2

Land Values, Rents and Demand

'Fixing a hole'

Introduction

The basic theory of rents and land values as it was developed by the classical economists, and set out in this chapter, implied that these were wholly demand determined. In the classical theory of Ricardo it was assumed there is a fixed supply of land and that it has a single use which is to be used to grow 'corn', in other words food. From these assumptions follow certain conclusions. First, that the imposition of taxes on land will neither increase rents nor alter the use of land, and, second, that 'the price of land is high because the price of corn is high and not vice versa'. The basic neoclassical analysis which is also set out here assumed that land had alternative uses and these conclusions did not necessarily follow.

We argue here that although the neoclassical theory would appear to be more generally relevant than Ricardian theory, nevertheless restrictive planning systems can lead to situations where the Ricardian assumptions apply and Ricardian theory is the more relevant. The planning system may fix the amount of land available for a particular use, and may permit only this amount of land, and no more, to be used in that way. It has therefore been argued in England where the planning system does operate in this way that therefore the Ricardian conclusion follows, namely that the price of land is high because the price of [housing] is high, and not vice versa. Following on from this it has also been argued that it follows that the price of land and housing is wholly demand determined so that the supply of land for housing is irrelevant. As we shall show, whatever might be the merits of the first conclusion, the second certainly does not follow from it. This is because it ignores the fact that the supply of land is under the control of the planning authorities and can be changed. The Ricardian conclusion depends, on the other hand, on the assumption that the supply of land is

fixed and unchangeable. An increase in the amount of land allowed by the planning system to be used for housing can therefore result in a fall in the price of land and housing, and this conclusion is consistent with Ricardian theory when this is correctly understood.

At the end of the chapter we go on to try to explain why many people, including many economists who should know better, can misremember, misunderstand and misrepresent basic rent theory. We conclude that it is, first, because students of economics spend very little time on the subject, including, possibly especially, those who go on to become professional economists. Second, it is because the concept of 'economic rent' which is widely used in economics is thoroughly misleading. It is meant to indicate a payment for a factor of production surplus to that required to transfer a factor from one use to another, but students assume, wrongly, that all land rents are in principle economic rents.

Ricardian rent theory

The assumptions of Ricardian rent theory are that the supply of land is fixed, and that a single product is produced from this given supply of land. In the original analysis this product was called corn. The economic analysis is represented diagrammatically in Figure 2.1. Rent is indicated on the vertical axis and the quantity of land on the horizontal axis. The fixed supply of land is therefore indicated in the figure by the vertical line SS′ in that OS hectares will be supplied whatever the rent offered or paid (above zero). The demand for land is derived from the demand for corn and is represented by the

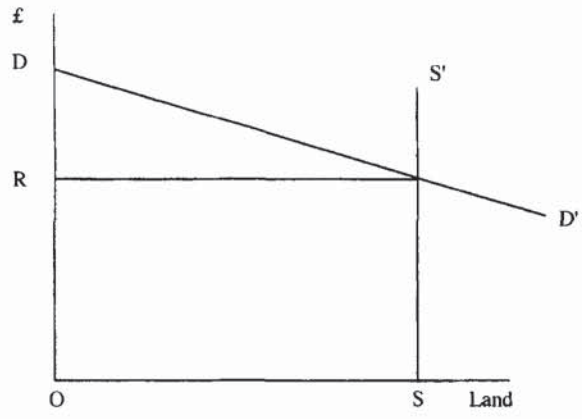

Figure 2.1

downward sloping demand curve DD'. Equilibrium in the land market in the form of equality between the quantity demanded and the quantity supplied fixes the rent which is paid at OR on the vertical axis.

Two conclusions follow from this analysis. First, the rent of land is solely demand determined; since the supply of land is fixed variations in rents can only occur through shifts in the demand curve DD'. Thus the rent of land is high because the price of corn is high and not vice versa, since the demand for land is derived from the demand for corn. Second, taxes levied on rents will not affect either the rent paid or the quantity of land supplied. The latter is fixed no matter what the price paid for it and the rent paid will be OR, as determined by the demand for land, no matter what proportion of this is taken in tax. From these conclusions follow the various proposals which have been made over the years for discriminatory taxes on land or the rent of land. Prominent examples are the single tax movement founded by Henry George in the nineteenth century, and the 100% Betterment Levy imposed under the UK Town and Country Planning Act of 1947 (on which see Prest 1981).

As Buchanan (1929) clearly shows, the Ricardian analysis takes the form that it does because it arose out of a particular political controversy – the debate over the Corn Laws in the early nineteenth century. The price of corn had risen during the Napoleonic Wars and the landed interest wanted duties on imports to continue in order to maintain the high price. The labouring classes and the new urban entrepreneurs wanted the price of corn to come down, the former to reduce the cost of living, the latter so that wages could also come down. Ricardo, and other economists of the time, were therefore interested in the effect of the Corn Laws on the distribution of incomes. The question at issue was whether the price of corn was being pushed up by the high rents demanded by land owners or not, and the Ricardian answer was that it was not. In the terms of the problem defined by the Ricardian assumptions, rent did not enter into the cost of production.

