" of a bit of analysis depends on the specific application. In this chapter we review the contents of the tool-kit. Choice of the actual tool is made when an application is carried out.

1. The Simplistic Textbook Approach

The usual textbook approach to rent control involves consideration of a totally partial-equilibrium model of the rental market. Homogeneous dwelling units, \( Q \) are traded in the market at a price per unit (or "rent") of \( R \). The supply of housing, \( S \), is a positive function of rent and demand for housing, \( D \), is negatively related to rent. An initial equilibrium situation is depicted in Figure 2.1 with quantity \( Q^* \) and rent \( R^* \) clearing the market.

The otherwise competitive market is now confronted with a rent control law which limits rents to \( \bar{R} \) per dwelling unit, where \( \bar{R} < R^* \). At \( \bar{R} \), \( Q^D \) dwelling units are demanded but only \( Q^S \) units are supplied. Therefore, as the story goes, there is an "excess demand" of \( Q^D - Q^S \) dwelling units. Under both the Marshallian and Walrasian market adjust-

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1 For several references on the "textbook" approach see the bibliography in Frankena (1975). Add to these Alchian and Allen (1969), Harrison (1977) and Le Grand and Robinson (1976), among others.
Per period price per dwelling (rent) $R$

Number of dwellings ($Q$)

Figure 2.1
ment assumptions there would be a tendency to restore the initial equilibrium. The market forces are thwarted by the rent control law.

The first prediction generated by this model is that the per period supply of rented dwellings falls from \( Q^* \) to \( Q^S \). There is a simultaneous increase in demand to \( Q^D \) and, as already discussed, there is an "excess demand".

The tenants of the remaining \( Q^S \) dwellings enjoy a reduced rent of \( \bar{R} \). There is a total transfer of "income" from landlords to tenants of \( Q^S(R^*-\bar{R}) \), which is graphically area \( R^*bc\bar{R} \).

It may be pointed out that there are "deadweight" or "social costs" associated with the law. The loss in "Marshallian" tenants' surplus is triangle \( adb \) and the similarly defined loss in landlords' surplus is \( bdc \).

Various other points may be made. For example, Alchian and Allen (1969) argue that "criteria [other than price] will be used for discriminating among claimants for the available good" (p.113). They draw the "connection between rent controls and manifestation of greater discrimination by personal characteristics" (p.114). Textbook writers may also have something to say about the "spill-over" of excess demand into uncontrolled markets. This aspect is taken up by Phelps Brown and Wiseman (1964), for example, who consider all the possible outlets of unsatisfied demand. Many writers take up the question of maintenance and argue that landlords will have an interest in the deterioration of controlled dwellings. Le Grand and Robinson (1976) argue that "[e]ven if they do not withdraw their property, landlords may choose to conserve their reduced profits by reducing their expenditures on maintenance and repair work" (p.92).

There are various shortcomings with the simple textbook story. For example, there is often no distinction between the short- and the
long-run - important dynamic considerations are ignored. Further, the implications of distinguishing between "dwelling units" and "housing services" are usually insufficiently drawn out. Yet another omission from the story is a close consideration of what "rent control" laws actually entail. They normally extend beyond controls on rents.

Most of the aspects of the problem have been treated in the more specialized literature. It is to these other considerations that we now turn. Before doing this we explore the definition of "rent control".

2. What is Rent Control?

It is too simplistic to talk only in terms of "rent control". In particular, controls on evictions must also be considered. Laws on rental housing may also contain other relevant provisions. For example there may be controls on security bonds. Another popular element in such laws are provisions relating to repairs and maintenance. Often there are anti-discrimination clauses. When considering the effects of such laws the whole package of provisions must be taken into account. This becomes especially important when analysing modern "regulatory" legal packages which attempt to affect virtually every element of the landlord-tenant contract.¹

Rent and eviction controls must go together if laws are to be "effective". If only rents are controlled, landlords may evict tenants, defeating the objective of the rent control. If evictions are controlled (to ensure "security of tenure") and rents are not, landlords can force out unwanted tenants by raising rents.

To show the importance of eviction controls we reconsider the simple textbook model with an additional constraint: eviction control

¹ The recent phenomenon of "rental market regulation" is considered in depth in Chapter 8.
is also imposed such that landlords are unable to evict any tenants from the initial $Q^*$ dwelling units. The supply curve now has a vertical section at $Q^*$ below $R^*$ (see Figure 2.2). The predictions now alter considerably as compared with the simple textbook model.

An "excess demand" is created which is, ceteris paribus, less than before. In Figure 2.2 it is $Q^D - Q^*$. There is no reduction in the number of dwellings traded as all initial dwellings are "locked in" by the eviction control. Being no diminution in the number of dwellings there are no deadweight losses according to the Marshallian measure. Measured in Hicksian terms there is a deadweight loss. The rent and eviction control law involves a straight transfer from landlords to tenants of $Q^* (R^* - R)$ (graphically, $R^* de R$), in addition to the "excess demand" at the controlled rent.

This serves as a reminder that analyses of "rent control" must take cognizance of the particular law being considered. Another instance where this is important is in relation to the control or otherwise of new leases. Positive predictions may be very sensitive to the pervasiveness of controls. This question is taken up in a later section of this chapter.

3. A Simple Dynamic Model - The "Lindbeck Model"

An obvious extension of the simple textbook model is the incorporation of some inter-temporal adjustment mechanism. This task was performed by Lindbeck (1967) who is perhaps best known, in regard to his rent control writings, for his statement that "[i]n many cases rent control appears to be the most efficient technique presently known to destroy a city - except for bombing" (Lindbeck 1971, p.39).

Lindbeck's model involves three conceptual time periods - "momentary", "short-run" and "long-run". For each time period there is a supply relationship. The momentary supply curve is vertical. No
FIGURE 2.2
adjustment is possible to a change in demand in the very short-run.\(^1\) Some response is possible in the short-run where we assume a positive but finite elasticity of dwelling supply with respect to rents. The long-run supply curve is perfectly elastic at the long-run rental price. The three supply curves are drawn in Figure 2.3 as \(S_M\), \(S_S\) and \(S_L\), respectively.

Suppose an initial long-run equilibrium at \(R_L\) and \(Q^*\) is disturbed by an upward shift in demand from \(D\) to \(D'\). The initial impact of the shift will be totally absorbed by a rise in rents to \(R_M\). The higher rent will induce a supply response according to \(S_S\) and rents will be bid down to \(R_S\). Quantity supplied will rise. A further response will occur in the next period (\(S_{S1}\) and \(R_{S1}\)) and in each ensuing period until a new long-run equilibrium is reached with \(R_L\) and \(Q^{*'}\).

As we will see in an ensuing chapter on rent control in the Australian Capital Territory, rent control which holds rents below short-run levels but above the long-run equilibrium, will serve to slow adjustment to long-run equilibrium. However, long-run equilibrium would still be reached. If rent is controlled below \(R_L\) the model predicts that the rental market will eventually disappear (unless landlords are restricted by controls on eviction).

4. Issues Relating to Maintenance

So far we have talked in terms of variants of a model where homogeneous dwelling units are leased. This is obviously unrealistic because (i) dwellings are heterogeneous, ranging from mansions to shacks, and (ii) the amount of services ceded by a dwelling is, to some extent, a variable. This leads us to want to think in terms of "housing service units". This concept has been discussed at length by Olsen

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\(^1\) Even if total supply of housing is totally inelastic in the short-run, an increase in demand for rental housing may be partly accommodated by owner-occupied housing being bid away from its occupants. This phenomenon is explored in Chapter 4.
FIGURE 2.3
(1969a) and is the most satisfying way of dealing with the problems raised by a heterogeneous capital stock of housing.\footnote{The idea of housing services seems to emanate from Muth (1969). Both Muth and Olsen explain the concept much better than could be attempted here.}

The amount of housing services supplied can be increased by either increasing the stock of housing or by increasing the amount of housing services produced from the existing stock. A reduction in housing services supplied can result from withdrawal of stock and/or failure to maintain existing stock. Writers such as Olsen (1969b), Moorhouse (1972) and Frankena (1975) have used the distinction between stock and services to provide valuable insights into the effects of rent control.

Rent control may be one of three broad types. Rent per dwelling may be controlled, irrespective of the amount of services it produces. This imposes a revenue constraint per dwelling but the landlord has some scope to raise the price per housing service unit. A second kind of rent control would limit the price per service unit. In this situation the rent controller would fully take into account enhancements or deteriorations in the dwelling being rented. A third kind of rent control might involve elements of both these. While the hybrid variety is probably the most commonly observed, we will confine attention to the two clear-cut cases. In doing so we will draw heavily on Frankena's article.

The model where price per housing service unit is controlled is quite straightforward and yields predictions very similar to those of the simple textbook model. Consider Figure 2.4 which depicts a typical firm producing rental housing (panel (a)) and the market situation (panel (b)). Controlling price per unit will mean that landlords will reduce the quantity of housing services produced by their dwellings. At the micro-level there is a decline from \( q^* \) to \( q \) while at the market...
level there is a decline from $Q^*$ to $Q^s$. The rent per dwelling will fall from $p^*q^*$ to $p^\bar{q}$. There will be excess demand for housing service units of $Q^D - Q^s$. There will be the usual transfer effect and efficiency costs.

The major difference with the textbook model is that the response is in terms of withdrawing dwellings and the deterioration of dwellings. Maintenance spending is allowed to lapse. In the long-run the rental market will disappear as loss-making landlords desert the market. We should make two points in relation to eviction control. Firstly, eviction control will not impede the reaction to the price control which takes the form of reducing the housing services generated by a particular dwelling. This is in contrast to the situation with the simple textbook model where the only adjustment possible is removal of dwellings. Secondly, eviction control will impede the long-run adjustment. Both these points seem to have been overlooked by Frankena.

The second Frankena model, the "revenue constraint model" is of more interest as it leads to different predictions about the effects of rent control.\(^1\) While housing services from a dwelling unit are variable, controlling rent from the dwelling presents the landlord with a rectangular hyperbolic revenue constraint. Reducing the quantity of housing services means that price per service unit can be increased. Consider Figure 2.5(a) and (b) which is the same as Figure 2.4 except for the omission of the controlled price per unit ($p$) and the addition of micro- and macro-revenue constraints. Imposition of the revenue constraint will have the following effects. Firstly, the quantity of housing services produced will fall, in aggregate from $Q^*$ to $Q$ and the price per unit will rise from $P^*$ to $P$. Secondly, there will be no "excess demand" as these can be removed by quality adjustments.

\(^1\) The revenue constraint approach first appears in Olsen (1969b) and receives much embellishment from Frankena.
Short-run supply curve with revenue constraint

FIGURE 2.5
Finally, landlords may or may not make profits after rent control is imposed. In the case as shown in Figure 2.5(a), profits are made. If profits were being made and new entrants were subject to rent control, a long-run equilibrium would be restored at zero profits. For the representative firm this would occur where \( \bar{R} \) cuts the LRAC curve. For the market as a whole this would occur where a horizontal line from the intersection of \( \bar{R} \) and LRAC intersected the demand curve. New entry would shift the revenue constrained short-run supply curve to the right until it intersected the demand curve at this point. As the original equilibrium would not be restored, rent control of this kind would still involve an efficiency cost.

There are several problems with this model, not all of which are recognized by Frankena. One problem relates to the need to constrain the price elasticity of demand to be strictly above unity. If not, there could be no revenue constrained equilibrium. Secondly, adjustment of "quality" might take a long time. In the absence of physically destroying housing services, the only means of allowing service units produced to decline is via failure to maintain them. Surely the scope for this is severely limited in a practical sense? Thirdly, tenants may themselves undertake repairs thus suppressing the decline in quality. Such action will presumably shift the demand curve down by the amount of the per unit repair expenditures.

5. The Incorporation of "Need" - Cooper and Stafford

An interesting little paper by Cooper and Stafford (1975), and two follow-up papers by the same authors ((1979) and (1980)) have created a considerable amount of interest. The matters treated have received considerable textbook attention - Stafford (1978), Robinson (1979) and Button (1976). For this reason we review the basic issues covered in this literature.
The point of departure for Cooper and Stafford was the attempt, in Britain's 1974 Rent Act to define "fair rent". The criteria were to be (i) characteristics of the property such as age, locality and "character", and (ii) "For the purposes of the determination it shall be assumed that the number of persons seeking to become tenants of similar dwelling houses in the locality on the terms (other than those relating to rent) of the regulated tenancy is not substantially greater than the number of such dwelling houses in the locality which are available for letting on such terms." As Cooper and Stafford interpret this, "abnormal scarcity" should be ignored and all "need" met.

The ideas may be interpreted in terms of Figure 2.6 which is based on Cooper and Stafford's (1979) Figure 5. The model is in terms of homogeneous dwelling units, not housing service units, and long-run supply, $S_L$, is less than perfectly elastic. Short-run supply is perfectly inelastic, $S_M$. "Need" for housing is $OT$ dwelling units. The market would establish a short-run rent of $R_2$. This would not be a "fair rent" as "need" is not satisfied. But no satisfactory long-term solution presents itself. Both $R_1$ and $R_3$ have some claims to being "fair" but both involve a failure to meet "need". On the basis of Cooper and Stafford's interpretation, the British conception of "fair rent" is untenable.

In a sense - a very real sense - Cooper and Stafford have created the difficulty with the "fair rent" concept by modelling in terms of dwelling units rather than service units. "Need" is not a popular concept with economists who find "demand" far more to their liking. While family units are linked with dwelling units, problems abound. Of course, the housing stock is "flexible" in the sense that available stock can be used more or less intensively.
Price per dwelling unit

FIGURE 2.6

SM

SL

R2

R3

R1

0

T

0

Number of dwelling units

("Need")
Rothenberg (undated) has set out a very interesting model where the housing market is divided into submarkets. Each submarket is a cluster of housing where dwellings produce similar amounts of housing services. Substitutability within a submarket is very great but inter-submarket substitutability is limited. Some submarkets will be a lot closer together than others but happenings in all submarkets will have implications for all others. Rothenberg analyses two types of rent control - one which affects all quality levels; the other affecting only one submarket. In the process Rothenberg comes close to considering some of the issues raised by Olsen (1969b) and Frankena (1975).

While Rothenberg must be applauded for injecting a greater sophistication into the analysis of rent control, there is some doubt about the richness of the harvest in terms of novel results. As his paper is very long and technical it is left to the interested reader to peruse and assess. However, let us summarize the major predictions of the case where all quality levels are rent controlled.

Rothenberg assumes a rent control scheme where all existing dwellings are controlled but new dwellings are exempt. Increased maintenance spending is allowed as a cost, as is expenditure on improvements. The effect of rent control on new dwelling construction is adverse due to the expectational effect of controls - "the existence of rent control ... raises the possibility that controls may be extended" (p.25). In relation to existing units "the owner of the housing unit will see advantage in decreasing its quality level" (p.28). Further, "the match of tenant characteristics and housing characteristics can come to decline appreciably" (p.30) and "events in the rental part of the market will have an effect on the ownership part of the market" (p.31).

1 The idea of an expectational effect arises several times in this thesis, including in the appendix to this chapter.
7. Rent Control and the Demand for Substitute Accommodation

Most analyses of the economic implications of rent control have tended to rely on the conventional partial equilibrium approach. But at the same time writers have also attempted to sketch the implications of rent control for markets where substitutes are traded. The analysis has generally been quite casual and apart from some notable exceptions, formal general equilibrium approaches have not been employed. In an appendix, the literature in this area is reviewed critically and some suggestions for reform are submitted. In particular, where rationing is by "chance and favouritism" (to borrow Friedman and Stigler's (1946) apt phrase) and not by an "equitable" sharing arrangement administered by the government, there is no satisfactory theoretical framework currently available.
APPENDIX TO CHAPTER 2

THE EFFECTS OF RENT CONTROL IN RELATED MARKETS

Early post-war British writers on rent control, such as Paish (1950), Needleman (1965) and Phelps Brown and Wiseman (1964), all asserted that rent control would lead to prices being higher in the uncontrolled sectors than they would have been if the rental housing market had not been interfered with. Paish states, for example, that the "rise in the price of small houses cannot ... be taken as an indication of the rise in rents which would ensue if rent restriction were withdrawn; for much of it is due to the concentration upon the only completely free sector of the market of the excess demand created by [the rent control] ... " (p.6). A more general assertion by Needleman is cited by Cheung (1975, p.4) and Phelps Brown and Wiseman meticulously analyse the consequences of rent control for related markets and make similar statements as to the upward price effects created in these markets. Cheung has drawn the further implication that not only will prices be higher in the uncontrolled sector(s) but also that "development" (supply) would then be encouraged (increased) as a result of rent control.

Gould and Henry ((1967), hereafter G-H), writing in the mid-'sixties, begin their paper by referring to the earlier British literature which is referenced above. G-H claim these writers "seem to believe that the proposition [that rent control raises prices in the uncontrolled sectors] follows immediately from the most elementary supply and demand analysis" (p.42). But G-H do not wish "to make specific assertions about rent control, but to consider, at an abstract level, how the analysis of effects of price control on related markets might be carried out. Indeed, the housing market possesses so many technical and institutional peculiarities that we would disclaim any pretension that the simple models we develop are necessarily relevant to that market" (p.42).
G-H state the problem more clearly than earlier writers. There will be both demand and supply interdependence between the rental market and related uncontrolled markets. "[E]ven if it were conceded that demand were to rise in the uncontrolled sector, the final effect on price would be in doubt if the increase in demand were accompanied by an increase in supply" (p. 43). But G-H then, surprisingly, decide to ignore supply interdependence although it is an essential element of the problem.

G-H use two different assumptions about the way available supply is shared among consumers after price control is imposed. The first of these is the "rationing" assumption where the government shares out the available quantity equally among the consumers. The second assumption is that of "first come, first served" where "satisfied" buyers get all they want of the good at the lower controlled price and "unsatisfied" buyers get nothing.

In their treatment of the "rationing" case, G-H draw on the analysis by Tobin and Houthakker (1950-51). There are $n$ goods, $X_1 \ldots, X_n$, and $X_1$ is price controlled and rationed. $X_1$ and $X_2$ are Hicksian net substitutes and G-H find an expression for the derivative $dX_2/dp_1$. Controlling $X_1$'s price reduces the supply of it, as $dX_1/dp_1 > 0$. Without presenting any details of this analysis the following comments can be made:

(1) G-H do not present a true general equilibrium analysis. Tobin and Houthakker were only interested in the individual's response to rationing, given that the starting point was the free market equilibrium. This does not appear to be the starting position utilized by G-H who have their individual consumers in an initial position of rationed discomfort. Cornes (1979) has shown that, given this starting position, a reduction in the ration must have an adverse real income effect and that in a general equilibrium
context, this real income effect cannot be outweighed by the beneficial real income effect of the fall in $p_1$. The result claimed by G-H, that price control may not lead to a rise in the price of an uncontrolled net substitute, is shown by Cornes to be possible in a full general equilibrium approach, but for different reasons than those asserted by G-H. In the general equilibrium context the "paradoxical" result is due to the strong superiority, not inferiority, of the substitute and due to strong supply interdependence. G-H reach the right conclusion but for the wrong reasons.

(2) While G-H were not prepared to claim their analysis of either allocation assumption was necessarily relevant to rent control, it would seem that their "rationing" case is totally inappropriate in rent control cases. Cheung (1975) has not been so careful and claims that G-H have "partially challenged" the British view of the effects of rent control on related markets. "For example, under what they have chosen to call the "rationing" assumption, they argued that the price of a substitute in the uncontrolled sector will rise only if both the controlled and the uncontrolled goods have "normal" income effects" (fn. 13, p.4). Rent control, of course, creates a situation where rationing is by "chance and favouritism" which will have consequences different to those due to an equal sharing arrangement. Friedman and Stigler (1946) have considered the feasibility of public rationing of house space and conclude that "it would raise stupendous administrative and ethical problems" (p.28). In addition to administering new lettings, existing leases would have to be modified. If, however, rental housing could be "rationed" in the G-H sense, the Cornes' general equilibrium analysis would be an appropriate tool for attacking rent control problems.
Rent control would seem to imply a rationing scheme similar to that of G-H's "first come, first served". But not exactly the same. At least some demanders will not get all they want of the controlled good (housing services) at the lower controlled price. Some will have too much and others too little. In short, some will not be "on" their Marshallian demand curves. The question of quantity constraint, as it relates to tenant benefit, is discussed in Chapter 3. For present purposes we will consider G-H's assumption as a reasonable approximation.

Before setting out the G-H second model it must be emphasised that the analysis is inherently illegitimate as there is no numeraire. In a two good model, lowering (controlling) the price of one good only has meaning if it is a price reduction relative to \( p_2 \), the second good's price. If this is the case (and it clearly is not according to G-H), the "solution" is immediate: \( p_2 \) must "rise" (relative to \( p_1 \)). The only reason for setting out the model is to exposit some further difficulties and because it is the only approach to this problem known to the present writer.

The price of the first of the two goods \((X_1, X_2)\) is controlled to \( p_1^* \). There are \( N \) buyers, \( j \) of whom get access to the controlled good and \( k = N - j \) who do not. The individuals are identical in that they have the same free market "demand functions", \( D_1 = D_1(p_1, p_2) \) and \( D_2 = D_2(p_1, p_2) \). Supply of each good is a function of own price only, thus \( S_1 = S_1(p_1) \) and \( S_2 = S_2(p_2) \). The model is written down as:

\[
S_1 = S_1(p_1^*) \tag{A2.1}
\]

\[
D_1 = D_1(p_1^*, p_2) \tag{A2.2}
\]

\[
j = S_1/D_1 \tag{A2.3}
\]

\[
j + k = N \tag{A2.4}
\]
\[ D_2^* = jD_2(p_1^*, p_2) + kD_2(p_2) \]  
\[ S_2 = S_2(p_2) \]  
(A2.5)  
(A2.6)

Of these, (A2.5) requires some explanation. The second RHS term is the demand for the uncontrolled good by unsatisfied potential buyers of the controlled good. To them, the price of the controlled good is irrelevant to their determination of desired consumption of \( X_2 \) and does not enter their demand function.

Disequilibrium prevails in the controlled market such that \( D_1 > S_1 \) at \( p_1^* \). For equilibrium in the uncontrolled market, \( D_2 = S_2 \).

Substituting in (A2.5) and (A2.6), differentiating (treating \( p_1^* \) as a variable) and re-arranging, we have:

\[ \frac{dp_2}{dp_1^*} = \left( \frac{\partial D_2/\partial p_1^*}{\partial S_2/\partial p_2} - \frac{\partial D_2/\partial p_2}{\partial S_2/\partial p_2} \right) \]  
(A2.7)

If the market for good 2 is Walrasian stable, the denominator is positive. Then if \( \partial D_2/\partial p_1^* \) can be shown to be positive, G-H claim a paradoxical result is possible in that lowering the controlled price may lead to a reduction in the uncontrolled price. Conditions favouring \( dp_2/dp_1^* > 0 \) "are the asymmetry in the responsiveness of demand for \( X_2 \) to \( p_1 \) ... and the irresponsiveness of demand and supply for \( X_1 \) to its own price" (pp.48-49). What is wrong with this analysis?

1) There are only two goods and, implicitly, a fixed money income.

Under G-H's assumptions, lowering \( p_1 \) means a reduction in supply of \( X_1 \). Therefore expenditure on \( X_1 \) must fall and \( p_2X_2 \) must rise. Then as long as \( 0 < dX_2/dp_2 < \infty \), \( p_2 \) must rise when \( p_1 \) is controlled.  

---

1 G-H give every reason for us to believe money income is constant. They talk, for example, about \( X_1 \) and \( X_2 \) being gross substitutes, "without eliminating income effects" (p.46). This only makes sense if money income is constant. G-H also lead us to believe that \( dX_2/dp_2 \) is finite and positive. This is explicitly assumed for \( X_1 \).
(2) There is no supply interdependence in the model. Moorhouse and Block (1968) have incorporated supply interdependence and easily show that $\frac{dp_2}{dp_1^*}$ can be positive if $\frac{\partial S_2}{\partial p_1^*} > 0$. But these authors have accepted the basis of the G-H analysis which is fundamentally invalid.

(3) As mentioned above there is no numeraire, a fundamental requirement. Cornes (1979), in a three good general equilibrium model constructed around the "rationing" assumption found it necessary to make one good the numeraire. Any successful analysis of the "first come, first served" case would require at least three goods, one of which was a numeraire.

(4) G-H assert that disequilibrium can remain in the controlled market and that no "black market" arises. But Barzel (1974) argues that the unsatisfied customers will bid up the price paid by satisfied customers through "waiting" so that the effective price will be the demand price for the quantity supplied. The higher effective price will cause an increase in demand for substitutes (a "substitution effect") but "[s]ince ... the real price paid by buyers is higher than that received by sellers ... we have a net resource cost resulting in a negative income effect that for superior goods will shift demand to the left, enhancing the price effect on complements but reducing that on substitutes" (p.84). The effect of waiting is another essential consideration in modelling unorganized rationing schemes.

As a final point on the issue of rent control as it affects related markets we must note the warnings of Cheung (1974). He cautions that "[i]f certain outcomes are to be attributed to the [price or rent] control, the constraints specified must conform essentially to those in real practice" (p.55). If economists blindly used simple general models in all circumstances, without recognizing the special factors
thrown up by particular problems, the science would be severely retarded. It is the versatility of the economists' tools which makes economics such an interesting and useful discipline.

G-H have questioned the relevance of simple demand and supply analysis in deriving predictions about the effects of rent control. But a dynamic partial-equilibrium demand and supply analysis can get us a long way in analysing the implications of rent control. We can also illustrate many of the points made above. To satisfy Cheung we carefully define the form of control as "rent control" where: (i) The market is initially in long-run equilibrium.¹ (ii) Rent control is applied to existing dwellings only - all new dwellings are exempt. (iii) While controlled rent (per housing service unit) is held below long-run market rent, R*, it is above variable costs or outgoings, G. That is G < R < R*. (iv) Eviction control applies to existing dwellings such that there is no diminution of quantity, after control, from the original equilibrium level, Q*. The situation is illustrated in Figure A2.1 where S is the short-run supply curve and D the demand curve. If eviction control were absent, quantity offered would fall to where the R line hits S, in the short-run. But quantity is held at Q*. There is a pure transfer to existing tenants of R*abR. There is excess demand of Q-Q*, totally induced by the lower price.

The demand for non-controlled rental housing can be analysed via "fringe" demand and supply curves. The initial situation is trivial. No-one is willing to pay above R*, the fringe demand curve beginning at R* on the vertical axis. Nothing will be supplied except above R* so the fringe supply curve begins at R* on the vertical axis also.² The equilibrium price is R* and nothing is traded in the uncontrolled market.

¹ Long-run supply is assumed to be perfectly elastic.
² These fringe curves are so trivial that they are not shown in Figure A2.1 to avoid cluttering.
Figure A2.1
But controlled and uncontrolled markets do exist side-by-side as in the cases of, for example, Sydney (see Chapter 6) and New York City (see Olsen (1972)). Circumstances will tend to change yielding a fringe demand curve like, say, $D'$. In particular, growth of income and population may increase total demand for rental housing. Accommodation of this demand must occur in the uncontrolled market. Further, the short-run fringe supply curve may not begin at $R^*$ if there is a fear of extension of controls harboured by landlords. The existence of such a fear will lift the long-run supply price by an amount equal to the probability of control multiplied by the expected reduction in rent. Call this amount, $f$, giving short-run supply curve $S'$ and long-run supply curve, in the uncontrolled market, $S_{L'}$.

Rents in the uncontrolled market must be above $R^*$ as long as $f > 0$. In the initial short-run period, uncontrolled rent will exceed $f + R^*$. But this rental, given by the intersection of $S'$ and $D'$ will attract new entry. In the next period $S_1'$ will be the relevant short-run supply curve and the rental will be established where $S_1'$ intersects $D'$. This rental will be lower, and quantity traded in the uncontrolled market, higher. This process will continue - in the absence of other disturbances - until the uncontrolled rental reaches $f + R^*$ and uncontrolled quantity traded is given by dropping a perpendicular from the intersection of $S_{L'}$ and $D'$.

When the uncontrolled market is in long-run equilibrium the only excess demand remaining will be that induced by the rent control plus that encompassing those demanders who would pay above $R^*$ but not $f + R^*$ per unit.

What we can conclude from this analysis is that rents in the uncontrolled market could be taken as an accurate guide to market rents

---

1 We do not show the shift in the aggregate demand curve, again to avoid cluttering.
if the uncontrolled market is in long-run equilibrium and \( f = 0 \). Contrary to what is often asserted, rent control need not necessarily lead uncontrolled rents to be higher than otherwise. We note the further implication that, in aggregate, rent control will not increase "development" above what it would have been and will lessen it if \( f > 0 \). These hypotheses flow from a particular set of assumptions and are only "valid" under these conditions.
CHAPTER 3

CONCEPT AND MEASUREMENT OF TENANT BENEFITS

Many public policies with respect to the rental housing market result in benefits to tenants. Such policies principally comprise those of public housing provision, housing allowances, rent control and urban renewal. The evaluation of tenant benefits presents both conceptual and measurement problems. The conceptual difficulties are particularly severe in cases where policies impose a quantity constraint on recipients. All of the policies mentioned may entail such a constraint.

Initial attempts to conceptualize tenant benefits were made in relation to public housing. Bish (1969) and Smolensky (1968) proposed measures which assume tenants are on their Marshallian demand curves. Even if this assumption is applicable, the measures proposed are unsatisfactory. De Salvo (1971) suggested a conceptually pleasing measure which was essentially Hicks' equivalent variation. This measure is valid in situations with or without quantity constraints.¹

The discussion revolves around the use of an equivalent variation measure even though it is recognized that the compensating variation may be appropriate in certain circumstances. Basically the equivalent variation springs to mind when adoption of a rental housing market scheme is contemplated while the compensating variation has an application when considering the removal of an extant scheme.

The De Salvo measure was developed for public housing situations. De Salvo (1975) applies the measure in just such a situation. This concept is applicable also to cases of rent control, housing allowances

¹ The novelty of the De Salvo method is the application of Hicks' equivalent variation to quantity constrained situations. Where there is no quantity constraint we should, but do not use the label "Hicks' equivalent variation".
and urban renewal. The use of the measure in each of these situations is discussed in this chapter.

In section 3 we consider two possible Marshallian measures of tenant benefit where quantity is constrained. One is labelled the "simple Marshallian surplus", the other the "ideal Marshallian surplus". The EV and CV are also examined in the price-quantity space and the bounding properties of all four measures are explored. The simple Marshallian surplus is found to have a very undesirable property in that it tends to overstate welfare change. The section introduces a novel technique for analysing quantity-constrained situations.

The actual estimation of tenant benefits is fraught with difficulties. The assumption of a Cobb-Douglas utility function allows ease of estimation of tenant benefits using readily available data. However, it is not very realistic. Murray (1975) has worked with a "generalized CES" utility function. It may also be possible to begin directly with an expenditure function.

The final section explores the bias that might result from using average data instead of individual data when estimating tenant benefits. Discussion revolves around E.O. Olsen's (1972) analysis of rent control in New York City. Olsen has applied an unsophisticated Marshallian measure to the estimation of tenant benefits. The use of this measure could be seen as cancelling out some of the advantage due to having a rich bank of individual data.

1. Naive Measures of Tenant Benefit

Smolensky (1968) sought to measure tenant benefits from government housing as "the amount of money, which if it were paid annually to the tenants of public housing for as long as the housing units stand, would leave the total cost of the program to the nation unchanged" (p. 95). Supposing that \( V \) is the initial cost of the dwelling, \( R_{pt} \) is project rent, \( O_t \) is operating cost, \( n \) is the life of the dwelling and \( r \) the rate of interest, then \( S_t \) in

\[
V = \sum_{t=1}^{n} \frac{(R_{pt} - O_t) + S_t}{(1 + r)^t}
\]
is Smolensky's implicit subsidy. Smolensky estimated $S_t$ to be an average of $62$ (1965 prices) per month for government dwellings let under the United States' Public Law 171 over the period 1952 to 1964. This is, of course, a measure of tenant benefit based on the differential between "market" and project rent. Bish (1969) has used a similar measure. Consider Figure 3.1 which is representative of Figure 2 in Bish's paper (p.426). Bish contends that "as the degree of elasticity is not known, we assume here that housing is a constant-cost industry; thus, the private market value estimated in this study is assumed to be equivalent to area OBEG in figure 1" (p.429, Bish's italics). The public tenant is sold OG units of housing service for OA per unit, project rent being OAFG. There is thus a subsidy of ABEF, the difference between market valuation of OG and the amount actually paid. Bish regards his analysis as an improvement over that of Smolensky because the latter concentrates "on the cost of the program rather than on direct benefits accruing to individuals occupying the subsidized housing" (p.428). While this is true, both measures leave a lot to be desired.

Both Smolensky and Bish assume, implicitly and explicitly (respectively), that tenants are on their Marshallian demand curves. In most cases, public housing policies impose quantity constraints which will, except by accident, be binding on the tenants. But even if the public housing offer is compatible with the recipient's demand curve, the Smolensky and Bish measures are still far from ideal. Consideration of Figure 3.1, for instance, indicates that the Bish measure overstates tenant benefits by area CEF, if benefits are interpreted in a crude Marshallian sense.

2. The De Salvo Measure

Bish and Smolensky developed measures of tenant benefit to deal with public housing situations. De Salvo (1971, 1975) was also con-
Price per unit of Q

FIGURE 3.1 (Bish 1969, p.426)
cerned with conceptualising (and measuring) tenant benefits from public housing programs. The De Salvo method can, however, be adopted to deal with situations of rent control, housing allowance and urban renewal. Indeed, it is applicable in any situation where there is a quantity constraint in addition to the constraints imposed by income and prices. In all the housing applications of the measure we will assume that the free market price of housing services that are privately supplied remains constant.¹

The basic approach assumes that individual consuming units ("individuals" or "families") have a utility function,

\[ U = U(H, N) \]

relating utility to consumption of housing services (H) and the consumption of non-housing commodities (N). Hicks' composite theorem is assumed to hold. The utility function is assumed to be "neo-classical" with properties that yield smooth, convex-to-the-origin indifference curves. In the absence of a quantity constraint, utility is maximized subject to a budget constraint,

\[ Y = P_H H + P_N N \]

where the prices of both commodities, \( P_H \) and \( P_N \), are assumed fixed, and the individual's initial income, \( Y \), is fixed.

Tenant benefit measures arise for different policies by determining, (i) the way in which the particular policy alters the individual's choice set, and (ii) the response of the individual to the changed circumstances. This exercise will be performed for each policy considered, beginning with public housing. A simple rent control

¹ While every individual is a price-taker, the aggregate effect of an increase in demand for housing services may be to raise their prices. If we cannot assume a constant price of housing, the analysis becomes unworkable. There is considerable evidence for a high long-run rent elasticity of supply of housing. (See the discussion in Chapter 4.)
situations will then be examined, followed by analyses of a housing allowance scheme (the now defunct Australian Housing Allowance Experiment, HAE) and an urban renewal scheme.

