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Chapter Title: Economic Characteristics of Private Property in Urban Land and Improvements

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## Economic Characteristics of Private Property in Urban Land and Improvements

TRANSACTIONS in urban real estate markets consist of sales and L purchases, exchanges and transfers, and pledges of the rights to the exclusive control and use of urban land and improvements.<sup>1</sup> It is these rights, not the actual land and improvements, which constitute property of economic significance. From land and improvements comes a flow of varied and numerous services or utilities essential to civilized life. These may include not only mere shelter but also a pleasant environment, the convenience of rapid communication, accessibility to places of employment and shopping facilities, and other features of community life. They may consist of such intangible satisfactions as a good address, or proximity to the great or near-great. The exclusive right to enjoy or control any or all of these services for any period of time constitutes property.

## PUBLIC AND PRIVATE PROPERTY IN LAND AND IMPROVEMENTS

Property in land and improvements may be held by public authority or by private individuals; and, since many services are supplied, the right to enjoy or control them may be divided between public authority and one or more private individuals. Thus, both private and public property may exist in connection with the flow of

1 Many real estate terms with undefined or ambiguous meanings are widely used. Thus, in law, "real property" is used as an antithesis to "personal property," and both are used to signify either rights or physical objects. Sometimes, "realty" and "personalty" are used to apply to things, the term "property" being reserved for rights; but, in common language, "property" is frequently used to signify a parcel of land and its improvements. The term "real estate" is no more precise, for in common parlance it may mean land and improvements, or rights in land and improvements, whether technically real or personal property. In the expression, "real estate market," reference is usually to the sale or transfer of any of the rights, principally fees and leaseholds, and the pledge of these interests by execution of mortgages or their equivalent.

In this study, the term "property" is used only in connection with rights in land and improvements; land and improvements, when the physical objects are referred to; and "real estate" to denote both rights (whether in real or personal property) and the physical objects in which these rights inhere.

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services from a single parcel of land and its various improvements.

In fact, such a division of property does exist in every parcel of land and its improvements, for complete control is never wholly vested in private individuals. Government or public authority always retains three rights to which all private property is subject. The first is the right to extinguish private property when the land and improvements are needed for a public purpose; this right is asserted through the power of eminent domain. The second is that of placing restrictions on the use of land and improvements; this right is asserted through the police power, and is expressed in measures designed to protect the public health, morals, and general welfare. Finally, the public authority retains the right to levy taxes against private property for the support of its activities.<sup>2</sup>

Private interests in land and improvements held subject to public rights are known as estates, and in law are classified according to a number of their attributes: (1) the quantity or duration of the estate, (2) the quality of the estate, (3) the time of enjoyment, (4) the number of owners, and (5) incorporeal rights. Some of these attributes are important only legally, but others are significant for an economic study of the behavior of real estate markets. The following three sections of this chapter deal with the kinds of estate (or interest) most commonly involved in real estate transactions, namely, the freehold in fee, fee simple, or fee simple absolute; the leasehold; and the equitable (or legal) estate created by a mortgage or deed of trust in the nature of a mortgage.

## ATTRIBUTES OF THE FREEHOLD ESTATE IN FEE

The fee embodies the largest quantity of rights and covers the longest term of any estate. It gives to its holder all the rights that a private person can possess, and its duration is in perpetuity. Thus, the owner in fee may enjoy exclusive use and occupancy for life, subject to the reserved public rights; he may provide for disposition of his rights after death; he may, during his lifetime, convey them to others in whole or in part, in perpetuity or for designated periods of time; he may convey these rights as of the present or future; he may pledge his rights as security for a debt or for the performance of an

<sup>2</sup> For elaboration and discussion of these public powers, see Miles L. Colean, The Impact of Government on Real Estate Finance in the United States (National Bureau of Economic Research, Financial Research Program, 1950) Chapter 2, especially.

obligation. Within the law, he may do as he pleases with all the rights to use and occupancy theoretically in perpetuity.<sup>8</sup>

Few owners in fee, however, preserve all their rights intact, even during their lifetime. Most fees are divided into parts which are bought and sold in the market, or are pledged at one time or another as security. Once an owner has disposed of part of his rights, or has pledged all or a portion of them as security, he is restricted by the terms of the agreements he has entered into.

