

CHAPTER 9

URBAN HOUSING

9.1 INTRODUCTION

The purpose of this chapter is to investigate housing as a commodity in an urban environment. Large parts of land use in urban areas are devoted to the provision of housing. Housing is a unique commodity in that it affects a major portion of any household's annual income. It is also an essential component of living standard, comfort, security and social status. People devote large shares of their income and time to housing activities. Much of energy goes into acquiring, financing, maintaining, insuring and repairing homes.

Housing is thus an important and valuable asset for any household. Housing is one of the largest categories of privately-owned assets as well as one of the most durable. In this chapter, housing will refer to any type of dwelling that can be viewed as public-serviced premises. Services will include *inter alia*, water, sanitation, electricity, roads and sewerage. Housing will therefore not include informal settlements without any form of public services.

9.2 HOUSING AS A COMMODITY

The housing stock can be seen as the fixed capital stock that is accumulated for the purpose of sheltering the population. Housing is both a source of consumption and a means of investment. As a consumer, housing services are enjoyed and as an investor, value is accumulated over time. Housing contains aspects of both private and public goods. The aspect of private consumption is clear, while living in a particular location or neighbourhood (and local government) implies decisions concerning public goods. This combination of attributes makes housing a very special and difficult commodity to analyse. Housing services can be thought of as the services implied by the use of the

housing stock. The services that are derived from the stock have two dimensions. The quantity of housing services yielded by the housing stock is normally related to some measure of the physical size of a unit of stock. The quality of services can be related to the amount of satisfaction derived from a given quantity of services (Hirsch, 1973: 46).

Housing is distinguished by five characteristics, *viz*: heterogeneity, immobility, durability, large expense relative to income and high adjustment costs (Bogart, 1998: 275). Many other goods share one or more of these characteristics but none shares all of them. A brief discussion of each characteristic follows:

i) Heterogeneity

One of the first questions facing a prospective homeowner is whether to purchase or rent a house. Once this decision is made, many other competing factors should be taken into consideration. These factors include cost, space, location, appearance, rooms, access to transportation and social composition of the neighbourhood. One of the most important factors is cost and it may be necessary to compromise on the other desired factors due to limited income. A main problem of heterogeneity of housing is that it is very difficult to compare some houses to others.

ii) Immobility

Once a housing unit is constructed it is almost impossible to move and very expensive to demolish or to replace it with some other housing unit. A large element of irreversibility in the construction of housing brings forward the effect of sunken costs and uncertainty on investment. This fact is important because the homeowner/investor wants assurance and certainty concerning recouping sunken costs.

iii) Durability

Housing can last for a very long period of time and expectations about future market conditions will strongly influence decisions by prospective homeowners. The future value of a housing unit may depend on future market conditions and this will to a certain extent determine the potential to sell the house sometime in

the future. The future quality of the neighbourhood should also be seriously considered due to the durability of housing. A lovely open field across the street, zoned for commercial development, may change today's beautiful view into tomorrow's traffic jam. The future quality of a neighbourhood thus determines whether the value of a property will increase or decrease. As mentioned before, property refers to a piece of land with improvements such as a housing unit.

iv) High expense relative to income

This characteristic is self-explanatory. A person will necessarily be faced with trade-offs in the location decision. All the desired amenities will not be in close range due to some sacrifices because of the major expenditure involved in owning a house. If a house is rented, the same type of problem will arise because the better the location in terms of amenities, the higher the rent.

v) Large adjustment costs

It is expensive for a household to move and therefore households will adjust their housing only if the benefit of doing so is very high. If the difference between their current situation and their desired situation is very large, the incentive to move, irrespective of the financial burden, may be high. Many households may not be in their "ideal" housing situation but are close enough to it to render the costs of adjusting (opportunity cost) undesirable.

It is clear that the magnitude and characteristics of the urban housing problem have altered over the years, but as Donnison (1967: 45) has pointed out:

The most urgent and harrowing housing needs have remained much the same over the last two centuries, appearing in the form of overcrowding, sharing, ill-equipped and insanitary housing, and the homelessness.