Neoclassical rent theory

Marginalist or neoclassical rent theory was developed in a different political context. The controversies over the Corn Laws had raged 50 years or so before. So far as the neoclassical economists were concerned, the rent of land was merely another aspect of a general price theory rather than a question of the distribution of income. The simplified mode of analysis used by Ricardo with one land use and a fixed supply of land was set aside. Land had alternative uses and it followed that, like any other factor of production,

it must receive its due remuneration. 'A potato field should pay as well as a clover field and a clover field as well as a turnip field, and so on' (Jevons 1911, p. xviii).

Further, since each piece of land had an opportunity cost – the rent that could be obtained in the most profitable alternative use, it followed that the rent of land *did* enter into the cost of production. 'So far as cost of production regulates the values of commodities, wages must enter into the calculation on exactly the same footing as rent' (Jevons 1911, p. xvi).

The neoclassical approach is represented diagrammatically in Figure 2.2. The given supply of land is again indicated along the horizontal axis as OS and rent on the vertical axis. Instead of all the land being used for growing one product, called corn, there are now assumed to be two uses for land, growing potatoes and growing corn. The demand curve for potatoes is represented conventionally by a downward sloping demand curve PP', so that the amount of land used for growing potatoes is indicated along the horizontal axis from left to right, starting from O. The remaining land, the land that is not used for growing potatoes, can be used for growing corn. The amount of land used for growing corn, since the total amount of land available is given, can therefore be indicated in the reverse direction along the horizontal axis, from right to left, starting at S. The demand curve for land for corn can also therefore be drawn from right to left, as the line CC', sloping downwards from the right, since the smaller the amount of land used for growing corn, the smaller the amount of corn for sale, and the higher its price, and so the higher the rent paid for land on which to grow corn.

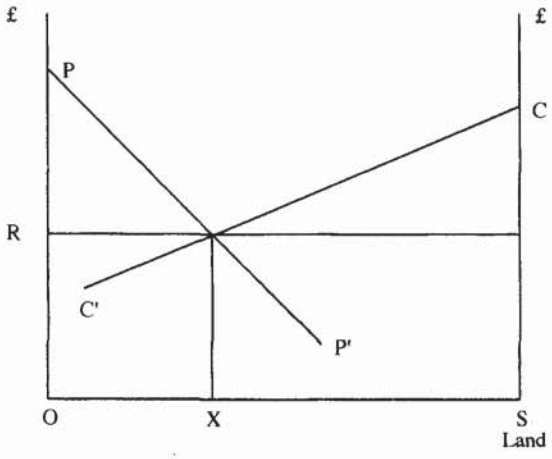

Figure 2.2

Equilibrium in the land market is determined, in Figure 2.2, by the intersection of the two demand curves. At that point the rent payable in each use will be the same and competition between land owners will ensure that this is so. And only at that rent will the total quantity of land demanded for the two uses equal the supply. In the figure the rent is therefore OR, OX is used for growing potatoes and XS for growing corn.

It can easily be demonstrated using this diagrammatic analysis that, contrary to the conclusions of Ricardian theory, an increase in the rent of land can cause an increase in the price of a good. Suppose that there is, for some reason, an increase in the demand for potatoes, with no change in the demand for corn. The increase in the derived demand for land for potatoes is represented in Figure 2.3 by a shift to the right of the demand curve from PP′ to P_1P_1'. The increased demand for land for potatoes means that some land which was used for growing corn is now bid for to be used for growing potatoes. The result is a reduction in the amount of land used for growing corn, from SX to SX_1, and a commensurate increase in the land used for growing potatoes. There is also, of course, an increase in the rent paid for all land from OR to OR_1. But less corn is being supplied to the market since less land is being used to grow it, and at a higher cost, since rents have increased. The price of corn will therefore also rise. Now it is quite clear that the increase in the rent of land is not caused by the increase in the price of corn. Exactly the reverse is true. The price of corn has risen because the rent of land has risen. Thus the price of corn is high because the rent of land is high, and not vice versa.