(i) Public Housing

Suppose a family is initially in equilibrium at point A in Figure 3.2. Now suppose an offer is made of $H$ units of housing services at $\alpha P_H$ per unit, where $\alpha < 1$. The new budget line has slope $- (\alpha P_H / P_N)$. The nature of the offer constrains the family to point B, which is not a point on the demand curve in the $(P_H, H)$ space. This point yields utility level $U_1$. But $U_1$ could be furnished by an infinity of other combinations of $H$ and $N$, one of which corresponds to a tangency with a budget line with the slope of the original price ratio. This particular point is C in Figure 3.2. Measured in non-housing goods, the amount of money needed to make the family as well off at the old price ratio as under the public housing scheme is the vertical distance $DE$ between the original budget line and that tangential to $U_1$ at C. This amount is Hicks' price equivalent variation measure of consumer's surplus. The necessary income supplement will always be less than the cost of providing the government housing, except in a special case.

Net of administrative costs, the public housing offer costs $BE$ in Figure 3.2, while the income grant would only have to be $DE$. Bish and Smolensky both use $BE$ as a measure of tenant benefit, but in the context of the tenant being "on" his Marshallian demand curve.\(^1\) This case is shown in Figure 3.3 which is similar to Figure 3.2 except that point B is now a point of tangency between the new budget line and $U_1$ (that is, it is a point on the Marshallian demand curve in the $(P_H, H)$ space). Clearly, the simple rent differential is still not equal to Hicks' equivalent variation, and, indeed, overstates it. The same level of utility is still available at a lower cost via an income grant of $DE$.

\(^1\) Bish uses the difference between market rent and tenant rent while Smolensky suggests the difference between resource cost and tenant rent. If public housing is produced inefficiently the measures will differ.
FIGURE 3.3
There is a special case where the simple rent differential will equal Hicks' equivalent variation. This is when the budget line representing free market prices, but incorporating the Hicksian equivalent variation in income, is tangential to the highest indifference curve attainable with the government offer at the quantity of housing services incorporated in the government offer. In other words the offer point must be on the income expansion path.

(ii) Rent Control

As in the case of government housing, rent control also results in individuals assuming positions off their Marshallian demand curves. At below market rents, many families would prefer to consume more housing services but are prevented from doing so because of the difficulties they would encounter finding a dwelling, at a controlled rent, compatible with their demand curve. There are very great pressures to stay where they are and enjoy the subsidy bestowed on them by (unwilling) landlords. It is for this reason that it has long been recognized that one of the costs of rent control is the restriction it places on mobility. Many workers do not respond to labour market signals because it might entail moving and, thus, forfeiture of tenant benefit from rent control.

Consider Figure 3.4 which represents a rent control situation. The family initially consumes $\bar{H}$ units of housing services at $P_H$ per unit ("rent" is $P_H \bar{H}$), being in equilibrium at point A on indifference curve $U_0$. A rent control policy is introduced which limits price per housing service unit to $\alpha P_H$, $\alpha < 1$, and disallows eviction. At $\alpha P_H$ the family would like to be at point E, on $U_2$, consuming a greater quantity of housing. Excess demand for rent controlled dwellings makes such a move very risky and the family "sits" in the dwelling yielding $\bar{H}$ units of housing. At the controlled price, $\alpha P_H$ a higher iso-utility curve, $U_1$, is reached and the family is at point B. This is
FIGURE 3.4
not a point on the demand curve in the \((P_H, H)\) space. Any combination of \(N\) and \(H\) along \(U_1\) will yield the same satisfaction – the family is indifferent between the rent control position, \(B\), and say, position \(C\). \(C\) could be attained if the pre-rent control price ratio were restored, and a lump-sum payment of \(DA\) made to the tenant. \(DA\) is, of course, Hicks' equivalent variation.\(^1\) While \(DA\) and market freedom would make the tenant equally happy as under rent control, it costs the landlord the greater amount, \(BA\), to put his tenant on \(U_1\). If the aim of rent control was to benefit the tenant by \(DA\), then this could be done at a lesser cost to the landlord. The landlord always has the option of offering the tenant any amount in excess of \(DA\) for vacant possession. The landlord could retrieve up to \(BD\), in this way, that would otherwise be lost. The landlord, having bribed the tenant, would then sell his property at the vacant possession price. Perhaps rent control policies could be improved by allowing this possibility – if the landlord could bribe the tenant to leave, without coercion, he could then re-let at market rents. The tenant would be equally well off as he would accept no less than \(DA\), the landlord would gain by \(BD\), and a rentable dwelling would not be "lost" to an owner-occupier.\(^2\)

There are circumstances where rent control may mean that families consume "too much" housing. This sort of situation arises where rent control has prevailed for a long time and family members have left home leaving only the parents in a family-size house. Such a case is illustrated in Figure 3.5. The family is at point \(A\) consuming \(H\) units of housing services. The simple rent differential is \(AC\), the equivalent variation is only \(CD\). Now introduce the possibility of sub-letting

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\(^1\) We are assuming a single period time horizon so as to avoid the capitalisation problems otherwise encountered.

\(^2\) Shreiber and Tabriztchi (1976) have analysed the question of landlord-tenant agreements as a solution to some of the problems of rent control. They do not, however, advance the particular solution suggested in the text.
FIGURE 3.5
The sitting-tenant can sub-let units of housing services along the "sub-letting locus" marked in the figure. The rational master-tenant would sub-let a total of $H-H^*$ units, finding a new equilibrium at point B. In this situation the master-tenant's equivalent variation would be enhanced by $AD$, making a total of $AC$. Sub-letting can, therefore, bring the simple rent differential and the equivalent variation into line. As a consequence, all "demand-side" inefficiency can be removed.

(iii) Housing Allowances

The form of the Australian housing allowance scheme was to be decided by HAE, which was abandoned in June 1978. It was fairly clear, however, what the administrators had in mind. The scheme they envisaged entailed a dollar payment equal to the actual rent paid minus one quarter of the recipient's pre-allowance income, $Y$. There was a maximum allowable rent in calculating payments, although recipients would have been able to occupy dwellings with rents above this maximum. The maximum was known as "standard rent" ($S$). It can safely be assumed that recipients would respond to such a scheme in a strategic manner so as to extract maximum possible payments consistent with their income. This would normally entail occupying a dwelling costing an amount at least equal to standard rent.

Figure 3.6 is useful in expositing the De Salvo measure in the HAE case. In acting strategically to maximize utility subject to the post-HAE choice set, a "corner solution" is the best possibility and this occurs at a consumption of $S/PH$ units of housing services. Hicks' equivalent variation is found by drawing a line which is both tangent to the family's indifference curve and parallel to the original budget.

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1 This section is based on material contained in two previously published papers - Albon (1977b and 1979b). Other matters raised in these papers are discussed in Chapter 10.
FIGURE 3.6
The family pays a total rent of $ml and receives $el as a HAE payment. The payment is valued only at $kl by the recipient, as an income supplement of $kl would yield the same utility as a tied (HAE) payment of $el.

In some circumstances, HAE is as efficient as an untied income supplement. This occurs if, and only if, a family wishes to consume housing costing more than $S. For this to occur there must be an indifference curve tangential to the segment ec of the post-allowance choice set.

There will be other cases where individuals will only participate if they can form a coalition with their landlord. We will not pursue such cases here, deferring the discussion until Chapter 10.

(iv) Urban Renewal

In a recent paper by Flowerdew and Rodriguez (1978), an attempt is made to conceptualize and measure tenant benefits from urban renewal programs. In some circumstances, such programs may involve a tenant moving from one quantity-constrained position to another, thus presenting an interesting and difficult conceptual problem. Flowerdew and Rodriguez seem to deny that an equivalent variation measure is possible. However, a measure to handle such situations can be devised.

Consider Figure 3.7 where a simple "urban renewal" case is shown. Suppose public housing is provided at $\alpha^p_H$ per unit. Initially the individual is at point A. The authorities now undertake an urban renewal program and offer the individual more units of housing services at price $\alpha^p_H$, but constrain him to point B. To compare the two quantity-constrained points the ploy is to find utility-equivalent points associated with free market prices. These points are C and D, respectively. The equivalent variation is marked on the vertical axis. An alternative exposition of this case is alluded to in an ensuing section of this chapter.
(v) Other Cases

Many other cases spring to mind. Three will be mentioned here. Firstly there is the Australian Government's "Regulation 92" which is a rent subsidy available to public servants where the degree of subsidization is related to rent, up to a maximum. In some ways the scheme is similar to the HAE. A second example is the practice of the Australian National University in letting houses to undergraduate students at below-market rents. During an internal inquiry into this practice a colleague (George Fane) enunciated the principle that a lump-sum subsidy would be more efficient than the provision of cheap housing. Finally, there is the Australian Government's Defence Housing Scheme which has recently been under review. In the process of review Michael Cook (1978) has written a very interesting paper pointing out the inefficiency of tying transfers to housing consumption. This paper is all the more interesting because it was written in apparent ignorance of much of the recent literature on this subject.

3. Marshallian Measures, the De Salvo Measure and a Compensating Variation Measure

Marshallian measures of welfare change have been considered for the purpose of evaluating tenant benefits in the context of quantity-constrained situations. For example, Olsen (1972) has used a Marshallian measure of the tenant benefits from rent control in New York City. Murray (1976) has analysed the bounding properties of this measure. Unfortunately, in so doing, Murray seems to have erred. The measure considered by Olsen and Murray can fairly be dubbed the "simple Marshallian surplus" (SMS) in contrast to what might be called an "ideal Marshallian surplus" (IMS) developed by Cornes and Albon (1980). In this section we use the price-quantity space to set out the SMS, the IMS, the De Salvo measure (the EV) and a compensating variation (CV). The bounding properties of these
measures are explored, partly by use of the quantity space diagram. It is found that CV<IMS<EV<SMS for a normal good. While Marshallian measures in general cannot be recommended, the SMS seems to be particularly undesirable as it has the curious tendency to show an increase in welfare where no increase has occurred.

Olsen's measure, the SMS, is illustrated in Figure 3.8. The symbolism is altered to be more in conformity with that used in Cornes and Albon and that used in this thesis. The demand curve $D$ is a function $D(P, \pi, Y)$ where $\pi$ and $Y$, both assumed constant, are prices of other goods and money income, respectively. The price elasticity of demand is assumed to be unity. The individual illustrated is off his demand curve and consumes less than he would at market prices ($H < H_m$). Total benefits are equal to $P_m b_c P_s$ less $adb$. The first area represents the lesser amount $\bar{H}$ is purchased for than it would be at market prices, while $adb$ is (Marshallian) surplus precluded from the tenant because he is unable to purchase the market quantity of housing, $H_m$. In symbols Olsen's measure is

1 For convenience the 'H' subscript is dropped in this section.

2 Integration does not immediately yield the final expression above. If the constant is taken outside the integral,

$$P_m H_m \left\{ \frac{H_m}{H} \right\} dH$$

and the integration performed, we have

$$P_m H_m \left[ \ln H_m - \ln \bar{H} \right]$$

Incorporation of the price terms does not alter the value of the expression but does make the terms directly observable.
FIGURE 3.8 (Modified Olsen 1972, p. 1084)
We will return to a discussion of Clsen's application of this measure later in this chapter.

An alternative technique for treating quantity constraints in the \((P,H)\) space is set out in Cornes and Albon (1980). This approach involves the use of iso-utility curves which form a locus of price and quantity combinations (given \(\pi\) and \(Y\) constant) each yielding a given utility level. Similar curves have been applied, in an analysis of credit rationing, by Jaffee and Russell (1976).

In Figure 3.9 there are three types of construction. Firstly, there is the Marshallian demand curve, \(D\), which is a function \(D(P,\pi,Y)\). Secondly, there are compensated demand curves which are of the form \(C(P,\pi,U)\) where \(\pi\) is held constant, \(Y\) is allowed to vary and \(U\) refers to the constant utility level along a compensated demand curve. We are dealing solely with a normal good, like housing, so that the compensated demand curves are steeper than the Marshallian demand curve. Finally there are special indifference curves which have zero slope where they cut \(D\) and are indicative of a preference direction such that utility increases for southerly movements.

Suppose an individual is initially at the free market position with price \(P_m\) and quantity \(H_m\), on the Marshallian demand curve. We are able to handle policies which offer either "too much" or "too little".
housing at the controlled price. Suppose a situation where "too little" housing, $H$, is offered at the controlled price, $P_s$. Indeed we will consider the situation where $H$ is less than $H_m$. As the $P_s, H$ coordinate is not a point on the Marshallian demand curve, we are unable to apply the usual measures (Marshallian surplus, EV and CV) immediately. Our method is to find a point on the Marshallian demand curve which is equivalent to the constrained point, $P_s, H$, in the sense of being on the same iso-utility curve. This is found by "jumping" from the constrained point to the point $P_z, H_z$, both of which lie on the same indifference curve, $U^S$. Note that we have assumed that the policy actually increases utility (from $U^m$ to $U^S$) so that the individual does not have to be coerced into accepting the offer.

Having found the coordinate $P_z, H_z$ we can identify three measures of the welfare change. Firstly, there is the "ideal Marshallian surplus" (IMS), the integral over price of the Marshallian demand curve between $P_m$ and $P_z$. That is,

$$\int_{P_m}^{P_z} D(P, \pi, Y) \, dP$$

Geometrically, this is area $P_m AEP_z$. Our second concept is the equivalent variation, the integral over price of the compensated demand curve, $C^S$ between $P_m$ and $P_z$. That is,

$$\int_{P_m}^{P_z} C(P, \pi, U^S) \, dP$$

In Figure 3.9 this is area $P_m FEP_z$. This equivalent variation measure is precisely that which we have discussed earlier in the chapter - the
"De Salvo measure". Finally, we have a CV measure, 
\[ P^m - \int_{P_z}^{P_m} C(P, \pi, U^m) \, dP \]
which is \( P_m ABP_z \) in Figure 3.9.

The three concepts we have found are conceptually pleasing. The measures obey the following for a normal good: \( CV < IMS < EV \). For a good with zero income effect we have \( CV = IMS = EV \). While a Marshallian measure of any kind is not the first-best choice, the IMS seems to be the most desirable conceptual measure in the absence of a Hicksian measure. This is because of its bounding properties. However, the IMS is difficult to estimate in empirical applications as an estimate of \( P_z \) is required.

In comparison, the SMS is perhaps easier to measure while being conceptually less pleasing than the SMS. In his paper exploring the bounding properties of the SMS and the EV, Murray (1976) argues that "when consumers face constraints apart from prices and income, .... Marshall's measure of consumer's surplus [the SMS] cannot be relied upon as a lower bound to Hicks' equivalent variation" (p.499). This claim appears to be off the mark - in fact the SMS always forms an upper bound to Hicks' EV. For a normal good, \( SMS > EV > IMS > CV \).

To facilitate the comparison let us again look at the SMS. Another interpretation of the SMS involves identifying the price, \( P_s^* \), at which the individual would choose the constrained quantity \( \bar{H} \). \( P_s^* \) is marked in Figure 3.9. We then have the following expression for the SMS:
\[ SMS = \int_{P_m}^{P_s^*} D(P, \pi, \gamma) \, dP - \int_{\bar{H}}^{P_s^*} \bar{H} \, dP. \]
Geometrically, this is $\hat{P}_s GSP_s - \hat{P}_s GAP_m$ which is, of course, equivalent to $P_m HSP_s - AGH$, the SMS as identified earlier. The SMS also has an interpretation in the quantity space (Figure 3.10) as distance GB (the equivalent of $\hat{P}_s GSP_s$) minus the Marshallian surplus ($MS_{AG}$) of the move from A to G (equivalent to $\hat{P}_s GAP_m$ in Figure 3.9).

Having made the translation from the $(P, H)$ space to the quantity space it is now possible to compare the $SMS_{AB}$ with the $EV_{AB}$ for a normal good. The proof that $SMS_{AB} > EV_{AB}$ is rather inelegant. However, it serves the purpose. The following steps give us the result:

- The $EV_{AB}$ has been previously discussed and is marked in Figure 3.10.
- The $SMS_{AB} = GB - MS_{AG} = GJ + JB - MS_{AG}$ (By previous definition).
- $GJ > EV_{AG} > MS_{AG}$ (The first inequality arises due to the property of indifference curves for a normal good which dictates that the vertical gap between indifference curves decreases with increases in the quantity of the good. The second inequality is the conventional result for a normal good.)
- $GJ - MS_{AG} > 0$
- $SMS_{AB} - JB = GJ - MS_{AG}$ (Rearrangement of definition.)
- $SMS_{AB} > JB$
- $JB > AK > EV_{AB}$ (By the above-mentioned property of indifference curves for a normal good.)
- $SMS_{AB} > EV_{AB}$

The inapplicability of the SMS is more pronounced by consideration of a corollary of the above result. When the policy change is one where the fall in price and the constraint on quantity are such that the individual remains on the same indifference curve, the SMS will show a rise in
welfare. In the face of this deficiency the simple Marshallian surplus measure is unlikely to command much support from applied economists.

What then of the main advantage of the SMS, its ease of measurement? According to Murray (1976), recent work in "estimating indifference maps directly .... should make passe the approximate techniques [of earlier writers]" (p.494). If this statement is accepted the SMS has nothing to recommend it.

4. Estimation of Tenant Benefits

In actual applications of the De Salvo measure, many researchers have assumed a Cobb-Douglas utility function. This particular form has two significant advantages. Firstly, very simple expressions for tenant benefits can be derived quite easily. Secondly, the informational requirements in applying the measure are "minimal".

Against these advantages, there is one major drawback - the Cobb-Douglas restricts preferences to a very large degree. It implies unitary price and income elasticities of demand. The appropriateness, or otherwise, of the Cobb-Douglas can only be determined empirically.

In the case of public housing, an expression for tenant benefit using the Cobb-Douglas utility function can be derived as follows.
We seek to maximize the utility function,

\[ U = H^\beta N^{1-\beta} \quad (3.1) \]

subject to the budget constraint,

\[ Y = \alpha P_H H + P_N N \quad (3.2) \]

where \( \alpha (<1) \) is the proportion of private rental price per housing service unit by which this price is reduced. Partial differentiation of the appropriate Lagrangian, and solution of the resulting set of simultaneous equations for \( H \) and \( N \), yields the following demand relations:

\[ H = \frac{\beta Y}{\alpha P_H} \quad (3.3) \]

\[ N = \frac{(1-\beta)Y}{P_N} \quad (3.4) \]

A family with an initial income of \( Y \) is given a public housing offer of \( H \) at \( \alpha P_H \) per unit. This yields a utility level of

\[ U_1 = H^\beta N^{1-\beta} \quad (3.1a) \]

As \( Y - \alpha P_H H \) is income left for consumption of \( N \), then by reference to (3.4), (3.1a) can be rewritten as

\[ U_1 = H^\beta \left( \frac{Y - \alpha P_H H}{P_N} \right)^{1-\beta} \quad (3.1b) \]
Hicks' equivalent variation is found by determining the level of income, \( Y^* \), that would cede \( U^1 \) at the original price ratio (\( \alpha = 1 \)) where the individual was not constrained in his housing choice. The appropriate expression for \( U^1 \) is, under these circumstances,

\[
U^1 = \left( \frac{\beta Y^*}{P_H} \right)^\beta \left( \frac{(1-\beta)Y^*}{P_N} \right)^{1-\beta} \tag{3.1c}
\]

Setting (3.1b) equal to (3.1c), thus keeping the family on a given indifference curve, \( (U^1) \), and solving for \( Y^* \) results in

\[
Y^* = \left( \frac{P_H H^H}{\beta} \right)^\beta \left( \frac{Y - \alpha P_H H^H}{1-\beta} \right)^{1-\beta} \tag{3.5}
\]

which is, of course, the expenditure function. At market prices, \( H \) would cost \( P_H H^H \) which can be denoted \( R_m^* \). At subsidized prices, \( H \) costs \( \alpha P_H H^H \), that is \( R_p^* \). Substituting into (3.5) yields

\[
Y^* = \left( \frac{R_m}{\beta} \right)^\beta \left( \frac{Y-R_p}{1-\beta} \right)^{1-\beta} \tag{3.5a}
\]

the level of income necessary to yield the same level of utility at market prices as is yielded by the public housing offer. The expression for tenant benefits is, then,

\[
T = \left( \frac{R_m}{\beta} \right)^\beta \left( \frac{Y-R_p}{1-\beta} \right)^{1-\beta} - Y \tag{3.6}
\]

Exactly the same expression can be derived in rent control situations. Where, in the public housing case, \( R_p^* \) was the rental on the public housing dwelling, we now interpret it as the controlled rent, \( \alpha P_H H^H \), where \( \alpha \) is set by the rent controller and \( H^H \) is the fixed amount of services yield by the controlled dwelling. \( R_m^* \) is equal to \( P_H H^H \).

Now consider the HAE case. Suppose first a case where the participant consumes \( S/P_H = H^H \) units of housing yielding utility level,
U_1 = \frac{Y}{P_H} \left( \frac{Y - P_H}{P_N} \right)^{1-\beta} \tag{3.7}

where \( \overline{Y} \) is now defined as initial income plus the HAE cash payment. That is,

\[ \overline{Y} = Y + (S - 0.25Y) \tag{3.8} \]
\[ = 0.75Y + S \]

We now seek that level of income, \( Y^* \), which would yield the same utility as the HAE payment in a situation where no strings are attached. This utility level is

\[ U_1 = \left( \frac{\beta Y^*}{P_H} \right)^\beta \left( \frac{(1-\beta)Y^*}{P_N} \right)^{1-\beta} \tag{3.9} \]

By equating (3.7) to (3.9) and using (3.8) we can solve for \( Y^* \) as

\[ Y^* = \left( \frac{S}{\beta} \right)^\beta \left( \frac{\overline{Y} - S}{1-\beta} \right)^{1-\beta} \tag{3.10} \]

Tenant benefit is \( Y^* - Y \). In other cases where the participant consumes more than \( S/P_H \) units of housing services, the HAE payment will be equivalent to a lump-sum income supplement, that is, \( Y^* - Y = S - 0.25Y \).

No attempt is made to derive a tenant benefit expression for the urban renewal case.

The major advantage of the Cobb-Douglas utility function is that only one parameter, \( \beta \), is required. \( \beta \) is simply the proportion of income spent on housing in the unconstrained situation. It does not need to be estimated if this unconstrained choice is directly observable. In cases where \( \beta \) is not directly observable, Murray (1975, pp.774-775) sets out a procedure for its estimation (or at least this would appear to be the only rationale for setting out this procedure).
In his analysis of tenant benefits from public housing, Murray (1975) employs what he calls a "generalized CES" utility function of the form (in our notation),

\[ U = (aH^b + N^c)^d \]

where, a, b, c and d are parameters. Murray sets out a complicated procedure to estimate these parameters. This function does not conform with the usual CES specification, unless parameters b and c are equal. This is why Murray calls the function a "generalization". Aaron and von Furstenberg (1971) have suggested the use of a CES function and set out a functional form which is in keeping with the accepted interpretation of that function. Other utility functions could be applied to the estimation of tenant benefits.

Alternatively, one could begin directly with the expenditure function, thus dispensing with the explicit consideration of utility functions. This approach is a gift from the development of duality theory.

A final possibility is to ask tenants how much they value the benefits from the particular housing program. This approach is used by Flowerdew and Rodriguez (1978) in relation to urban renewal programs. This method could also be used in situations of rent control, public housing and housing allowances. One difficulty in applying this method may be one of preference-revelation. Interviewees may be unwilling to reveal their true preferences if it was felt this might jeopardize the continuance of their subsidy.

1 In situations where moves are required (as in urban renewal programs), moving costs are incurred. If an interview method is used to ascertain tenant benefits, moving costs will tend to get tangled up in the measure.
5. Individual Versus Average Data

In applying any of the measures of tenant benefit it is desirable to have data at the individual level so as to avoid the possibility of aggregation bias. It is interesting to inquire into the extent of any aggregation bias as it is sometimes the case that average data only is available.

In his study of rent control in New York City, Olsen (1972) applies the simple Marshallian surplus measure to the evaluation of individual tenant benefits from rent restrictions. A unit elastic demand curve is assumed for each tenant. Only the position of the curve can vary. The sample size is very large - 5,915 families.

Total tenant benefits from rent control in New York City are estimated to be $270 million in 1968 - an average of $213 for the 1,266,829 families in controlled dwellings. However the total cost of rent control to landlords \( (R_m - R_p) \) was found to be a massive $514 million or $406 per dwelling. This might suggest, from our previous analysis, that families were consuming an amount of housing services, under rent control, considerably less than they would have under free market conditions (i.e. \( H_m - \bar{H} \) is large). However this is not the case - Olsen's mean sample value of \( R_m \) is $1,405 while \( P_{H_m} \) is $1,470. The average family would only consume 4.6 per cent more housing if totally free to choose. This seems to suggest that tenant benefit should be quite close to the rent differential, \( R_m - R_p \), or the cost to landlords. However when Olsen uses the average data to calculate the SMS \( (R_p = 999, R_m = 1,405 \text{ and } P_{H_m} = 1,470) \) he finds this very result - tenant benefit in total is $513.1 million (almost
$405 per family) which is extremely close to the simple rent saving. Olsen relegates this finding to a footnote where it is noted that "the use of aggregate data can result in large errors in estimating the benefits and waste from government programs that do not simply reduce the price of a good from some one level to some other level for all subsidized families ...." (fn. 18, p.1094). Unfortunately there is no explanation of the deficiency.

In private correspondence with the author, Professor Olsen expanded on the discrepancy with an illustrative example and other empirical evidence. The illustrative example points to the importance of the distribution of house-space across individuals. Mean values mask the distribution. Deviations from the mean cancel out while still being responsible for welfare losses. The other empirical evidence was a reference to a study of tenant benefits from public housing, Kraft and Olsen (1976). These authors found mean tenant benefits of $54 per month using individual data compared with $72 per month using average data. The mean transfer was $74 per month. A De Salvo-type measure was used in their study.

In a study of rent control in the Australian Capital Territory (see Chapter 7), a crude attempt is made to apply the De Salvo measure using a Cobb-Douglas utility function and average data. It is likely that the use of average data in this application may not result in too much bias. The disparity between the result of using average as against individual data will be greater the more dispersed is constrained

consumption relative to desired levels. On this basis the New York City bias would exceed that in Canberra because rent control had prevailed for longer in the former city than in the latter. The longer rent control is in force the more the pattern of desired consumption will diverge from the actual pattern. The divergence will result from changes in incomes, family sizes, tastes, etc.

Before closing this chapter, one further aspect of Olsen's (1972) study deserves attention. As it applied the SMS, an upward bias would be expected. Applying the De Salvo measure to the average data and assuming a Cobb-Douglas utility function ($\beta$ is $1,470/6,229 = 0.236$) results in an average tenant benefit figure of $393$. The average figure for the SMS is $405^1$. This constitutes a particular example of the general result that SMS > EV for a normal good.

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1 Olsen's use of a unit elastic demand curve is consistent with a Cobb-Douglas utility function.
CHAPTER 4

THE ELASTICITY OF SUPPLY OF RENTAL HOUSING

The responsiveness of the supply of housing to changes in demand (and rents) is the most crucial empirical issue to be decided in relation to the informed formulation of housing policy. The effects of rent control, for example, are dependent on the elasticity of supply. If supply is inelastic, as many suggest, then rent control may not have the adverse supply effects usually associated with that policy. Inelastic supply conditions will also thwart the success of a housing allowance scheme. No appraisal of rental housing policy would be complete without careful consideration of the all-important supply issue.

All the evidence on the supply issue points to a high elasticity of supply for all housing and for rental housing, alone. This evidence—all from the United States—is reviewed in this chapter. There is no Australian study which provides any substantial evidence on the question of supply response. However, the Australian literature contains many assertions that the supply of (rental) housing is highly inelastic with respect to rents. The surfeit of assertions and the dearth of evidence sit uneasily together.

The major concern of this chapter is to provide some evidence for a prior belief that the elasticity of supply of rental—and other—housing is highly elastic. In addition to reviewing the considerable U.S. evidence, two attempts are made to furnish some Australian evidence. Firstly, time series data from the Australian Capital Territory is used in regression analysis of the supply relationship.

1 An initial attempt at coming to grips with this problem is embodied in a paper presented at the 1979 La Trobe Economists' Conference (Albon, 1979c). Considerably more work has since been performed.

2 If total supply is inelastic, the supply of rental housing can still be elastic.
Secondly, some other quantitative and qualitative evidence is brought to bear on the question.

1. Review of Australian Studies on Supply Response

Most Australian writers on the issue of supply response have been satisfied to make assertions, one way or the other, without the backing of reasoned argument and/or careful empirical analysis. An example of an unfounded allegation of inelastic supply can be found in Apps (1976). Other examples are cited in Chapter 10 where we discuss the housing allowance issue.

The paucity of Australian evidence is reflected in Neutze and Bethune's (1979) review of Australian urban economics. These authors discuss the issue on pages 86-88, especially in relation to capital gains as a stimulus to rental housing investment. Then, on page 90, when discussing the abandoned Housing Allowance Experiment, Neutze and Bethune assert that "[t]he main economic argument against provision of assistance in cash is that supply may be price inelastic (Australian Institute of Urban Studies 1975). This is less likely to be a problem as long as governments still construct housing for rent and sale (Stretton 1974)". The AIUS reference gives no evidence to support Neutze and Bethune's first assertion. Instead we find non sequiturs such as: "...[T]he increased demand [for rental housing] is not taking the usual form of a demand-price satisfactory to the prospective supplier. Rents are sticky. People are showing a marked reluctance to pay the much higher rents which the investor would have to charge to make a profit, and consequently the necessary supply of investors is absent" (p.38). While arguing that inflation may make investment in rental housing attractive — because of possible capital gain — the AIUS goes on to say that "[i]n a sense the people who are being phased out are the legitimate investors, the people who go into an enterprise to make income from it, leaving only those who can afford to gamble on a
capital gain... [I]n the present configuration of costs, interest rates and expenses of running, investment in rental housing is quite unprofitable" (p.39). What is missing from the AIUS reference is any real evidence. There is an assertion of a "marked shortage of rental housing ... and a rise in rents" (p.38) and an observation that strata titles were becoming more prevalent. The lack of evidence shows up clearly in the tentative way the AIUS opens its conclusion to this discussion: "... if this exodus from the rental investment market has been occurring ..." (italics added). The AIUS does proceed to discuss the deleterious effects of local council regulations on the costs of rental housing provision. The other reference given by Neutze and Bethune is equally disappointing. Stretton (1974) is attributed with showing that government housing provision mitigates the problem of inelastic private supply conditions. This would be difficult to demonstrate, both in principle or empirically. Stretton does neither. This issue is taken up later in this chapter and in Chapter 10.

One study of rental housing supply which did hold considerable promise was the Rental Investment Study conducted by Dr. John Paterson (of the New South Wales Planning and Environment Commission) in association with the Australian Housing Research Council. While all the survey data has been collected, it has not been processed and interpreted. Apparently Dr. Paterson has withdrawn from the undertaking. However, the data may still form the concrete basis necessary to fully resolve the supply issue in Australia.

1 The effects of these regulations are probably very important and are deserving of careful study.

2 One interesting side-effect of the defunct Australian Housing Allowance Experiment would have been the generation of a rich bank of cross-section data suitable for sophisticated cross-sectional regression analysis.
2. Assumptions about the Supply of Land

Suppose, as one extreme, that the supply of urban land were fixed. In these circumstances, it might be thought that eventually there would arise a classic Ricardian situation where increases in demand for housing would result purely in increased returns ("rents") to the suppliers of the factor in fixed supply (land). The supply of housing (in total) would be perfectly inelastic. This type of situation would never arise. Firstly, the supply of urban land is never rigidly fixed. Even in places like Hong Kong, where the conditions for a Ricardian case are most appropriate, new land is created by filling in the sea. Secondly, even if the supply were fixed, supply of housing services would not be perfectly inelastic unless structures and land were required in fixed proportions. Housing services are not produced via a fixed coefficients production technology. Structures can be variable in height and "quality". Arnott (1978) has pursued this aspect of the supply issue and has defined the "elasticity of supply of structures on a fixed area of land to be the reciprocal of the percentage increase in the average construction costs of a unit of structure from a percentage increase in structural density" (p.295). This is a variant of a definition earlier proposed by Grieson (1974).

As interesting as it may be to theorize of such matters, for practical purposes we require a concept of supply elasticity which allows land and structures to vary. This is, of course, what we typically observe in actuality. Much new housing in our cities is broad-acre development on the suburban fringes. Flat/unit construction is largely confined to the redevelopment of intra-marginal areas of the city. In addition, existing stock can be altered and added to. Ideally, then, we would encompass all of these three types of supply response in our analysis.
3. **Empirical Approaches**

(a) The Housing Production Function

As we have noted, the supply of housing services can be seen in terms of a production function relating housing services to inputs of structures and land. One approach to the elasticity of housing supply would be to attempt to estimate the production function. If this function was constant returns to scale and if the long-run supply elasticities of land and structures are both perfectly elastic, the long-run supply of housing would be perfectly elastic. A skilled exponent of this approach is Richard Muth (1969 and 1971). The expectation would be that structures could be reproduced at constant per unit cost but that land would not be so reproducible. As a city expands, land in "better" locations will assume a premium value as rents are bid up, largely due to transport cost advantages. Further, the total amount of land in a city may be severely limited and difficult to increase (e.g. Hong Kong). Whether this is important or not depends on the elasticity of substitution of land for structures and the relative importance of land and structures. Muth's investigations lead him to the conclusion that "even if the supply of land were perfectly inelastic, housing subsidies to lower income families would have little effect upon housing prices" (1971, p.244).

(b) The Indirect Method

Yet another method has been proposed by Smith (1976) and, less obviously, by Grieson (1974). The empirical method is "indirect" as it does not rely on direct estimation of a supply function or production

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1 An interesting paper by Rydell (1976) considers alternative means of proceeding and concludes in favour of the production function method.

2 Estimates of the elasticity of substitution vary markedly (see, for example, Smith, 1976 and Sirmans, Kau and Lee, 1979).