Thus, a fee may become encumbered by its owner so that its economic characteristics are changed. The rights disposed of, though not of such a nature as to destroy the fee as contemplated by law and equity, may so restrict the owner's future actions as to change the nature of the retained rights. It is always necessary, therefore, to inquire whether a fee is free and clear or encumbered; and, if encumbrances exist, to know their characteristics before completing a transaction affecting the fee.

#### CHARACTERISTICS OF LEASEHOLDS

A leasehold estate is created when an owner of an estate conveys rights to another, reserving for himself two rights: (1) the right to receive rent for the term of the agreement and (2) the right of reversion, that is, to regain the rights he has relinquished. In turn, the owner of a leasehold estate may also dispose of his rights in toto or in part. He may create new leasehold estates within the framework of his own, pledge his rights as security, or hold them intact for the term of his estate.

Each owner or group of owners of an estate, whether freehold or leasehold, holds it to the exclusion of all others. However, use and occupancy of particular space (the visible evidence of ownership) can be enjoyed exclusively only by the owner or owners of one of the various existing interests, whose rights may be remote from those of the fee owner and even from those of other intervening owners.

#### FEES AND LEASEHOLDS AS SECURITY

The fee or leasehold estate is pledged as security for the payment of a debt or the performance of an obligation by the execution and

<sup>3</sup> Some legal limitations do exist regarding the control which a person may cause to be exercised after his death, but these are not important in the market.

delivery by the owner of an instrument known as a mortgage, or a deed of trust in the nature of a mortgage. The character of this instrument, and the way it is used in financing real estate transactions, will be examined in detail. Here, it is sufficient to say that the interest it carves out of the owner's estate is of a different character from those previously commented on. Ordinarily it pledges all the rights of the owner and therefore restricts his future actions, but it does not commonly deprive him of the enjoyment of the rights of use and possession until after default. Rather, it conveys a contingent right which all other transactions must take into account. For the rights it pledges may, until the obligation is discharged, be forfeited, and with their forfeiture all the rights conveyed by the owner subsequent to the pledge are annulled.

#### DETERMINATION OF OWNERSHIP OF INTERESTS

It frequently becomes difficult to determine precisely the character and priority of interests or estates. This determination is made by examining all the evidence available, both written and oral, bearing upon issues that may arise between the owners or claimants of different estates. Through centuries of adjudicating cases, and by the adoption of constitutions and enactment of legislation, the law of real property and that of landlord and tenant have been developed. They exist as a means of identifying and protecting these varied and sometimes widely distributed interests, and have become one of the major branches of law. Their wide scope and complexity account for much of the cumbersomeness surrounding the transfer of real estate interests.

# CHARACTERISTICS OF THE SERVICES OF LAND AND IMPROVEMENTS

Transactions in the real estate market include the sale, purchase, exchange, and pledge of a wide variety of rights. Their characteristics or attributes differ widely. Some are of short duration; some are in perpetuity. Some represent immediate as well as long-deferred benefits; others represent only one or the other. Some are held by a single owner; others are widely held. Some confer upon their owners a wide range of action; others bring only limited privileges.

4 Technically, the right is a vested one which may be enforced only upon the happening of a contingency.

In every case the rights represent interests in the control of a stream of services rendered by land and improvements, the characteristics of which are determined by the land's location and the improvements placed in and upon it. We shall discuss first the characteristics common to all locations and types of improvements and then those peculiar to each of the several types.

### JOINT NATURE OF SERVICES

First, the services rendered are the joint product of land and improvements. Unimproved urban land can serve only limited uses, improvements being essential for use by any large number of persons. Once improvements are installed, however, the services are a joint product of land and improvements; the two unite to form a compound, not a mixture.

#### PERSISTENCE OF THE FLOW OF SERVICES

Durability is an outstanding characteristic of improvements, no way having been devised for constructing improvements so that they will last for a predetermined length of time and then disintegrate or collapse. The combination of land and improvements may end by destruction or demolition (sometimes by conversion), but this rarely occurs, except after a great many years. Thus, for a long time, the *kind* of services rendered is predetermined by the improvements, and cannot be substantially changed.