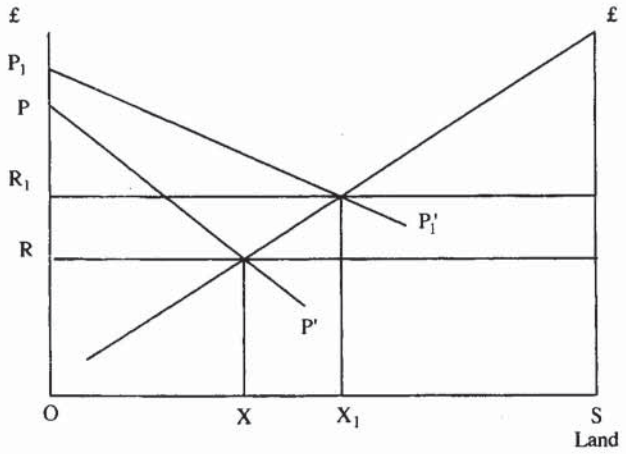

Figure 2.3

So the Ricardian analysis can be incorrect, and in most circumstances, where land has alternative uses and can be shifted from one use to another, it is incorrect. The rent of land for a particular use is not solely determined by the demand for the product. Moreover, the second conclusion from the Ricardian analysis can also be incorrect, in that land taxes can affect the use of land. It can easily be seen from Figure 2.2 that an equal tax on both types of land use would certainly be neutral in its effect. But it can also be seen that any form of land tax which differentiated between land uses would not be neutral in its effect, but would result in a shift in the use of land from the higher to the lower taxed use with the tax being passed on in the form of a higher price for the product of the land taxed at the higher rate.

Ricardian theory remembered

I said in the introduction to this chapter that many people have seemed sometimes only to remember the Ricardian analysis of land values. This was particularly evident during the 1980s in arguments over the effects of planning restrictions, particularly those restricting the development of housing in southern England. At that time Ricardian theory was called on to justify the view that an increase in the amount of land made available for housing would not affect the price of land or of housing.

An example is the evidence given by David Eversley (formerly Chief Strategic Planner at the Greater London Council, Professor of Regional Planning at the University of Sussex, and Professor of Social History at Birmingham) at a planning inquiry into the appeal of Consortium Developments Ltd against refusal of planning permission for a new development at Tillingham Hall in Essex. He said that:

> the price of land is determined by the price the developer (builder) expects to be able to get for the dwelling he puts on the land. This statement is, essentially, only a special case of one of the few economic theories to have stood the test of time: the theory of rent. First propounded in its modern form by David Ricardo, more than 150 years ago, it was adopted by Marx, by the liberal classical economists, and by the neo-classical school, and it has never been seriously challenged. (Eversley 1986, p. 22.)

Eversley's view is extreme in that he states that the Ricardian analysis was accepted by the neoclassical economists, and, as we have shown, this is certainly not true. More usually neoclassical economics was ignored entirely. An example of the neoclassical view being airbrushed from history is a paper by W.S. Grigson for SERPLAN (London and South East Regional

Planning Conference – the regional planning organisation of the local authorities in South East England). He stated that:

> House prices determine land prices not the reverse, because the builder's estimate of the selling price of the building will largely determine his bid for the piece of land. This view is shared by economists and practitioners alike. (Grigson 1986, p. 6, quotation marks in original omitted.)

Of course these writers were not professional economists. But examples can be found in the economics literature. Michael Ball, a housing economist then at Birkbeck College, London, wrote that:

> It is frequently suggested that high land prices cause high house prices. A common argument for such causality confirms an 'implicit adding up' theory of price determination. In it house prices are the sum of adding up land costs, construction costs and builder's profit. Ricardian rent theory and its modern variants would dispute that conclusion by arguing for a residual view of land prices. Residential land prices, it argues, depend on the profitability of housing development. (Ball 1983, pp. 112ff.)

Those economists who go into print on the subject of land economics are usually more careful, but this quotation certainly represented the views at that time of many, if not most, economists who do not work in the field. That this was so was borne out by an informal survey which I carried out among the non-spatial economists working at the University of Reading in the late 1980s. About two-thirds subscribed to the Ricardian views set out above and were unaware of any alternative, neoclassical, view.

Planning controls and rent theory

There may, of course, be some justification for the Ricardian view being so thoroughly embedded in English thought in that it could be argued that the system of planning controls in modern Britain has caused a situation in which Ricardian rent theory is more applicable and relevant than neo-classical rent theory. These planning controls are fairly rigid and ensure the separation of the markets for different uses. Housing land is land on which residential development is permitted, offices are not allowed to be built in certain areas, green belt land cannot be developed at all, and so on. As a result adjacent and otherwise apparently identical pieces of land may sell at entirely different prices depending on the uses to which the planning system will allow them to be put. For example, according to the Property Market Report for Autumn 2002 (Valuation Office 2002) the price of

agricultural land in South East England was about £9000 per hectare, while the price of land for residential development, outside London, was likely to be at least £2 million and possibly substantially more.