3 Land is usually found to be about one-quarter of the value of a house and land.
function. A rent supply elasticity is inferred from a formula requiring data only on land prices (a measure of economic rent) and total market price of a house and land. Consider Figure 4.1, reproduced from Smith (1976, p.392). R is economic rent and C is resource cost. Given first approximations, the change in economic rent is \( dR = QdP \) and the change in resource cost is \( dC = PdQ \). The change in total expenditures is \( dE = dR + dC \). Given the definition of supply elasticity as \( \varepsilon_s = \frac{dQ}{dP} \) (noting the misprint in Smith), it is simple to derive

\[
\varepsilon_s = \frac{dE}{dR} - 1.
\]

Smith believes that the "direct approach to estimating supply elasticities is generally preferred except where output measurements are difficult" (pp.392-393). This is often the case with housing studies. It would seem that Smith’s method is dependent on the stability of the supply curve. If the supply curve were to shift around, the simple result would seem to be in jeopardy (that is, supply would not be identified).

This method also yields quite high estimates of the elasticity of supply. Grieson estimates a supply elasticity of structures of 2.36 using 1970 U.S. average data. Smith estimates partial elasticities of quality and density with respect to the market price of 3.75 and 5.26, respectively. Again these estimates give no grounds for pessimism about supply response.

(c) Cross-Section Regression Analysis

Several studies of the rental housing supply function employ cross-section data on rents, incomes, family size, distance from the central business district, operating costs, etc. These studies rely on the ploy of deriving a reduced form equation by eliminating the quantity variable which is not directly observable. One such study is that of de Leeuw and Ekanem (1971) which employs 1967 U.S. cross-section data to derive
FIGURE 4.1 (from Smith, 1976, p. 392)
elasticities of supply of .3, .5 and .7 for high-, moderate- and low-income housing, respectively. As these are allegedly long-run elasticities, they give some grounds for pessimism. de Leeuw and Ekanem conclude that "subsidizing the demand for low-income housing would drive up rents" (p. 817). Grieson (1973) re-specified the de Leeuw and Ekanem equations and re-estimated to find figures of .37, 1.8 and 2.2 for the three respective categories. de Leeuw and Ekanem (1973) largely accept Grieson's re-specification but refer to two concepts of "long-run" - one where the quantity of structures can be varied, the other (longer) long-run where the form of existing housing capital can be altered. They concede that in this "second long run, at least under competitive conditions, prices per unit of housing service presumably approach new construction prices (plus local land rents) for all types of housing. Since the construction of new housing is a replicable process, we might expect (input prices aside) constant returns to scale to characterize, at least approximately, this long run" (p. 437). Again we have an optimistic assessment of supply response.

A final example of a cross-section study is that of Vaughn (1976) which estimates supply elasticities as a by-product of analysing the housing demand function. Vaughn argues that "the supply price elasticity must be infinite for there to be no bias in the income elasticity estimate" (p. 47). By use of an interesting method, Vaughn infers a supply price elasticity of 1.63 for renter-occupied Negro households. Again, this is a quite high elasticity which is applicable (it must be assumed) to de Leeuw and Ekanem's shorter "long-run".

(d) Time-Series Regression Analysis

Analysis of the elasticity of supply using time-series data has not been a favoured means of procedure in previous studies. Muth (1960) raised the possibility of estimating a short-run supply elasticity using time-series data but dismissed it because of conceptual and data diffi-
culties. Maisel (1963) estimated an equation for housing starts in the United States, 1950M to 1952S, which has explanatory variables including the ratio of rents to housing costs. A significant positive correlation between starts and the rent/cost variable was found.¹

The analysis of the housing supply function via time-series data is fraught with difficulties but is still a fruitful endeavour. In this chapter, Australian Capital Territory data is used in an attempt to estimate short- and long-run rent elasticities of supply for flats. Some of the problems of using time-series data for this purpose are discussed in this section.

In addition to the usual problems of identification and "partial adjustment", time-series regression analysis of rental housing supply raises two peculiar problems in relation to the dependent variable.

One major difficulty arises because rental housing, owner-occupied housing and vacant housing is readily transferable between categories. The supply of rental housing may result from new construction or by transfer from owner-occupancy or vacancy. A resolution in terms of a disentanglement of new construction by intention is out of the question. Fortunately, a solution suggested itself. Ironically, the answer lay in the very root cause of the problem – the high degree of substitutibility, on the supply side, of different forms of housing for one another.

Consider Figure 4.2 which represents the total housing market in long-run equilibrium. Demand for rental housing is $D_R$ and demand for owner-occupied housing (also a function of rental per unit of housing

¹ Reference should be made to the work of Whitehead (1971, 1974) on the United Kingdom housing market. Supply functions are estimated for housing starts and "elasticities" are estimated. Real and nominal values seem to be confused. A stock adjustment specification is not employed and (useless) flow elasticities are calculated. In the latter respect, Whitehead makes the same mistake as Albon (1979c).
FIGURE 4.2

Long-run rental price

$\frac{R}{P}$

D_o

D_R

S

S'

Q_R

Q'

Q_0

Q'_0

Q

Q'

FIGURE 4.2
service) is indicated by $D_o$. Differences in tax treatment of owner-occupiers and landlords are ignored. The market clears the fixed quantity of housing services, $\bar{Q}$, at the long-run rental price, with $Q_R$ housing units being rented and $Q_o$ units being occupied by owners. Any new supply would be forthcoming along the short-run supply curve, $S$. There would be a whole series of such supply curves, one for each construction period, which, given an increase in demand ($D_R$ and/or $D_o$) would trace out an adjustment path to a new long-run equilibrium. For convenience, we assume that long-run supply is perfectly elastic.

Now suppose that the advent of a housing allowance scheme were to raise demand for rental housing to $D_R'$. The initial response would involve renters and potential renters, armed with housing allowances, bidding for the fixed supply of housing from owner-occupiers. They would initially be able to bid away $Q_R' - Q_R$ units, raising the rental price to $(R/P)'$. However, the higher rent would attract new entry according to $S$. At the end of the first construction period, the total stock of housing services would have expanded to $\bar{Q}'$. $D_o$ must now be re-drawn to the $\bar{Q}'$ axis and will cut $D_R'$ to the south-east of the current intersection, indicating a lower rent and higher quantities of rental housing and partial restoration of the amount of owner-occupied housing. More new supply is evoked in the second construction period, and, if long-run supply is perfectly elastic, a new long-run equilibrium will eventually be restored with the original long-run rental price and all of the allowance-induced demand being accommodated.¹

¹ This analysis has some interesting implications. For example, the usual analysis of rent control when supply is fixed is incorrect. When total supply is fixed, a rise in demand for rental accommodation only will not raise rents by the same amount as when it is assumed that the supply of rental housing is fixed. As we have shown, the same is also true when demand for rental housing rises due to the introduction of a housing allowance scheme.
The important implication of this analysis for estimation of the supply curve is that the dependent variable, $\Delta Q_t$, should include all units, whether intended for rental or owner-occupancy. The short-run flow supply curve, $\Delta Q_t = f(R_t/P_t)$, will be identified, given that only the demand curve shifts. The identification problem is discussed below.

Another difficulty with the dependent variable relates to the heterogeneity of housing. The ideal solution would be to convert all dwellings to homogeneous housing service units. As dwellings range from shacks to mansions, the conversion is far from simple. The crudest possible correction would be a division into "houses" and "flats". More sophisticated divisions are possible depending on data availability.

Use of time-series data to estimate demand and/or supply relationships always involves a potential identification problem. Consider Figure 4.3(a) where the flow supply curve, $\Delta Q_t = f(R_t/P_t)$ is identified. The supply curve does not shift; only the demand curve is subject to shifting. A regression of quantity on rental price would yield a supply curve. Conditions unfavourable to estimation of a supply curve are shown in Figure 4.3(b). Here a regression of quantity on price would yield a demand curve. In short, we need a relatively stable supply curve with a demand curve that shifts around, if we are to successfully estimate a supply curve by simple regression.

However, there are other possible problems of identification. Consider Figure 4.3(c) which shows a rather deceptive case. The observations seem superficially consistent with the supply curve being identified but, in fact, the supply curve also shifts. In the case shown, simple regression would yield an underestimate of the true supply elasticity. Figure 4.3(d) is a case where the demand and supply curves shift in an offsetting fashion such that some very price-inelastic "supply curve" (or "demand curve") would be fitted. These circumstances
Figure 4.3(a)

Figure 4.3(b)

Figure 4.3(c)

Figure 4.3(d)
might arise where demand for rental housing is rising at the same time as increasingly more stringent local government regulations are raising the costs of flat/unit development. Such regulations may take the form of zoning, specification of minimum standards or imposition of maximum height/plot ratios. There is some evidence that regulations have had an effect in many localities in the larger cities (see, for example, Paterson, Yencken and Gunn, 1976).  

Finally, there is the problem of accounting for inter-temporal changes in the extent of supply response. The short-run response will be considerably less than the long-run response. One way of estimating the long-run elasticity is via the partial adjustment specification. If we specify the desired level of stock, $Q^*_t$, as a function of rental price (and, possibly, other variables), ignoring the disturbance,

$$Q^*_t = \alpha + \beta \left( \frac{R_t}{P_t} \right),$$

and a partial adjustment equation for new construction,

$$\Delta Q_t = \lambda (Q^*_t - Q_{t-1}),$$

then we derive an estimating form of

$$\Delta Q_t = \alpha \lambda + \beta \lambda \left( \frac{R_t}{P_t} \right) - \lambda Q_{t-1}.$$

A short-run elasticity can be calculated from the estimate of $\beta \lambda$ and the long-run elasticity from $\beta$.

(e) Other (Less Sophisticated) Methods

Many people would argue that elaborate statistical methods are unnecessary to demonstrate that the supply of rental housing is not inelastic, except in the very short-run. They might point to the

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1 The Priorities Review Staff (1975) also commented on the effects of these regulations. The PRS was concerned that it is "the poor who are most likely to be harmed by restrictions of the sort being discussed" (p.131).
apparent failure of rents to rise, relative to other prices, over a very long period of time. They may, indeed, mention an Australia-wide fall in real rents over recent years, despite a rise in the relative importance of the private rental sector. In the United States the Housing Allowance Supply Experiment strongly indicates that the results of housing allowance programmes in Brown County (Wisconsin) and St Joseph County (Indiana) "reveal no significant price increases beyond those clearly attributable to national price inflation - especially rising energy prices" (Barnett and Lowry, 1979, p.v). The major method applied was a comparison of rent inflation in the programme areas with national rent inflation.

4. Time-Series Regression Analysis of A.C.T. Data

(a) Identification and Specification Problems

In the light of the discussion of likely difficulties in using time-series data to analyse the housing supply function, it is necessary to consider whether these problems are going to arise when working with Australian Capital Territory data covering the period since late 1973. Here we examine only identification and specification problems. Some of the other hazards are discussed, after the results are presented, to guide the reader as to how to interpret the results.

A priori reasoning seems to suggest that the supply curve will be readily identifiable in the Australian Capital Territory. The demand curve has probably shifted very much while the supply curve has been quite stable, over our data period. Demand for private housing is a function of many things other than price per housing service unit ("rent"). These other factors include incomes, cost and availability of finance (for owner-occupied housing), conditions pertaining to Government house and flat rentals and sales, and the rate of immigration to the Territory. All of these factors have shown considerable volatility. For instance, the rents of government dwellings have risen

1 Although this has not been true of Sydney in recent years.
dramatically since the mid-1970's. According to the ABS Government Rent Index (a component of the A.C.T. CPI), rents rose almost exactly threefold between 1973D and 1978D. Private rents rose by only about 29 per cent over the same period. A severe means test was imposed on Government housing in 1974. Previously a waiting list was the rationing device. The rate of population growth has also fluctuated considerably. In 1971 it was running at nearly 10 per cent per annum compared to about 2 per cent now. Over the "Whitlam Years" it was around 7 per cent.

There is no need to document the considerable changes in the conditions of finance facing prospective home-buyers. In short, there is substantial reason to believe that the demand curve for housing has been subject to marked shifts over recent years. If it can be shown that the supply curve has been relatively stable, we have ideal conditions for directly estimating a supply curve.

The supply curve will basically reflect construction costs and land costs. Regressions of quantity on rents will reveal these costs, if the supply curve is identified. What factors may shift the supply curve? If this were a study of say Melbourne or Sydney, local government building and zoning regulations would have to be taken into account.¹ These have changed markedly in recent years elsewhere, but not in the A.C.T. One factor peculiar to Canberra was the existence of rent control over the period from 1973D to 1976M (see Chapter 7). It may be argued that rent control would create a "movement along" rather than a "shift in" the supply curve. However, this ignores a separate "expectational" effect of rent control (see Chapters 2, 6 and 8) which has been tested for by the inclusion of a rent control dummy.

¹ A regression method for dealing with gradual structural shifts has been proposed by Wilton (1975). This technique may be potentially useful in time-series supply studies of the Melbourne and Sydney rental markets.
over the period of control. The rent variable will, of course, pick up any movement along the supply curve, if supply is identified. There may be other factors which have shifted the supply curve. If the simple regressions are unsuccessful this will be prima facie evidence of the existence of such "omitted variables".

Because flats/units are far more likely to be built for rental than are houses, it was decided to work with them exclusively. A partial adjustment specification, as set out earlier, was used. While a rent variable immediately suggests itself for inclusion, the form of this variable is not entirely obvious. Further, it was necessary to consider the inclusion of other explanatory variables.

It was expected that investment decisions would not be related to current values of the rent variable. Investors are hardly likely to respond immediately to a single period (quarterly) rise in rent. They would need to be convinced that this was not a temporary phenomenon before making such a permanent decision. It was further obvious that the rent variable would have to be in real terms - investors presumably do not suffer from money illusion. Deflating rents by the consumer price index and a house price index are possibilities. A final problem arose in relation to capital gains - should these be included as they may form part of the investor's return? For at least two reasons, capital gains (and losses) have not been incorporated. One very pragmatic reason is that it is extremely difficult to do so. Investors will react to anticipated capital gains (losses). Such anticipations are very hard to measure and model. Actual changes in value are of very little help. A second excuse is that long-run real capital gains are non-existent or very small if

1 Rent control was imposed rather suddenly and unexpectedly - even taking the administrators by surprise. The best laid plans of mice and men were disturbed. The rent control dummy is, perhaps, designed to pick up a "disruptive" effect more than an "expectational" effect.
properly measured. This is not to deny that prospects of gains or losses will be important at particular times.

Other explanatory variables, apart from lagged stock and the rent control dummy, were considered. One such variable that might be considered is a real rate of interest. While this variable may have some influence on supply it was not used because it will primarily have its effect on the demand side of the market. Secondly, the extent of Government dwelling construction might be tried. Again this is, in part, a demand-side variable but which also has claims as a supply influence, particularly on the basis of it being an important influence on expectations. A negative sign on this variable would be expected.

(b) The Data

Quarterly data on the relevant variables were collected for the Australian Capital Territory over the period 1973D to 1979J, giving an initial 23 observations. Observations were "lost" due to averaging and lagging. Each variable is described in turn. The major variables are set out in Table 4.1.

Commencements of Flats (CF): This variable was collected from the ABS publication "Building Statistics: Australian Capital Territory" (AGPS, Canberra), various issues. Only private commencements are included. Over the data period the series fluctuates very widely from 0 in 1975M to 205 in 1973D. The mean is about 100 over the sample period. The considerable fluctuation necessitated some smoothing - the raw variable was just too variable to explain. The extreme volatility is largely due to the lumpiness of flat/unit projects in the context of a small aggregate. The variable has been smoothed by specifying a moving average form. Our variable, MACF_t is equal to \( \frac{1}{3}(CF_{t-1} + CF_t + CF_{t+1}) \).
### Table 4.1: Data Used in A.C.T. Regressions

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<th>SF</th>
<th>GHFC</th>
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**Sources:** See Text.
Stock of Flats (SF): The base of the stock is arbitrary, but the stock of private flats was known as at the June 1971 Census. The Stock series was constructed by accumulating quarterly completions of flats on the basic figure of 4703. This assumes no demolitions. Completions were taken from the ABS' "Building Statistics ...", various issues.

Rent and Price Variables: All rent and price variables are from the ABS publication, "Consumer Price Index; Index Numbers for Groups, Sub-Groups and Special Groupings, Canberra" (various issues). The rent index (R) covers "rent, privately owned houses and flats" with base 1973D = 100. While a combined index over such a short period is far from ideal, it was the best available. Two deflators, P and H, were collected. P, the Canberra consumer price index was converted to base 1973D = 100. H is "house price, repairs and maintenance" for Canberra, also converted to 1973D = 100. It is regarded as a "cost index" from the investor's viewpoint. Two variables were formed which incorporated lags. These are "RPLAG", \(1/2[(R_{t-1}/P_{t-1}) + (R_{t-2}/P_{t-2})]\) and RHLAG, \(1/2[(R_{t-1}/H_{t-1}) + (R_{t-2}/H_{t-2})]\).

Rent Control Dummy (RCD): This variable is equal to 1 over the period of compulsory rent control, 1973D to 1976M.

Government Dwelling Construction (GHFC): Quarterly figures on Government house and flat completions were collected from the ABS publication, "Building Statistics: Australian Capital Territory" (op.cit.), various issues. House and flat completions were aggregated to form the variable GHFC.

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1 There is some evidence that house and flat rents moved in a disparate fashion. In the rent control period, the rent controller allowed a higher rate of return on flats than on houses. According to RESI data (see RESI, 1975, Appendix 10), rents of furnished flats rose 8.18 per cent from 1973S to 1974S while furnished house rents fell 0.57 per cent over the same period. To overcome these problems an attempt was made to construct a separate index for houses and flats based on data collected from the "To Let" columns of the "Canberra Times". Construction of an index was frustrated by the paucity of data over the rent control period when "To Let" columns dwindled dramatically.
(c) Estimation Procedure

The equations reported here are estimated on the Australian National University's package programme AUTREGAL (see Pagan, 1976). This regression package allows for the use of many quite sophisticated regression techniques, including "correction" for autocorrelation by a maximum likelihood estimation procedure.

Where an equation displayed evidence of autocorrelation, it was re-estimated encompassing the "correction" for the appropriate order of autocorrelation. Autocorrelation was detected by perusal of the correlogram of autocorrelation coefficients. Standard tests for autocorrelation are inapplicable in the presence of a lagged stock variable and the test statistics are not reported.

It should also be noted that the "moving average" procedure used in the equations for flats may introduce econometric problems. A moving average process may be introduced into the disturbance. This problem arose in relation to a moving average specification of wage equations, and is discussed by Rowley and Wilton (1974) and by Kenward (1975). A close examination of the correlograms (after autocorrelation correction) of the preferred equations does not indicate that the moving average procedure is a problem in these regressions.

(d) The Results

After variables were lagged and the moving average commencement variable formed there were effectively 20 quarterly observations over 1974J to 1979M. Equations were run beginning with the purest form of the hypothesis before adding other variables mentioned earlier. All the "usual" problems of experimentation were encountered and a considerable pile of print-out was amassed. Even so, the results are not particularly exciting.
The simple hypothesis involved the estimation of an equation with explanatory variables being the lagged rent variable and lagged stock. The estimated equation is

\[
\text{MACF}_t = -228.27 + 1.20 \text{ RHLAG} + 0.034 \text{ SF}_{t-1}
\]

\[
\begin{align*}
(-1.47) & \quad (1.03) & \quad (2.93)^* \\
R^2 = .36 & \quad \text{SE} = 24.703
\end{align*}
\]

The equation is unsatisfactory in several respects. In particular, the lagged stock variable has the wrong sign, the rent variable is statistically insignificant, the \(R^2\) is very low and there were signs of first-order autocorrelation in the correlogram of residuals.

Inclusion of the rent control dummy improves matters to some extent, yielding

\[
\text{MACF}_t = 118.03 + 1.152 \text{ RHLAG} - 73.12 \text{ RCD} - 0.014 \text{ SF}_{t-1}
\]

\[
\begin{align*}
(1.46) & \quad (2.12)^* & \quad (-7.44)^* & \quad (-1.70)^*
\end{align*}
\]

\[
\rho_2 = .45 \quad R^2 = .81 \quad \text{SE} = 14.30
\]

\[
(1.93)^*
\]

The equation has been run with a second-order autocorrelation correction and there is no significant autocorrelation evident in the correlogram of the corrected equation. The lagged stock variable has the right sign and is reasonably significant. The coefficient is indicative of a very long mean lag (adjustment period), even though a long lag would be

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1 The Durbin-Watson statistic is inapplicable in these equations. The Durbin statistic is not calculable. One asterisk indicates significance at at 95 per cent level, two asterisks infers 99 per cent. The \(R^2\) is the coefficient of determination (uncorrected) and \(\text{SE}\) is the standard error.

2 All equations reported contain RHLAG which proved most successful in the experimentation.
expected. The $R^2$ is quite respectable. Based on mean values of the stock and rent variables, the implied short-run elasticity of supply with respect to the rent variable is .0149. The long-run elasticity is 1.062.

Experimentation with equations which included the government house construction variable were not very successful. The presence of GHFC resulted in the following equation:

$$MACF_t = 255.34 + .314 \text{ RHLAG} - 62.22 \text{ RCD} - .071 \text{ GHFC}_t$$

$$(2.87)** (0.54) \quad (-6.37)** (-2.21)$$

$-0.022 \text{ SF}_{t-1}$

$$(2.93)**$$

$\rho_2 = .55$

$$(2.32)*$$

$R^2 = .86 \quad SE = 12.60$

Unfortunately, the insignificance of the coefficient on the rent variable mars an otherwise impressive equation. All variables have the expected sign, including GHFC.

(e) Interpretation of the Results

(i) The supply elasticities from the preferred equation are supportive of a very inelastic short-run supply response and a fairly high "long-run" response. Indeed, the "long-run" elasticity is such that, given a rent elasticity of demand of one, that .52 of a specific subsidy would end up in tenants" "hands". However, two points must be kept in mind. Firstly the "long-run" to which we are referring is de Leeuw and Ekanem's first long-run - not the longer long-run when a very high elasticity would be expected. Secondly, the estimates of the

---

1 The implied adjustment period is "too long" and reflects an inadequacy of data and/or specification.

2 This result is dependent on simple partial-equilibrium incidence analysis. Most recent studies indicate a demand elasticity of less than one and, thus, a higher proportion of the subsidy falling on tenants.
elasticities are biased downwards by the use of actual units—and not housing services—as the dependent variable. To the extent that "quality" went up over the data period,¹ the coefficient on the rent variable will be biased downwards.

(ii) The results are indicative of an adverse effect of rent control on supply. This evidence is of two kinds. Firstly, a positive supply elasticity itself is indicative of an adverse effect. This result was found by Maisel (1963) for United States data. Maisel found that "the relatively low level of rents resulting from rent control seems to have had a depressing effect on starts through most of 1952, ... [but in] 1953 and 1954, rents shot up much faster than costs, thus adding to the expansion" (p.377). Secondly, the rent control dummy enters with a highly significant negative sign. While this cannot be interpreted as an "expectational" effect, it is evidence of a disruptive effect—the short-run substitutability on the supply-side is limited. There is also some evidence of development plans being switched to Queanbeyan.

(iii) There is some evidence of a role for Government house and flat construction as a "crowding out" agent. (Unfortunately, GHFC also "crowded out" the rent variable.) The verification that increased public housing activity reduces private activity is not without significance, and contradicts the views of some "supply pessimists".

(iv) The results have considerable limitations. Some have already been mentioned. Others include the following: The data period is quite short and covers a turbulent period. The rent variable is an amalgam of flat and house rents, not flat/unit rents alone. Experimentation with long lags on the rent variable was ruled out by a shortage of observations. There must be some uneasiness about the exclusion of capital gains and losses from consideration. The links between the Canberra and Queanbeyan

¹ There is considerable evidence that "quality" did increase over the period of our analysis.
markets (see Chapter 7) have been neglected - much new rental investment took place in Queanbeyan over the earlier part of the data period.

5. Less Formal Australian Evidence

During the 1970s the decline in the size of the Australian rental market ceased and the relative size of the market has remained static during the decade. As at the June 1971 Census, 18.11 per cent of all dwellings were privately rented. The figure was 17.97 per cent at the 1976 Census and seems to have been about the same at the time of the November 1978 "Survey of Home Rental and Ownership" (about 18.25 per cent). This large absolute growth of the private rental sector was not accompanied by any increase in real rentals. Indeed, the real level of rents declined considerably over the decade - see Table 4.2. This is hardly consistent with the predictions of the supply pessimists whose reasoning would have led them to predict either constant or rising real rent levels. If anything, the 1970s data is consistent with rental housing being produced under decreasing cost conditions.

Other informal evidence could be presented. For example, Lampe (1977) has analysed the "recycling boom" in Sydney over the period 1972-1977. This involved the renovation of old buildings which, together with new construction, resulted in a "glut of rental properties .... Owners of rental flat blocks often found themselves saddled with an investment property returning 6 and 7 per cent a year yield ....". Again, this is inconsistent with inelastic supply. Another bit of informal evidence is presented in Chapter 7. Demand diverted to Queanbeyan due to rent control in Canberra called forth a phenomenal flat-building boom.

6. Conclusions

This chapter is written as if the "supply optimists" were the ones with the case to answer. Theoretical considerations indicate a high total elasticity of supply in the long-run and high short-run elasticities for any particular type of housing - rental or owner-occupied.
### Table 4.2: Movements of Australian Rents

<table>
<thead>
<tr>
<th>Quarter</th>
<th>(1) Private Rents (Base 1966-67=100)</th>
<th>(2) CPI (All Groups) (Base 1966-67=100)</th>
<th>(3) (1)/(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971 J*</td>
<td>134.2</td>
<td>117.2</td>
<td>1.145</td>
</tr>
<tr>
<td>1972 J</td>
<td>143.2</td>
<td>124.5</td>
<td>1.150</td>
</tr>
<tr>
<td>1973 J</td>
<td>152.4</td>
<td>134.7</td>
<td>1.131</td>
</tr>
<tr>
<td>1974 J</td>
<td>166.3</td>
<td>154.1</td>
<td>1.079</td>
</tr>
<tr>
<td>1975 J</td>
<td>192.7</td>
<td>180.2</td>
<td>1.069</td>
</tr>
<tr>
<td>1976 J*</td>
<td>219.4</td>
<td>202.4</td>
<td>1.084</td>
</tr>
<tr>
<td>1977 J</td>
<td>243.6</td>
<td>229.6</td>
<td>1.061</td>
</tr>
<tr>
<td>1978 J</td>
<td>261.0</td>
<td>247.6</td>
<td>1.054</td>
</tr>
<tr>
<td>1979 J</td>
<td>280.5</td>
<td>269.4</td>
<td>1.041</td>
</tr>
<tr>
<td>1979 D</td>
<td>289.3</td>
<td>283.9</td>
<td>1.019</td>
</tr>
</tbody>
</table>

* Census Dates

**Source:** Australian Bureau of Statistics, "Consumer Price Index", Catalogue No. 6401.0, various issues.
The available evidence seems to confirm this prior reasoning. All the United States evidence implies a high elasticity. The Australian evidence presented here points in the same direction. The "supply pessimists" are the ones who "should" be providing a case for inelastic supply. This must be in the form of logical argument and careful empirical investigation rather than assertions.

It should finally be emphasized that problems with housing supply are not likely to arise on the market side. Rather, supply difficulties are inherent in government policies like rent control/regulation and building/zoning regulations. The "supply pessimists" would be better employed seeking out "government failure" rather than alleging "market failure".¹

¹ Inelastic supply is not a "market failure" in the usual sense of the term.
CHAPTER 5

A HISTORY OF AUSTRALIAN RESIDENTIAL RENT CONTROL LEGISLATION
AND OF ECONOMISTS' ATTITUDES TO THAT LEGISLATION

To set the scene for the three ensuing chapters, this chapter reviews the history of residential rent and eviction controls in Australia. In addition to examining the nature of these controls, we also review the reactions to them from, in particular, academic and other economists. It could hardly be said that the economics profession was a major force in securing the decontrol of the rental market.

Very little attempt is made to assess the effects of the various bits of legislation. This task is left for case studies presented in later chapters. Here we are primarily descriptive.

The saga begins with New South Wales Fair Rents Act of 1915 and ends with a brief introduction to current day "rental market regulation". A lot of controls have been applied to a lot of dwellings over the intervening sixty five years. No pre-1915 cases of residential rent control are known to the author. This is not a denial of their possible existence.

1. The Pre-1939 Situation

Almost certainly, Australia's first experience with rent control was the New South Wales "fair rent" experiment which was established by that State's Fair Rents Act, 1915.\(^1\) The history and operation of the Act are discussed in a paper by H.V. Evatt (1920). This paper is possibly the first academic analysis of rent control to appear in the world. Evatt expresses qualified support for the New South Wales legislation on the basis that the adverse effect of the Act ("adding its quota to the causes of the housing shortage", p.20) was possibly out-

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weighed by its effect of keeping "rents at a reasonable rate during an exceptionally difficult period, and ... [acting] as a valuable deterrent to the building "profiteer"." (p.20).

The New South Wales Act was only partial in its coverage, excluding leases exceeding three years or cases where rent was more than £3 a week. The Act set out a rigid formulation for the determination of rents. An "opportunity cost" was calculated by applying an interest rate to the building's capital value. To this was added the costs entailed by a list of specified outgoings (rates, land tax, repairs and maintenance, insurance, depreciation and a vacancy allowance). Any "fair rent" so determined (indeed, any rent falling within the ambit of the Act) was not to exceed the actual rent prevailing as of the first day of 1914, unless there were exceptional circumstances. The eviction provisions of the Act were such that the landlord had to show reasonable cause for ejecting a tenant.

The Act attracted considerable attention, both in Australia and abroad. Whitman (1925) was quite impressed with the legislation, suggesting that it "went further than that in this country [the United States] during the war [because] fair rent courts were established and definitely instructed with reference to the net returns which might be allowed to landlords" (p.345). Evatt reports on some of the Australian commentaries on the Act. The Act came in for some criticism by the now long-since defunct Inter-State Commission and an ex-Premier of New South Wales who suggested that any person building rental housing after the introduction of the Act deserved to be sent to Callan Park, a well-known Sydney lunatic asylum.

The Fair Rents (Amendment) Act, 1920, made some minor amendments to the New South Wales legislation, including the outlawing of above-rent payments such as "key-money" and the prohibition of refusal to let a dwelling to a tenant with children.
A 1926 amending Act explicitly set out a series of grounds on which an eviction could be made. These included failure to pay rent, being a nuisance to neighbours, using the premises for immoral or illegal purposes and reasonable requirement of the premises for occupancy by the owner.

A non-Labour Government was elected in 1927 at an election in which rent control had been an issue. In his policy speech, the leader of the new Government, Mr. Bavin, had pledged substantial decontrol. The 1928 Fair Rents (Amendment) Act provided that the legislation should cease to have any effect after July 1, 1933. Dwellings built during or after 1928 were exempted and the 1915 standard rent was dropped. The basis on which a rent determination was made was altered to have a one year duration.

The Fair Rents (Amendment) Act, 1915-1928, was finally completely removed from the statute books in 1937. In the meantime, however, the depression had intervened. Two Acts of importance had early ensued - the Reduction of Rent Act, 1931 (which reduced rents by $\frac{22}{2}$ per cent, allowing for voluntary reductions since June 30, 1930) and the Ejectments Postponement Act, 1931 (which among other things outlawed "squatting"). The Landlord and Tenant (Amendment) Act, 1932, dealt also with the postponement of ejectments and the reduction of rents.

According to the De Baun Report (1939) there was not, for any practical purposes, any form of rent control in New South Wales on September 3, 1939. The War was soon to change that situation.

Victoria's first brush with rent control was its 1938 Fair Rents Act. The Housing Investigation and Slum Abolition Board in its First (Progress) Report (1938) had expressed some dismay that the June, 1937 basic wage increase had led to rent increases. According to the Victorian 1956 Board of Inquiry (1956), referring back to this 1937
experience, "[s]ome machinery is, in my opinion, necessary to ensure that landlords do not, without justification, use their dominant position to deprive tenants of the benefits of increased income" (p. 22). The Report of the Housing Investigation and Slum Abolition Board led to the 1938 Act.

The 1938 Act was limited to houses with capital value of £800 or less in Melbourne, Ballarat, Hamilton and Shepparton. Either a landlord or tenant could apply for a determination. Rents could not be determined at more than 10 per cent of current capital value. A determination would remain in force from six months to two years, as determined. The principle was established for Victoria that rent controls were useless without eviction controls. Such controls were incorporated in the Act as a set of prescribed grounds.

According to Butlin (1954), the "Queensland Government had had [in 1939] a system of rent control since 1920, and this had been tightened up in 1938" (p. 48). Butlin gives no reference for this statement. In the Queensland Year Book (1967 and following editions) there is a single sentence referring to this pre-war legislation. It reads: "Under the earlier legislation, The Fair Rents Acts, 1920 to 1938, control was much wider."

No other pre-war cases of rent control in Australia are known to the author.

2. Rent Control During World War Two

After the outbreak of war in 1939, the question of rent control was discussed at the September 1939 Premiers' Conference. A result of the Conference was the introduction of National Security (Fair Rents)

1 It may be an interesting exercise to inquire into the selective operation of the Act. The answer may have something to do with the existence of a Labour/Country Party Coalition Government in Victoria at the time.
Regulations by the Federal Government which gave the States executive power to freeze rents at the August 31, 1939 level. States could set up Fair Rents Boards to make determinations at the request of either landlords or tenants. Prescribed grounds for eviction were allowed for. These comprised failure to pay rent, failure to take reasonable care of the premises, use of the premises for immoral purposes, being a nuisance to neighbours, sub-letting at a profit or if the landlord had made a contract of sale with a requirement of vacant possession. According to Butlin (1954, p.48), where these Regulations were applied "they gave landlords considerable advantage as compared with tenants". At the end of 1939, the rent freeze ceased so only those who had sought a determination had "protection" under the Regulations. Butlin also reports, however, that "many tenants would prefer to pay higher rent than risk eviction and bad relations with their landlords" (p.49).

Three States adopted the 1939 Regulations - namely, Queensland, Victoria (which suspended its 1938 Fair Rents Act) and Tasmania. New South Wales decided to introduce its own legislation, the 1939 Fair Rents Act which applied only to dwellings with rents of less that £3.10 per week. Rents were pegged at the August 31, 1939 level, and fair rent machinery was established. Rents were to be set on a mechanistic basis, as in the 1915 Act.

South Australia froze rents as at September 1, 1939 and allowed rent increases only where there were improvements or structural alterations. Eviction restrictions were the same as in the Commonwealth Regulations. Western Australia pegged rents at the August 31, 1939 level and only allowed increases, by appeal to the Supreme Court, for premises with values in excess of £2,000. Eviction controls similar to those in the Regulations were imposed.

New Federal Regulations were introduced in March 1940. As with the 1939 regulations there was no compulsion for the States to adopt
them. These Regulations froze rents at the December 31, 1940 level and a determination from a Fair Rents Board was required to vary a rent. Eviction provisions remained substantially as they had earlier. Queensland, Victoria and Tasmania continued with the Federal Regulations. South Australia and Western Australia had their own rigid rent and eviction control laws. New South Wales' Fair Rents Act was a matter of some concern to some commentators as its legislation was relatively weak.