The necessity for enduring qualities in improvements partially accounts for the fact that their installation or construction is usually costly, often requiring a large capital investment to be made over a considerable period of time prior to the appearance of the product. Once the investment has been made, the future character of the product is essentially fixed.

#### NECESSITY FOR CONTINUOUS EXPENDITURES

As with other capital goods, the original funds invested in improvements must be supplemented by continuous expenditures in order to release and maintain the flow of services. Failure to provide funds for operating costs can result only in rapid deterioration of improvements, loss of private rights through nonpayment of taxes, or deterioration of services. When these funds are provided, however, the stream of services (or, alternatively, a new stream to be provided by

the construction of new improvements) can be expected to continue for many years.

## DURABILITY, EXPECTATIONS, AND PRICE CHANGES

Many transactions involve rights which continue over long periods, some even in perpetuity, and this expectation of a continuing flow of services has important repercussions in the market. In such transactions the immediate and the remote futures play a part; and the longer the future into which expectations are projected, the greater their effect in the present.

The effect which expectations would have in real estate markets may be illustrated by a purely hypothetical example. Let us assume that a prospective home purchaser is influenced in determining the price he will pay solely by his opinion of what course prices will take over the next period, say five years, or by his opinion as to what price he could get if he wished to sell at the end of that time.<sup>5</sup>

If prices have remained constant for some time and if he believes they will continue to do so, he would be willing to pay no more than the prevailing price. If, however, he expects an upward price trend, he would be willing to pay more. Suppose, for example, that he thinks prices will rise 5 percent per year for five successive years. Since at the end of the period prices will have risen by 27.6 percent, the prospective purchaser (or seller) would calculate that a house currently priced at \$10,000 could then be sold for \$12,763 (Table 1).6 If both the buyer and seller are convinced that prices will rise at this rate, the \$2,763 anticipated price increase will be reflected in the asking and the offered price. The discounted amount of \$2,763 due in five years at, say, 4 percent is \$2,271.7 The final price paid will approach \$12,271 by an amount reflecting the firmness of the convictions of buyer and seller and their respective bargaining abilities.

In a rising market this process of discounting the increases which are expected over a number of future periods may accelerate the rate of price change that actually occurs within the first period. For

<sup>&</sup>lt;sup>5</sup> The period may be any arbitrary unit of time, and any number of periods may be taken, but care must be exercised in discounting to assure that a uniform rate of interest per annum is assumed.

<sup>6</sup> It is assumed that the buyer anticipates no change in operating costs, that he will sell at the end of the whole period, and that both parties expect prices to remain at the new level.

<sup>7</sup> Variations in the rate of increase and rate of interest used vary the amount of price change resulting, but do not vary its character.

TABLE 1 — EFFECT OF EXPECTATIONS ON THE PRICE OF HOMES PUR-CHASED FOR OWNER-OCCUPANCY, ASSUMING AN ANTICIPATED PRICE INCREASE OR DECREASE OF 5 PERCENT PER ANNUM FOR FIVE YEARS, DISCOUNTED AT 4 PERCENT PER ANNUM

Number of Years Over Which Price Change is Expected	Assuming a 5% Rise per Annum		Assuming a 5% Decline per Annum	
	Index of Price in Year n	Index of Present Price a	Index of Price in Year n	Index of Present Price a
	127.63	122.71	77.38	81.41
4	121.55	118.42	81.45	84.14
3	115.76	114.01	85.74	87.32
2	110.25	109.48	90.25	90.98
1	105.00	104.81	95.00	95.19
0	100.00	100.00	100.00	100.00

a The following formula may be used to compute the index of present price:  $I = 100 \{1 + [(1 + r)^n - 1][1 + i] - n\}$  where r = expected rate of increase or decrease in price and i = the rate of discount per year.

example, in the hypothetical case just given, the expected increase of 5 percent per year for five years may result in an increase, during the first year, of up to 22 percent. As cases are multiplied during the first year in which increases of more than 5 percent are realized, the expectations of buyers and sellers may change from 5 percent per year to the higher rate of increase which has been realized in actual transactions. When these expectations become crystallized widely in the market and are again projected over a number of future years and discounted, they tend to be reflected in still greater increases in price.