Thus each piece of land can be regarded as having a single use, the use currently allowed by the planning system. In these circumstances Ricardian theory certainly appears to be more relevant than neoclassical theory. The situation can be represented as shown in Figure 2.4. Once again there is a given supply of land in the area or region, and this is shown as OS along the horizontal axis. Of this, OX is allowed to be used for housing and XS is land for which agriculture is the only permitted use. The derived demand curve for land for housing HH' slopes downwards from the left. The demand curve for agriculture is shown, however, as a line sloping downwards from the right (as did the demand curve for the alternative agricultural use, potatoes, in Figures 2.2 and 2.3). Although all the land in the area could be used for either housing or agriculture, the planning system separates the markets and different rents are charged in each market. R_H is the rent for land allocated for housing and R_A is the rent for land where only agriculture is permitted. So when the supply of land for each use is fixed within the planning system then the price of land is determined by demand.

Thus the conclusion may rightly be drawn that the price of housing land is high because the price of housing is high and not vice versa. That is indeed true. But we cannot go on to conclude that the level of demand is the only determinant of the price of land and the price of housing. And so go on to draw the illegitimate conclusion that the supply of land, or the 'planned'

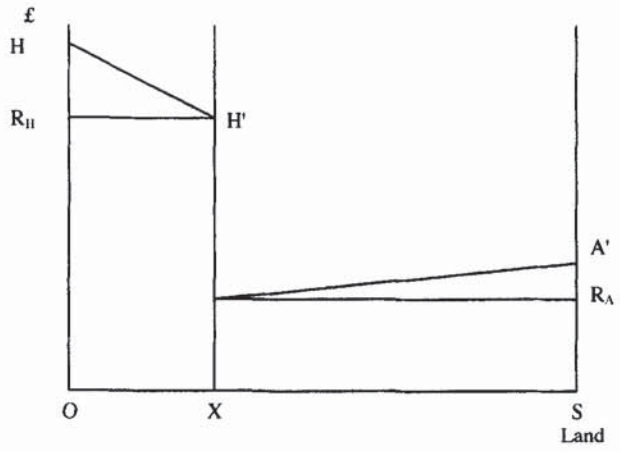

Figure 2.4

allocation of land to different uses, does not matter and has no effect on the price of land and the price of housing.

Eversley and Grigson, in the pieces quoted above, did precisely that. They used the conclusions of Ricardian rent theory to argue that the high price of housing land was not caused in any way by restrictions on the availability of land, but was solely the result of a high level of demand. They concluded that, in consequence, there was no need to release agricultural land for housing development because this would have no effect on either the price of housing or the price of housing land. Moreover, for a period of time at the end of the 1980s and the beginning of the 1990s, this conclusion was accepted at the highest levels of government. So, at the end of the Tillingham Hall inquiry referred to above, the Secretary of State's Inspector refused permission for the proposed development, and stated in his findings that:

> 12.19 Whether or not these latest trends indicate a crisis, I am persuaded that they are not caused by a shortage of building land. Shorter term fluctuations in house prices appear to be caused primarily by financial factors with house prices determining land prices. Expert opinion is agreed that the reverse does not apply.

What has been forgotten in this use of Ricardian analysis is that the supply of land does actually matter, even within the Ricardian framework. Moreover, most economists who write textbooks attempt to make this clear. For example, Richard Lipsey, in a passage which seems to have remained unaltered through all the editions of his book, writes that Ricardo's argument:

> was elaborated by considering land to have only one use, the growing of corn. The supply of land was given and virtually unchangeable, i.e. land was in perfectly inelastic supply and landowners would prefer to rent out their land for some return rather than leave it idle. Nothing had to be paid to prevent land from transferring to uses other than growing corn, because it had none. Therefore, so went the argument, all the payment to land, i.e. rent, is a surplus over and above what is necessary to keep it in its present use. *Given the supply of land*, the price will depend on the demand for land which is itself a function of the price of corn. (Lipsey 1975, p. 366, stress in original.)

The argument that the supply of land, if it can be changed, does affect the price of land can easily be demonstrated diagrammatically. In Figure 2.5 the rent or price of housing land is determined initially, as in Figure 2.4, by

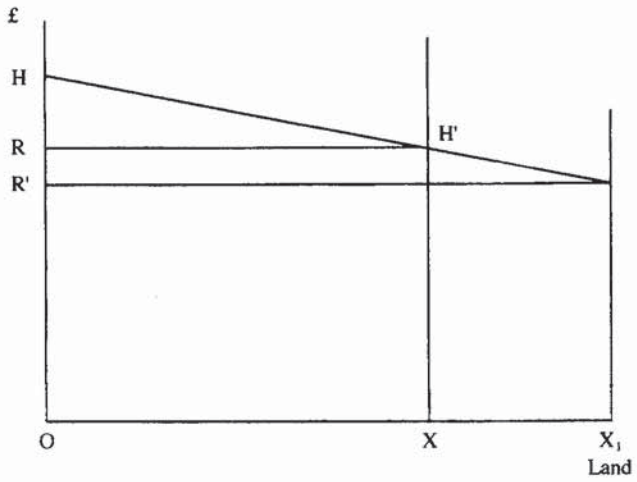

Figure 2.5

equality between demand and supply when the supply is fixed at OX, and the demand curve for housing land, derived from the demand for housing, is HH'. The price of housing land is therefore fixed as OR. It is obvious that if the demand for housing shifts, then an increase in demand will cause the price of land to rise and a decrease in demand will cause the price of housing land to fall. To that degree the price or rent of land is demand determined. But now suppose that the supply of housing land is increased as planning authorities give permission for a number of new housing developments. In Figure 2.5 this is indicated by XX_1 on the horizontal axis. The supply of land for housing shifts from the vertical line at X to the vertical line at X_1. A new equilibrium will be reached with equality between demand and supply at a new lower rent OR'.