Therefore, although the details have changed, the fundamental problems remain the same and seem equally difficult to solve in the short term.

9.3 DEMAND FOR HOUSING

The aggregate demand for housing behaves somewhat differently over the short term compared to the long term. Short-term demand is largely a reflection of income and income expectation and of cost and the availability of financing. Long-term demand for housing is related to the size and age distribution of the population, the magnitude and distribution of income and the relative prices of housing services (Hirsch, 1973: 47). The cost of a particular housing unit is assumed to be of two kinds. Firstly, the price of the housing unit itself and secondly, the accessibility costs associated with the residential location as well as the sites to which the household commonly travels.

The rental price determines whether a household will rather rent or buy a house. People who rent are normally low-income, high-mobility people because of the high transaction costs of purchasing and selling a house relative to moving from one rental unit to another (Bogart, 1998: 290). For example, students with a combination of relatively low income and high mobility are almost certain renters. The most important aspect concerning demand is the elasticity of demand with respect to price and income. The relevant income for housing demand is permanent income rather than the income in any given year. The large cost of moving and the major financial commitment and transaction costs when purchasing a house make it unlikely that a household will adjust its housing consumption as often as its annual income changes.

One of the main difficulties in estimating the demand for housing is that a demand curve shows the relationship between quantity demand and price. In the case of housing the quantity demand is not readily observable due to the multidimensional nature of housing as a commodity. The current demand pattern seems to be for more but smaller residences. Although the majority of housing is demanded for the various attributes which it offers to the occupant, there are some exceptions. Property values have tended to keep abreast of inflation over the long run and ownership has consequently been seen as an attractive investment opportunity (Mills & Hamilton, 1994: 227). Related to this is the potential of earning an income by letting the property. The higher

the potential income from a house the greater its attractiveness as an investment. Local governments do not base their estimates of future housing requirements on effective demand but rather on the concept of "need" which is a social concept completely unrelated to price (Button, 1976: 150).

Additional factors explaining housing demand include employment locations, availability of public services such as schools, the quality of the environment both in physical and social terms and the accessibility to other consumption goods (Hirsch, 1973: 49). The concept of residential location is thus related to the demand for housing in the sense that demand for housing in general may be viewed as a given, although the demand for a specific residential location is very important. Various factors influencing the residential location decisions of households (See also Chapter 6) will now be analysed.

The residential location decisions of households are generally based on the attributes of a house and the characteristics of the neighbourhood. Some factors will have a positive influence while others may have a negative influence on the decision to locate in a specific neighbourhood. The neighbourhood is, after all, an extension of one's own house. Neighbourhood characteristics influence the buying as well as the selling price of a house. This in turn determines the value of the property and thus the potential return on investment. Factors influencing prices and values and ultimately the residential location decision will now be listed (McDonald, 1997: 212):

Generally positive effect:

- i) Neighbourhood income, size of houses, quality of houses
- ii) Employment location
- iii) Quality of local school
- iv) Physical environment/proximity to a park
- v) Proximity to highway interchange
- vi) Distance to public transportation
- vii) Existence of zoning or restrictive regulation versus their absence

Generally negative effect:

- i) Crime rate in the area
- ii) Property tax rate
- iii) Air pollution
- iv) Airport noise
- v) Proximity to contaminated areas
- vi) Proximity to power plants
- vii) Industrial noise
- viii) Traffic noise
- ix) Location in a floodplain
- x) Distance to employment
- xi) Distance to shopping
- xii) Distance to airport
- xiii) Adjacent to railway

Although this is a lengthy list, not all these factors can always be incorporated in the location decision of a household. Five major characteristics, identified by Segal (1979: 214) normally used when evaluating the attractiveness of a residential location, are the following:

- i) Physical characteristics of the neighbourhood such as housing structures.
- ii) Socio-economic characteristics such as the characteristics of people living in the neighbourhood.
- iii) Public services such as quality of schools, roads and local recreation.
- iv) Environmental qualities such as topographical features, landscape and weather.
- v) Accessibility of the neighbourhood in terms of the sites to which the household commonly travels.