Once a price rise has begun, purchasers and sellers may not only change their opinions as to the rate of price rises over successive future periods, they may also shorten the time period within which they expect each successive rise to occur, thus accelerating the rise in prices.

The longer a price rise has lasted, the shorter the portion of its total course that still remains to be run; and the greater the rate of realized increase, the nearer a level is approached at which no further increases are probable. In the example taken above, the assumption was that these increases would occur over five time periods of one year each. If the buyer and seller had expected only four successive increases, the effect would have been to add only 18.4 percent to prices in the current year instead of 22.7 percent (Table 1).

On the other hand, expectation of a price decline has the opposite effect. If prices are expected to decline at the rate of 5 percent per year for five years, they will then stand 22.6 percent below the present level (Table 1). Thus, a loss of \$2,262 would have been realized on a \$10,000 home at the end of five years. This amount at 4 percent has a present worth of \$1,859.

If expectation of changes in the price level solely determined the price paid, the purchaser would want to pay no more than \$8,141, while the seller would try to obtain as much of the difference between \$8,141 and \$10,000 as he could. Again, the price agreed upon would depend upon the firmness of the convictions and the bargaining abilities of the two parties to the transaction. If the price agreed upon within the first year falls below \$9,500 in a sufficient number of transactions actually consummated to establish this lower level of prices in the market, the realized rate of decline is greater than anticipated at the beginning of the year, and again the rate of decline is accelerated.

When the purchase is made for investment rather than for direct occupancy, the situation is analogous but not identical. If the purchaser and seller expect net rents to remain constant, the price will be based upon the capitalization of current rents; but if they anticipate an increase in net rents, the price will be based upon current net rents plus the increase expected.

Assuming the anticipation of a 5 percent rise in net rents per year, at the end of five years net rental income will have risen by 27.6 percent and the resulting increment in capitalized value will be discounted to the present as in the case of the owner-occupied home. In addition, the purchaser of the rented land and improvements would enjoy an increasing income over current net rents during the period of ownership. Accordingly, he would be willing to add some of the present value of these increments to his purchase price, and the seller would increase his asking price by a similar amount.

If the calculation were made over as short a time as five years, the price increase reflected in this discount of the additional income would be slight but would operate in the same direction as the expectation of an increase in capital value. Similarly, expectation of declines in net rents would tend to accelerate the rate of decline in prices of rented land and improvements slightly more than in owner-

occupied homes. The difference is so slight, however, that it need not be followed in detail.

It is not to be implied from these examples that such a detailed calculation is made in every transaction. The expected resale price, however, does enter into most calculations, especially those of experienced investors; and expectations, though vague, play an important but not mathematically precise part in determining prices.

Inasmuch as it may require considerable time for an adjustment of sellers' to buyers' expectations to be effected, changes in expectations may not be translated suddenly into market prices. During such adjustment periods, the market is described as "frozen." Thus, by permitting expectations to extend over long periods, the permanence of land and improvements contributes to the amplitude of price fluctuations in real estate markets.

#### PERISHABILITY AND LOCALIZATION OF SERVICES

Notwithstanding the permanence of land and improvements, the services they provide (such as shelter, privacy, and so forth) are perishable as are all services. From the time capital is invested for improvements, it is essential that services be utilized as fully as possible. Otherwise, a portion of the stream of potential services is permanently lost.

Another characteristic of these services is that they can be utilized only where produced. This has an important effect on the market because, unlike most economic goods which can be moved according to market conditions, they are localized and the market must come to them.

#### INFLUENCES AFFECTING QUALITY OF SERVICES

Although the stream of services provided by land and improvements is continuous, the quality of those services may not be uniform in time. Their quality depends upon the degree to which they meet the requirements and preferences of users. It is affected, therefore, by the attributes of the land and improvements and by users' preferences and choices. The former are largely fixed when improvements are constructed; the latter are in constant flux. Good design, adaptation of structure to land, and flexibility in use are some of the attributes of improvements which enable them to render a high quality of service, while the opposite condemn them indefinitely to

inferior service. Management policy also affects the quality of services.

The above factors affecting the quality of services are controllable, but other influences are controllable only by an authority extending over a wide area, inasmuch as they are extraneous to a particular parcel of land and improvements. Typical of the latter are the uses to which adjoining or near-by parcels are put, influences which can be controlled only by the exercise of zoning rights.