This new price has been reached by increasing the supply, given the demand curve. One could therefore argue that the price is supply determined, given the demand curve, with as much justification as one could argue that the price is demand determined, given the supply curve. In truth, of course, as the argument based on Figure 2.5 should make clear, the price is determined by both demand and supply. It may be noted that, for the sake of simplicity and realism we have assumed that the price of agricultural land can be taken as fixed within the area we are considering, as would be true, say, in southern England.

Of course, also for the sake of realism, one should also say that shifts in demand will affect house prices and land prices much more quickly than shifts in supply. A fall in interest rates is likely to result in house prices

being higher than they otherwise would be within a few months, possibly a few weeks, since it takes a very little time for buyers to reconsider their mortgage position. On the other hand an increase in the supply of land for housing may take years to affect prices. First, in Britain, planning permission has to be obtained and any associated legal agreements drawn up and agreed. Together these may take a year or more. Then the houses have to be built. This also will take a year or so. Only when they are being sold will prices be affected. Further, if the development is a large development, as Tillingham Hall was intended to be, development of the site will be phased over many years as the land becomes part of the developers' land banks. The reduction in prices which results from an increase in supply is therefore likely to be difficult to disentangle from all the other influences on prices while development is planned and carried out. Of course, if the land and property market were a completely efficient market then the announcement of an increased land supply would result in house buyers and builders immediately lowering prices in anticipation. But the property market is not an efficient market, as we shall seek to show in Chapter 4, so although there may be some anticipatory price reductions these are likely to be few and small.

Hierarchical planning systems

There remains one situation where both the Ricardian and the neoclassical models may be relevant, rather than one or the other. Some planning systems operate what may be called hierarchical zoning policies. So, for example, only one part of an area may be used for industry but all of it may be used for residential purposes. The policy may be explicit, as it is in some US cities, or it may be implicit, in that, say, in some parts of southern England it may be very much easier to obtain planning permission for the redevelopment of industrial land for housing, but almost impossible to reverse the process.

The situation is illustrated in Figure 2.6. As before, an area of land is represented on the horizontal axis as OS. Rents or prices are indicated on the vertical axis. Sloping downward from the left is a demand curve for land for industry, DD'. The amount of land which is currently allowed to be used for industry is marked as OI on the horizontal axis. The intersection of the vertical supply curve II' with the demand curve DD' fixes the initial price of land for industry OP_1. On the right-hand side of the figure the demand for housing is assumed to be initially relatively low, and to be indicated by the demand curve HH' sloping downwards from the right-hand axis. The amount of land available for housing given initially as IS and the intersec-

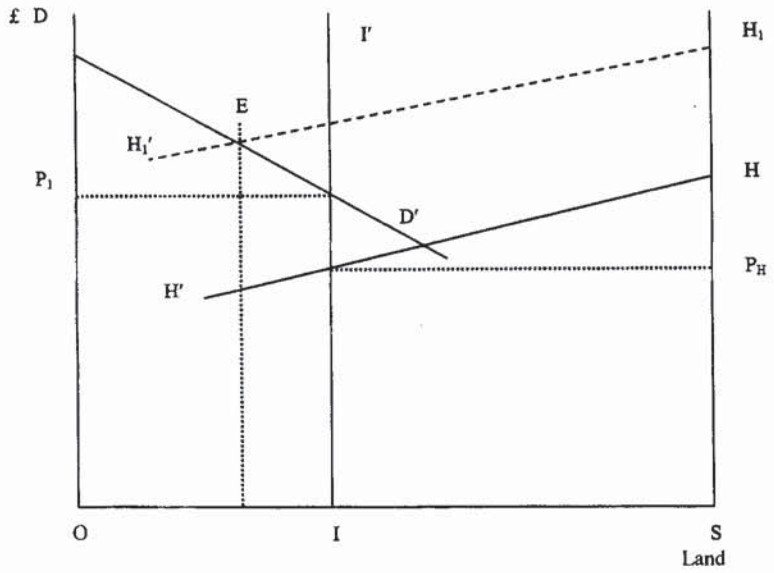

Figure 2.6

tion of the vertical supply curve at I with the demand curve HH' sloping downwards from the right-hand axis determines the price of housing land, marked as SP_H on the right-hand axis. Thus the planning constraint is operative and the situation in both markets appears to be best represented by the Ricardian model.