After the Australian Labour Party came to power in 1941, new National Security (Landlord and Tenant) Regulations were introduced in November of that year. These could be compulsorily imposed on any State and in the Territories. The eviction provisions were considerably tightened up and applied universally. The rent control provisions froze rents at the August 31, 1939 level except via a determination (to be based on such things as capital value, the Commonwealth Bank overdraft rate, rates, taxes, insurance, repairs and maintenance spending, rents on comparable premises, any services provided, justices and merits of the case, and hardship). These regulations applied immediately in New South Wales, replacing the existing weak controls, and subsequently were adopted in the Australian Capital Territory (December 1941), Tasmania (February 1942), Victoria (March 1942), Queensland (April 1942) and the Northern Territory (January 1943). Western Australia and South Australia continued their own legislation without interference from the Commonwealth which considered the State legislation to be adequate.

A new set of Commonwealth Regulations were introduced in June 1945. One of the main features of these Regulations was the extension of controls to "shared accommodation". Small changes were made to the eviction provisions including the requirement for a Magistrate to have regard to alternative accommodation in considering whether to issue an order to quit.
In 1946 and 1948 other minor amendments occurred, but the situation remained substantially unchanged. The Regulations ceased to exist entirely in 1948 (as we will see below).

The effects of the Regulations had been to keep rents virtually static over the period from the beginning of the War until 1948. Over the war period itself, Table 9.1 shows that rents rose by only 1.0 per cent while the "C" series consumer price index as a whole rose 22.3 per cent over the same period. It was known, however, that illegal payments such as "key-money" and above-rent payments were quite common.

The economists' verdict on the controls was generally favourable. E. Ronald Walker (1939), a former Professor of Economics at the University of Tasmania, expressed strong support for wartime rent controls. He saw the object of such controls as to "avoid a rise in general living costs and to prevent profiteering" (p.101). In his study of the wartime rental market in Melbourne, Prest (1945) contrasted the situation in 1939 to that at his time of writing. In 1939 "there was no scarcity of houses ... in the sense that we know it today" (p.53). This was despite a high level of post-depression demand. "The rise in rents must ... have served as a brake upon demand, compelling some of those seeking better homes to revise their ideas, restraining some who contemplated housekeeping for themselves, and sometimes, perhaps, inducing the postponement of marriages" (pp.53-54). Prest then refers to the "pegging" of rents in 1939 which "prevented any further application of the brake which higher rents had previously imposed on the expansion of demand ... Thus demand and supply have ceased to be adjusted to one another by the operation of the market. Demand exceeds supply and even the normal interchange of houses has come to depend on personal contacts ..." (p.54). Surprisingly, Prest then states that "[t]his does not constitute a criticism of the war-time control of rents and property values" (p.54). The pressures of wartime demand (argued by Prest to be
mainly due to rising incomes) were "too powerful to be held in check by any normal increase in rents and property values. A rise in rents of the required magnitude would have borne particularly heavily on all those whose incomes did not rise proportionately and particularly on the families of service men. This in itself is sufficient justification of the control of rents and property values" (p.54).

Another commentator on the wartime controls was Mendelsohn (1941a and 1941b) who gives two completely different views on the controls. In the first mentioned reference, Mendelsohn argues that measures to regulate rents "can have no effect on the basic level of rents, which is determined by the demand for houses and the cost of producing them. In the long run ... rent restriction has a bad effect, because it discourages new building and creates a housing shortage" (p.58). However, in (1941b), Mendelsohn argues that the "regulations can ... be justified on the ground that they have prevented a probable future price rise" (p.1) and that "[r]ent control must be considered as an integral part of general housing policy ..." (p.2).

3. The Demise of the Commonwealth Regulations and the Response of the States

As of early 1948, the Commonwealth Landlord and Tenant Regulations applied in all States and Territories except the two most westerly States which had their own stringent legislation. This situation was soon to change with the removal of Commonwealth power to regulate over rents and prices.

The National Security Act lapsed at the end of 1946 and rent/eviction controls were included under the Defence (Transitional Provisions) Act. This legislation was successfully challenged in the High Court which led the Federal Government to seek a change in the Constitution through a Referendum to retain permanent power over rents and prices. This Referendum, held in May 1948, was "lost" by the
Federal Government and the power to legislate in this area was consequently restored to the States in August 1948. The Commonwealth retained the power to control rents and prices in the Territories.

South Australia and Western Australia continued their own legislation after 1948. The other States all adopted legislation very similar to the Commonwealth Regulations. In each case, the eviction provisions written into the new State Acts were virtually identical to each other and to those in the now-defunct Commonwealth regulations. The rent control provisions were also very similar, except in Queensland where the Landlord and Tenant Act (1948) only controlled rents of houses, whereas the other State acts also encompassed flats.

The Australian Capital Territory’s Landlord and Tenant Ordinance was introduced in 1949. It carried on the provisions of the Regulations except for one important difference— all premises built or leased after March 1, 1945, were exempted from rent controls except via a fair rent determination which could be sought by either landlord or tenant from the rent controller, but was binding once made. Eviction controls were continued.

What is important is that all States, being completely free to legislate in the area of landlord and tenant, decided to continue with systems of rigid rent and eviction controls.

Commentators on the rent control issue at the time of the transition from Commonwealth to State legislation were conspicuous by their absence. In 1948, Downing published two pieces of work on housing policy. In the less substantial work, an Economic Record article, Downing (1948a) completely ignores rent control, while in the International Labour Organization book (1948b), there is only incidental mention. This is a little difficult to understand in the context of blanket rent control throughout Australia and where privately rented
dwellings constituted some 40 per cent of the total dwelling stock. In his review of Downing's book, Arndt (1949) took Downing to task for his neglect of rent control. Arndt outlined some of the problems allegedly associated with rent control and suggested that a "choice will have to be made between further injury to landlords, subsidization of abnormally low housing expenditure out of the public purse, or a gradual stepping up of controlled rents. The first two courses seem hardly justifiable; the third will require unusual political courage" (p.100).

4. Decontrol in the 1950s

Except in Western Australia, there were five years of State legislation before the first chinks in the armour of rigid rent and eviction controls appeared. Western Australia was the first State to decontrol, beginning this process in 1951 and very nearly completing it in 1954. All States made some moves towards relaxing controls during the fifties, for instance in relation to decontrolling new lettings (for example, Victoria in 1953 and New South Wales in 1954), allowing proportional rent rises (as in Victoria, Queensland and South Australia) or slowly freeing up evictions (as in New South Wales). By the end of the decade, three States had decontrolled to a large extent (these were Western Australia, Tasmania and Victoria) while South Australia and Queensland had gone a considerable way towards decontrol. New South Wales still had a substantial way to go in 1960.

Western Australia's Increase of Rent (War Restrictions) Act 1939-50 was continued after the War by continuance Bills which in some cases incorporated slight amendments. The Rents and Tenancies Emergency Provisions Act No. 47 of 1951 continued the effects of the former Act, but in a considerably restricted form. This Act decontrolled all new leases, allowed controlled rents to be raised by up to 20 per cent and put rent determinations on the basis of current capital value less depreciation. The Act was amended in 1953 such that, as from May 1, 1954,
landlords and tenants could negotiate on a rent. Both parties still had recourse to a rent determination based on current values if agreement could not be reached.

Tasmania allowed a 20 per cent rise in dwelling rents in 1950 and additional increases were allowed in 1952. At the end of 1955, Tasmania's Landlord and Tenant Act lapsed and was not renewed. However, in 1956, new provisions in the Fair Rents Act re-introduced elements of control. Even so, Tasmania can be counted amongst those States which had largely decontrolled by the end of the 1950s.

In 1953 Victoria decontrolled all new lettings, and all leases on dwellings not let between 1940 and 1954. As from the beginning of 1955, all dwellings let in 1940 at £2.10 or more became subject to an agreed rent and, if no voluntary agreement could be reached a determination based on current capital value (rather than the previously used 1940 value) could be sought. Several amendments were made in the 1955 Landlord and Tenant (Amendment) Act, which was to operate from mid-1956. Written leases of three years or more could be subject to an agreed rent and dwellings that became vacant could be re-let without an externally determined rent. The base rent (that is, the rent prevailing in 1940) could be increased by up to 25 percent. The most crucial step came in 1959 when an amendment allowed rents on all dwellings to be fixed by agreement. Failing an agreement, a determination based on current values could be sought. Certain leases remained controlled.¹

In South Australia, an independent committee of enquiry reported in 1951 and as a result of the report, South Australia abandoned 1939 values as the basis for "fair rent" determinations. The rent-setting body, the Housing Trust, was instructed to use "current replacement

¹ Considerable information about the Victorian legislation is contained in Brooking and Chernov (1972). Strangely enough, the 1959 amendment receives little attention in any of the sources. The leases which remained controlled are listed in Bradbrook (1975-76).
cost, less depreciation" in setting rents. A 22\(\frac{1}{2}\) per cent addition to
the base rent was allowed in 1951 and this was extended to 27\(\frac{1}{2}\) per cent
in 1954 and 33\(\frac{1}{3}\) per cent in 1955. Written leases for two years or more
were exempted from control in 1954 and all fixed term leases were
exempted the following year. These latter amendments effectively de-
controlled all new leases, whether on new or previously unlet dwellings
or where vacant possession had been attained on previously let
dwellings. South Australia entered the 1960s with a fairly gentle form
of control similar to that in Tasmania and Western Australia.

In Queensland, as in New South Wales, rent control remained more
rigid than elsewhere. An amending Act of 1957 allowed an increase of
20 per cent in the controlled rent of dwellings which were in existence
in 1942, the basis of determination being the 1948 value, which replaced
the previously-used 1942 capital value. Dwellings first leased after
1957, and premises which were leased after that date, but which had not
been leased during the previous three years, were exempted from control.
Any other leases made after 1957 were to be free of control if the
parties agreed in writing.

As set out in more detail in Chapter 6, New South Wales "dragged
the chain" in terms of decontrol during the fifties. Despite the advent
of "creeping decontrol", New South Wales maintained far more rigid
controls than any of the other five States.

Finally, we should consider what happened in the Territories.\(^1\)
In the A.C.T. no important changes occurred in the 1950s, or, indeed, the
sixties. The one minor change was a 1952 alteration which served to
include those involved in the Korean conflict amongst "protected
persons".

\(^1\) Apart from the implementation of wartime Federal Regulations in
January 1943 and the imposition of controls after Cyclone Tracy in
1974, the author reluctantly admits virtually no knowledge of what
happened in the Northern Territory regarding residential tenancy
law.
Interest in rent control by Australian economists during the 1950s was minimal. One item by economists known to the author is a newspaper item by three economists (D. Cochrane, D.M. Hocking and J.E. Isaac, 1953) all of whom were then at the University of Melbourne. This item appeared in the Melbourne "Age" and argued for the abolition of rent controls in Victoria. They argued that the shortage of housing was an artificial creation which would be largely solved by the removal of rent control.

When the New South Wales Government set up a Royal Commission to enquire into its Act at the end of the decade, N.T. Drane was commissioned to write two papers on the economic effects of rent control. These two papers (Drane, 1961a and 1961b) leave the reader with the impression that Drane is ambivalent about the rent control issue. In the first of the two submissions, Drane asserts that "landlords should be prevented from charging excessive rents" (1961a, p.231). Only a "fair" or "normal" return should be allowed (that is, the average rate of return to landlords if there were no housing "shortage"). Then "there is still the question of which valuation to apply it to. Clearly the market valuation ... cannot be employed, for this reflects any scarcity of dwellings which may exist. Adoption of this market valuation ... would yield the landlord his 'monopoly' return ... [while] adoption of values at some base date ... will tend to result in the landlord being denied not only the 'monopoly' rent but also some of his 'fair' return as well" (p.230). Despite this, Drane concludes by recommending gradual de-control with an interim subsidy scheme for needy tenants and eventual total reliance on public housing as a means of helping the poor through the medium of housing. Drane's failure to come to firm grips with the rent control issue is reminiscent of Mendelsohn's attitude twenty years earlier.

Opposition to controls came from bodies such as the Bank of New South Wales in its Review (1953 and 1958) and the Institute of Public
Affairs (1954). Both of these organizations argued in objective terms for the easing of controls and provided informative accounts of the positions in each State.

5. The Sixties

The big event of the 1960s was the slow decline of rent control in New South Wales. By the end of the decade, rent control appeared to be a dead issue throughout Australia. Even where facilities for control still existed, these were very little used. In some States, there were still vestiges of the "old control" manifested by pockets of dwellings still under some form of control. Despite this, a reviewer writing from the vantage point of 1970 would have (erroneously, as it transpired) dismissed rent control as a thing of the past.

In New South Wales, there were still 207,000 controlled dwellings in 1960, this representing about two-thirds of all private rentals. By the end of the decade (more precisely, in 1969) there were about 49,000 controlled dwellings still extant (see Nelson, 1977, p.138). The pace of decontrol was certainly much quicker in the sixties than in the preceding decade. However, New South Wales still lagged behind the other States. The rather interesting story of decontrol (and frustrated decontrol) in New South Wales in the sixties is told in the next chapter.

Queensland was the other State which had not substantially decontrolled in the 1950s. Decontrol occurred such that only those dwelling houses which were let or leased during the three-year period ending on December 1, 1957 remained under old control. Until the end of 1970, either the landlord or tenant could apply to a Fair Rents Court for a determination. The Stipendiary Magistrate assessed the rent so as to allow a return of six per cent of the capital value after allowing for outgoings, services provided by the lessor and vacancy. At the end of 1970 all rent control in Queensland ceased after the amendment of

In Victoria, there were still vestiges of control. In addition to a diminishing number of tenancies under "old control", there remained a facility for setting "fair rents". The Rental Investigation Bureau (RIB) could recommend a fair rent determination after a complaint from a tenant. The RIB still operates today, negotiating settlements and recommending some cases to a Fair Rents Board. Fair rent determinations allowed an 8 per cent return on capital value plus an allowance for legitimate expenses by the landlord (including rates, land tax, rates, 20 per cent depreciation on furniture and an allowance for agent's fees). Capital value was estimated from a number of sources, including sales of comparable premises.

South Australia retained some "old control", but with rents based on current values (unlike New South Wales). At the end of 1962 the Landlord and Tenant (Control of Rents) Act was replaced by the Excessive Rents Act under which a tenant could apply to a Local Court to determine whether the rent was excessive. South Australia has also had, throughout, a Housing Improvement Act which allows the control of substandard houses. This latter Act is administered by the Housing Trust.

Tasmania and Western Australia, had, for all intents and purposes, removed rent control prior to the sixties, and need not be further considered.

The Australian Capital Territory made no changes to its Ordinance in the 1960s. Rent control had, however, become a dead issue as the small base of controlled dwellings dwindled and very few new determinations were made under the "voluntary" system.
In keeping with the diminished importance of rent controls in the 1960s, there seems to be a complete lack of writings on the subject by economists.

6. The 1970s

The seventies have witnessed something of a revival of controls on the rental housing market. Traditional rent control came and went in the Australian Capital Territory. Some form of controls were also imposed in Darwin after the cyclone. Most important, however, has been the advent of a soft form of control in several places—South Australia, New South Wales, Victoria, Queensland and the Australian Capital Territory. This form of intervention is sometimes given the label of "rental market regulation". The issues raised by these regulatory activities are considered in Chapter 8.

In August 1973, compulsory rent control was re-introduced into the Australian Capital Territory. In many ways, the system was very close to that which prevailed during the war years. The Ordinance was amended again in 1976 so as to remove compulsion from the legislation. In addition to making applications non-compulsory again and removing rent pegging until there had been a determination, the 1976 amendments made other changes. A "voluntary" system of fair renting was restored where determinations, based on current values (not at a prescribed date) could be sought by landlords or tenants and were to hold for one year only. Where there was no determination in force, the landlord was required to give notice 90 days in advance of a proposed rent increase. The amended Ordinance placed a limit on the amount of a security bond at 4 weeks rent. These changes were in line with recommendations made by the Henderson Poverty Enquiry (see Bradbrook 1975).

The imposition of rent control in Canberra attracted considerable attention from many quarters. The then Real Estate and Stock Institute of Australia (see RESI, 1975) published a study of these controls. This
was a thorough and objective study which stimulated a considerable debate on the issue of rent control. The Priorities Review Staff, in its Report on Housing (1975) looked at Canberra’s rent control and condemned it for "depress[ing] rental investment below what it would otherwise have been", "benefit[ing] a few affluent tenants", "discriminat[ing] against potential low-income or high-risk tenants" and "encourag[ing] evasion or contempt for the law" (p.156). The effects of Canberra’s rent control laws are analysed in Chapter 7.

A final instance of rent control in the seventies is that which was imposed in Darwin after Cyclone Tracy hit the city on Christmas Day 1974. Singleton and Howard (1977) observed that it may have been possible to have a "natural economic recovery" in Darwin brought about by market forces. What was actually observed was that the authorities "imposed rent control, .... forbade people to repair their own houses, and dithered about letting contracts for the building of new houses." (p.207). Contrast this with the experience after the 1906 San Francisco earthquake as described by Friedman and Stigler (1946) and related in Chapter 7.
CHAPTER 6

THE VALUE OF TENANCIES DUE TO RENT CONTROL IN POST-WAR NEW SOUTH WALES

As a direct result of rent control legislation, a controlled tenancy becomes a valuable capital asset. Evidence presented in this chapter suggests that a tenancy subject to rent control in New South Wales in 1960 had a capital value of an average $2,500 (in 1960 prices). To put this in perspective, this figure compares to the then average price of a house (including land) in Sydney of about $8,000. As a further point of comparison the $2,500 figure represents a grand total of $517,500,000 on the 207,000 controlled dwellings in 1960. The New South Wales State budget in 1959/60 was $525 million.2

While it is tempting to think of the $2,500 figure as representing a "tenant benefit", this must be resisted. As will be argued, the value of a tenancy and tenant benefit may coincide. More generally, however, the value of a controlled tenancy will form the upper bound to tenant benefit. What can be said with more certainty is that the value of a tenancy subject to control will equal landlord loss. Tenant benefit and landlord loss will only rarely be of equal magnitude. The fact that landlord loss generally exceeds tenant benefit constitutes what is probably the greatest inefficiency associated with rent control.3

Rent control in New South Wales created considerable social conflict. Tension between landlords and tenants manifested itself in various ways, as can easily be imagined given the extent of the capital

1 This chapter is based on a paper initially presented at the 1977 ANZAAS Congress (Albon, 1977a), part of which has been developed into a paper recently published in Australian Economic Papers (Albon, 1979d).

2 These comparative figures are from the Official Year Book of New South Wales, No. 57, 1961 and from Neutze (1977).

3 As discussed in Chapter 3, it is possible that voluntary agreements between landlords and controlled tenants would serve to mitigate the degree of inefficiency.
loss suffered by landlords. One consequence of the controls was the advent of professional eviction services to help landlords remove sitting tenants. There was also animosity between "satisfied" and "unsatisfied" tenants as glaring horizontal inequities arose. The reader is referred to Webster (1980) for a colourful account of the social implications of the controls.

As a background to estimating the value of controlled tenancies in post-war New South Wales, some preliminary matters require attention. Firstly, we look at the course of rent control legislation in New South Wales during the post-war period. This allows us to proceed to a consideration of the effects of the legislation in the context of a simple neoclassical model of the rental market. This analysis suggests a conceptualization of the value of a controlled tenancy which is then subjected to several caveats.

1. Rent Control Legislation in New South Wales

As explained in Chapter 5, some form of rent control has existed in New South Wales almost continually since 1915. Commonwealth powers to legislate in the area of landlord and tenant lapsed in 1948 and New South Wales enacted the Landlord and Tenant (Amendment) Act. As time proceeded, this Act became an obstacle course, especially for those without legal training.¹

The form of control was two-pronged. Rents were controlled and evictions made very difficult. All rents were set at the level of August 31, 1939, except where the building was not in existence, or was not being let, at that date. Until 1954, all newly-let dwellings were subject to a compulsory fair rent determination. Rents could only be changed via a determination from a rent-setting tribunal which was to have "regard to" factors such as capital value of the property (its 1939

¹ For a guide through the legal jungle of the New South Wales Act see Lewis (1958), Clyne (1970) and Nelson (1977).
value or value at construction), rates and insurance, repairs and main-
tenance, depreciation, rents of comparable dwellings and the Common-
wealth Bank’s overdraft rate. There were several grounds for
eviction but these only provided a prima facie case. Courts, in
enforcing an order to quit, had to consider "any hardship" that might
be caused to the tenant.

Amendments to the Act allowed a gradual decontrol, beginning in
1954. However, New South Wales was the laggard in decontrol. It
spurned the option used in all other States of allowing a percentage
increase in all rents. It also persisted doggedly with 1939 capital
values as the basis of rent determinations. The other five States all
moved either to current values or later-year values, at some time during
the fifties.

New South Wales did make three significant changes to its Landlord
and Tenant (Amendment) Act during the fifties. The first major reform
was the exemption, in 1954, of all new lettings and of leases on dwel-
lings built between 1941 and 1954 which had not been previously let.
Secondly, a 1956 amendment allowed decontrol of dwellings where vacant
possession had been attained by the voluntary quitting of the tenant
or if eviction had occurred on certain grounds. Both of these changes
were made under Section 5A of the Act. The final major change in the
fifties came in 1958 when new grounds for eviction were added.

1 The procedure used would tend to result in base-period values being
preserved. Suppose the base-period value is \( V \), then to retain \( V \)
the following equation must be satisfied.

\[
V = \frac{(R - G)}{r},
\]

where all variables are defined as in the text. Controlled rent
must therefore be set according to

\[
\bar{R} = r\bar{V} + G,
\]

as indeed (roughly speaking), it was. This assumes a perpetual
time period. If rent control is not expected to last forever,
the controller’s procedure would establish a value above the base-
period value.
Until 1954 all private residential tenancies were controlled. By 1960 about two-thirds of all private rentals, or some 207,000 dwellings, were still under rent control. The pace of decontrol quickened in the sixties such that by 1966 there were about 55,000 controlled dwellings. By 1969 the number had dwindled to about 49,000.¹

The State was governed by the Australian Labor Party from 1948 to 1965. In 1960, this Government directed a Royal Commission to inquire into the Landlord and Tenant (Amendment) Act, 1948-1958. The Commission reported in 1961 and recommended (i) that rent control be abolished for luxury premises, (ii) a milder form of control for premises remaining under control, and (iii) a 60 per cent rise in the rent of controlled premises (see the Report (1961)). The Commission’s recommendations were not accepted. Rent control nearly lost its teeth in 1964. This was not due to Government action, but, rather, to legal challenge. In 1963 the Supreme Court of New South Wales confirmed that the Fair Rents Courts should not consider current capital value when making determinations. The 1939 value (or value at construction if built after 1939) was to remain the appropriate value. However, in 1964, the High Court of Australia reversed this decision and Courts began to use current values in determinations. By an extremely complex series of events (see Clyne, 1966) this was not to continue and there was a reversion to the use of 1939 values. This often cited affair is usually remembered by the 1963 Supreme Court case, Rathborne v. Abel, which began it. Meanwhile, some amendments to the Act had taken place. In 1964, Section 17A was added which allowed landlords and tenants to agree on a rent, if they wished. Soon after came the "wealthy tenant" provision which meant that if a tenant’s income exceeded a given amount (initially $6,000 per annum) he could be asked to agree on a rent based on current values, or be decontrolled. Prior to 1964 it had been possible to get an eviction if it could be shown that a tenant could not be made to agree.

¹ These figures are given in Nelson (1977, p.138) and are derived from a variety of sources.
better provide himself with accommodation than could the landlord. Major amendments were made to the Act in 1968 when inheritance of tenancies was limited to a spouse, sub-letting was made illegal and other anomalies cleared up.

2. A Simple Model of the Controlled Market

Here we set out a simple partial equilibrium model of the controlled rental market of the type considered in Chapter 2. The model is basically the neoclassical competitive market analysis. The uncontrolled segment of the market is not explicitly modelled. The model assumes that information is costless and that there is no risk or uncertainty. While these latter assumptions would seem to be unrealistic, they are not crucial. The implications of dropping them will become clear as the argument proceeds. There is a single constant market rate of interest, \( r \), which is known by all agents involved in the market. For the present, it is assumed that all agents expect rent control to continue indefinitely and tenants wish to stay in their rented dwellings indefinitely.

The supply curve, \( S \), in Figure 6.1, has a horizontal discontinuity at the cost of outgoings (\( G \)), a vertical section at \( Q^* \) (the fixed supply of dwellings locked in by the rent control law) and an elastic portion above long-run market rent (\( R_m \)). All the dwelling units yield equal quantities of housing services and the landlord is assumed to be incapable of varying the quantity of services yielded by a dwelling. That is, the landlord cannot let maintenance expenditure lapse. Outgoings, comprising rates, insurance and maintenance, are constant.

The demand curve, \( D \), holds constant such factors as income and the price of alternative accommodation. The market would clear the fixed supply of dwellings, \( Q^* \), at long-run market rent, \( R_m \). With the controlled rent, \( \bar{R} \), there is an excess demand of \( \bar{Q}-Q^* \) dwelling units. At the controlled rent there is a transfer of surplus from landlords to tenants of \( R_m ab\bar{R} \).
If a landlord wished to sell a dwelling, with a sitting tenant, he could expect to receive an amount of \((\overline{R} - G) / r\), which is the value of the net rental stream capitalized at the market rate of interest, \(r\).

If \(\overline{R}\) and \(G\) were equal, the asset would have zero value to the landlord such that he would be indifferent between keeping it or giving it away. If rent control were removed entirely, dwellings would assume a value of \((R_m - G) / r\), the capitalized value of the stream of net market rents.

3. The Value of a Tenancy, Tenant Benefits and Landlord Losses

At first glance, \((R_m - \overline{R}) / r\) would appear to be the value of a tenancy. There are, however, good reasons for dispensing with the indefinite time horizon. Tenants may not anticipate an indefinite tenancy and/or there may be an expectation that rent control will not prevail forever. It is hardly necessary to make the further obvious point that dwellings do not last forever. Suppose, then, an \(n\) period tenancy which would have a value of

\[
\sum_{i=1}^{n} \frac{R_m - \overline{R}}{(1+r)^i}
\]

An alternative to truncating the series at \(n\) would be to capitalize over an indefinite time period at a risk-augmented rate of interest. This alternative is considered below.

Expression (6.1) is, subject to two possible qualifications, an accurate representation of landlord loss. The first qualification is that the landlord at any point of time may not be the original landlord and the current landlord may have purchased the dwelling at the "sitting tenant" price. In this case, the capital loss is incurred by the original landlord. Nevertheless, a loss has been incurred. A second

1. Shreiber and Tabriztchi (1976), writing in relation to New York City's rent control, use this fact to argue against the abolition of rent control. To do so "would bring windfall gains to these landlords at the expense of the tenants rather than restoring rights to the initial landlords" (p.516). This is an example of what Tullock (1975) has called the "transitional gains trap". This question is treated at length in Chapter 9.
possible qualification is that $R_m$ may not be the appropriate market rent. An alternative concept, $R_m'$, is discussed below.

There are even more caveats to using (6.1) as a measure of tenant benefit. Firstly, the existing tenant may receive no benefit even though he pays a below-market rent, if the tenancy was purchased. Again, there is still a benefit, received by the original tenant. Secondly, the tenant may be quantity constrained. Even when the rent control is first imposed, $R_m - \bar{R}$ will not be a good measure of tenant benefit (for the period), unless the income elasticity of demand for housing services is zero (see Chapter 3). As time proceeds, a tenant's demands may change due to increases or decreases in family size. The controlled dwelling will embody too few or too many housing services, respectively, reducing benefits below $R_m - \bar{R}$ even further. The tenant has an incentive to stay on as long as benefits are positive. Finally, there is the matter of $R_m'$, now to be discussed.

We define $R_m$ as the long-run market rent for currently controlled dwellings that would be established if rent control were completely removed. $R_m'$, on the other hand, is the rental level charged for previously controlled dwellings in the context of a situation of partial decontrol - that is, where the private rental market remains predominantly controlled, but where some decontrol has occurred.

If it was likely that $R_m$ and $R_m'$ would be markedly different, this would be a matter for some concern. Fortunately, $R_m'$ and $R_m$ should be numerically close, with $R_m' > R_m$. Given free entry into the uncontrolled private rental market, competitive forces will keep rents down, if they happen to rise above $R_m$. This process is described in the Appendix to Chapter 2. When previously controlled dwellings are released, they will become available for lease or owner-occupancy. Tenants of previously controlled dwellings will either lease
or become owner-occupiers. There will be an increase in demand for, and supply of, privately rented dwellings in the uncontrolled market. Only if the demand effect exceeds the supply effect would rents rise, and, as we have argued, market forces would push uncontrolled rents down to \( R_m \), given free entry.

There was, however, a sense in which entry was not completely free. This was due to a fear of recontrol harboured by landlords which probably meant that a risk premium was being imposed on uncontrolled rents.\(^1\) It is difficult to ascertain the quantitative significance of the fear factor which is the only possible influence that could keep \( R_m \) above \( R_m \).

4. **Estimate of the Value of Tenancies**

The information necessary to estimate the value of tenancies due to rent control in New South Wales is available from the Report of the Royal Commission of Inquiry on the Landlord and Tenant (Amendment) Act, 1948, as amended. This Report, published in 1961, assembles information on controlled and uncontrolled rents, property values, number of dwellings and other pertinent matters.

The estimation of the value of controlled tenancies can proceed from two directions. One approach is to estimate (6.1) on the basis of a rent differential and an estimate of \( n \). A second approach is to look directly at capital values. The best such data would be information on "key-money" and successful bribes to secure vacant possession.

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\(^1\) Nelson (1977, Ch. 5) provides some evidence for a fear of re-control. Some indirect evidence is provided by the sluggishness of investment in rental housing after controls on new dwellings were lifted in 1954. As a rough measure of such activity one might take the proportion of total dwellings built 1954-61 (the intercensal period) which were privately tenanted in 1961. The New South Wales figure was 10.89 per cent while that for Western Australia, which completely decontrolled in 1954, was 13.41 per cent. (The census figures are from the 1961 Census, Vol. I, Part IV, Table 14, for each State). The issue of the "fear factor" is taken up in Chapters 2 and 8.
Most of our direct evidence, however, is based on the difference between vacant possession and "sitting tenant" values of dwellings. We will, in turn, utilize both the rent differential and capital value approaches.

In the Report, it was estimated that, if total decontrol had occurred in 1960, the rise in rents would, "in a large proportion of cases, ... be between 100 per cent and 150 per cent of the existing controlled rent" (p.22). The Commissioners' estimate was based on a number of factors including the Section 5A experience and the observed rent increases in Victoria after almost total decontrol in that State. Their estimate also took cognizance of opinions presented to them in the course of their enquiries. Further, their estimate is consistent with the rate of increase of the general price level which had occurred over the period since rent control had been imposed. All in all, the Commissioners' estimate seems to be a good one.

Controlled rent in New South Wales in 1960 had a mean value of $291.20 per annum. Applying the Commissioners' estimates yields a range of $R_m$ from $582.40 to $728.00. The lower bound of $R_m - R$ is, then, $291.20 and the upper bound transfer is $436.80. Capitalizing both of these as perpetuities yields respective values of $4,853 and $7,280, using as a discount rate the then prevailing maximum bank overdraft rate of 6 per cent. There is some evidence to suggest a time horizon, n, of 10 years for the average tenancy (see, for example, the Report, p.24). The present value of $R_m - R$ over 10 years is $2,143 for the lower estimate and $3,215 for the upper bound.

The validity of these estimates can be assessed by looking at more direct evidence on the value of tenancies. Before examining the evidence on property values we need to establish that this will yield comparable figures to those derived above. Suppose that landlords and tenants both expect rent control to be effectively removed at the end
125.
of period \( n \). If the dwelling could be prematurely decontrolled it would have a value of

\[
\sum_{i=1}^{n} \frac{(R - G)/r}{(1+r)^i} + \frac{(R - G)/r}{(1+r)^n} = \frac{R_m - G}{r} \quad (6.2)
\]

With the tenant remaining in the dwelling under rent control until period \( n \), it would have a value of

\[
\sum_{i=1}^{n} \frac{R - G}{(1+r)^i} + \frac{(R - G)/r}{(1+r)^n} = \frac{R_m - G}{r} \quad (6.3)
\]

Subtracting (6.3) from (6.2) leaves (6.1). To estimate (6.1) from the value perspective we need information on property values before and after (partial) decontrol. Alternatively, we need data on "key-money" payments or on bribes offered to secure vacant possession.

In Appendix 45 of the Report there is data for a sample of 15 dwellings sold to sitting tenants and then re-sold with vacant possession. The mean difference is $3,036. This is an estimate of (6.1) but comes from only a very small sample. Appendix 43 presents data on "owner's interest" in controlled dwellings as against "improved value", both as estimated by the Valuer General. The average difference between these, a measure of tenant's interest, is $2,670. The sample size here is 166. There is also some evidence on bribes offered. Appendix 48 gives information on 15 bribes offered or paid to tenants for vacant possession. The average bribe was $2,172, but we are not told which, if any, of the bribes were successful. Nelson reports claims by Peter Clyne that he paid between $2,000 and $2,400 for vacant possession in 1963 (see pp.268-269). No information on "key-money" was readily available - the ABS does not keep a series of "key-money" payments.

All of the evidence seems to indicate an average "tenant's interest" of around $2,500 in New South Wales in 1960. According to
the Report there were about 207,000 controlled dwellings in the State in that year. The total value of tenancies was, then, about $2,500 \times 207,000 = $517,500,000. Of the 207,000 dwellings under rent control, some 170,000 were in Sydney. Tenants' interest in Sydney alone was approximately $425,000,000. Converting these estimates into 1980 values gives a figure of around $2 billion for the New South Wales estimate.

Finally, it is possible to have a stab at the risk-augmented interest rate implied by the above figuring. If the figure of $2,500 is taken as a fair estimate of the average value of a tenancy and the Commissioners' middle estimate of market rent ($655.20) is accepted (giving \( R_m - R = $364 \)), then the implicit risk-augmented interest rate is \( $364 / $2,500 = .1456 \). The implicit 1960 risk factor is, then, 14.56 per cent minus 6 per cent, or 8.56 per cent.