Some neighbourhoods may provide access to services that households do not currently require but may demand in future. This component of demand for residential locations is known as option demand (Hirsch, 1973: 50). Option demand refers to the demand for

the availability of goods and services whether they are consumed or not. Some households will appear willing to pay for the value of certain unchosen alternatives such as a good university that will not necessarily be used. Neighbourhood differences affect the demand of housing services more than the supply of these services.

9.4 SUPPLY OF HOUSING

The aggregate supply of housing is related to prices and quantities of land and other inputs to the production of housing. In the short run, the supply of housing is essentially the existing standing stock. If the demand for housing increases three supply responses are available. New houses can be built, deterioration of some units may be reduced by renovation and remodelling and some units may be moved from one sub-market (high-income) to another (low-income). A firm will construct a house if its value will exceed the construction costs and therefore the highest supply of houses will be where the difference between the value and construction cost is the greatest (Hirsch, 1973: 47). Another important source of housing, overlooked at times, is the conversion of non-housing property such as a school or warehouse, into housing. Government can encourage these activities, since they are important sources of affordable housing for low-income households. Kelly (1993: 147) also argues in favour of government subsidies for the construction of housing for low-income families, because once these are built, people will improve and customise them. One feature common to all categories of housing is the difficulty of increasing the total physical supply in the short term and supply is thus very inelastic over the short term (Button, 1976: 149).

Another method of maintaining the level of existing stock of housing, is the filtering model of housing. The durability of a housing unit increases the probability that several households will occupy it during its lifetime. This makes it possible to analyse it according to a process known as the filtering model of housing. The filtering model is one in which housing is constructed for high-income households and over its lifetime is passed on to ever lower-income households. This model has some important public policy implications (Mills & Hamilton, 1994: 251).

Firstly, it illustrates why constructing new houses for low-income households is sometimes inefficient. The price of these new houses should be affordable to low-income households. If reducing the durability of housing to reduces costs, resources devoted to constructing these houses are wasted relative to constructing more durable housing. This implies a loss to society as a whole. Secondly, this model can be used to argue that the construction of new housing for high-income households may benefit many others. It is important, however, to note that there are transaction costs involved in converting housing from one market to another and the benefits to low-income households depend on a fairly rapid turnover of housing. If the filtering process operates with a substantial lag, the current low-income households may not receive much benefit from current subsidies to housing construction. Lastly, the location of housing, which will be used in the process of filtering, may be poorly located from the perspective of the lower-income people to whom it is supposed to be filtering.

In some cases, the process of filtering is seen as one where some neighbourhoods may slip in status. However, the process does not have to be one of decline only. If the neighbourhood has some advantages, it may be economically worthwhile for a developer to renovate it. Jackson (1985: 286) argues that neighbourhoods have life cycles just as people do, the exception being that neighbourhoods can be renovated. The popular idea of gentrification is an illustration of the potential for revitalisation in deteriorated areas that have locational advantages.

9.5 HOUSING POLICIES

Because housing markets are important and complicated, the door has opened to government intervention. The role of government can be one of supplying housing, enabling low- and middle-income households to own their own homes or encouraging the upgrading of the quality of housing to the level of low-income households. The main difficulty when formulating a housing policy is the complex interrelationships which exist between the various housing sub-markets (Button, 1976: 156). Public housing projects are expensive and complicated and certain problems can arise in designing and

operating public housing. One of the main problems is the location of the planned new housing project for low-income households. Access to public transportation is essential and this seems to dictate that public housing should be close to where poor people live. This approach, however, has certain drawbacks. The first is the disruption caused by demolition and construction. The second, and probably more important, is the social stigma attached to living in a sub-standard neighbourhood. Since some people would want to avoid that stigma, the housing project could become a home only for those with no other place to go.