Suppose that the demand for housing and housing land increases so that the housing land demand curve shifts upward to H_1H_1'. The price of housing land will increase relative to the price of industrial land. Instead of being lower, the price of housing land is now higher than the price of industrial land. It now becomes profitable to develop industrial land for residential use, and this will tend to happen. Some land will be lost to industry, and the price of land for housing will tend to fall and the price of industrial land will tend to rise. The new long-run equilibrium would be indicated in the figure by the intersection of the two demand curves DD' and H_1H_1' at E.

Thus the situation will change to one which is best represented by the neoclassical model. The change might also have occurred because of a fall in the demand for land for industry. In each case the precise situation and how best to apply the economic analysis has to be reconsidered. The problems in the late 1980s which arose in discussions of the economics of the planning system came about because people remembered only one approach and

quoted its conclusions without thinking through the situation, and considering, given the situation, whether these conclusions followed.

Urban rent theory

As we have tried to show, an understanding of Ricardian and neoclassical rent theory is essential to any understanding of the determination of rents and land values. Both approaches suffer from one major deficiency, however. Both of these basic analyses consider areas of land within which rents and land values do not vary. But as we said in Chapter 1 the economic analysis of rents and land values which has been developed since the 1950s has been based primarily on Von Thunen's model of the variation of agricultural rents and land values with distance from a major market centre. Of course, with the falls in the cost of transporting goods over the last 150 years, since Von Thunen's research, agricultural rents do not, in fact, vary very much because of distance. Nevertheless the cost of daily transporting people to work remains relatively high, and the Von Thunen analysis is the basis of the economic analysis of urban areas.

In the urban version the price of land declines at a decreasing rate with distance from the city centre, as shown Figure 2.7. Distance from the city centre or central business district (the CBD) is represented along the horizontal axis, and rents (or land values) on the vertical axis. The rent of land at the city centre is shown on the vertical axis as OC. The rent of the agricultural land surrounding the city is OA. The rent of land at the centre falls

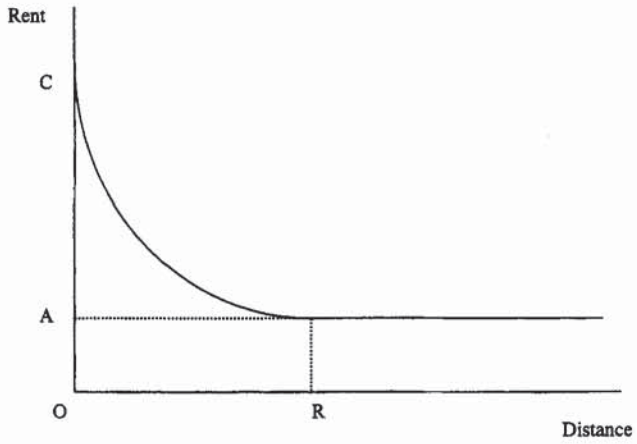

Figure 2.7

with increasing distance from the CBD until it becomes equal to OA at the edge of the city, defining the radius of the urban area, in the absence of topographical variation, as OR. The location of the various activities within the urban area, in the absence of planning constraints, will be determined by a 'trade off' between the cost of transport to the centre and the cost of land. So, in terms of residential location, in England or North America households with high incomes and large families and therefore wanting large houses with gardens, may choose to locate far from the centre of the city, even though commuting costs are high, because the savings on the cost of space are even higher. Poorer households may live near their workplaces, which may be at the centre. Being unable to afford to buy much space anyway, the savings from living further out are small, so travel costs become more important. The theory and the evidence are set out elsewhere (see Evans 1973). For our purposes at this point it is sufficient to note the smooth rent or land value gradient which is implied by the theoretical analysis with rents in each use being equal at the (spatial) margin, with a similarly smooth progression of uses, through, say, commercial uses at or near the centre, and industrial and various kinds of residential use to reach the edge.

That these smooth transitions do not occur is evident. With respect to the land market alone there are three reasons why they won't occur. In the first place the land market is imperfect and inefficient, as we shall show in Chapter 4. In the second place, the use of land will be affected by the preferences and behaviour of land owners, about which we shall have much more to say later. And, in the third place, land use is affected by planning controls which consequently affect land values, and that is what concerns us here.