5. Conclusions

The New South Wales Royal Commission of Inquiry presented a long and impressive report which contained the basic groundwork for estimating the great extent to which landlords lost from rent control. The gain to tenants was also very large although it did not completely offset the landlords' loss. Redistribution via rent control contains inherent inefficiencies. Implementation of the Royal Commission's recommendations would have led to considerable falls in the loss to landlords and in the gain to tenants. However, the rent increases recommended (60 per cent on most premises) fell far short of those required to bring rents up to market levels (at least 100 per cent). New South Wales had let the control on rents become so severe that an act of immense political courage was required to relieve the effects
of the rent restrictions, even partially. The Government of the day lacked the courage and/or the will to take such a step.¹

¹ The political aspects of rent control and decontrol in New South Wales are set out in Helen Nelson's thesis (1977) and in a later paper (Nelson, 1980).
When compulsory rent control was imposed in the Australian Capital Territory in September 1973, it was the first new case of rent control in Australia for over twenty years. One must be thankful to the then Minister for the Capital Territory, Mr. K.E. Enderby, for providing analysts with a case of rent control which could be examined in the context of the "social laboratory", as Canberra is sometimes known. Indeed, Mr. Enderby provided other opportunities for applied studies in price control and non-price rationing. For example, he largely replaced the land auction system with a peculiar "allocation system". Other examples continued to be supplied, including the provision of subsidized public housing and cheap mortgage loans.

In this chapter we analyse the effects of the system of rent (and eviction) control which prevailed over the period from September 1973 to early in 1976. In doing so we apply the Lindbeck model set out in Chapter 2 and test its predictions in the Canberra context. Some modifications of the model are sketched, particularly because we have to take cognizance of the inter-relationship between the Canberra and Queanbeyan rental markets.

The objectives of this chapter are to determine the consequences of rent control in Canberra. In particular we seek evidence of "excess demand" for rental housing, of efficiency costs and of transfers from landlords to tenants. In addition to having an appropriate model in

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2 To be fair to Mr. Enderby, his Government did improve the situation in relation to public housing in the A.C.T. by placing a means-test on applicants.
mind we need to have a clear idea of the legislative details of the control system. Further, considerable empirical information is required and is not always easy to attain. A good deal of attention is given to the estimation of market rent.

1. The 1973 Legal Changes

The 1973 amendments to the Australian Capital Territory Landlord and Tenant Ordinance (1949) were imposed in a context where very few dwellings were under control. A "fair renting" system was in operation on a "voluntary" basis and eviction controls were applicable. However, in effect the rental market was free of major legal encumbrance.

Mr. Enderby reintroduced compulsory rent control because of what he saw as "a great shortage of rental accommodation" and "unreasonably high" rents. "The legislation sought to maximize the opportunities of low and middle income earners ... to have access to ... accommodation at a reasonable rent" (Quoted in RESI, 1975, p.52). Mr. Enderby also pointed out that more public funds were being provided for house and flat construction, simultaneously with the imposition of rent control.

1 If there was a "shortage" of rental accommodation, it is difficult, a priori, to see how rent control could assist in alleviating that situation. Perhaps Mr. Enderby was influenced by the opinion of former American president, Harry Truman, who, in 1949, stated that: "The present housing shortage makes it necessary to continue rent control for at least two years, and to strengthen its enforcement. I recommend that this be done." (See Grampp, 1950, p.427, fn.2). However, Mr. Enderby seems to have overlooked much evidence on the possible problems rent control might cause, such as that presented by Friedman and Stigler (1946) in the case of San Francisco. After the 1906 earthquake, more than one half of the initial housing stock had been destroyed and, despite considerable evacuation, remaining housing had to accommodate a significantly larger number of people. Many years later, San Francisco experienced another period when pressure was put on available housing. Between 1940 and 1946 the population grew by about one third (or 4.5 per cent per annum). In 1906 rent was the rationing device, and, due to more intensive use of the remaining stock of dwellings, there was no discernible housing shortage. In contrast, in 1946, rent control was imposed and "chance and favouritism" became the rationing mechanism. There was a considerable, and apparent, housing shortage in San Francisco in 1946.
The system of control was very similar to that which prevailed during the war years. Focus was on a base date for value and rent. The legislation came into force in September 1973. All rents on private dwellings were frozen at their January 1, 1973 levels and could only be changed via a fair rent determination from the Rent Controller. This entailed the landlord making an application to the Rent Control Office for a rent variation. Once a determination was made it remained in force for one year. The landlord's only recourse was an appeal to a Fair Rents Board (i.e. to a magistrate). Tenants also were eligible to apply for a fair rent determination. Appropriate arrangements were made for tenancies since January 1 1973 and for new leases entered into too. As discussed in an ensuing section, all fair rent determinations were based on January 1 1973 capital values. Eviction controls in the Ordinance were such as to set out possible grounds for securing an eviction. These included the failure to pay rent, failure to comply with other conditions of the lease and sale of the dwelling to an intending occupier who must pay one quarter of the sale price within 12 months. As in the New South Wales legislation, one or more of these grounds was to be regarded as necessary, but not sufficient, for an eviction. Eviction could not occur without a court order, and the court had considerable discretion.

2. Adaptation of the Lindbeck Model

Lindbeck's (1967) dynamic partial equilibrium model of the rental housing market (see Chapter 2) is modified to allow for the influences

1 One departure from the wartime type of system was the removal of the requirement that the Rent Controller have regard to "justices and merits" of the case and the circumstances of the parties. This was partly a legacy of the Rathborne v. Abel case in New South Wales (see Chapter 6).

2 Further aspects of the legislation, particularly in relation to the fair rent determination procedure, are considered later. Detailed information can be sought by consulting the Ordinance itself and the study by the Real Estate and Stock Institute of Australia (1975). An item in the "Canberra Times" (27.6.75) also gives a good summary of the legislation and its implications.
of related markets such as the Queanbeyan rental market and the owner-occupancy market. The availability of government-supplied housing, at below-market rents, also asserts an influence on the Canberra private rental market.

In the long-run, supply will be perfectly elastic at the long-run rental price, $R_L$, as long as house building is a constant cost industry, and demand increases do not bid up land values in better locations. Suppose that, in Figure 7.1, an initial equilibrium where demand, $D$, equals long-run supply, $S_L$, is disturbed by a rise in demand to $D'$. As stock is fixed, momentary equilibrium will occur at $R_1$, the relevant "supply curve" being $S_{L1}$. The existing stock of dwellings is rationed by price and the price difference, $R_1 - R_L$, accrues to landlords as a pure rent. The existence of super-normal profits will attract new entry in the form of greater construction of dwellings for rental purposes, upward filtering of existing stock and the purchase of existing dwellings for rental. The rate of conversion of existing dwellings to private rental will depend on conditions in the market for owner-occupied dwellings. The elasticity of the short-run supply curve, together with the rent elasticity of demand, will determine the speed of adjustment to long-run stock equilibrium. The more rent-elastic is the short-run supply curve, the faster will be the adjustment. Adjustment occurs over "construction periods" by a process indicated in Figure 7.1.

The impact of rent control can be analysed using this simple model. Suppose that, in Figure 7.1, rents are prevented from reaching $R_2$ in the first construction period and, instead, are set at $\bar{R}$. This has two effects which lead to an excess demand for dwelling units. Firstly, less new entry than otherwise will occur, the extent of this effect being governed by the elasticity of the short-run supply curve. Second, demand will be greater, at the controlled rental, by an amount deter-
FIGURE 7.1
mined by the rent elasticity of demand. Holding the price to $\tilde{R}$ results in an excess demand of $ab$ units. More generally, the following further predictions can be made about the effects of rent control:

(i) Excess demand will prevail such that rationing will occur by means other than open price adjustment. A "black market" may arise to allocate dwelling units. If not, excess demand will manifest itself in a related market. The alternatives to renting in Canberra would appear to be a choice of renting in Queanbeyan, becoming an owner-occupier, renting from the Government, or an obscure alternative such as living with friends or relatives or caravan dwelling.

(ii) The maintenance of below-market rents will result in a transfer from landlords to tenants and a deadweight loss in landlords' (producers') and tenants' (consumers') surplus. Considering the Canberra market alone, the transfer of surplus from landlord to tenant is $R_{2\tilde{R}cd}$, the total deadweight loss is $cfe$ comprising a loss to tenants of $dfe$ and a loss to landlords of $cfd$. In addition to the deadweight surplus loss, there will be a cost to society due to the use of resources by the controlling authority in interfering with the market. However, Canberrans are not the only persons affected by rent control in the ACT. The effects on Queanbeyan residents must also be considered. Existing Queanbeyan tenants would suffer a loss in tenants' benefit, while producers there would gain.

(iii) Rent control can have a whole variety of other effects. Labour mobility may be reduced due to the unwillingness to leave a controlled dwelling because of the favourable rent and the difficulty of finding alternative accommodation. Space may be used inefficiently due to the distortion of the housing/non-
housing choice. Discrimination against certain classes of tenants (e.g. "groups" and young families) is likely to occur so as to minimize risk of damage. Further, maintenance expenditure will be allowed to lapse, particularly if rent control limits the rent per dwelling and not the rent per housing service unit. This latter effect may take some time to become evident.

3. The Determination of Rental Price

In determining "fair rents" the Rent Controller collects information from the landlord (or his agent), the tenant (if he wishes to provide it) and an evaluation of the dwelling's value from the Valuers' Section of the Australian Taxation Office. The procedure used in determining fair rents has been described in detail elsewhere (RESI 1975, Ch.2), but some points are relevant. A formula was used which accounted for the following: (a) opportunity cost calculated as 6 per cent of assessed value for houses and 9 per cent for flats, (b) an allowance for repair and maintenance expenditure ($150 annually up to $35,000 assessed value and $200 for over $35,000), (c) expenses incurred on insurance and rates, (d) an allowance of 20 per cent of the value of furnishings, (e) a vacancy allowance, and (f) an agent's commission of 7 per cent of the above items totalled. The Rent Controller was not bound by the resulting formula rent and could (and usually did) make a "subjective adjustment".

This formulation displays an inadequate and inequitable allowance for opportunity cost, ignores changes in capital value and disregards short-run considerations. The first two difficulties can be overcome by using an approach suggested by Swan (1976). Consider the following expression,

$$P_t = -V_t + \frac{N_t - I_{t+1} + P_{t+1} + V_{t+1}}{1 + r_t}$$

(7.1)
where $P_t$ is the net present value of any pure economic profits, $V_t$ is net present value or market value of the productive asset (i.e. dwelling), $V_{t+1}$ is the anticipated value of the asset in the next period, $N_t$ is net revenue generated by the asset (i.e. gross revenue less all outlays other than capital outlays), $I_{t+1}$ denotes gross investment outlay, and $r_t$ is the market rate of interest. $P_t$ will equal zero when there is no market power and when there are no short-run pure rents due to lags in entry, knowledge imperfections, lack of foresight, etc. $P_t$ will equal zero when there is freedom of entry and in the long-run. In long-run equilibrium, then, $P_t = P_{t+1} = 0$, such that equation (7.1), on manipulation, becomes

$$N_t = r_t V_t + [V_t - (V_{t+1} - I_{t+1})].$$  \hspace{1cm} (7.2)

$N_t$ is not a complete indicator of user cost because other costs, not associated with capital outlay, must be covered by the landlord. These comprise rates, insurance and agents’ fees and are denoted $G_t$. The gross rental formula is, then:

$$R_t = N_t + G_t = r_t V_t + [V_t - (V_{t+1} - I_{t+1})] + G_t$$ \hspace{1cm} (7.3)

Attempts to estimate $R_t$ were made for each of a sample of 100 dwellings collected from the Rent Control Office. Many operational difficulties were encountered. The determination of an appropriate opportunity cost proved difficult. A market rate was considered more

---

1 The analysis can be conducted in terms of real magnitudes. The real rate of interest ($h_t$) is $(r_t - p_t) \frac{1}{1 + p_t}$ where $p_t$ is the general rate of inflation. The real rental price formula is

$$\frac{R_t}{1 + p_t} = h_t V_t + \frac{[V_t - (V_{t+1} - I_{t+1} - p_t V_t)]}{1 + p_t} + \frac{G_t}{1 + p_t}$$

where $G_t$ is measured in end of period prices. The rental price is measured in beginning of period prices. While it is possible to conduct the analysis in real or nominal terms, a mixture of the two is inadmissible. In an article on Canberra’s rent control, McLeod (1975) incorrectly measured opportunity cost in nominal terms and the change in capital values in real terms.
desirable than the maximum bank overdraft rate which the Rent Controller had "regard to". The maximum call rate on loans to dealers in the short-term money market was used. The market values of dwellings, $V_t$, was proxied by the Taxation Valuer's assessed value which was made as of 1 January 1973. Value changes were ascertained by applying an "appropriate index" to this base value. A land-house value index was constructed by the author for the period 1962-63 to 1974-75. This index grew at an annual average rate of 5.7 per cent which was taken to be the long-term "expected" rate of appreciation.\(^1\) Furnishings were treated in the same way as by the Rent Controller.

Using this information gave an average rental price below the Rent Controller's average "fair rent" determination. This was not because the Rent Controller was allowing for short-run considerations. Rather, it was due to his complete neglect of asset value changes. This oversight, in quantitative terms, outweighed the effect of making an inadequate allowance for opportunity cost. An alternative means of estimating market rent in Canberra, based on the experience of Queanbeyan, is set out in an ensuing section.

4. The Canberra Rental Market and Related Markets

While a demand function has not been estimated, it is probable that demand for rental accommodation in Canberra is related to such factors as rents in Canberra and Queanbeyan, income, population growth rate, cost of owner-occupancy, cost and eligibility of renting from the Government, and conditions pertaining to the Government's public-service private rent subsidy. Rents had been rising in Canberra at about 8 per cent per annum, on average, between 1971 and 1973. House rents had been rising much faster than flat rents over this period. House prices had been increasing very rapidly over these years also. The rate of

\(^{1}\) Information on the quality adjusted index and other aspects of the estimation procedure are available, on request, from the author.
increase in rents had not been high relative to the rate of inflation in the A.C.T.

The imposition of rent control did create a disequilibrium in the Canberra market. There is considerable qualitative evidence of the extent of excess demand. "To Let" columns dwindled dramatically, bond requirements rose sharply (and bonds became more difficult to redeem), bribes were offered to secure leases and long-term caravan parks boomed. Some extent of the excess demand can be gauged by examining the related markets of Queanbeyan, owner-occupancy and Government housing.

Queanbeyan is a New South Wales town just outside the A.C.T. border about 15 kilometres from Canberra's Civic Centre. In 1974 Canberra's population was about 180,000 and that of Queanbeyan was about 20,000. Accounting for only 10 per cent of combined population, Queanbeyan provided about 25 per cent of rental accommodation. There were about 2,000 flats and houses leased in Queanbeyan in 1974 and some 6,000 (estimated below) in Canberra. The size of the Queanbeyan rental market had expanded from 1,556 at the 30 June 1971 Census.

Queanbeyan was a major outlet for Canberra's excess demand. Queanbeyan's population grew by 1,310 in 1974/75 compared with an average of 900 in the previous three years. Canberra's population growth fell from 12,200 in 1973 to 10,900 in 1974. Demand for rental accommodation in Queanbeyan was at an unprecedented level in 1974. While demand usually has a seasonal dip in the period from December to February this is normally followed by a seasonal peak around March. The demand for rental accommodation was so severe in March/April 1974, that one large estate agent (at least) was telling enquirers that there were absolutely "no vacancies". This was the first time in the firm's history that this

Much of this qualitative evidence is presented in RESI (1975).
had ever occurred. Vacancy rates were well under 2 per cent and remained so until about August 1975.

What caused the high level of demand in 1974? On this the two estate agents interviewed disagreed to some extent. While one identified a "spill-over" of demand due to rent control in Canberra, the other was quick to offer the opinion that demand would have been as great in the absence of rent restrictions in the A.C.T. The latter agent did, however, claim that rent control in Canberra led to a transfer of some flat construction plans from Canberra to Queanbeyan. Certainly there is much qualitative, and some quantitative, evidence of a flat building boom in Queanbeyan which began in 1974, and peaked in 1975. The only numerical datum available is a series of unit "approvals" which is inconclusive, mainly because approvals do not necessarily imply commencements and approved projects may be commenced up to three years after approval. The Queanbeyan City Council, the two estate agents interviewed and casual empiricism do, however, point to a dramatic increase in flat building in 1974 and 1975.2

The owner-occupancy market was another possible outlet for excess rental demand. This does not seem, however, to have been very important. Prices steadied in 1974 and this is consistent with a fall in demand for owner-occupied housing and a shift of supply of rentable

1 The series of approvals, presented in Table 7.1, indicates a peak in the series in 1973. The building peak certainly came later.

2 It is claimed, by the estate agents, that owners set rents in a cost-plus fashion, where a return of approximately 10 per cent per annum on invested funds is sought. If yet another refutation of Hall and Hitch (1939) is required, it is provided by Queanbeyan evidence over recent years. Rent increases in Queanbeyan early in 1974, can, at least in part, be explained by increases in costs (council rates and interest rates both rose in this period). However, the "cost" element cannot explain all the rent rise as the "plus" factor also rose considerably because of the high level of demand. As will be shown later, the Queanbeyan rental market became greatly depressed and the Hall and Hitch rule was, of course, abandoned due to the recognition of market pressures. Low levels of demand had pushed rates of return down to as low as 6 or 7 per cent in 1976.
Table 7.1: Flat Building Approvals - Queanbeyan, 1963-1975

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Applications</th>
<th>Number of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>22</td>
<td>124</td>
</tr>
<tr>
<td>1964</td>
<td>27</td>
<td>171</td>
</tr>
<tr>
<td>1965</td>
<td>32</td>
<td>137</td>
</tr>
<tr>
<td>1966</td>
<td>17</td>
<td>122</td>
</tr>
<tr>
<td>1967</td>
<td>16</td>
<td>93</td>
</tr>
<tr>
<td>1968</td>
<td>30</td>
<td>354</td>
</tr>
<tr>
<td>1969</td>
<td>41</td>
<td>440</td>
</tr>
<tr>
<td>1970</td>
<td>17</td>
<td>194</td>
</tr>
<tr>
<td>1971</td>
<td>22</td>
<td>256</td>
</tr>
<tr>
<td>1972</td>
<td>20</td>
<td>365</td>
</tr>
<tr>
<td>1973</td>
<td>30</td>
<td>680</td>
</tr>
<tr>
<td>1974</td>
<td>24</td>
<td>425</td>
</tr>
<tr>
<td>1975</td>
<td>24</td>
<td>281</td>
</tr>
</tbody>
</table>

Source: City of Queanbeyan, Mayoral Report, 1975.
dwellings from the rental market. Many potential renters were unable or unwilling to become owner-occupiers. The number of vacant dwellings in Canberra rose from 4.784 per cent of total stock as at 30 June 1971 to 6.362 per cent at the local census of 2 July 1975. This increase is possibly accounted for by landlords selling off dwellings to owner-occupants with a resulting period of vacancy between tenancy and sale and short-term emigrants from Canberra leaving houses vacant rather than renting them at below-market rents.

Another possible outlet for unsatisfied demand in the Canberra private rental market was Government housing. This was clearly not important in the short-term due to the existence of waiting lists of about three years. Further, strict eligibility conditions were introduced in 1974 such that numbers on the waiting list fell from 7,843 in June 1973 to only 2,997 one year later. Commencements of Government houses and flats fell from 1,191 in 1973 to 1,129 in 1974.

Finally, there was only recourse to "emergency" measures, such as living with relatives or friends or living in caravans.

We conclude this section with the observation that Queanbeyan was probably the major recipient of Canberra's excess demand. For those frustrated in Canberra, it appears to have been the only feasible short-term alternative.

5. Estimation of Market Rent

A previous section has indicated the difficulties of using a formula approach in estimating a market rent. In this section an alternative

1 The course of actual house prices as measured by average sale prices of established and new houses was, on a March to March basis, a rise of 11.04 per cent in 1971, 23.98 per cent in 1972, 33.96 per cent in 1973, -0.34 per cent in 1974 and 6.98 per cent in 1975.

2 Allocation in Canberra by "chance and favouritism" probably leaves those with the lowest incomes unsatisfied. While these persons are eligible for Government housing, they are least likely to have the capacity to become owner-occupiers.
approach is used which endeavours to discover what would have happened in Canberra by examining the adjacent, uncontrolled, Queanbeyan market. This approach proves to be quite fruitful and provides a basis for the surplus estimates made in the next section.

Table 7.2 presents data on the relative rent movements in Canberra and Queanbeyan over the period of interest. The Table indicates a most remarkable disparity. What would have happened in Queanbeyan if rent control had not been imposed in Canberra? Consider again Figure 7.1, and imagine the demand and supply curves are aggregates over the Canberra and Queanbeyan markets. Suppose overall demand increases so that, given an initial long-run equilibrium, rents would rise to $R_1$. In the momentary conceptual time span, supply would be fixed in both markets. Adjustment would begin so that over "construction" periods there would be a movement back to long-run equilibrium. The momentary (or fixed supply) response would have occurred in Queanbeyan with, or without, rent control in Canberra. In the event, of course, rents kept rising in Queanbeyan because the "spill-over" of demand at prevailing rents exceeded the ability of Queanbeyan to accommodate it.

If the momentary rise in rent is taken as that which occurred until the September quarter of 1974, then the "fixed supply" rise is 14.29 per cent. Of course, supply was not rigidly fixed and some new supply would have become available by that date. Initial total quantity was about 8,000 units and initial rent about $2,080. Given some assumptions about the elasticities of supply and demand, the "short-run" rise in rent ($R_2 - R_1$) which would have occurred, can be estimated. Supposing a short-run (one year) supply elasticity ($e_s$) of 0.1 and an elasticity of demand ($e_d$) of 1, then rent would have risen about 13 per cent. To be on the safe side, we will assume a smaller increase of 10 per cent.
Table 7.2: Canberra and Queanbeyan Private Rent Indexes, Quarterly, December 1973 = 1

<table>
<thead>
<tr>
<th></th>
<th>Canberra</th>
<th>Queanbeyan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>0.9712</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>0.9890</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1.0000</td>
<td>1.0000</td>
</tr>
<tr>
<td>1974</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>1.0080</td>
<td>1.0000</td>
</tr>
<tr>
<td>J</td>
<td>1.0140</td>
<td>1.1005</td>
</tr>
<tr>
<td>S</td>
<td>1.0160</td>
<td>1.1429</td>
</tr>
<tr>
<td>D</td>
<td>1.0200</td>
<td>1.1833</td>
</tr>
<tr>
<td>1975</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>1.0290</td>
<td>1.2117</td>
</tr>
<tr>
<td>J</td>
<td>1.0510</td>
<td>1.2396</td>
</tr>
<tr>
<td>S</td>
<td>1.0620</td>
<td>1.2570</td>
</tr>
<tr>
<td>D</td>
<td>1.0790</td>
<td></td>
</tr>
<tr>
<td>1976</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>1.1090</td>
<td>1.1580</td>
</tr>
</tbody>
</table>

Sources: Canberra Index is the "Rent, Privately Owned Houses and Flats" Sub-group from "Consumer Price Index, Index Numbers for Groups, Sub-groups and Special Groupings, Canberra" (ABS).
Queanbeyan Index from a sample of rents on 161 Queanbeyan flats taken from the files of Allen Curtis & Partners, Queanbeyan.
An estimated rent increase of 10 per cent in 1974 is regarded as rather conservative. Rents in both markets had been rising at about 8 per cent per annum in the three preceding years. Taking all factors into account this was the absolute base to the 1974 rise. Further, obviously not all excess demand flowed from Canberra to Queanbeyan. To the extent that it did not, any estimate based on Queanbeyan's experience must be an understatement. Finally, the estimate of 10 per cent has been corroborated by the views of estate agents.

6. Estimation of Costs and Transfers

In this section we attempt to identify the gainers and losers from rent control and to estimate the extent of gains and losses. If Canberra was the only market to consider then the areas in Figure 7.1 would be relevant. Tenants' benefit is the transfer \( R_2 R_{cd} \) minus the deadweight loss in tenant's surplus \( dfe \).\(^1\) The loss in landlords' surplus is \( cfd \). The transfer is estimated, as are administrative costs. Further, it has to be recognized that Queanbeyan tenants lose, and Queanbeyan landlords gain, from rent control in Canberra. Total tenants' benefit in Canberra and Queanbeyan is estimated using a variant of the De Salvo measure discussed at length in Chapter 3. Firstly we need to gather the necessary quantitative information.

The rent elasticity of demand is assumed to be unity. Such an assumption implies that families spend a fixed proportion of their incomes on housing despite rent changes. In Australia, such habits are promoted by the practice of lending institutions not to lend to home buyers an amount which would entail repayments above a certain proportion of income. Empirical studies of the demand for rental housing also suggest a unitary demand elasticity (see e.g. de Leeuw and Ekanem, 1971, and the references therein). If some local evidence is required,

\(^1\) This is, of course, a Marshallian measure of surplus. It implicitly assumes a zero income elasticity of demand for housing.
the practice of Queanbeyan real estate agents in recommending rent cuts of up to 20 per cent to combat a 1976 vacancy ratio of 16-17 per cent implies a rent elasticity of almost unity.¹

The question of rent elasticity of supply, discussed in Chapter 4, is an extremely difficult one. Based on the estimates made there, and allowing for the biases likely to be inherent in them, an elasticity estimate of 0.1 does not seem to be a major perversion of reality.

In order to estimate the number of dwellings under rent control in 1974 two possible approaches were explored. One was to seek this information directly from the Rent Control Office, the other was to make an estimate on the basis of the 1971 Census data. On 30 June 1971 there were 5,496 dwellings rented other than from the Government or an employer. These comprised 3,082 houses, or 9.5 per cent of the stock of 32,455 houses, and 2,414 self-contained flats (51.3 per cent of 4,703). From that date until the end of 1973 there were 9,330 house completions and 780 flat completions. Assuming constant occupancy rates, and no demolitions, there would have been 6,782 tenanted dwellings at the beginning of 1974, comprising 3,970 houses and 2,812 flats. The Rent Control Office provided information as to the number of first applications for a fair rent determination as of January 1974 and 1975. The respective figures were 3,018 (about 1,600 houses and 1,400 flats) and 5,833 (3,400 and 2,400). If an application for a determination had not been received it could mean one of three things: (i) the parties were happy with the January 1973 level of rent, (ii) the parties were ignorant of, or were evading, the law, or (iii) the landlord was sufficiently sceptical of the benefit-cost ratio of making an application as to persevere with the level of 1 January 1973. In regard to this latter point, in the first round of determinations, 38

¹ The assumption of a unit elastic rental demand entails some amendment to Figure 7.1 in that the demand curve should appear as a rectangular hyperbola.
per cent of rents were raised above the existing level, 32 per cent were not altered, and 30 per cent were reduced. It is not surprising that some landlords were unprepared to undergo the expense and trouble of being told something different from what the market was signalling. Significantly, given the estimates based on the Census data, a considerably larger proportion of flats to houses had come up for rent determination as of January, 1974, and this reflects economies of scale in applications for multiple units, and the higher opportunity cost (9 per cent as against 6 per cent) allowance for flats compared to houses. It seems, therefore, that the major reasons for non-application were pessimism about potential gains, transaction costs, and inertia. For the purposes of estimation it is conservatively assumed that about 6,000 dwellings were directly affected by rent control in 1974.

Market rent has already been estimated as being about 10 per cent above controlled rent in 1974. Taking the simple average rental in early 1974 as $2,080 per annum, market rent would have been about $2,288.

Given the information above, tenants' benefit in Canberra is estimated as about $1,248,000. Any estimate of tenants' surplus foregone by supply restriction may well be a considerable underestimation, particularly when rationing is based on "chance and favouritism". There is no guarantee that those most willing to pay will be accommodated. If so, some with greater willingness to pay (greater surplus) will be included in the unsatisfied fringe. However, given the trivial nature of the tenants' surplus loss in this case, this effect is unlikely to be very important.

1 \( R_\text{cd} \times \frac{\text{6,000}}{208} = \text{6,000} \times \text{6,000} = \text{1,248,000} \). Tenants' surplus foregone is derived by integrating the unit elastic demand curve over the relevant range and subtracting from this the amount that would actually be paid for the lost supply at market rents. The loss in landlords' surplus is equal to supply foregone times the annual difference in rent, all divided by two. With an \( \varepsilon \) of .1 these latter amounts are too small to warrant calculation. Supply foregone is only about 60 dwelling units (i.e. 1 per cent of 6,000).
A major set of costs that have to be considered are those associated with the administration of rent controls. These costs, which are based on estimates by the Real Estate and Stock Institute of Australia (1975, Ch. 6), total about $415,000 in 1974. Firstly, there is the cost of the rent control activities of the Rent Control Office which are estimated at $143,000. Then there are valuing costs of about $138,000 and costs of the Fair Rents Board of some $48,000. Finally, there were costs associated with the private sector’s compliance with the legislation. The principal cost here is that of application to the Rent Controller for a fair rent determination, although there are other costs (e.g. appeals, "lobbying", etc.). The total cost of application may have been as high as $86,000 in 1974.

Renters in Queanbeyan, of course, lost due to rent control in Canberra because they paid rents higher than those they would otherwise have had to pay. Tenant benefit from rent control was less than benefits to Canberra tenants by the loss in Queanbeyan. The De Salvo method can be adapted for use in estimating net tenant benefit from rent control in Canberra. Suppose total utility of Canberra-Queanbeyan renters is given by a Cobb-Douglas utility function,\(^1\)

\[
U = Q^\alpha C^\beta N^\gamma
\]

where \(Q\) is consumption of Queanbeyan rental housing services, \(C\) is that in Canberra, and \(N\) is consumption of non-housing commodities by renters. The parameters \(\alpha\), \(\beta\) and \(\gamma\) are free market proportions of \(Q\), \(C\) and \(N\). After rent control, the budget constraint of Canberra-Queanbeyan renters is

\[
\bar{Y} = \lambda P_Q Q + \mu P_C C + P_N N
\]

where \(P_Q\), \(P_C\) and \(P_N\) are the respective market prices of \(Q\), \(C\) and \(N\); \(\lambda\) is the multiple by which Queanbeyan rents were raised above market level by rent control, and \(\mu\) is the proportion of \(P_C\) to which the

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\(^1\)The use of a total utility function will give a different result than would estimation of the many constituent individual utility functions unless all individuals have identical utility functions.
price of housing service units was reduced due to rent control. \( \overline{Y} \) is after-tax income of total renters in Canberra and Queanbeyan.

The level of income, \( Y^* \), necessary to make renters as well off at market prices as they would be with rent control can be derived as:

\[
Y^* = \left( \frac{\overline{Y} - \mu \overline{P}_C - \overline{P}_N}{\alpha} \right)^\alpha \left( \frac{\overline{P}_C}{\beta} \right)^\beta \left( \frac{\overline{Y} - \lambda P_Q Q - \mu \overline{P}_C}{\gamma} \right)^\gamma \lambda^{-\alpha} \tag{7.6}
\]

where bars indicate quantities consumed after rent control. Hicks' equivalent variation measure of tenant benefit is, then, \( Y^* - \overline{Y} \), the income supplement (non-taxable) necessary to maintain the rent control utility level.

Given the assumptions already made, the following estimates are suggested, \( \mu \overline{P}_C \) is expenditure on rental housing in Canberra under rent control which equals \( $2,080 \times 6,000 = $12,480,000 \). \( \mu \) is equal to 0.91. \( \overline{P}_C \) is \( $2,288 \times 6,000 = $13,728,000 \). Expenditure on rental housing if rent control did not exist is \( $2,288 \times 6,060 = $13,865,280 \). Total income, \( \overline{Y} \), equals average male weekly earnings, after tax, multiplied by total renters. This is a sum of \( $7,500 \times 8,000 = $60,000,000 \). \( \beta \) is, then \( $13,865,280/$60,000,000 = 0.231 \). Without rent control

1 Utility yielded by the rent control policy, \( U_1 \), can be expressed as

\[
\left( \frac{\overline{Y} - \mu \overline{P}_C - \overline{P}_N}{\lambda \overline{P}_Q} \right)^\alpha \left( \frac{\overline{P}_C}{\beta} \right)^\beta \left( \frac{\overline{Y} - \lambda P_Q Q - \mu \overline{P}_C}{\gamma} \overline{P}_N \right)^\gamma
\]

while an income level of \( Y^* \) in the following expression would yield the same utility level at market prices. \( U_1 \) then, also equals

\[
\left( \frac{\alpha Y^*}{\overline{P}_Q} \right)^\alpha \left( \frac{\beta Y^*}{\overline{P}_C} \right)^\beta \left( \frac{\gamma Y^*}{\overline{P}_N} \right)^\gamma
\]

Equating the two expressions and solving for \( Y^* \) yields (7.6).
expenditure in Queanbeyan would have been market rent times free market quantity.\(^1\) Actual Queanbeyan rent was $1,627.6 and \(\lambda\) was 1.0757. Market rent would then, be about $1,513, \(\alpha\) is equal to \((1,513 \times 1,980)/$60,000,000 = 0.05\). \(\lambda P_Q Q\) is about $3,255,000. \(P_N N\) is \(\bar{Y}\) minus rental spending in Canberra and Queanbeyan under rent control. This is an amount of $44,265,000 and \(Y = (1 - \alpha - \beta) = 0.719\).

Substituting all these estimates into (6) yields a value of \(Y^*\) of $60,990,000. The Hicks' equivalent variation measure of total tenants' benefit is \(Y^* - \bar{Y} = $990,000\). This comprised a tenants' benefit in Canberra and a loss to tenants in Queanbeyan. It differs from the previous estimate of tenants' benefit because it encompasses Queanbeyan losses and because it allows for quantity constraints. The gain to producers in Queanbeyan has not been estimated but is certainly of a small order of magnitude.

7. Events Since 1974

The differential between rents in Canberra and Queanbeyan began to close in 1975. The Rent Controller adopted the rent index in the Australian Consumer Price Index as a relevant factor in determining rents. Further, rent increases began to taper off in Queanbeyan as supply, induced by high rents in the previous year, began to become available. The relative changes are shown in Table 7.2. Further, late in 1975, a weakening of demand seems to have begun and this has continued. By 1975 vacancy rates were rising and rents falling in Queanbeyan.

The abolition of compulsory rent control was announced by the Minister for the Capital Territory, Mr. A.A. Staley, in April 1976.

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\(^1\) Equilibrium quantity would have been less in Queanbeyan without rent control. If \(\varepsilon_S\) was 0.1 in Queanbeyan, then, at market rent, some 20 less units would have been forthcoming. Market quantity is assumed, thus, to be 1,980. The one-year elasticity of supply in Queanbeyan may well have been much higher.
Canberra has reverted back to a "voluntary" system of fair renting where tenants or landlords may request a fair rent determination which, once delivered, is binding. The 1976 amendments were not a pure reversion to the pre-1973 situation. Over the intervening years the (Henderson) Poverty Enquiry had occurred and much attention had been given to "regulation" of the rental housing market (see Bradbrook, 1975). Some of these changes found their way into the A.C.T. Ordinance. Examples are the limitations on the amount of security bonds and changes to the fair renting system. As the legislation now stands there is the distinct possibility that a de facto system of rent control could emerge in Canberra. These aspects are taken up in the next chapter.