Changes in users' preferences also affect the quality of services; but, because of the durability of improvements, these effects are uncontrollable by the owner or manager of the individual parcel. In the time that an improvement stands, changes in taste and preferences may become so pronounced that what was once the finest in design, equipment, and location is rendered quite obsolete. Finally, new methods of transit may effect a different pattern of convenience or accessibility and profoundly change the quality of services which a particular parcel can render.

#### INCOMMENSURABILITY OF SERVICES

No method has been devised by which either the quantity or quality of services provided by different parcels of land and improvements can be compared.<sup>8</sup> Parcels cannot be graded, standardized, or interchanged; consequently, they are ordinarily purchased after personal inspection, although this procedure is unsystematic and precludes delicate distinctions in the market.

#### INFLEXIBILITY OF SUPPLY OF SERVICES

Since the kind of service to be rendered is determined by the character of the improvements, there can be relatively little modification of their potential volume without extensive construction or conversion. Conversion, however, usually involves large capital outlays. The alternative of building new improvements, on the other hand,

8 The method devised by the Federal Housing Administration for comparing risk in mortgage loans, principally on homes, is an ingenious device for weighing intangible factors similar to those involved in the quality of services rendered by land and improvements. In fact, many of the "features" and "items" used in this rating scheme represent influences determining the quality of services rendered by the land and improvements pledged as collateral to the loan. See Federal Housing Administration, *Underwriting Manual* (1938) Part 2, Sections 6, 7, 8, and 9. The same type of method is described in the *Home Mortgage Loan Manual* (American Bankers Association, Revised Edition, 1947).

frequently involves demolition which temporarily reduces the supply of services available.

Similarly, diminution of the volume of potential services can be realized only by demolition or closing of improvements. Strong forces, however, such as overhead or operating charges, tend to hinder these decisions since these charges are not proportionately reduced by partial closing of improvements and are not stopped even by total abandonment. In other words, although there can be some adjustment in services of various qualities, an important increase or decrease in the supply of services rendered by land and improvements occurs only over long periods.

#### VARIABILITY OF DEMAND FOR SERVICES

On the other hand, effective demand for these services fluctuates considerably in both short and long periods. In periods of expansion, established business concerns expand and new concerns are organized, both requiring more land and improvements. Also, with an increase in income, qualitative and quantitative changes occur in the demand for housing facilities. New households are created, both by marriage and by the "spreading out" of persons who have been living in limited quarters, and housing standards rise, with demand shifting toward better living accommodations.

In some respects, the reverse occurs during periods of contraction as business demand for the services of land and improvements shrinks and the demand for housing facilities lowers both in magnitude and in quality ranges.

Long-run changes in demand occur in both the quality and quantity of services. Quantitative changes result from changes in population, especially in the number of households, shifts in age distribution, changes in geographical location of population and economic activities, changes in industrial output, and changes in the volume and distribution of national income.

Qualitative changes, on the other hand, come largely from technological progress and rising standards of living. As a result of advances in public health and in transportation, urban real estate is now expected to provide services of a quality wholly unanticipated even two generations ago. Many of the attributes of these services, such as facilities for automobiles and common untainted water supply and sewage disposal service, have come to be provided by public

authority, largely from taxes on private rights in land and improvements. Others, such as elevator service, electricity, air conditioning, telephones, and other communication facilities, and greater convenience and comfort in arrangement and attractiveness in design, are provided as a matter of course by private owners. The effect of these qualitative changes is to quicken obsolescence and to create dissatisfaction with services long before the physical life of improvements has expired.

## Characteristics of Services and Nature of the Real Estate Market

Since the services of land and improvements can be used only where they are produced, they must be disposed of in a restricted, localized market, difficult to anticipate because of the small area covered. Affected by every significant change in the economy, particularly by changes in expectations, the market for each kind and quality of service, as will be seen in the following chapters, may behave quite differently. Consequently, the real estate market cannot be analyzed as a single market, but only as a series of localized, fragmentized, and particularized markets for a wide variety of rights to assorted services flowing from numerous unique sources, and only roughly comparable one with the other.