If planning controls limit the availability, that is, the supply, of land for some uses, but demand increases and remains high, then the value of land in those uses will increase. In the absence of planning controls, land in other, relatively less profitable, uses would be converted, either through redevelopment or in some other way, so that it could be used in one of the more profitable uses. The smooth land value gradient would be retained. With inflexible planning constraints such conversions in the use of land are not possible. Therefore some land values may increase as demand shifts, but the land market cannot adjust. The result is a land value or rent gradient of the kind shown in Figure 2.8. Here a green belt at the edge of the built-up area results in a substantial difference between the value of developed and agricultural land, and constraints on the availability of land for commercial and industrial uses result in the value of land in these uses being higher than the value of land in residential use. Instead of a smooth land value gradient we have one with ups and downs like the teeth on a saw.

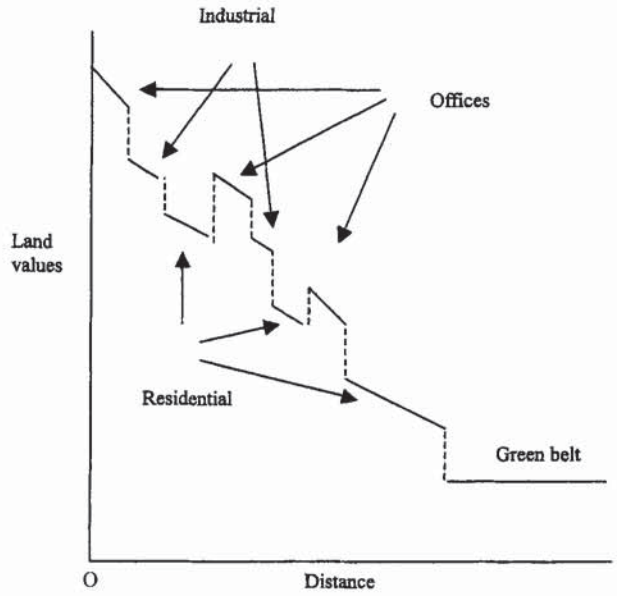

Figure 2.8

The Von Thunen/Alonso land value gradient, modified by the effects of planning controls, is a better representation of the situation in urban areas than the simple Ricardian and neoclassical versions set out earlier. Nevertheless, in terms of our understanding of the land market, rather than our understanding of urban areas, little is in fact gained by the additional refinement. In the absence of planning controls the situation, on the demand side, approximates to the neoclassical. In the presence of planning controls limiting the use of land the situation approximates to the Ricardian. But, of course, as we showed in the previous section, if the planning controls are more flexible in one direction than in another the situation may be sometimes Ricardian and sometimes neoclassical. And finally, if the situation is best represented as Ricardian, because of planning constraints, it is at least now understood that the restricted availability of land through the planning system will result in higher land prices.

Rents, economic and commercial

Before we leave the subject of demand theories of land values there is a question which I raised earlier and to which I would like to return. Why do people misremember the theory? The position with respect to the applicability of the Ricardian and neoclassical theories is, I believe, perfectly clear, and all that has been done in this chapter is to restate it. For the sake

of clarity we summarise it here. First, even if the total supply of land is fixed, if the land has two or more uses then it is perfectly possible for an increase in the rent or price of land to cause an increase in the price of one or more of the goods or services produced on that land. Second, even if, because of planning restrictions say, some land has only one use, varying the supply of land for that use, for example by varying the planning restrictions, will cause the rent or price of that land to vary and the price of the good or service produced on it to vary – in particular an increase in the supply of land for a use will cause the rent of that land and the price of the good or service produced to fall.

These two conclusions would seem almost universally applicable. Certainly it is difficult to conceive of a situation where the area of land is fixed and immutable and it only has one use. Any piece of land is either going to have two or more possible uses or the single use for the land has been decreed by a man-made restriction which can be modified.

This being so, why should people, even those with a training in economics, persist in a belief that an almost inapplicable theory is universally applicable? Put another way, why should they forget, indeed erase from their minds, neoclassical theory and remember only Ricardian theory, forgetting even then its qualification – 'given the supply of land'?

There seem to me to be two reasons, the one a matter of practice, the other a matter of theory. As regards the question of practice, in deciding how much to pay for a piece of land a developer will calculate what could be built on it, estimate what these buildings could be sold for, estimate the cost of construction, and deduct these estimated costs from the estimated sales proceeds. The balance is the maximum amount which could be paid for the land to yield a profit. With an allowance for a normal profit this is the 'residual valuation method' of estimating the value of a piece of land.

It is evident that this method of valuation implies that the value of the land is dependent on the sale price of the buildings. Thus this accords with Ricardian theory. From the point of view of the practical man of affairs the Ricardian argument is obviously correct. Ignored, of course, is the fact that the residual valuation method is essentially short run.