Another event has been the perennial appearance of arguments for a system of commercial rent control in Canberra. There has been a marked reluctance to learn from the experience of residential rent control. Commentators, including Mr. Staley(!) and the Editorial writer of the "Canberra Times" have blamed the planning system for creating monopoly power for commercial landlords. Mr. Staley argued that "very carefully regulated release of certain sorts of sites ... [means] that some business owners to some extent have the game by the throat" (Canberra Times, 16.3.77, p.3). Whereas in Melbourne Mr. Staley would "let the market decide", in Canberra he would like to see a Commercial Rents Tribunal set up "to give all tenants whose leases were being renewed access to a tribunal to determine the market rent for the premises" (Canberra Times, 30.7.77, p.3, italics added). Nothing has yet come of these proposals. Neither of Mr. Staley's successors have been as positive about the issue.

8. Conclusions

Several major conclusions seem to emerge. It appears that rent control did have a binding influence in that rents were kept down artificially. The contrasting movements of Canberra and Queanbeyan
rents is clear evidence of this. While rent control was imposed in a tight market situation, the policy seems to have made things considerably tighter. While some tenants in Canberra benefited from lower rents, there were associated disbenefits. Deadweight and administrative costs were incurred by the community. In addition, as the Priorities Review Staff (1975) put it, the "policy [rent control] acts to benefit a few affluent tenants, it implicitly taxes landlords (who may be poorer than their tenants) and discriminates against potential low-income or high-risk tenants (who miss out on any form of housing) ..." (p.156). Discrimination is the only variable left to landlords. This certainly showed up in relation to non-family "groups" and young families with children. Considerable costs were borne (and are being borne) in Queanbeyan. The spill-over of excess demand raised Queanbeyan rents in an extraordinary fashion, harming the poor tenants of Queanbeyan. A policy designed to help the poor in Canberra ended up harming the most vulnerable people in the Canberra-Queanbeyan area. The distorted market signals in Queanbeyan led to an over-expansion of new supply which made the recession that much more difficult for Queanbeyan landlords. Rent control did not stay around long enough to create problems of maintenance and repairs. This was fortunate. However, the overall conclusion must be that rent control in Canberra has verified most of the expectations of simple neoclassical analysis and must be condemned as a costly redistributive device. ¹

¹ While one academic commentator, M.A. Jones (1976) claimed that rent control in Canberra had the "classic effects", particularly "a decline in the supply of rental houses and flats" (p.290), another M. Neutze (1978) thought the controls were of "doubtful effectiveness" (p.93). Neither writer presents any evidence for his statement.
The contemporary mania for paternalistic legislation has not bypassed the rental housing market. The cry is not for traditional "rent control". Rather, the new fad is for "rental market regulation", a legal package which stops short of "rent control", particularly in relation to rent-setting. This is not to say that rental market regulation is devoid of the problems associated with rent control. The contrary is strongly argued in this chapter. While regulation is examined as a general phenomenon, several Australian and overseas cases are used for illustrative purposes. In particular, some emphasis is placed on the intended Victorian legislation.

1. Rent Control and "Rental Market Regulation"

As it has been known in Australia, rent control involves the very rigid control of dwelling rents coupled with severe constraints on landlords' ability to evict tenants. Commonly, rents have been frozen at the level which prevailed at a prescribed date. Often there is a facility for varying rents via a rent determination. A rent controller is usually given the task of making rent determinations based on the capital value of the dwelling as at a prescribed date. Increased outgoings (on rates, insurance and maintenance) are usually accounted for in making determinations. However, as was argued in Chapter 6, the use of base period capital values has the effect of holding capital values down to levels prevailing at the prescribed date. Where free market capital values are rising (as they typically have where rent control has prevailed), there is a big incentive for landlords to evict tenants and sell their properties to an owner-occupier. However they

1 This Chapter is in part a culmination of several writings on the issue of rental market regulation, comprising two submissions to enquiries (Albon, 1978a and 1979a) and two rather polemical pieces (Albon, 1978b and c). A debt to Ross Parish (1980a and 1980b) will be evident.
are frustrated by eviction controls which only allow the landlord right of repossession on certain grounds (such as failure of the tenant to pay rent or the landlord requiring the dwelling for his own occupation). The specified grounds have commonly only provided a *prima facie* ground for eviction and considerable notice has typically been required.

"Rental market regulation" is a combination of legislative elements drawn from traditional rent control laws and from consumer protection legislation. It usually involves some form of rent control which is not particularly rigid. For example, tenants may have the right to seek a "fair rent" determination based on the dwelling's current capital value. Annual rent increases may be limited to some maximum percentage. The periodicity of rent increases may be restricted and/or considerable notice of rent increases may have to be given. The regulators do, however, tend to refrain from blanket rent freezes and rent determinations based on unrealistic base period capital values.

Severe eviction controls are also part of the regulators' repertoire. Regulatory legislation specifies allowable grounds for eviction and periods of notice required to attain evictions. Landlords may be able to get around these controls by hiking rents to encourage a tenant to leave "voluntarily". However, this will be unavailable where there is some form of control on rents or rent increases.

In addition to rent and eviction controls, regulators attempt to control many other aspects of the landlord-tenant contract. It is particularly popular to interfere with the security bond system. Often the regulation limits the size of a security bond to some maximum, usually a multiple of the weekly rent. In addition, the government may establish a "bond bank" and require all bonds to be lodged with this fund. The regulators may then supervise the size and return of bonds, as well as expropriating the interest income.
Another area of interference is in relation to repairs. In some cases, tenants are able to withhold rent payments to finance repairs they deem necessary. Restrictions on repairs may take other forms - such as compulsory repair orders.

The regulatory legislation may contain other items. For example, the right of entry of the landlord or his agent may be controlled. Parties to a tenancy agreement may be required to enter a written lease arrangement. Parties may be forbidden from "contracting out" of provisions in the legislation. Discrimination (for example, on the basis of a potential tenant having children) is often outlawed.

The pervasiveness of regulation is indicated by the listing of United States legislative elements set out by Starr (1979, p.32). Local governments have interfered "by regulating rents; by annulling the owner's previous right to terminate a tenant's tenure at the end of any lease period without cause; by tightening controls over the various kinds of activities that could be permitted within a residential building; by making more difficult eviction for established causes ...; by establishing special courts to deal with housing matters, and condoning so-called rent strikes ...; by refusing to allow owners to remove their rental units from the market unless they prove a compelling need for their own use of them; by forbidding discrimination against tenants on the grounds of race, religion or nationality, or because they have children; by making rules against pets all but unenforceable; by adding new requirements ... to an already long list of housing-code specifications; ...".

2. The Ideology of Rental Market Regulation

To some extent, rental market regulation is tied up with the "consumer protection" movement. It simply extends "protection" to a further commodity - rental housing services. Parish (1980a) has noted some common ideological features of protectionism. This is worthy of some discussion in the context of rental housing.
One aspect of thinking by the pro-interventionist group is an asymmetry in the alleged role of economics. There is an acceptance of "economic motives in housing when they proceed from the tenant's perspective", but application of "moral criteria to landlords" - "If a tenant complains that rents are too high, his action is economic and natural; if an owner does not spend money because the cost of repairs is too high, he is greedy" (Starr, 1979, p.27). Something of this view seems to come through in the Victorian Community Committee's (1978) Report where a "reasonable landlord" is defined as one who "is prepared to accept a degree of social responsibility and control in the provision of housing and is not merely motivated by profit" (p.33, italics added).

There is a common uneasiness about profits. The greed and avarice of individuals is not seen as a force which can be harnessed for the betterment of society. Reformers do not say that landlords should be deprived of a "fair return" but there is always the hint of a monopoly element. Jane Fonda puts it this way: "We're not trying to screw landlords out of their profits, but we have to find a way for people to get a roof over their heads while landlords make a decent profit. What we have to do is eliminate the greed quotient" (Quoted in "Time", April 30, 1979, p.69).

Landlord and tenant meet in an unequal contest. As Sim (1975) would have it, landlords have a "bargaining superiority" over their tenants (p.431). Or as the Community Committee believes, "[m]ost tenancy agreements cannot be described as contracts freely entered into between two equal parties" (p.55).

Finally, we have the assertion that housing is special - a meritorious commodity deserving of extraordinary attention from legislators. This line of approach is very prominent in the Community Committee's Report. Fuller discussions are to be found in Chapters 1 and 10.
3. **Internal Origins of Australian Rental Market Regulation**

If we seek internal origins of rental market regulation in Australia we need not look beyond the Commission of Inquiry into Poverty (1975) and the growth of "consumer protectionism". Quite clearly, advocates of this kind of interference in the private rental market see it as but another branch of "consumer protectionism". Rental housing is one of many products where consumers are susceptible to falling prey to avaricious traders. It was inevitable that the oldest bogey-man of them all - the landlord - would eventually attract the attention of the consumer protection movement.

The Poverty Commission was clearly not in favour of rent control, despite suggestions made to it that "there should be a major extension of measures of rent control" (p.161). Rent control was rejected for three reasons: (i) Landlords will "have a clear incentive to get rid of their tenants" (p.161). (ii) Rent control "can lead to landlords attempting to cut costs by not spending money on maintenance" (p.161). (iii) "Even more serious is the overall effect of a sharp reduction in the supply of rental accommodation" (p.162). We must concur with the Commission when it concludes that "we do not agree that rent control is in the long-term interest of tenants" (p.162).

It is also easy to agree with the Commission when it maintains "that the market mechanism does operate, with imperfections for private rental housing and suggest[s] that many of the problems of low income private renters result from their low incomes" (p.162). Here the agreement must stop. Despite these very sensible observations, the Commission then comes out in favour of legislative interference in the market: "The cheap private rental market has many other unsatisfactory aspects such as insecurity of tenure, illegal retention of bond money, biased leases, and legislation which gives tenants few legal rights. Professor Sackville will be proposing legal changes which are needed to improve
the situation" (p. 162). Here lies the germ of "rental market regulation" in Australia.

Details are set out in Bradbrook (1975). The legal reforms suggested involve setting up in each State a Residential Tenancies Board and a Tenancy Investigation Bureau. These bodies would be vested with the full complement of regulatory powers. The solution was simple. All that was needed was for each State to enact the necessary legislation.

The Poverty Commission's proposals attracted considerable support from some quarters. For example, the Australian Institute of Urban Studies (1975) published a Report of a Task Force which asserted that "landlord and tenant meet in an unequal contest" (p. 46) and urged "the Australian Government to take the initiative in getting adoption of the Bradbrook proposals on uniform Australia-wide fair rent legislation" (p. 70).

The legal profession seems also to have played a role in regard to the advent of regulation of the rental market (and many other markets). As Starr (1979) has argued, "[t]he body of laws on the books offers immense opportunity for exploitation by lawyers who hope to begin political careers, as many legislators now in office have, by leading the 'tenant movement' and doing its work" (p. 33). It remains to be seen whether any political careers will emerge from lawyers' involvement in the Australian "tenant movement".

4. External Origins of Australian Rental Market Regulation

Australia cannot be regarded as a pioneer in rental market regulation. This dubious distinction probably lies with Canada. However, there are other cases. A close-to-home example is New Zealand which has for some years had regulatory-type legislation. The United States is now producing instances of this type of law, and certain aspects of the United Kingdom's rent laws display regulatory characteristics.
The early and heavy involvement of certain Canadian Provinces with rental market regulation makes it possible to dub this type of legislation, with some justice, the "Canadian Disease". The Provinces which enacted regulatory legislation include Ontario, British Columbia and Quebec. Ontario's laws were first enacted in 1970. A great debate has taken place in Canada over this issue. The extent of this debate can be gauged by checking the bibliography in a Canadian Council on Social Development (CCSD) publication, Patterson and Watson (1976). The CCSD has argued strongly for what it calls "rent regulation" while groups like the Fraser Institute (1975)\(^1\) and the Urban Development Institute have been strong in opposition to it. Victoria's Community Committee on Tenancy Law Reform (1978) has drawn heavily on the alleged success of Canadian legislation to bolster its case for reforming Victorian landlord and tenant law.

In the United States, New York City's rent control has attracted much attention. A system of controls in Massachusetts has long been in operation. Very recently, however, a great deal of regulatory activity has occurred in the United States. The pro-interference movement has been able to boast the vocal support of Jane Fonda (see *Time*, April 30, 1979, p. 69)\(^2\). The American push for regulation has had most success in California - the home of "Proposition 13". According to the agitators, tax reform and their movement are not unrelated. They argue that property tax cuts have not been passed on to tenants.

Legislation in the United Kingdom has elements of both "rent control" and "rental market regulation". As set out in Cooper and Stafford (1980), the United Kingdom's law attempts to define (objectively) "fair rent" and has very rigid security of tenure provisions.

\(^1\) Unfortunately the Fraser Institute concentrates on attacking rent control and not rental market regulation. To this extent their study is a little disappointing.

\(^2\) There is also an article in "Economist" (April 28, 1979, pp. 50, 53) on the same subject.
In New Zealand there seems to be considerable support for regulatory-type legislation in the landlord and tenant area. *New Zealand Economic Papers* contains two articles which mentioned the issue of rent control. Both of these articles, Easton (1976) and Stephens (1976), were broadly in favour of some form of control. Easton saw "rent controls as a viable form of social policy" (p.20) while Stephens proffered that "some form of limited rent control could be advocated, as the usual criticisms are less applicable" (p.51). Support for regulatory legislation also seems to come from the legal profession. In a collection of studies on landlord and tenant law, Sim (1975) asserts that the "social rationale of rent control lies in the fact that ... land is a commodity which we all need but cannot afford to own" (p.431). Sim also asserts that landlords have a bargaining superiority over tenants.

Soon after the Labour Government came to power in 1972, Rent Review Regulations were introduced in New Zealand. Rent Review Authorities were established within the Department of Labour. Tenants could appeal against rent increases which had occurred since 1 April (April Fools Day) 1972 (inclusive). Only rent increases which could be shown to be due to increased costs were allowed. The Regulations also imposed maxima on rent payments in advance and on bonds; disallowed evictions where tenants had made an application under the regulations; allowed tenants to recover any excess payments and disallowed "contracting out" from the provisions of the Regulations. The Regulations evoked little response from tenants. According to Frame and Harris (1977), the "government was clearly expecting a great number of applications, and must have been disappointed (and perhaps more than a little bemused) when only 208 applications for review were received by early February 1973 ..." (p.220). Not to be deterred, the government began work on what became the Rent Appeal Act which came into force on February 1, 1974. This Act has all the characteristics of the archetypal rental market regulation scheme. Rent Appeal Boards were established to set "equitable rents"
- "that rent which ... a reasonable landlord might expect to receive and a reasonable tenant might expect to pay". The Boards were to have "regard to" a number of factors. Determinations remained in force for 12 months when made. In relation to evictions, the Act said deceptively little. Evictions were disallowed only for reason that the tenant was exercising his rights under the Act (e.g. applying for an "equitable rent" assessment). In practice this has meant that a landlord attempting to gain possession has had to prove that he was doing so for reasons other than the tenant exercising his rights. That is, he has had to prove some other substantial reason for seeking an eviction. The Act, like the Regulations, placed a limit on advance rent payments and on security bonds. Receipts had to be given for all payments. Tenants could deduct "excess payments" from their rent. Key-money was made illegal. Discrimination on the basis of the tenant having children was also made illegal.

5. Australian Legislation

Several States and the Australian Capital Territory have enacted, or are about to enact, regulatory-type legislation in the landlord and tenant area. There almost seems to be a competition to see who can go furthest in the regulatory area.

The first State to act was New South Wales. Eviction provisions were tightened up considerably in 1977. A court order became necessary to effect an eviction, whether a lease is current or not. Penalties for illegal evictions of up to $500 for an individual and $5,000 for a corporation were provided. New South Wales' Landlord and Tenant (Rental Bonds) Act, 1977 set up a Rental Bonds Board to administer the security bond system. The aim was to set up a central fund into which all bond monies would be paid. Repayment of bonds was to be supervised by the Board. Interest on bond money was to be used to provide, through the terminating building societies, cheap finance for first home-buyers
Provision of a rental advisory service was also envisaged. In 1979 the Board had about $30 million in custody, employed 46 people and a computer, and had an administrative budget of about $750,000. The Government had anticipated $42 million in custody but the market had found ways around the scheme, including the use of specially designed insurance policies. An analysis of the scheme can be found in Mitchell (1979). In addition to the above-mentioned measures there are perennial rumblings indicative of further possible action in New South Wales.

Also early to act was South Australia. The legislation it enacted, its Residential Tenancies Act, 1978, conforms quite closely to the Henderson model. The Act carries over rent-setting powers from the former Excessive Rents Act. A Residential Tenancies Tribunal was set up to adjudicate on disputes between landlords and tenants and to set rents — if desired by the tenant. The size of bonds was limited to a maximum of three weeks rent and bond money has to be deposited with the Tribunal. Eviction controls were tightened up. A good summary of the provisions of the South Australian Act is contained in Whitely (1979).

As we have seen in the previous chapter, the Australian Capital Territory has also been active in a regulatory direction. In addition to the measures taken concurrently with the removal of compulsory rent control, there have been pressures to adopt more of the elements of the Henderson-Bradbrook-Sackville regulatory package. Curiously, these pressures seem to have arisen from within the regulatory agency, the Department of the Capital Territory. An inquiry was announced and submissions solicited, early in 1978. The submissions included one from Albon (1978a) arguing against the changes mooted. As of the time of writing, nothing has been done to further change the Ordinance.

1 The Department of the Capital Territory's action is a complete reversal of the usual procedure where a politician perceives a problem which is then referred to the Department. The private interest regulation school should be interested in this reversal.
Not to be left behind, Victoria has been going through a long and involved process aimed at reforming its landlord and tenant law. In response to what it saw as a "scandalous, antiquated, oppressive and plainly biased" law, a government-sponsored "Community Committee on Tenancy Law Reform" was set up in December 1976. The Committee reported in 1978, suggesting sweeping changes to the Victorian legislation. Events seemed to go the way of the Committee as the draft Residential Tenancies Bill adopted most of the Committee's recommendations. A long and intense public debate ensued, indicating a considerable strength of feeling on the issue. A "Twilight Seminar" was held on the subject in December 1978 which was addressed by the Attorney-General (Mr. Storey), Mr. Salvaris (a lawyer representing the Committee's views), Mr. Chernov (a barrister-at-law and co-author of a legal text on the Victorian legislation), Mr. Cook (of RESI of Victoria), Mr. Geschke (Director of Consumer Affairs) and Professor Parish (Professor of Economics at Monash University). This seminar livened up the debate. The "Age" newspaper gave the issue much coverage. The decision was taken to let the draft bill "lie on the table" while submissions were called. By late in 1979, after an election had intervened, a new draft bill had been produced which considerably weakened the provisions. The forces supporting the cause are, of course, furious, and the debate has been re-kindled in a quite dramatic manner.

6. Short-run Effects of Regulatory Legislation

In response to the 1978 draft Victorian bill, Parish has developed his "Twilight Seminar" paper considerably. This paper (Parish, 1980b) analyses the effects of interfering with private contractual arrangements in the landlord and tenant area. Parish takes each of the major elements in the originally proposed legislation and

1 See the Community Committee's Report (1978, p.7).

2 Printed posters seen on the Balaclava Railway Bridge are suggestive of a conspiracy (by landlords and others) to kill the Bill.
examines its likely implications. In addition, he analyses the overall effects of the whole regulatory package.

In general, the regulatory-type legislation will raise the demand for, and reduce the supply of, rental accommodation. Rental accommodation, seen as a "bundle of property rights", will be altered in character. From the tenant's point of view there will be greater security of tenure (eviction controls), a better-maintained property (repair provisions), more privacy (landlord/agent entry restrictions), greater surety of security bond repayment, and so on. These factors will increase the tenant's willingness to pay for rental accommodation. However, these enhanced rights are only attained at a cost to landlords which will cause them to offer rental accommodation at higher per unit prices.

Let us examine this process in a highly simplistic partial-equilibrium market context illustrated by Figure 8.1. Initially we have demand, $D_0$, supply, $S_0$, and market-clearing rent ($R_0$) and quantity ($Q_0$). The regulations act as a tax on landlords, shifting the supply curve to $S_1$. On the other side of the coin, the new rights are positively valued by tenants and shift the demand curve upwards - to $D_1$. A new rent, $R_1$, and quantity $Q_1$, are established.

As drawn in Figure 8.1, the "tax" on the landlord exceeds the "subsidy" to the tenants, resulting in higher rents (as would occur anyway) and a lower quantity of rental accommodation. The figure is drawn in this way because it is believed that this would be the situation. Most tenants, who have quite good relationships with their landlords, would place little value on their enhanced rights. All landlords will bear the risk of major troubles and all will need to consider this risk as part of their long-run costing exercise.

1 As Parish points out, to assume otherwise implies there are unrealized gains from trade and that the "government fist" would be more successful than the invisible hand in securing these gains.
Price per unit of rental accommodation (R)

Units of rental accommodation (Q)

FIGURE 8.1
Note that, as is usual in partial-equilibrium analysis, we have assumed, that rents are allowed to rise (i.e. rent increases are not suppressed by the rent-setting authority) and that rental units are allowed to be withdrawn (which is highly unlikely given the stringent eviction controls). If rents were held down and evictions/withdrawals did not take place, excess demand would be created and landlords would be forced to accept less than normal returns. The illusory "greed quotient" would become a thing of the past.

Parish analyses the major provisions of the 1978 Victorian Bill separately. As the Bill is (was) typical of regulatory schemes, we will briefly review these elements and their likely implications.

In regard to the rent-setting provisions, more will be said (in the next section) in relation to possible longer-term implications. To a large extent the effect of these provisions will depend on the way they are implemented - as Frame and Harris (1977) would put it, more on the "informal practices" rather than the "formal rules". The Victorian legislation would allow a tenant to apply for a rent reduction if he thought his rent was excessive. The tenant's first step would be to contact the Director of Consumer Affairs and ask him to investigate the matter. The Director would, if he deemed the rent was excessive, attempt to negotiate a reduction with the landlord. If the rent established is not satisfactory to the tenant he may apply to a Tribunal for a determination. The Tribunal would consider matters such as rents on comparable premises, special characteristics of the premises, rent increases since the tenant went into occupation and value of the premises. Increases in rent were limited to one only in 12 months, irrespective of change in tenancy.¹

¹ Parish has argued that rent increases will tend to be concentrated around changes of tenancy. Often landlords use the gap between tenancies for improvements and repairs. Further, there is a "subjective argument" why increases will occur at this time. Those seeking tenancies are more attuned to the market than sitting tenants so the landlord finds the rent "easier" to raise for a new tenant than for the old.
In relation to evictions, the 1978 Bill was positively Draconian, but stopped short of complete security of tenure. Six months' notice was required where there was no specified ground and immediate eviction was possible if the tenant endangered the safety of neighbours or maliciously damaged the property. Fourteen days was required in two other cases (failure to pay rent for fourteen days or more, and other breach of duty) and sixty days for several other grounds. Periods of notice and penalties have been reduced in the current version of the Bill. Even so, these eviction provisions are possibly more important than the rent controls. In the United Kingdom, landlords have attempted to minimize risks of being stuck with bad tenants by letting to more transient groups.\(^1\) Those seeking long-term tenancies - presumably those that governments wish to "protect" - are particularly disadvantaged. Presumably, the same sort of effect can be expected to occur here.

Another major part of the Bill relates to security deposits. The role of security deposits would seem to be to induce tenants to look after the landlord's property. If not, the deposit can be withheld. The Community Committee recommended their abolition on the grounds that they represented a hang-over from the days of "key-money" (which might soon be back!) and because they were a major cause of landlord-tenant conflict. The Committee wanted an insurance scheme; the original Bill encompassed a mixed scheme. An insurance scheme would seem to be a highly undesirable innovation as it would reduce the incentive for tenants to care for the dwelling. The extra costs to landlords would be borne (to some extent) by all tenants. The security bond system cannot readily be related to key-money and disputes over bonds are probably more a symptom than a cause of disputation. While security bonds figure as the

\(^1\) For some discussion of and references to this phenomenon see Cooper and Stafford (1980).
major factor in landlord-tenant disputes, it is not entirely clear that the extent of bond disputation is all that great.¹

Another provision relates to sub-letting and disallows the landlord from unreasonably withholding permission for the tenant to sub-let. While such a restriction would be far more a problem in a regime of traditional rent control, it does impinge on landlords' exercise of property rights. As such it is another item in the regulatory tax borne (in part) by landlords.²

Finally, amongst the many other provisions there is one which would outlaw discrimination by landlords against tenants with children. When there is a threat to the use of price as a rationing device, resort will normally be taken to non-price rationing methods. Having set up a situation ideal for the promotion of discrimination it is only to be expected that the Bill's draftsmen would wish to insert anti-discrimination clauses. In this respect the cynic would say that they have probably not gone far enough. Other bases of discrimination (like race or colour) should have been considered.

7. Longer-Term Effects of Rental Market Regulation

In the previous section we have analysed the "short-run" or "primary" effects of rental market regulation. The "secondary" or longer-term effects will depend on how the legislation is actually operated (including those "informal practices"), on how it is used by the public and on how legislators respond to any difficulties which may

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¹ RESI figures on bond repayments, reported and used by the Community Committee (1978, p.50) are hardly evidence of a really major problem. According to RESI's survey, 86 per cent of tenants received full repayment and 96 per cent retrieved at least half.

² The incidence of any tax - implicit or explicit - will depend in part on the elasticity of supply. The more elastic is supply the more the incidence will fall on the buyer (tenant). Regulatory taxes will fall more and more on tenants over time if the elasticity of supply increases in the long-run.
arise. In setting out some possible scenarios, illustration is again drawn from the Victorian Bill.

Rent control would seem to be the likely outcome of any secondary response to the effects of implementing the proposed legislation. The route back to rent control is argued below.

Given its obvious distaste for rent control, it is a little surprising that the Commission of Inquiry into Poverty (1975) advocated legislation, similar to that embodied in the Victorian Bill, which makes rent control highly probable. As we noted earlier, the Commission saw "unsatisfactory aspects [of the cheap private rental market] such as insecurity of tenure, illegal retention of bond money, biased leases and legislation which gives tenants few legal rights" (p.162). These formed a basis for its advocacy of "regulatory" legislation, not for rent control. The Commission failed to see the likely link between the two.¹

The first route back to rent control could be achieved without the Victorian Government enacting legislation beyond that already provided for in the proposed Act. All that is necessary is for the authorities to respond to the primary impact of the legislation in such a way as to effectively impose rent control. While the existing Rental Investigation Bureau has had very little business in setting rents (see, for example, Bradbrook, 1975-76), the situation is likely to change dramatically if the proposed legislation is enacted. The legislation would cause rents to rise. This will induce more tenants to seek rent determinations in itself. But tenants will also be far more aware of the new Bureau than of the existing Bureau. This stems from the publicity already given the proposed legislation as well as the probable further media coverage that would herald the establishment of the new Residential Tenancies

¹ Professor Henderson accused Professor Parish of "naughtiness" for suggesting that regulation might lead to control. Henderson has argued that regulation will help prevent control.
In addition, the Director of Consumer Affairs would have the power to initiate investigation. Once given a determination (and security of tenure for a year), there is nothing in the proposed legislation to stop tenants from getting a series of determinations ensuring indefinite security of tenure (as long as the tenant "plays the game" in relation to paying rent and looking after the premises).

Whether the above scenario represents a situation of true de facto rent (and eviction) control is dependent on how the Tribunals actually set rents. If they set rents below market levels, and if such sub-market determinations become widespread, a form of rent control could be said to prevail. The only possible item in Clause 77 of the Bill which could prevent the setting of below market rents is the instruction that the Tribunals have "regard to" the rent payable on comparable premises in the locality. There will, however, be pressure on the Tribunals to hold rents down.

This is only one possible route to rent control as a result of this legislation. Suppose, for argument's sake, that the Tribunals show remarkable restraint and do not hold rents down below market levels. Remembering that "market" rents will be higher than otherwise anyway (because of factors already discussed) and that the market will be "tighter", we might take the Ontario route to control. Ontario, Canada, is proclaimed by the Community Committee on Tenancy Reform (1978) as the ideal prototype for the legislation proposed in Victoria. Let us hope that the Committee is not suggesting a complete emulation of Ontario because Ontario has now adopted rent control. The Ontario-type legis-

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1 In Canberra, the Rent Control Office has, in the past, virtually advertised its services in an attempt to "drum up business".

2 A determination does not have to be made to influence landlords' behaviour in relation to rents. The threat of being taken to the Tribunal is probably sufficient in many cases. The pervasiveness of rent regulation should not be measured by the number of determinations alone.
lation simply does not work. When the regulations begin to create problems of high rents and high search costs, the legislators look around for something to blame other than the legislation. And because the legislation is blameless, the solution must lie in more legislation. However, those who are tempted to move from "regulation" to "control" should take cognizance of the following statement from the Ontario Minister for Housing: "[The fall-off in rental production] can largely be attributed to high interest rates, escalating costs and, more recently, to the introduction of rent control. It is our judgement that the modifications to the Landlord and Tenant Act, per se, have not been an important consideration in the building decline" (italics added, quoted by the Community Committee, 1978, p.74). The regulations themselves are implicitly apportioned some blame by the Minister. But, more importantly, Ontario has not been content with just the regulations and went further to introduce a form of rent control - which was found to have some unsatisfactory implications.

A third possible outcome is that the institution of regulatory-type controls will create a fear that there will be an extension of controls. Whether this happens or not is immaterial - it is the fear of recontrol that matters. In addition to the primary impact costs imposed on landlords, they will be burdened by a further cost. If rent control is expected to be imposed, landlords will be expecting to incur the costs associated with rent control. This cost will affect landlords' current behaviour, leading to demands for higher rents and the (attempted) withdrawal of some rental units. This effect will be additional to the primary effect. The results of these two effects could be quite dramatic, perhaps leading to a successful call for full rent control.

8. Australian Evidence of a "Fear Factor"

The issue of a fear factor has been raised in Chapters 2 and 6 and is here further developed. An appreciation of the significance of a
possible "fear of recontrol" is crucial to understanding the true implications of rental market regulation. Some Australian evidence of such a fear is presented.

In way of evidence confirming the "fear factor" we can appeal to cases where full rent control has been partially relaxed by the exclusion of new lettings from control. As Rothenberg (undated) puts it, "while the new unit is uncontrolled when it first comes into the market, the existence of rent control as a policy raises the possibility that controls may be extended to it at some later part of its life. Such subsequent extensions of control have been experienced in the real world, so it is not an idle surmise" (p.25). An excellent discussion of this phenomenon, with overseas evidence, can be found in Block (1972, pp.50-54). We argue here that "regulatory controls" are very capable of creating exactly these same fears.

Australian landlords are control-wary to the extreme, remembering their complete emasculation in the 1940s and 1950s. When compulsory rent control was introduced into Canberra in 1973, the Real Estate and Stock Institute of Australia responded by preparing a long, expensive and thorough report on the adverse effects of rent control.¹ The strength of their reaction can only be explained by the fear that controls may be extended to other parts of Australia. In a sense their fears have proved to have been well founded.

Before examining some statistical evidence on the Australian situation in the 1950s, we will look at some more qualitative assessments of the situation. Helen Nelson (1977), in her thesis on The Politics of Rent Control in New South Wales, discusses the fear of re-control question at some length. New South Wales had decontrolled new dwellings in 1954 but, despite this, Nelson reaches the cautious con-

¹ See RESI (1975) and Chapter 7.
clusion "that rent control was a deterrent to potential investors in new rental construction" (p.143). A damning conclusion was reached, at the time, by the Department of National Development (1956) which presents a list of "maladjustments" to the rental housing market comprising "the abandonment by private investors of the building of new houses and flats for rental (this has not recovered, despite the removal of rent control from new building in most States), the withdrawal of many previously rented houses from the rental markets, rent and tenancy controls ..." (pp.11-12, italics added). Yet another mid-fifties verdict comes from the Institute of Public Affairs (1954). Referring to Victoria, which had decontrolled new dwellings in 1953, the IPA stated that "[t]he continuance of rent control has had a bad psychological effect on investment in house property for rental purposes. Although technically free from control, most investors do not relish building at the present high level of costs coupled with uncertainty about the future of rent control legislation" (p.76). Other such statements could be cited.

Table 8.1 summarizes the interesting evidence provided by census data on the rental housing investment record of the mainland States. If there was a fear of recontrol, then we would expect that States which decontrolled most would have the best investment record. In particular, we are seeking evidence that decontrol only of new lettings has a lesser impact than total decontrol. The Census data for June 30, 1961 gives a breakdown of the then stock of privately rented dwellings by date of construction. In Table 8.1 the number of the 1961 stock constructed in the inter-censal (1954-1961) period is expressed as a proportion of the total inter-censal construction for each of houses, flats and total dwellings. A priori, one would expect Western Australia to come out on top as it was the only State to completely decontrol during the fifties (in 1954). Certainly we would expect Western Australia to dominate New South Wales (which decontrolled new dwellings in 1954 and then made no major concessions towards decontrol until the 1960s and Victoria (which
Table 8.1: Rental Investment Performance of the Mainland States 1954-1961

<table>
<thead>
<tr>
<th></th>
<th>Queensland</th>
<th>Western Australia</th>
<th>New South Wales</th>
<th>Victoria</th>
<th>South Australia</th>
</tr>
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<tbody>
<tr>
<td>Number of houses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>privately tenanted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>as of June 30 1961</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>built in 1954-1961</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>as a proportion of</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>total construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of houses, 1954-1961</td>
<td>.1069</td>
<td>.1099</td>
<td>.0742</td>
<td>.0743</td>
<td>.0774</td>
</tr>
<tr>
<td>Number of flats</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>privately tenanted</td>
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<td>as of June 30 1961</td>
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<td>built in 1954-1961</td>
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<td>as a proportion of</td>
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<tr>
<td>total construction</td>
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<td></td>
<td></td>
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<tr>
<td>of flats, 1954-1961</td>
<td>.7585</td>
<td>.6182</td>
<td>.4962</td>
<td>.5189</td>
<td>.4553</td>
</tr>
<tr>
<td>Number of dwellings</td>
<td></td>
<td></td>
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<td>privately tenanted</td>
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<td>as of June 30 1961</td>
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<td>built in 1954-1961</td>
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<tr>
<td>as a proportion of</td>
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</tr>
<tr>
<td>total construction</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>of dwellings, 1954-</td>
<td>.1556</td>
<td>.1341</td>
<td>.1089</td>
<td>.1060</td>
<td>.1015</td>
</tr>
<tr>
<td>1961</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Proportion of 1961</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>housing stock rented</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>to tenants by State</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing Commission</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>or Trust</td>
<td>.06</td>
<td>.10</td>
<td>.05</td>
<td>.05</td>
<td>.15</td>
</tr>
</tbody>
</table>

Sources: Private construction figures from 1961 Census (calculated from data in Vol. I, Part IV, Table 14, for each State). Public housing figures from Jones (1972).
decontrolled new lettings in 1953 and made other minor moves towards greater freedom in the ensuing five years, including the allowance of a 25 per cent increase on "base rent" in 1955). This expectation is borne out, with New South Wales and Victoria performing least well of all mainland States. However, the results for Queensland and South Australia appear to contradict the overall hypothesis. Queensland, which was not a leader in legislative decontrol, performed better in rental investment than any other State studied. South Australia, which did go a long way towards decontrol, did not have a good private rental investment record over the period. Perhaps these results are not quite as damning as they seem on first glance. In the case of Queensland, flats were completely omitted from its 1948 Landlord and Tenant Act. This early and emphatic concession led to a flat building boom in that State. Queensland's position at the top of the "ladder" is attributable to its record with flats. However, Queensland's performance with houses, second only to Western Australia, is difficult to explain and weakens the thesis somewhat. In the South Australian case, a quite considerable amount of decontrol was associated with an abysmal record of private rental investment. However, there was an unusually large amount of public rental investment (see the last row of Table 8.1). As argued elsewhere in the thesis, public housing investment "crowds out" private housing investment, possibly on a one-to-one basis. This phenomenon not only goes a long way towards explaining the South Australian result, but also reinforces the conclusions reached about Western Australia in relation to Victoria and New South Wales. However, Queensland still remains a problem.
and makes it difficult to strongly conclude that the prior expectation of a "fear of recontrol" is borne out by Australian data for the period under consideration.¹

9. Conclusion

It is difficult to be sanguine about the likelihood of success of rental market regulation. Like rent control, this type of legislation will result in benefits for some tenants. These benefits will not be wrought without costs and the costs must be at least as great as the benefits. If there are problems in the rental housing market, rental market regulation is not the way to solve them. As the Poverty Commission rightly points out, most of the problems stem from the low incomes of some tenants. Interference with the landlord-tenant contractual arrangement seems to be a mis-direction of energies. Policies aimed at the root cause of the problem would be far more sensible.