Another problem that may occur is that only the construction costs are partially funded by government and operating costs and maintenance are expected to come from the new residents. Shortly after the new houses are built, the maintenance costs are low. However, as the housing ages, maintenance costs increase without a commensurate increase in the ability of the residents to finance repairs. This eventually leads to the deterioration of the neighbourhood. The real problem with public housing is that it does not address the true problem facing poor people living in low-cost housing. The true problem is not so much a housing as an income and employment problem. The question can thus be asked: Why do people advocate policies that focus on housing rather than on job creation and increasing income?

Several answers can be given to this question. Firstly, positive externalities may result from consuming better housing. Secondly, the construction industry may benefit from building these houses, using the assistance of poor people as its argument but not really its goal. Lastly, there may be paternalism on the part of the government and the public - "the poor will just squander money" - and that leads to prescribing to people what they are allowed to do with their public subsidies (Bogart, 1998: 302).

Another form of local government intervention in housing markets is that of rent control. This is the practice of imposing a price ceiling on the rental price of housing. This is usually considered negatively as it may lead to income redistribution and lack of a sufficient supply of "affordable" housing. Existing tenants may benefit from this because

they are already in a housing unit and will now pay less for it. However, they may face higher costs due to the reduction in maintenance by property owners since the latter are unable to charge market-related rents. Property owners may also attempt to convert existing rented units from the price-controlled sector to the uncontrolled sector. This may take the form of converting it for commercial purposes or abandoning it altogether. None of these actions will benefit the low-income tenants.

The abandonment of a property means that the housing rent cannot cover the variable costs meaning that the value of the property, less any demolition costs, is zero. No property taxes are collected from the time the property is abandoned and this puts pressure on the budget of local governments. The abandoning of property may cause serious social problems in that it hurts the appearance of the neighbourhood, is a fire hazard and can attract criminals. Sometimes local governments fail to adjust assessed values downward as rent declines, causing abandonment of property. A way to counter the problem of abandonment is the provision of property tax holidays and incentives to property owners, allowing them ample time to renovate and upgrade their property before the reinstallation of current property taxes.

Zoning ordinances often impose minimum lot sizes and other requirements that affect housing. This implies that some households would choose to live in housing of relatively low quality but the local government will not permit this because of concern for the health and safety of the public and the neighbourhood in general. The more affluent a society, the higher it tends to set minimum standards of housing which are considered acceptable (Button, 1976: 151).

9.6 SUMMARY

Housing is a unique commodity in that it provides both public and private good consumption as well as being an investment. Housing is heterogeneous, durable, immobile, expensive and requires large adjustment costs to alter its consumption. People choose to own or rent a house based on their individual characteristics. A

person renting a house is normally from the low-income group or is very mobile. The demand for housing depends on the price of a house as well as the income of a household. Residential location is related to the demand for housing. The residential location decisions of households are generally based on the attributes of a house and the characteristics of the neighbourhood. Factors influencing prices and values and ultimately residential location are physical characteristics, socio-economic characteristics, public services, environmental quality and accessibility of the neighbourhood.

The aggregate supply of housing is related to prices and quantities of land and other production factors used in the production of housing. Three methods of increasing the supply of houses are the building of new houses, renovation and remodelling of existing housing units and the movement of units from one sub-market to another.

Due to the public nature of housing, government intervenes to some extent in various ways to address problems in the housing market. Government's role may be one of supplying housing, enabling households to own their own homes or encouraging the upgrading of the quality of housing. The deterioration of buildings sometimes occurs with rents falling without downward adjustment of assessed values by local governments, causing abandonment of property. Some households would choose to live in housing of relatively low quality but the local government will not permit this because of minimum housing standards.

The supply of affordable housing is one of the main problems faced by local authorities in urban areas. The supply may, however, be addressed over the long term, although a lack of job creation and thus income will still hamper development if not addressed. From a local authority perspective, job creation should be a higher priority because a person receiving an income without a home, is less of a burden than someone with a home without a job.



The high concentration of people in urban areas results in certain negative externalities. In the next chapter a summary of the main externalities culminating from the previous chapters will be analysed briefly, as will policies to address them. The policies should be directed towards creating an environment conducive to economic growth and development.