The second reason is dependent on the development of economic theory and its terminology. There is a confusion created in the minds of students (and economists) by the two meanings of the term 'rent' when it is used in economics. There is the actual rent paid for the use of land and buildings – commercial rent, the ordinary, everyday usage, and there is the payment to

a factor in a particular use over and above the transfer earnings necessary to remain in that use – economic rent, a piece of economists' technical jargon. The problem is that the technical term is actually a legacy of the original Ricardian analysis. One conclusion resulting from this analysis was that (since the supply of land was fixed and only had one use) rent, that is commercial rent, did not need to be paid for land since land would provide its services (to produce the single product) no matter how great or small the reward paid for it. From this it seemed logical to coin the term 'economic rent' to describe the reward which a factor might receive for the use of its services over and above the reward necessary for it to be transferred from the best alternative use, i.e. over and above transfer earnings.

While it may have seemed logical to coin the term by analogy with commercial rent, it was actually very misleading. Students were led to believe that since economic rent is a term coined by analogy with the commercial rent paid for land, it follows that the commercial rent of land is an economic rent. But the only theory of rent which is consonant with this view is the original Ricardian analysis. Trying to sort out the complications of first-year economics it would seem obvious to many that this then is the theory which must be remembered. Psychologically this is called the reduction of cognitive dissonance (Festinger 1957).

Leaving psychology aside, it is actually quite logical that students should remember only the Ricardian analysis. After all, if commercial rents are not economic rents, but mainly transfer earnings, as neoclassical analysis suggests, why do lecturers and teachers of economics say that economic rents are like commercial rents. And if teachers and lecturers say that economic rents are conceptually like commercial rents, students can be forgiven if they then remember that commercial rents are (like) economic rents, and then remember only the theory of rent which justifies this conclusion.

The trouble is that this not some piece of arcane theory of interest only to professional economists. It has some practical importance. There must be few areas of economics as expensively argued over as the theory of land rent during full scale planning appeals featuring Queen's Counsel, junior barristers, and the cross-examination of expert witnesses, as at the Tillingham Hall Inquiry. And which even then led the Inspector to the wrong conclusion! Of course, the situation was clarified over time. Other planning inquiries also discussed the problem, with other witnesses, including the author. And after some years the Department of the Environment employed consultants to produce a report to try to settle what had by then become known as the Evans–Grigson dispute (Department of the Environment 1992).

All of this is useful in generating fees for experts and consultants, but it would have been better if the confusion had not arisen in the first place. In this respect the most useful step which could be taken would be to abandon the term 'economic rent'. For if, in almost all conceivable circumstances, commercial rents are not economic rents, what is the point of the analogy?

Of course, the concept is useful, but it would be best if its name included the word surplus: after all, in explaining the term 'economic rent' lecturers have to explain that it is a surplus, so why not use this term? The best replacement would appear to be 'surplus earnings'. Then it would be clear that surplus earnings and transfer earnings are a division of total earnings, and that the two terms go together. Moreover, one could then at least talk of the rent of land being divided into surplus earnings and transfer earnings without engendering the confusion which can result from talking of rent being partly economic rent.

Summary and conclusion

In this chapter we have set out the basic Ricardian and neoclassical theories of the rent and value of land. We went on to show that the existence of planning controls may make the Ricardian theory of greater relevance than it would first appear. Because a planning constraint fixes the supply of land for a use, it creates a situation which accords with Ricardian theory which assumes that land is fixed in supply and only has one use. But we also show that this does not mean that the price of this land is wholly demand determined, since the supply can actually be changed, and we have shown that changes in supply through the planning system will affect the price.

We showed that there may be circumstances, with what might be called a hierarchical planning system, where the Ricardian model may sometimes apply, and the neoclassical model may also sometimes apply, depending on the economic circumstances. We also set out the basic analysis of the urban land value gradient, and indicated how it too may be modified by the existence of planning controls.

Finally, we discussed the confusion created by economists' use of the term 'economic rent' to indicate surplus earnings to a factor over and above transfer earnings, since the unwary are led to assume, wrongly, that commercial rents paid for the use of land are economic rents, and are led to remember only Ricardian theory as the theory for which this is true. It would be best, I suggest, and would avoid much confusion, if the term 'economic rent' were replaced by a term such as 'surplus earnings'.

Unfortunately I have little hope that this suggestion will be adopted by the economics profession. First, because changing the names of concepts after they have been in use for a century or more is difficult to achieve. Second, the economics of the land market and of land rent is regarded as of little importance by general economists so that the fact that the general usage creates more confusion than clarification in land economics will not be regarded as any reason for change. And, since this is so, it is advisable for those involved in studying and teaching land economics to be very aware of the possibility of confusion and misunderstanding. This is particularly possible since general economists may sometimes use the term 'rent' when they mean 'economic rent', as in the term 'rent seeking activities'. The use of this term in the study of the economics of land use planning can create total confusion in the minds of students of land and property, who can easily fail to realise that the rents being sought are not commercial rents but economic rents.

In the next chapter we turn from considering the demand for land to considering the supply of space, the way in which the land market adjusts to increases in the value of land, either by bringing more land into use, or by changing its use, or by increasing the capital investment at the site in order to increase the amount of space by building more.