¹ Figures equivalent to those in Table 8.1 were available for the period 1947-1954, but not for intercensal periods after 1954-1961. Over the 1947-1954 period, all States except Queensland performed relatively better than in the 1954-1961 period. The total figures for each State were Western Australia, .1614, New South Wales, .1401, South Australia, .1374, Queensland, .1286 and Victoria, .1149. The ranking conforms well to expectations, except for New South Wales. Queensland excelled with flats.
CHAPTER 9

A CRITIQUE OF ARGUMENTS FOR THE IMPOSITION AND/OR RETENTION OF RENT CONTROL

In this chapter there are three major concerns. Firstly, we look at the arguments for or justifications of rent control put by legislators who introduce and/or retain such laws. Secondly, there is a review of the cases put by economists to support rent control. Finally, there is a critique of an argument for retaining rent control which is based on the idea of a "transitional gains trap". Many interesting and wider issues arise from these considerations. However, it is concluded that there is no clear case for rent control to be imposed or retained, once imposed. This negative conclusion carries over into a wartime situation where, while the pro-case is stronger than in time of peace, the argument is still very weak.

1. Arguments Used By Legislators to Justify Rent Control

In seeking arguments for rent control it would not seem unreasonable to expect that such arguments would be most clearly put by legislators introducing or justifying the imposition of rent control. However, this does not prove to be a fruitful area for the finding of clear and logical arguments. Nevertheless, we will review a number of the justifications that have been made.

In wartime Australia the stated aim of rent control was "to avoid rent inflation arising from increased spending power and from the exploitation of the acute shortage of accommodation in areas surrounding military camps and war-time industries" (Commonwealth Year Book, 1944-45, p.1116).

In New South Wales, the 1948 Landlord and Tenant Act was introduced into Parliament by the Minister for Conservation, Mr. Weir, with a statement that it "is agreed, I think on all sides, that fair rent legislation must be continued" (New South Wales Parliamentary Debates
(New Series), 187, Session 1947-48, p.3353). Mr. Weir asserted that "the fact is that the supply of accommodation ... is insufficient to meet the demand. Unless a degree of control is continued there would be wholesale eviction of [tenants] ... [If controls were lifted] rents would spiral ... I put it then that the need for rent control needs neither further emphasis nor further illustration" (p.3354). The (Liberal) Opposition Leader, Mr. Treatt, thought that because "many citizens have no homes ... it has been found necessary to fix the rent by persons who occupy houses provided for them by someone else" (p.3366).\(^1\) In the Report of the Royal Commission (New South Wales Parliament, 1961) the role of rent control was seen as "that of preventing the exploitation of a shortage of accommodation by the charging of excessive rents" (pp.16-17).

The lack of elaboration and/or logic of the New South Wales politicians was also a feature of Mr. Enderby's introduction of rent control in Canberra in 1973. As we noted in Chapter 7, Mr. Enderby introduced controls which "sought to maximise the opportunities of low and middle-income earners ... to have access to ... accommodation at a reasonable rent".\(^2\)

Other instances could be cited but no more light would be thrown on the situation. Justifications are either vague, indirect or illogical, indicating the possible presence of hidden motives. We now turn to the arguments that economists have used in support of rent control.

2. The Wartime Arguments

Conditions special to wartime are sometimes used as a basis for an argument for rent control. These special circumstances are said to

\(^1\) The convoluted logic of this statement is not a result of quoting Mr. Treatt out of context.

\(^2\) Quoted in RESI (1975, p.52).
be (i) that the supply of housing is very inelastic during a war period because of competing war-related demands for building resources and (ii) that a wide range of commodities are rationed and price-controlled. Before examining the two arguments we will review the situation which prevailed in wartime Australia.

Two striking features of wartime controls in Australia during World War Two are evident. The first of these was the wide extent of their coverage. Not only were most commodities controlled explicitly, but also wages and interest came under the regulatory net. Most commodities were controlled by the Prices Branch of the Department of Trade and Customs. Interest rates were controlled through the Treasury and the Commonwealth Bank. Machinery was already in existence to control wages, and profits were automatically controlled by the Prices Branch which set prices on a "cost-plus" basis. House rents have not, as yet, been mentioned. Their control brings us on to the second feature of wartime control in Australia. The rental housing market was treated differently to other markets. Butlin (1954), in reference to the administrative differences, states that "Rent Control from the beginning stood apart from other forms of price control" (p. 47). There were other differences. Firstly, housing services were not rationed by the government. They were allocated by what Friedman and Stigler (1946) call "chance and favouritism". This form of rationing tends to favour people such as existing tenants, childless couples and attractive unattached females. Those disadvantaged are mainly newcomers to town and minority groups. Secondly, rents were controlled by rigorous "pegging" such that they fell considerably relative to other prices and income. As Table 9.1 shows, rents (on 4 and 5 room houses) rose only 1 per cent during the war. Prices in general rose by more than 22 per cent and wage rates (not shown) by an even greater proportion. Finally, while some "essential"
Table 9.1: "C Series" Retail Price Index and its "Group" Index-Numbers
For the Six Capital Cities (Weighted Average)
Base: 1939 = 1,000 (By Conversion)

<table>
<thead>
<tr>
<th>Year</th>
<th>Food and Groceries</th>
<th>Rent (4 and 5 Rooms)</th>
<th>Clothing</th>
<th>Miscellaneous</th>
<th>All Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1939</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>1940</td>
<td>1,013</td>
<td>1,008</td>
<td>1,136</td>
<td>1,037</td>
<td>1,040</td>
</tr>
<tr>
<td>1941</td>
<td>1,021</td>
<td>1,011</td>
<td>1,329</td>
<td>1,101</td>
<td>1,095</td>
</tr>
<tr>
<td>1942</td>
<td>1,112</td>
<td>1,011</td>
<td>1,555</td>
<td>1,155</td>
<td>1,185</td>
</tr>
<tr>
<td>1943</td>
<td>1,118</td>
<td>1,010</td>
<td>1,712</td>
<td>1,205</td>
<td>1,229</td>
</tr>
<tr>
<td>1944</td>
<td>1,106</td>
<td>1,011</td>
<td>1,706</td>
<td>1,211</td>
<td>1,223</td>
</tr>
<tr>
<td>1945</td>
<td>1,115</td>
<td>1,010</td>
<td>1,694</td>
<td>1,206</td>
<td>1,223</td>
</tr>
<tr>
<td>1946</td>
<td>1,117</td>
<td>1,011</td>
<td>1,789</td>
<td>1,213</td>
<td>1,244</td>
</tr>
</tbody>
</table>

Rise, 1939-45%
11.5  1.0  69.4  20.6  22.3

Source: Year Book of the Commonwealth of Australia, No. 38, 1951

Note: The rise in the index overall, and the relative fall in the price of rental housing, would have been greater without subsidies. The extent of subsidies is indicated in Bambrick (1974).
commodities attracted a subsidy, rental housing did not. But rent control was seen as providing a subsidy, offsetting other price increases (see Bambrick, 1974, p. 4).

The discriminatory treatment of rental housing in Australia was also a feature in the United States and the United Kingdom. In the U.K., the overall rise in the working-class cost of living index was 28.43 per cent over the 1939-1945 period. The "rent and rates" component rose only 2 per cent over this period. Wage rates rose by 48.5 per cent. In the U.S., rent controls were imposed in 1942. Between 1942 and 1945 rents rose only .027 per cent while prices rose 10.21 per cent. Chance and favouritism was the rationing mechanism in both countries.

The first argument for the imposition of wartime rent control is the assertion that the rent elasticity of supply of rental dwellings is zero or very near zero. In such conditions, created by reduced availability of labour and building materials, shifts in demand result wholly or mainly in higher rents. Quantity response is negligible or very limited. Some writers, such as Whitman (1925) and Drane (1961a), have referred to this type of situation as "quasi-monopoly" or "monopoly". Government intervention, in the form of rent control, is justified in order to prevent the exercise of this alleged monopoly power.

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1 Bambrick (1974) reports that under an (abortive) 1946 housing program "the government had arranged to pay a subsidy on rent where the rental of a standard house absorbed more than 20 per cent of the income of the occupant" (p. 11). This idea has a remarkable likeness to the defunct Housing Allowance Voucher Experiment (HAVE, later HAE) where a subsidy of up to the difference between rent on a standard dwelling and 25 per cent of the occupants income, would be paid (see Chapter 10). It also bears a strong resemblance to the Government's public service rent allowance scheme.

2 United Kingdom data is from the Statistical Digest of the War (His Majesty's Stationery Office and Longmans Green and Co., London, 1951). United States data is from Grampp (1950).
Bloomberg (1947) puts the inelastic supply argument clearly and succinctly: "Proponents of rent control are not against landlords as a group. They advocate rent control because housing is scarce, and they do not think that a commodity which is scarce because of wartime restrictions on construction should be bid up in a free market to the benefit of those who happen to hold the commodity. The time to abandon rent controls is when landlords and tenants are in more equal bargaining positions" (p.217).

Excess demand is assured if rents are held below the market clearing level, and demand elasticity is non-zero. It is a consequence of not using the price system to ration the available quantity of housing services. Use of price as the rationing device will induce demanders to economize in the use of space. More people will have somewhere to live than under the rent control. Price rationing will accommodate more people with less average housing services than rent control which causes those lucky enough to find an abode to consume more space than necessary. Rent control must create an unsatisfied fringe of demanders who suffer while the satisfied under-utilize available housing.\(^1\) Walker (1939) has suggested that housing services should be formally rationed by the state and preference be given to poorer and larger families. Friedman and Stigler (1946) warn of the administrative nightmare that such rationing would probably involve.

The curtailment of any possible supply response is assured by rent control. It might be argued that none would occur even if rents were allowed to find market levels. This assumption is far too rigid. Supply response, in the form of housing service units available to the rental market, does not only take the form of new building. It also includes conversions of existing dwellings to make them yield more service units and owner-occupiers making parts of their homes available to renters. Rent control will not encourage such supply response. This

\(^1\) These propositions flow from simple partial-equilibrium analysis. There is no suggestion that the "unsatisfied fringe" will live in the streets. Perhaps they will live with family or friends or in mobile homes.
is for two reasons. Firstly, the reward for suffering the inconvenience of having lodgers is reduced. Secondly, once a part of the house is let it is extremely difficult to evict the tenant, if so desired. It should also be noted that building did not cease immediately the war began. In Melbourne, Prest (1945) reports the erection of over 15,000 new dwellings during the first two years of the war (p.54).^1

The second type of wartime argument relates to the pervasiveness of price controls in general, usually associated with rationing. Leaving rental housing out would be like leaving the lid off one pot. Unsatisfied spending power would surge into the only free sector only to force up prices. Rent control is advocated to prevent prices (rents) from rising in the free sector.

One solution would be to control disposable income in order to prevent a spill-over of unsatisfied demand into the rental housing market. The Government had at its disposal taxation and debt management policy to siphon off purchasing power from the private sector. There is, however, a considerable constraint on the extent to which the private sector can be squeezed. If too much purchasing power is expropriated from consumers, a disincentive to work effort would be created. The same sort of disincentive can be imposed from the other end, by rationing. This was recognized by Tobin (1952) who wrote that "rationing removes the incentive to work to the extent that this incentive is provided by the opportunity to increase consumption of the rationed commodities" (p.538). The incentive to work to buy uncontrolled goods is not reduced.

1. There was very little house building after the first two years of war in either Australia or the U.K. For the U.K., figures in the Statistical Digest, op.cit., reveal 332,405 completions in 1938-39, 195,962 in 1939-40, 42,498 in 1940-41 and less than 10,000 per year until 1945-46. This was not, of course, the only source of supply response.
Suppose that a considerable "spill-over" into rental housing does occur. If supply is fairly unresponsive, the consequence would be a redistribution of income towards landlords. Should this be allowed to occur? There are three possible courses of action. Rationing elsewhere could be removed. A second possible approach is to control disposable income by appropriate taxation and debt management policies. This might create disincentive effects but, at the same time, it would seem to be crucial. Prest clearly identifies rising incomes as the major causal factor in the increase in wartime demand for rental housing. Finally, rent control could be imposed. The disadvantages of this method have already been pointed out. The problem of disposable income being in excess of the value of available supplies (valued at controlled prices) would not be overcome.

In conclusion, then, rent control is not a suitable solution of the problems caused by any spill-over of demand into the rental housing market due to rationing. Appropriate demand management is the correct weapon.

As a final point on the issues raised by wartime, it is far from clear that the circumstances of war would create large increases in rent, if the market were free. Population growth is usually static during a war period but large population movements can occur. Rents may be expected to rise sharply in locations to which population shifts. Even this is not certain. When a serviceman goes abroad or into camp, house-space potentially becomes available for newcomers. As we have already noted, more intensive use can be made of a given stock of housing, even without structural alteration. Pressure on rents will only occur in areas where there is a net population increase.

The available evidence seems to support the contention that, in the absence of rent control, landlords' real incomes would tend to fall. Viner, in his discussion of U.S. experience in World War I, claims that
"[t]he average percentage of increase in rents of urban property of all kinds for the country as a whole was unquestionably considerably less than the average rise in commodity prices or in cost of living. This would indicate that the urban landlord also suffered a decrease in real income as a result of price inflation" (Viner, 1920, p.71). The Australian evidence is supportive of a rise in rents far less than the rise in prices in general. In 1946 it was officially estimated that if the rental market were decontrolled, rents would rise by an average of 15 per cent.\(^1\) The actual rise in rents was only 1.1 per cent between 1939 and 1946 while prices in general rose 24.4 per cent over the same period (see Table 9.1). Another possible indicator of unrestrained rent increases is given by the results when shared accommodation was brought under the wartime Regulations in June 1945. Of the 35,768 shared accommodation determinations made, rents were decreased in 20,954 cases, unchanged in 8,667 and raised in 6,147. "The net effect of all these determinations was to reduce rents by about thirteen per cent" (Butlin and Schedvin, 1977, p.563). If the Rent Controller was consistent, the shared accommodation experience is suggestive of market rents being approximately 15 per cent above controlled rents.\(^2\)

3. **Moralistic Arguments**

Two arguments for rent control which may on the surface appear separate but are, in fact, closely related, have distinct moralistic qualities. One argument is that "profiteering" is bad, the other is that "unearned increments" should not be allowed to be kept by landlords. The relationship between these two "arguments" is clear from a contemporary's views on the subject. In asking the question as to

\(^{1}\) This estimate is reported in Bambrick (1974, p.11) but is not sourced.

\(^{2}\) Given that a calculation based on the shared accommodation gives the same figure as the unsourced official estimate it is probably reasonable to expect that the two estimates have the same basis.
whether higher costs of new dwellings justified a rise in the rents of old dwellings, Walker (1939) replied that if "the object is to avoid a rise in general living costs and to prevent profiteering, the answer is in the negative; and the resulting disparity in the rents of old and new buildings must be accepted as a wartime inconvenience" (p.101, italics added). Walker calls any increase in rents of old houses due to rising costs of new, an "uneearned increment".

Those of the "cost-plus" school, if they stick to a rigid markup, deny any role for the demand side of the market. Any increase in a plus factor implies "profiteering", it would seem. The wartime Commonwealth Prices Commissioner, Professor Copland, chanced his hand at a definition of profiteering. He stated that "profiteering is a relative term. It is relative to some basis or standard that you have in your minds". He "took pre-war prices and pre-war profits as the standard ... From this we arrived at the idea that any rise in prices above those standard prices had to be justified by increased costs. The objective was to limit the rise in prices to the increase in costs due to the war" (Copland, 1940).

The implications of the views of Copland for rent control would be to allow existing landlords rent increases only on the basis of increased outgoings, although this would result in a decrease in profitability in an inflationary situation. Presumably new dwellings would be determined on the basis of current capital value so that a disparity of "new" and "old" rents would arise. This seems to be the sort of situation created by the rent control provisions of Australia's wartime Regulations.

The idea of taxing "uneearned increments" seems to flow from the ideas of Henry George. Parish (1977) identifies two classical arguments for taxation of unearned increments. "The ethical argument is that unearned increments may be expropriated simply because they are unearned;
their recipient cannot claim any moral right to them since they accrued to him without any effort or enterprise on his part.... The practical argument is that such gains may be taxed away without engendering any disincentives to effort and enterprise ..." (p.38). In the case of rental housing, rent control would mean a transfer of part or all of the "unearned increment" to the tenant, whose claim to it seems less than that of the landlord. Landlords could escape the expropriation by selling to an owner-occupier if eviction controls allowed such a transfer.

4. Equity Arguments

As we saw in the previous chapter, the Commission of Inquiry into Poverty (1975) believed "that many of the problems of low income private renters result from their low incomes". The Commission saw "rental market regulation" as a partial solution, but did not advocate rent control. Others have been less cautious in jumping from the observation that many tenants have low incomes to a proposal that rent control should be imposed. For example, Prest (1945) argued that it was "sufficient justification" for wartime rent controls that a "rise in rents of the required magnitude [to equilibrate the market] would have borne particularly heavily on all those whose incomes did not rise proportionately, and particularly on the families of service men" (p.54). Stated in this way, the equity argument looks something like the "inelastic supply" case. However, the equity argument is distinct and rent control has been advocated as a redistributive device to achieve a more equitable income distribution.

There are several objections to the use of rent control as a redistributive device. One major problem is that rent control does not

1 As was strongly argued in the previous chapter, rental market regulation could easily lead to rent control.
produce a straight "Robin Hood" redistribution from rich to poor.¹ Some landlords are poor and some tenants are quite well off. Rent control may create some poor-rich redistributions. In a United States study, Johnson (1951) found no conclusive evidence for the basic premise of the "Robin Hood" argument for rent control. The haphazardness of the redistribution is an off-mentioned feature of rent control schemes.

A second difficulty arises if we stop to think, "Why stop at housing?" If the poor have difficulty paying for their housing, presumably there are problems in paying for other things like food, clothing, medical care and transport. As has been suggested elsewhere in this thesis (and will be discussed at some length in the next chapter), there is no reason to regard housing as special. So in addition to rent control we would need to have food price control, clothing price control and so on.

In defence of rent control it may be argued that rent comprises an unusually large proportion of poor peoples' budgets and that rental housing is a commodity largely consumed by the poor. These factors would make rental housing a good target for price control if they were true² but it still has to be shown that price control is a good means of redistribution.

This latter demonstration is difficult, if not impossible. Better (less costly) means of redistribution are at hand, even if we are

¹ The term "Robin Hood" has been used in relation to rent control by Mishan (1969, p.42).

² According to the Household Expenditure Survey 1975-76 (ABS, Canberra, 1978) there is little basis for this belief. The very poorest group (under $80 per week household income) spent on average 13.84 per cent of their expenditure on housing (compared with 25.84 per cent on food and 13.71 per cent on transport and communication). Only 201,800 out of 651,500 households in this poorest group lived in rented accommodation, a percentage of 30.97. For the $80-$140 income group the corresponding figures are 16.93, 22.29, 18.18, 226,200, 599,400 and 37.73.
confined to using the rental housing market as a medium of redistribution. This matter is discussed at length in the next chapter.

5. A Critique of the "Transitional Gains (Losses) Trap" Argument for Retaining Rent Control

As we have argued, the case against rent control seems to be widely accepted by economists. Accordingly, one tends to find few economists arguing for its introduction (if it does not presently exist) or retention (if it does presently exist). It is surprising, then, to find Professors Shreiber and Tabriztchi (1976) arguing for the continuation of rent control in New York City. The argument used by Shreiber and Tabriztchi is very similar in essence to what Professor Tullock (1975) has dubbed the "transitional gains trap" except that, in the case of rent control, it is more a "transitional losses trap". In this section we do two things: firstly, the general transitional gains trap argument is examined critically; secondly, the application of this type of argument to rent control is put under scrutiny. We conclude that the transitional gains (losses) line of inquiry does not provide an acceptable argument for the retention of costly government-conferred privileges. This conclusion is heartening — if the "trap" argument were to gain acceptance it would involve the retention of a host of costly interventions in the free market system. Such a prospect would cause most Chicago-inspired economists to choke on a free lunch.

(a) A Red Herring in the Transitional Gains Trap

The "transitional gains trap" argument runs something as follows: The government bestows a monopoly privilege on a group of individuals or firms. The privilege provides the beneficiaries with a stream of rents which may be capitalized into a salable asset. Examples include production quotas and taxi plates. The original recipients all sell their asset over a period of time. The buyers pay an amount equal to the rent stream capitalized and, therefore, only earn normal returns from their activity, having paid for the rents in advance. At some stage the
government contemplates removing the monopoly privilege because of the deadweight or efficiency costs associated with the policy. On learning that the present operators have purchased their "privileges", the government should decide against policy-reversal because it would be taking away something the current agents never had. Alternatively, the government should disfranchise but pay compensation to all the "losers" if the excess burden of the taxes levied to pay compensation is less than the efficiency gain from demonopolization.

Let us view the transitional gains trap argument in the best possible light. A monopoly privilege exists and has attendant social costs but all holders of the monopoly rights make only normal returns. The policy involves a point like A (see Figure 9.1) inside the utility possibility frontier. Removal of the monopoly rights involves (i) a cessation of the associated efficiency costs, thus moving society onto the utility possibility frontier, and (ii) a loss to the current holders of the rights to the rents. The move, to a point like B, does not satisfy the Pareto criterion but it does pass the "Kaldor-Hicks" test. Hypothetical compensation could take the economy inside the shaded area. If redistribution were costless a point like C could be attained. There is nothing in the "new welfare economics" which says that compensation should actually occur, but the traditional efficiency argument dictates removal of the distortion.\(^1\)\(^2\) It is probably more fashionable to represent these situations in terms of a "social welfare function". The social welfare function may, or may not, favour the change from A to B. A case where it does not is shown in Figure 9.2.\(^1\)

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1 Tullock's statement that "... cancellation of the original gift ... [places society on] an inefficient portion of the Paretian frontier" (p.671) seems to involve an internal contradiction. Possibly it was intended to assert that the move did not satisfy the Pareto criterion.

2 Corden (1974) has embodied the requirement for compensation in what he calls the "conservative social welfare function". This boils down to a requirement that all changes must actually satisfy the Pareto criterion.
Utility of rest of society

Utility of holders of monopoly privilege

FIGURE 9.1
Utility of holders of monopoly privilege

Utility of rest of society

FIGURE 9.2
social welfare function we could use it to decide the issue. As we do not know it we are back with the traditional "new welfare" approach which tells us to remove the monopoly rights. Only a "distributional value judgement" can underlie compensation.

All of the above has accepted the basic argument that transitional gains are all-pervasive. These basic conditions are, however, highly unlikely. There are two vulnerable links in the argument.

Firstly it is difficult to believe that all holders of monopoly rights are new entrants in the sense that they purchased an asset entitling them to a stream of rents rather than receiving it "free" from the government.\(^1\) This is a matter for empirical investigation, case by case. However, a little "casual empiricism" is enough to convince one that there are still quite a few original beneficiaries around. It is probably not too unfair to suggest that Professor Tullock's discussion of this point is a little unclear.\(^2\) There is no reason, either in principle or empirically, to believe in the complete pervasiveness of transitional gains.

The second weak link is certainly the more important. Even if there are no original beneficiaries left in an industry or occupation it is not wise to assume that the current agents are only making normal returns. Presumably buyers of monopoly rights are aware that governments can (and do) sometimes cancel such rights. In addition, policies can be modified so as to affect the rents available. The possibility of both these types of contingency will be reflected in offer prices.

\(^1\) If one accepts the "rent-seeking" argument, then not even the original holders of rights can be regarded as necessarily earning above-normal profits. But this is another story.

\(^2\) Tullock seems to believe that after a lapse of time gains will "have been fully capitalized, with the result that the people in the industry now are doing no better than normal" (synopsis, p.671). There are at least three other statements to this effect (pp.672, 675 and 677).
The market will embody the probabilities of cancellation and modifications in government policies in the capital values it will establish for the "right" to an uncertain stream of rents. A government could proceed to withdraw monopoly privileges, safe in the knowledge that private decision-makers have accounted for the possibilities. In this sense there can be no losers and, therefore, there can be no trap. Of course, as in any lottery, there are gainers and losers. However those that play the game know the risks and need not be the subject of misguided derision or sympathy when the outcomes become clear.

By way of conclusion of the general discussion, it is strongly contended that we should not get ourselves ensnared in a transitional gains trap. There is no argument for enduring inefficient government-bested monopoly power. A close look into the trap only serves to reveal a lowly catch - a red herring!

(b) Rent Control - A Transitional Losses Trap?

Shreiber and Tabriztchi argue against the abolition of rent control in New York City because decontrol "may not restore the wealth to those landlords from whom the rights were originally taken" (p.515). The argument is that losses from rent control are transitional - borne by those landlords who owned properties when controls were first imposed. Over time "many controlled units [will have] changed hands ... and landlords who purchased such units bought them subject to the statutory tenancy and at prices lower than comparable uncontrolled buildings" (p.516). Abolition of control would bring "windfall gains" to the purchasing landlords at the "expense of the tenants".

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1 A colleague has suggested that attitudes to risk will have an important bearing on offer prices and asset values. This aspect of the problem will not be pursued.

2 Some evidence that purchasing landlords assess risk of decontrol is provided in our study of New South Wales' post-war rent control (see Chapter 6). Capitalization of rent differentials yields much larger values for tenancies than direct observation of this value. The implicit risk factor found was about 8.56 per cent compared to an interest rate of about 6 per cent. These figures pertain to New South Wales in 1960.
This seems to be precisely the type of argument set out by Tullock. However, Shreiber and Tabriztchi draw different policy conclusions than those implied by Tullock's analysis. Presumably, Tullock would support the retention of rent control only if negative compensation (taxing of landlords) involved an excess burden greater than that associated with keeping rent control. Shreiber and Tabriztchi argue unambiguously for the retention of rent control.\footnote{Shreiber and Tabriztchi are, however, concerned with the efficient allocation of the available rental stock such that each tenant has a willingness to pay at least equal to the market value of the dwelling. They propose achievement of this by facilitating voluntary agreements between landlords and tenants within the context of rent control remaining.}

It goes without saying that the efficiency solution must involve abolition of control. The "transitional losses" argument shares the same defects as the "transitional gains" argument.

While it is more common to see the rent decontrol issue in the "transitional losses" light, it can, to a degree, be viewed as a "transitional gains" case. This occurs when a tenancy is seen as a saleable asset. Rent control is imposed and the initial ("sitting") tenants are granted the right to a stream of rent savings. After some time has elapsed many (all?) tenants will have sold their tenancies for a price reflecting the expected stream of rent savings. Gains will only have been "transitional", accruing to the initial tenants. Tullock's line of argument would dictate that purchasing tenants be compensated if rent control were to be removed on efficiency grounds.

In practice the situation could be much more complex as two types of transaction may be occurring - sales of controlled properties and sales of tenancies. The situations created by decontrol can be summarized in the following matrix (Table 9.2). The outcomes assume that

193.
Table 9.2: Possible Consequences of Decontrol Where Agents Acted in Belief that Decontrol Would Not Occur

<table>
<thead>
<tr>
<th>Original Landlord</th>
<th>Purchasing Landlord</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Tenant</td>
<td>Original Positions Restored</td>
</tr>
<tr>
<td></td>
<td>Pre-rent control situation restored for tenant Windfall gain to landlord</td>
</tr>
<tr>
<td>Purchasing Tenant</td>
<td>Windfall loss to tenant</td>
</tr>
<tr>
<td></td>
<td>Windfall gain to landlord</td>
</tr>
<tr>
<td></td>
<td>Pre-rent control situation restored for landlord</td>
</tr>
</tbody>
</table>

assets are regarded as being riskless. Obviously we are delving into a real "can of worms".¹

Finally, the recent trap discussions should be related back to an older literature which broached the decontrol issue. Writings by Harrod (1947) and Paish (1950) of thirty years ago are mainly concerned with bringing about an efficient distribution of available housing without interfering with the distribution of income created by the rent control. The essence of Harrod’s scheme is the repeal of rent control associated with a tax on landlords equal to the difference between market and controlled rent. This tax revenue would be paid to existing tenants for a period of ten years, irrespective of whether they remained in the original dwelling. Paish’s scheme was a considerable modification of Harrod’s plan and we will not concern ourselves with the details.

Harrod seems to miss the point about the wealth transfer involved with rent control. Harrod argues that straight decontrol "would involve a hardship on those dwelling in rent-restricted houses, on account of their expectation of a continuation of the restriction, and a quite unwarranted windfall profit to the landlords" (p.122). Neutze (1978) has recently expressed a similar view, arguing that "repeal gives a capital gain to landlords at the expense of their tenants" (p.107). Neither writer seems to have the transitional loss-gain argument in mind.

However Paish does seem to express the germ of the argument put by Shreiber and Tabriztchi. Paish contends that "[w]hile some of the landlords who would benefit from repeal have no doubt suffered unjustly ..., there are others, such as the recent purchasers of rent-restricted property at the "sitting-tenant" price, who would make large windfall profits" (p.9).

¹ The actual importance of these trades is an empirical matter. Most rent control laws make trades in tenancies rather difficult.
The argument in favour of retaining costly interventions, like rent control, on the grounds of their being a "transitional gains (losses) trap" is, on the surface, appealing. Close scrutiny reveals that its attraction is very superficial. The structure of the argument is built on shifting sands. Even if the structure were stable, it need not be regarded as being a trap. Only if viewed with the help of a distributional value judgement will it appear as a trap. Traditionally, economists have been very uneasy about basing policy prescriptions on a distributional value judgement. Their lack of ease in this regard is more a strength than a weakness.

6. Conclusions

The overall thesis is that rent control is not a policy that can be recommended to governments confronted with imaginary or real problems in the rental housing market. In this chapter the thesis has been supported by demonstrating that there is no substance in any of the arguments for introducing or retaining rent control, even in wartime. Previously the thesis has been built up by examining the consequences of rent control (and of rental market regulation). In the next chapter the approach is to compare rent control with some other alternative policies (like housing allowances and public housing provision).
In the last chapter rent control was considered per se and found to be undesirable on a cost-benefit basis. However, if we have as an objective the desire to transfer wealth to low-income tenants (for whatever reason) then rent control must be considered as one of the means by which this may be achieved (even if it is a very imprecise means of achieving this end). The other means at hand are, basically, housing allowances and public housing provision. The three broad types of policy must be analysed and compared. If policy-makers are going to use the housing market as a medium of redistribution, society has an interest in them applying the most efficient available means to their task. Rent control is certainly not this means.

1. Housing Allowances

Prior to the elaborate housing allowance experiments in the United States, the United Kingdom and Australia, economists thought of housing allowances in terms of vouchers. The traditional voucher entails the government issuing a certificate entitling the recipient to purchase a stated number of dollars worth of housing. The landlord supplying the housing would be able to "cash the certificate in" for the stated amount. Olsen (1969a) regards such certificates as probably "the most efficient method of subsidizing the housing of low income families ..." (p.619). Olsen also reports the large-scale issuance of such certificates in the United States during the Depression.

Myers (1975) reports the change of emphasis in United States rental housing policies in the late 1960s. The movement was towards "demand-side" policies and a large housing allowance experiment ensued. This

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1 Much of the material in this chapter is based on two papers published in the Australian Journal of Management - Albon (1977b and 1979b).
was a far cry from the traditional voucher scheme. Similarly, the Australian experiment (1976-78) toyed with a concept of housing allowances which lacked the simplicity and attraction of the traditional voucher. The United Kingdom scheme, reported by Ricketts (1976), is perhaps one of the most convoluted "welfare" schemes ever devised by man.

The Priorities Review Staff (1975) in its excellent Report on Housing, supported a traditional voucher scheme if a minimum income scheme could not be introduced. The PRS wanted the scheme to apply to both renters and purchasers, advocating "means-tested vouchers which those on low-incomes could use for renting or purchasing accommodation from private or public suppliers [at market prices]" (p.100). The Commission of Inquiry into Poverty (1975) also supported some form of housing allowance scheme.

The now-defunct Australian experiment was the responsibility of the now-defunct Department of Environment, Housing and Community Development (EHCD). The experiment was initially known as the Housing Allowance Voucher Experiment (HAVE) and later as simply the Housing Allowance Experiment (HAE). The EHCD seemed to have difficulty deciding whether to use HAVE or HAE. In late 1977 it used both names in its information booklet (EHCD, 1977). The decision not to use vouchers had been taken (or dictated) as early as 1976. The name HAE seems to be most appropriate in this light.

The Federal Government had announced the advent of an experiment in 1976. This announcement seemed to herald a radical change in Government policy towards low-income housing. One may have anticipated a major move from subsidized public housing (a "supply-side" policy) to housing allowances ("demand-side policy"). This was not to be, as the experiment was terminated in June 1978.
The United States lineage of the experiment was obvious from the beginning. An American who was involved in the United States experiments, Arnold Katz, headed the project. Katz brought with him a prejudice for a housing allowance concept involving some tieing of benefits to housing consumption.\(^1\)

Having begun with a complicated idea, the HAVE team within EHCD seemed to be baffled by the implications. While an elaborate experiment was planned, EHCD did not really seem aware of what to expect. For example, the administrators did not seem to appreciate the likelihood of tenant-landlord coalition formation. Nor did they recognise the likely importance of moving costs on recipients’ reactions. The HAVE team also seemed to be dogged by internal dissension with some of the staff being extremely pessimistic about supply response and, it seems, opposed to the whole housing allowance concept. The original head of the experiment, Arnold Katz, returned to the United States prematurely and the headship was taken over by Dr. John Paterson.

Because the actual form was to be decided by an experiment, and because the experiment was aborted, it is not known with certainty how any Australian housing allowance scheme would have looked. In Chapter 3 we assumed a particular form for the purposes of analysing tenant benefits which would ensue. A perusal of papers by Katz and Jackson (1978) and Paterson (1977) plus the two EHCD information booklets (1976 and 1977) seems to bear out the bias in favour of the form assumed in Chapter 3. Accordingly we will persist with an analysis of that type of scheme and will carry over the assumptions and notation from the earlier chapter.

Consider Figure 10.1 which compares the choice sets presented by the traditional voucher, the HAE-type scheme and a lump-sum income

\(^1\) Katz did not seem to understand that the scheme he supported did actually involve tieing. See Katz and Jackson (1978, pp.199-200).
FIGURE 10.1
grant. If the recipient were to fully utilize the HAE-type payment available (i.e. receive $-25$ in payment), the diagram is drawn such that each scheme entails exactly the same payment. Measured in terms of housing services this payment is equal to $ab$ or $ge$. The choice sets each have one common segment, $ec$. The HAE-type scheme has the most restrictive choice set, $agec$. The traditional voucher allows choices along $abec$ and the lump-sum income grant presents the recipient with an opportunity locus of $dbec$. Another way of looking at it is to examine what is excluded of $dbec$. The lump-sum income supplement excludes none of $dbec$, the traditional voucher excludes $db$ and the HAE-type scheme disallows $dbe$. Yet another way of viewing these situations is in terms of tenant benefits (as measured by Hicks' equivalent variation) relative to the payment. For the lump-sum subsidy, tenant benefits and the lump-sum are always equal. This will be true for all three if the recipient ended up along $ec$. The probability of tenant benefits being less than the payment increases as the policy moves from the lump-sum income supplement (with zero probability) through the traditional voucher to the HAE-type scheme.

For some reason or another, the Australian housing allowance experimenters wanted to tie housing allowance payments to the recipients' consumption of housing more than would be entailed by a traditional voucher scheme. In short, the EHCD was opting for a less efficient scheme which would tend to raise the demand for housing more.¹

One aspect the administrators neglected to consider was the possibility of coalition formation as a means of untieing payments. Suppose the best a tenant could do from the HAE-type scheme was a "corner solution" at point $e$ with the consequence that his subjective valuation of the payment was below its dollar value. If the tenant

¹ This is difficult to understand if there was a real concern about the degree of supply response.
could, without cost, secure the same payment and consume housing according to his preferences, he would be able to find a position along segment be. The rental of a dwelling which would put him on be would be less than standard rent, S. Therefore the tenant would have an incentive to make an arrangement with his landlord to artificially charge a rent of S. The tenant might physically pay S and then be refunded the difference between standard and actual rent. Under these circumstances the HAE-type scheme would be effectively equivalent to the traditional voucher. However, there may be "flies in the ointment".

Firstly, the landlord may require a consideration, L, for cooperating. According to Tullock (1971), it would be zero. He states that if "the market is highly competitive (even if not perfectly competitive) it seems likely that the individual would be able to find a landlord who is willing to [make a full rebate of the difference between standard and actual rent]" (p.218). However, there may be circumstances where L is positive. One such situation is where any penalty from forming a coalition is borne by the landlord, perhaps in the form of a fine. L would then be a positive function of the probability of detection and the magnitude of the fine. Another situation where L is positive could occur when a landlord, having ensnared a tenant, demands a share of the payment knowing that it is costly for the tenant to move. On the other hand, it is also costly for the landlord to change tenants. Finally, there could be costs to the landlord in administering a tenancy where a rent rebate is being paid, and such costs would be met by the tenant. If L is positive, be will not be feasible. The opportunity locus will shift down by L so that the choice set would become afjec.

For convenience, we are assuming that he does not wish to consume less than S - .25Y worth of housing. We do not have to assume this.
Secondly, there may be penalties for cheating imposed on tenants caught in the act. At the experimental stage, households were to be excluded from the scheme for, among other things, filling out "intentionally untruthful" Household Report Forms (EHCD, 1977, p.11). Households could get back in the scheme by correcting their mistake within six months, but they would not have been eligible for any back payments. Coalitions would probably have fallen into this category of transgression as the information sought in the Household Report Form was that on which the calculation of the actual payment would have been based. Such a threat would not have concerned those families who would only participate with a coalition anyway. However, those with a lower opportunity cost of not forming a coalition would be deterred if the probability of detection was sufficiently high.

Another factor largely neglected by EHCD was the cost of moving. Both physical and psychic moving costs can be incurred. Denoting tenant benefits available from a family's initial position as \( B_0 \), those from the best HAE position as \( B_1 \), moving costs as \( M \) and the market interest rate as \( d \), we have

\[
(B_1 - B_0) \sum_{i=1}^{n} (1 + d)^{-i} > M
\]

(10.1)

as the condition for moving in the case of a family with an \( n \)-period horizon. There could be cases where the family initially consumes close to \( S/P_H \) units of housing services such that a high HAE payment with a high valuation is available without moving. The cost of moving would outweigh the present value of the extra tenant benefit attainable by moving. The moving condition might also not hold for families who initially consume little housing services and for which such services yield a low marginal utility. In the non-participation without a coalition case, the LHS of (10.1) is negative. For those who would just
participate in the absence of moving costs, \( B_1 - B_0 \) is very low and if (10.1) does not hold, they become non-participants unless via a coalition. The existence of moving costs therefore tends to enlarge the group who would not lawfully participate in HAE, and to raise the potential number of coalitions. For a family with a zero marginal utility of housing, moving costs are irrelevant as they will not move.

Under circumstances where a tenant has to move anyway, moving costs are irrelevant to the opportunity cost of not forming a coalition. Where there is zero risk to the tenant, this opportunity cost is the difference between the maximum attainable payment (receivable as an untied income supplement) and the best attainable tenant benefit without a coalition and \( L \), all expressed as a present value. That is,

\[
\sum_{i=1}^{n} \frac{(S - .25Y) - (B_i + L)}{(1 + d)^i} \quad (10.2)
\]

The moving condition for a tenant wishing to form a riskless coalition is

\[
\sum_{i=1}^{n} \frac{(S - .25Y) - (B_0 + L)}{(1 + d)^i} > M \quad (10.1a)
\]

If (10.1a) does not hold, a tenant could still seek to make an arrangement with his current landlord.

The case for preferring the traditional voucher to the HAE-type scheme is very strong. There is no faultless or unqualified argument for tying subsidization to housing consumption. The traditional voucher implies only a very small probability of the householder voluntarily attaining a tied solution and must be preferred. Tying involves costs - efficiency costs. These are greater under HAE. Even

1 This probability depends on the size of the payment. If this is very large it may entail "too much" housing consumption and cause tenant benefit to be less than the payment - except via a costless coalition.
if coalitions form to reduce these efficiency costs, the HAE-type scheme can only approach the efficiency of the traditional voucher. Finally, the HAE-type scheme raises the demand for housing more than the traditional voucher. This latter aspect must be a worry to the supply pessimists.

The issue of supply response has probably dominated the Australian debate about HAE. Supply pessimism has been a feature of both Australian and overseas writings. United States' supply pessimists include Myers (1975) and Hartman and Keating (1974). The latter writers argue that the advent of a housing allowance scheme will simply raise rents which are very "sticky" in a downwards direction. To prevent this happening, Hartman and Keating suggest that rent control should be imposed simultaneously with the introduction of housing allowances. 1

In 1976, Patricia Apps (1976) began the Australian debate with the comment that if supply is price-inelastic "the subsidy will be passed on to landlords in higher rents (in which case the experiment fails)" and the assertion that this result is so obvious that it "requires no expensive experiment". Jay (1977) quotes a group called SHELTER as claiming that the scheme would result in rent increases of the amount of the allowance. "The resultant increase in average rents will either force an increase in the maximum rent allowable or force tenants to pay for these higher rents. This rent/voucher spiral can be expected to occur without any significant increases in the supply of housing services ...." Neutze (1978, p.105) thought that "it [HAVE or HAE] might simply result in rents being bid up by the amount of the allowance so that most of the benefits go to the (landlord) owners of low-income rental housing". Robert Carter (1977), in his study of the Prahran Local Government Area, came out in favour of "[a]ttacking

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1 To my knowledge this has not been suggested for Australia. This is surprising. Adoption of the Hartman and Keating plan would probably mean the death-knell for a housing allowance scheme.
deficient housing demand in poorer housing areas" but warned that "[t]here will be localities in which complementary policies aimed at ensuring an increase in supply will be necessary if the vouchers are to lead to an improvement in housing standards rather than just an increase in rents" (p.24). David Kiefer has also written about the experiment (see Kiefer, 1978). Kiefer's treatment of the supply question is rather unusual as it seems to imply that rents will rise most in submarkets where there is an excess supply of low-income housing. This conclusion is counterintuitive.

If there are grounds for supply pessimism, the case for a traditional voucher is enhanced further. However, as discussed in Chapter 4, there is little basis for a belief that supply will be unresponsive, especially in the long-run.

Finally, there is the question of administration of the different types of scheme. In issuing traditional vouchers, the bureaucracy would only require accurate information about the recipient's income. Contrast this with the requirements of the sort of scheme which probably would have followed HAE. Actual rent and standard rent would have needed to have been known, in addition to income. A housing "police force" would have been needed to seek out the far greater number of cheats. The determination of "standard rent" in localities would have been an immense task. In addition to varying by locality, "standard rent" would have varied with family size. EHCD intended to undertake "[r]ental surveys .... in the three experimental sites prior to the commencement of the experiment in order to determine the average cost in the local housing market of dwellings of different size" (EHCD, 1976, p.19). The target group of the scheme comprised about 200,000 income units in 1973, if this group is taken to include private and public renters with less than 120 per cent of Henderson poverty-line incomes (see Commission of Inquiry into Poverty, 1975, p.164). The potential for building a bureaucratic edifice around any such scheme was enormous.
2. **Public Housing**

Apart from rent control, the predominant form of intervention in the Australian rental housing market has been the provision of public housing, until recently, at rents considerably below market levels. While the level of provision has been nowhere near as high as in the United Kingdom, much more has been done in Australia compared with the United States.¹

The history of Australian involvement in public housing is set out in several places, including Jones (1972), Neutze (1978) and Pugh (1976). The basis of the post-war activity has been the series of Commonwealth-State Housing Agreements (CSHA's) by which loan money, at concessional interest rates, has been channelled from the Commonwealth to the States for purposes of public dwelling construction. Rents have usually been set on a basis which covers "costs". For various reasons (cheap loans, use of historic cost, no taxation, etc.) rents have tended to be well below market levels. However, the 1978 CSHA provides for a move to market-related rents but with a continuation of the rental rebate schemes for those tenants on very low incomes.²

Australian public housing provision has worked in a fashion which is far from ideal. It has been plagued by various inefficiencies, inequity and corruption. This need not have been the case as solutions to most of these problems were - and are - available.

The inequity of the public housing programmes was forcefully brought home by the Commission of Inquiry into Poverty (1975). The

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¹ In the United Kingdom over 30 per cent of the housing stock is local authority owned (see Robinson, 1979, p.116). In Australia, the Government had built 9.5 per cent of the 1971 stock but only owned 5.4 per cent of it (see Neutze, 1978, p.94). The United States figure was about 1 per cent in 1967 (see Bish, 1969, p.432).

² In the Australian Capital Territory, Government rent increases have been very large relative to private rent increases in recent years such that they are now very close to market rents.
results of a 1973 survey showed that of 183,000 Australian public house tenancies, 132,000 (or 72 per cent) of the income units had incomes of at least 120 per cent of the "poverty line". At the same time, 125,000 "Henderson poor" families rented in the private market, receiving no direct benefit from public housing. A detailed analysis of data compiled during the 1974/75 Expenditure Survey gives further evidence of the extent to which public housing fails to accommodate the poor. This analysis was conducted by R.W. Archer of the (Federal) Department of Housing and Construction. Many people were (or are) poor when they enter public housing, but circumstances change in many cases. However, because of low rents a large number of tenants find they are better off staying put rather than adjusting their housing consumption to their changed circumstances.

One of the inefficiencies of public housing has already been covered in Chapter 3. Only by a fluke will a public housing offer not entail an efficiency loss due to quantity constraint. The less the range of offer and the less flexible the attitude to moves, the greater will be the efficiency cost. These costs probably have been quite high in Australia.

A closely related inefficiency is the effect on labour mobility. This has certainly been a major consideration in the United Kingdom. In Australia both intra- and inter-state mobility will have been effected by the way public housing has been provided. Again efficiency costs will result.

A third possible inefficiency is due to bad administration and corruption. Where a bureaucracy is involved in large-scale land purchasing and letting tenders for dwelling construction, there is scope for maladministration. One need not dwell on the rather dubious record of the Victorian Housing Commission in regard to land purchases. Land and construction costs have probably been considerably higher than for
private developers. The bureaucracies have been protected from competitive market pressures, a situation not compatible with cost-minimization.

A final inefficiency relates to the generation of negative externalities, especially where public housing has been concentrated in large estates or in high-rise developments. This has been a feature of Victorian practice where large numbers of people who "cannot cope" have been herded together to form unsatisfactory communities. These aspects have been discussed by writers such as Friedman (1962) for the United States and Brennan (1973) and Pugh (1976) for Australia.¹

There are means of overcoming many of the problems associated with public housing. If it were the case that there was a minimum income scheme or some similar policy in operation,² the solution would be to disband the housing commissions and trusts and to sell the existing stock, at market prices, giving first offer of sale to existing tenants. If we wish to persist with public housing there are various ways of improving the efficiency and equity of its provision.

The basic remedy is to make the public housing providers far more responsive to market pressures. In some respects the South Australian Housing Trust (SAHT) has been more attuned to the market than the other State authorities. Rather than being purely involved in acquiring stock through construction, the SAHT has purchased existing private stock in diverse locations. This has meant that the SAHT has been able to better match people to places and to avoid some of the worst difficulties due to concentration. Stretton (1974) claims that "[o]ne good way to keep public housing managers sensitive to what the customers really want is

¹ Reference is also made to the discussion of externalities in Chapter 1.
² Always assuming that society wants to redistribute wealth to low-income persons.
to have them compete in the open market as well as building houses ..." (p.66). But the competition must go further than this.

Somehow the housing has to be allocated in an efficient and equitable manner. However, if public housing is to remain a medium for redistribution towards low-income people, this is not an easy task. The difficulty is one of divorcing the degree of subsidization from the consumption of housing. Consider the case of a rental rebate scheme together with market rents. If the rental rebate scheme acts such that public tenants do not pay more than some percentage of their income in rent there is an incentive to "over-consume housing". It could be very difficult to devise a rebate scheme which did not have this feature. In the case where public housing tenants paying market rents were allowed to participate in any HAE-type scheme, the sort of problem we have already discussed would arise, except that the upper limit to the amount of subsidy is bounded.

Paterson (1975) has suggested another improvement involving an auction system where tenants bid for public house-space but where the proportion of their bid that they actually pay is related to their income. Paterson sees this as a market solution for which he has a strong preference: "I am an admirer of the market, not only on efficiency grounds, but also in its capacity as a check on social power. When allocation is by non-market means, discretionary power is automatically conferred on someone to make arbitrary choices between alternative claimants on a given resource" (pp.33-34, original italics). Paterson's scheme is superficially attractive. Re-bidding would occur annually and proportions of bids actually paid would be adjusted. As people get richer they would be induced out of public housing, contrary

1 Unless satiation set in the incentive would be to consume as much housing services as possible.
2 There is, however, a big gap between individuals' wishes and what the bureaucrats will concede.
to the current situation. Because the system would be like an *ad valorem* subsidy, there would be an excess burden (efficiency cost). It is difficult however to compare this efficiency cost with that of the present means of allocation (chance and favouritism?). My own intuition suggests that Paterson's scheme would be more efficient.

3. Other Rental Market Policies

The major rental market policies are certainly rent control, housing allowances and public housing. These three types of measure do not exhaust the possible methods of intervention. Here are some others:

**Direct Subsidization of Landlords.** While housing allowances involve the subsidization of tenants' demand for rental housing, it is possible to subsidize supply. If the aim were to increase the amount of housing services supplied at a lower net price to tenants, a subsidy to landlords on the basis of housing services may be an appropriate policy. Such a subsidy has not been prominent in discussions about rental market housing policy but seems to have certain attractions if the aim is to lower the price of rental housing without reducing its supply.

**Taxation Incentives to Landlords.** A policy possibility which has been discussed is similar in essence to direct subsidization of landlords. This policy would involve giving landlords a discriminatory tax incentive such as a rapid depreciation allowance. A scheme of this kind has operated in the United States (see Starr, 1979) and has recently been considered in Australia. There is talk that any Australian scheme would only apply to new rental housing, making the consequences difficult to predict. At present, landlords' rental incomes are taxed and usual business deductions - including interest payments - are allowed. While there is equity of treatment compared with businesses, there is horizontal inequity of treatment of owner-occupiers (whose imputed
income is not taxed and who cannot deduct mortgage interest) and landlords.

**Taxation Allowances for Tenants.** The Commission of Inquiry into Poverty (1975) suggested the use of a "rent tax credit" for people below the poverty line. The Commission's reasoning on the effects of such a tax credit is, however, highly questionable. The Commission argued that "[t]o provide financial assistance to those who continue to rent, in a manner which will benefit them and not just be passed on to their landlords in higher rents is not easy ... [A]ny rent supplement related to rent paid may have this effect .... [but] .... the supplementary Assistance and tax credit proposals discussed below can achieve high take up rates and provide assistance to renters without corresponding increases in rents" (p.162). The Commission seems to be arguing that a rent tax credit will not raise demand while a direct rent subsidy will. Fundamental economic logic suggests that both forms of subsidy will raise demand and that it is an increase in demand that will raise rents - at least in the short-run. Trying to push the subsidy in through the back door will not make any difference. The Commission also makes a further dubious statement when it asserts that if a rent tax credit were to be paid on an annual basis "it will be less likely to flow through into increased rents" (p.163).

4. **Factors Important in Deciding Between Alternative Policies**

The fundamental objective of rental housing market policies would seem to be to redistribute wealth to low-income tenants.\(^1\) Housing is the medium of redistribution. Why low-income tenants are singled
out from low-income people in general is something of a mystery. However, we will play the game and confine ourselves to redistribution through the housing market.

Apart from tenants (all tenants, not just low-income tenants), all landlords and all taxpayers have an interest in rental housing market policies. While remembering the objective of such policies is to transfer wealth to low-income tenants we will invoke the "dollar-is-a-dollar principle" in adding up costs and benefits. A dollar transferred to a tenant is a dollar transferred from someone else. Our objective is to minimize the costs of any given transfer.

In deciding between the competing policies, several matters need to be considered which involve both theoretical and empirical concerns. The first consideration is the very vexed issue of tying benefits to consumption of a particular commodity - in this case, housing services. This issue is very important, especially in relation to public housing and housing allowances.

(a) The Issue of "Tieing"

The issue of redistribution-in-kind versus lump-sum transfers has assumed great importance in recent years. From the recipient's point of view, redistribution-in-kind would only be regarded as inferior to a lump-sum transfer if it caused a substitution effect as well as an income effect. If the recipient's utility level only is considered, and a recipient family is unanimous about the form of its utility function, it will always value a lump-sum transfer as greater than or equal to a tied-transfer of equal monetary value (at given prices).
However, arguments for transfers-in-kind have been forcibly put in recent times. Firstly, a considerable literature on "merit goods" has arisen since Musgrave (1959) introduced the term. Subsidization in-kind has been justified if the medium of transfer is a merit good which is by definition, not valued by the recipient as much as it should be. Secondly, if the donor's welfare is taken into account, it may be the case that external benefits generated by the recipient's consumption of a particular commodity justifies tying subsidization to the commodity which creates the goods-specific externality.

There are, then, three arguments for transfers-in-kind. These are: the merit good argument; the goods-specific externality argument; and the argument, implied above, that recipient families may not be unanimous about their utility functions. Each will be treated in turn, paying special attention to the implications for housing.

Housing has often been singled out as a merit good. For example, Neutze (1978) has asserted that "housing is a merit good, and .... its value is not adequately reflected in conventional economic calculations (Stretton, 1974)" (pp.99-100). Merit good arguments, if they are not simple expressions of value judgements, involve either deficiencies of information or externalities. In other words, if merit goods have any significance it is only that of a sub-set of market failures. In the present context, information deficiency is unimportant and we will concentrate attention on the externality argument for using housing

1 Culyer (1971, p.548) probably overstates the situation when he asserts that "(de)merit wants must involve externality relationships".
as a medium of income redistribution. The term "merit good" will be avoided.

Economists used to be fairly unanimous about the optimality of lump-sum, untied transfers and this belief was based on the sovereignty of (recipient) consumers. However, according to Daly and Giertz (1976, p.179), "[r]ecent work in this area has demonstrated that unrestricted lump-sum transfers are not necessarily superior to restricted types if the motivating factor for the transfer is a goods-specific externality". Note the requirement that the externality be of a goods-specific kind. If the donors were concerned about the recipients' general well-being (a general consumption externality) the lump-sum transfer would remain optimal. No substitution effect would be required.

Those advocating transfer systems which "distort" recipients' preferences would seem to have two tasks. Firstly, they would need to demonstrate the existence of goods-specific externalities as being common amongst the population of non-recipient tax-payers. Secondly, there is the thorny question of the limits of the Paretian framework. Should goods-specific externalities be regarded as "legitimate" externalities which require some form of government action (subject to a cost-benefit analysis on that action)? While few would argue that production externalities (e.g. the smoky factory) do not fit into the Paretian framework, there are many who would, at the opposite extreme, argue against the inclusion of moral questions (e.g. homosexuality amongst consenting adults). Goods-specific consumption externalities comprise a set of relationships which intersect the set of "moral questions". The consumption of pornography is an element in the intersecting set.
Arrow (1970) has argued that "... if an individual expends resources in supporting legislation regulating another's behaviour, it must be assumed that the behaviour affects his utility" (p.67). Arrow, however, then equivocates by his statement that certain "crimes without victim" would be outlawed. Tullock (1971) has strongly suggested that laws against "crimes without victim" should be repealed. Tullock specifically includes coalition formation in the face of a tied subsidy amongst his "crimes without victim". McLure (1968) has suggested that cases where "distributional objectives are framed in terms of specific goods instead of in terms of general purchasing power" (p.479) deserve the same fate as all so-called "merit wants" - relegation to a "normatively empty box" into which the economist only delves at his peril. A third school argues that goods-specific externalities do belong in the Paretian framework. For example, Olsen (1971), in reply to Tullock, does place housing-specific subsidies in the Paretian framework and argues that landlord-tenant coalition formation is not a victimless crime - those who provide the subsidies are the victims. Olsen also points out that if the costs of enforcement exceed the net benefits\(^1\), cash grants become optimal.

The issue of goods-specific externalities is both a "philosophical" and an empirical matter. Whether one places these externalities in the Paretian framework or not probably depends on whether one is a "libertarian", a "paternalist" or whatever. If these externalities are accepted there are then two further obstacles to the advocacy of "tied" transfers -

\(^1\) Benefits to donors minus costs to recipients.
Are the externalities important in a quantitative sense and are the costs of policing less than the net benefits? Accordingly, we conclude that there is a case for "tied" transfers if we adopt a certain ("paternalistic") philosophical attitude and if we also have empirical evidence of a widespread and strong belief amongst donors that recipients "should" be tied and if the costs of enforcing the tying arrangement are lower than net benefits.

For its part the EHCD asserted two objectives for HAE - an income supplement objective as well as a housing-specific aim of increasing recipients' consumption (see EHCD, 1976). The EHCD did not expend any effort in arguing why it favoured bending preferences. Perhaps that was not its role.

The third argument for a tied subsidy is a lack of internal unanimity about a family's utility function. It is often asserted that the husband is a beer drinking chain-smoking gambler who controls the pay-packet and ignores the plight of the wife and children. The wife and children desire, among other things, better housing. The only way to ensure the transfer is not expended on beer, cigarettes and the horses is to tie it to consumption of a commodity like housing.¹ This argument seems to assume a great deal. For example, it implies that the state knows the family's utility function better than the husband. It also assumes that it is common for low-income husbands to behave in the manner asserted. It would be foolhardy to penalize the many for the sake of the few. A tying arrangement cannot always ensure the desired effect as recipients may find ways of undoing the knot. Finally, if the husband is so terrible the solution might be to channel an untied transfer directly to the wife. In Australia, family allowances are paid to the wife.

¹ Stretton (1974, p.51) uses precisely this argument. He argues that "[i]nside families, I believe the old-fashioned housing reformers were right to see housing as an asset more likely than most to be shared well. Unlike money income, it can't easily be monopolised, or spent on a bigger car, or over-committed to hire-purchase agreements; and deserting husbands find it hard to take it with them".
(b) The Form of the Policies

It is not enough to talk about "public housing", "housing allowances" or "rent control" as if they were well-defined entities. As we have seen, these terms mean very different things to different people. This should serve to make us very careful to define exactly what we mean. If a commentator comes out in favour of "housing allowances", for example, many questions should spring to mind. What groups are to receive the allowances - all tenants? low-income private tenants? public tenants? low-income purchasers? Is the allowance of the traditional voucher type or will payments be more dependent on housing consumption? How will payments vary with the incomes of recipients? These and many other questions will arise. Similarly, if we began with "rent control" (see Chapter 2) or "public housing" (see section 2 of this chapter).

(c) Elasticities of Supply and Demand

The question of supply response is a central issue of rental housing market policy discussions. The supply pessimists would argue strongly against any demand-side policies which raised demand for private rental housing arguing that very little new supply would be forthcoming and rents would tend to rise by the amount of the per unit subsidy.\(^1\) The pessimists would probably favour a policy like public housing provision as the only way to raise the stock of rental accommodation for low-income people.\(^2\) A belief in a low rent elasticity of demand as well as a low elasticity of supply might even engender

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1 However, as noted in Chapter 4, even if the total supply of housing is perfectly inelastic, an increase in demand for rental housing would not result in a pure rent inflation.

2 Friedman (1962, p.179) has argued that public housing projects in the United States have actually reduced the total supply of rental accommodation - "The number of dwelling units destroyed in the course of erecting public housing projects has been far larger than the number of new dwelling units constructed". The question of public house construction "crowding out" private construction was explored briefly in Chapter 4. Some evidence for a "crowding out" effect was found.
support for rent control. On the other hand, if we are sanguine about supply response, housing allowances become the only serious contender amongst the alternative types of policy.

(d) General Equilibrium Implications

The emphasis throughout this thesis has been on partial equilibrium analysis, although some general equilibrium considerations arose in the Appendix to Chapter 2 when considering the wider implications of rent control. However, general equilibrium considerations are important and the wider effects of policies may modify our feelings about their desirability.

In the case of rent control type policies we were able to conclude that control is likely to raise the demand for (and price of) substitute accommodation but that this effect would only be temporary if entry was totally free in these other related markets. Rent control will have only short-run implications for others, unless there is a fear that controls may be extended. These short-run implications may be quite severe (as in Queanbeyan during the mid-1970s). The fear of recontrol might also be significant, as in New South Wales during the late fifties.

The wider effects of housing subsidies have been considered by Aaron (1972) using the results of general equilibrium incidence analysis developed by Harberger (see the review by McLure, 1975). Aaron summarizes the general equilibrium effects of housing subsidies as follows: "Those who receive the subsidy are encouraged by reduced costs to consume more housing services. The total demand for a capital intensive product rises, driving up the return on capital relative to that of labor. As a result, the price of all capital intensive goods rises relative to that of all labor intensive goods to the benefit of consumers who spend more of their incomes on labor intensive goods and to the detriment of those who spend less" (p.50). These general equilibrium considerations may alter conclusions about the consequences of
implementing a subsidy scheme. However, these general equilibrium effects are likely to be unimportant relative to the direct effects.

In the case of public housing, there could be indirect benefits or costs to private renters. Again to quote Aaron, "if the availability of public housing reduces demand for unsubsidized housing more than it reduces supply, rents paid for low cost, unsubsidized housing will tend to decline" (p.121). If the public housing authorities built dwellings containing more housing services than would be built by private suppliers, private supply would be reduced more than private demand so that private rents would tend to rise. In the long-run, if supply is highly elastic, public housing would be a matter of indifference to private landlords.

A final general equilibrium consideration relates to the effect of various policies on the supply of effort. While recognising that this is an issue of some importance it is not one that will be pursued here. Some work on this problem has been done by Powell, Tulpule and Filmer (1977).

(e) Administrative Costs

All rental housing policies entail administrative costs. In Chapter 7 we considered the costs of administering Canberra's rent control. Olsen (1972) has examined the administrative costs of rent control in New York City. In this chapter we considered aspects of the administration of both housing allowance and public housing schemes. In choosing between schemes, relative administration costs are an essential concern. Simple schemes are to be preferred as they minimize bureaucratic discretion and, therefore, help prevent elevation and growth of the bureau. A traditional voucher scheme seems to come out rather well on an intuitive comparison with other policy instruments.
5. Conclusions

It is probably true that redistribution should occur on a general wealth-transfer basis - not through the medium of housing (rental or owner-occupied), food, medicine or any other commodity. To push this line of reasoning too far is, unfortunately, an ostrich-like response. In-kind transfers are important and will almost certainly remain so. Housing, which some regard as being "special", is a prime target for those wishing to see commodity-specific redistribution. Rent control has had a good run in Australia over the past sixty-five years and is now due for compulsory retirement. No grounds for keeping it on have come to light. The younger contenders - housing allowances and public housing - both have attractions. If rental housing is to be a medium of redistribution then the traditional voucher is the suggested means. This conclusion happens to concur with that of the Priorities Review Staff (1975).
rather than summarize the thesis chapter-by-chapter, the approach in this concluding chapter is to draw out the several major concerns or themes, making reference to the relevant chapters for elaboration. To some extent the ordering of the issues does not follow that of the chapters. Given the existence of recurrent themes and some discretion in the placement of chapters, this should not be surprising.

1. The analysis is an adaptation of the neoclassical partial-equilibrium approach. Certain variations from the basic analysis were found to be necessary to take into account the peculiarities of the housing market. Many of these factors are considered in a recent review by Maclennan (1979). Maclennan points out the "inadequacy of simple competitive models" (p. 328) in analysing the housing market and reviews the recent work on the major peculiarities. These are basically the factors considered in Chapter 1. The success of the applications in this thesis should be judged by the explanatory power of the predictions. The empirical parts of the thesis attempt to test the worth of the theoretical approach. It is contended that the modified-neoclassical analytical approach has not been a failure and may, indeed, have been a little successful.

2. There are two senses in which housing might be regarded as being "special". One of these senses is that considered above - the specialty of factors necessary in analysing the housing market. A second meaning is the assertion that housing is a particularly "meritorious" commodity deserving of special attention or subsidy. This contention is strongly disputed. Further, the case for intervention in the (rental) housing market is very weak. On efficiency grounds there is no important market failure. On equity grounds
there is no particular reason why housing should be a medium of any redistribution. There are, indeed, good reasons why it should not.

3. It was felt to be essential to tackle the question of supply response in rental (and other) housing. This is the subject-matter of Chapter 4. This is probably the most contentious issue in the housing debate. The United States evidence points to the expected result - a high "long-run" elasticity of supply with respect to rents. The attempt to estimate a supply function for Australian Capital Territory time-series data was neither a glorious success nor an unmitigated disaster. The indications from the analysis are supportive of a quite high "long-run" elasticity.

4. Analysts of rent control have used approaches which range from the simplest partial-equilibrium demand and supply model to a variety of more sophisticated analyses. The analysis must be tailored to the particular circumstances created by the legislation. For example, it is important to take cognizance of whether the "rent control" limits price per dwelling or price per housing service unit. Writers on rent control have tackled most of the appropriate issues. Chapter 2 reviews this literature and provides some critical comment.

5. If rent control has any tangible objective it is to bestow benefits on tenants. Other rental housing market policies would seem to have the same objective. There are various conceptual and measurement problems in relation to tenant benefits and these are discussed in Chapter 3. A version of Hicks' equivalent variation is proposed for use in quantity-constrained situations and applied to cases of tenant benefits arising from rent control, housing allowances, public housing, urban renewal and other policies. Two alternative methods of attacking the problem of conceptualizing
tenant benefits, where there is a quantity constraint, are set out. Two possible Marshallian measures are also discussed.

6. The central thesis can be stated as follows: Rent control is a "costly" redistributive device. Looked at in isolation, rent control has a ratio of costs to benefits in excess of one. Benefits fall in a very haphazard manner. Compared with housing allowances and public housing (both implemented in an appropriate way), rent control is an inferior policy. No economic argument for introducing or retaining rent control could be found. If redistribution is to be carried out, housing should not be the medium. Some more general means of redistribution (like a negative income tax) is preferable. If housing is to be the medium — for whatever reason — rent control is not the policy. These matters are discussed in Chapters 9 and 10.

7. The history of rent control legislation in Australia is reviewed (in Chapter 5) as a background to two case studies of rent control in Australia which allow us to focus on different aspects of the effects of this type of legislation. Chapter 6 deals with an entrenched system of control in post-war New South Wales. Major emphasis is on the conceptualization and estimation of the capital value of a controlled tenancy which is found to be very large — $2,500 in 1960 (1960 dollars) on average. Chapter 7 examines rent control in the Australian Capital Territory, 1973-1976. This system never became entrenched, but still had the classic effects expected of rent control. The relationships between the (controlled) Canberra and (uncontrolled) Queanbeyan rental markets are explored at some length.

8. A relatively new phenomenon in the area of landlord and tenant legislation is the advent of "rental market regulation" which can be distinguished from "rent control", despite some over-lapping
elements. Chapter 8 reviews different instances of rental market regulation in Australia and abroad, and assesses the likely short-run and long-run implications of this type of intervention. Evidence for a "fear of recontrol" is drawn from Australian experience in the 1950s. Rental market regulation is not recommended as a solution to the problems of low-income tenants.


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