Introduction

Planners, geographers, urban economists and others concerned with 'urban questions' have produced a considerable and valuable body of literature over the last decades. They have, however, ignored or neglected the agents who produce and control the built environment. This is a serious shortcoming and therefore the object of this study is to address this issue by focusing on property developers and construction contractors.

There will be differences between the approaches adopted in this work and other approaches. Some differences arise from different theoretical conceptions while others arise from different starting points in addressing 'urban questions'. However, the aim is to produce a study which will complement the existing literature as well as provide a challenge to broaden thinking.

A considerable amount of work has emanated from the sociological tradition in recent academic history. This study is not a sociological one, but the disaffection with the Chicago School of sociology[1] led some authors to be concerned with the redistribution of resources in a physical environment,[2] a concern which is relevant to this study. Other authors[3] went a step further to consider the redefinition of social relations as a necessity to achieve redistribution, the struggle over collective redistribution being one motor for changing social relations.[4] These academic traditions have recently become more fragmented,[5] one important component being concerned with the production of the built environment.[6] This work emanates from that academic development plus a personal career interest on the part of the author in construction and development. C. Wright Mills[7] predicted that academic work would become more fragmented and diffuse. This work tries to link back to a broad range of traditions, although the main thrust is economic rather than sociological. It is hoped that by linking traditions there will be useful material both implicitly and explicitly for social scientists.

Content and outline

The first main question addressed by the book concerns how the production and control of the built environment relate to the performance of the economy as a whole. In order to relate the built environment to the economy, an understanding of the operation of the economy is essential. A theoretical view of the economy is outlined in the first chapter. A materialist starting point is provided with theories of crisis considered as the pivot around which the production and control of the built environment relate. Four theories of crisis are considered. They are *profit squeeze*, *underconsumption*, the *tendency for the rate of profit to fall* and *overproduction*. The chapter ends with a *synthesis* of the tendency for the rate of profit to fall and overproduction in this century.

The second main question addressed by the book concerns the characteristics and operation of the property and construction sectors. They both pose theoretical challenges because their appearance is distinctive. The few accounts of the construction industry have emphasised the description of the different characteristics without providing an explanation of them. In the case of the property sector there have been attempts to try to relate the activities to spheres or fractions of the economy despite the differences. Using crisis theory chapters 2 and 3 relate the characteristics of these two sectors to the economy, so providing a theoretical basis to explain how and when these sectors grow or decline and why these sectors exhibit different characteristics.

Chapter 2 concerns the property sector. In relating the sector to the economy a number of theoretical points are developed. It is argued that there is no urban rent theory, but that rentals for property have to be considered in three components, the ground rent for the land, the value of the building and the building rent. The introduction of building rent uses the differential and absolute categories applied to ground rent, but in the context of the built environment differential building rent II takes on an additional significance. The three components are then related to each other.

Chapter 3 takes the general theory, applying it to the construction sector. It is argued that the sector is not backward, as is usually thought, but is different because of its relationship to the market and its experience of crises of accumulation. This completes the theoretical arguments, which are used in subsequent chapters to describe and explain the activities of the property and construction sectors between 1939 and 1979 in Britain.

Most accounts of recent decades, particularly planning and welfare orientated works, acknowledge the importance of the second world war

but the main thrust of these accounts frequently starts around 1945. This work considers the second world war to be a crucial period related closely to the theory of crisis, and therefore commences at the beginning of the war. The analysis in chapter 4 shows the concentration and diversification of construction capital during the war and the relationship between these processes and the state.

Chapter 5 considers the reconstruction period, showing how the restructuring of the construction sector during the war was a necessity for the physical and hence economic reconstruction of the nation state after the war. It also demonstrates that the destruction during the war was an essential feature for post-war property development and the emergence of a new property sector.

Chapter 6 encompasses the period of prosperity in the late 1950s and during most of the 1960s. It shows that the renewal of capital accumulation created the demand for office and retail development not only due to the expansion of these sectors but also because the existing stock was outmoded. The construction sector experienced high workloads, particularly from public sector contracts, and the division of these markets between contractors is analysed.

By 1968 rates of profit in industry were showing signs of falling and there was an increase in labour unrest. The considerable state expenditure, a large portion of which was on construction work, had led to a considerable increase in fixed capital nationally, which through tax and inflation had a detrimental effect on industrial profit rates. Chapter 7 deals with this first phase of economic crisis, but demonstrates that the experiences of both the property and construction sector were more favourable than many other sectors, not because they defy the general processes but because of their relation to the economy in the first phase of economic crisis.

The property sector received a stimulus from the need to speed up capital circulation, which had a spin off for construction too. The dependence of the world economy on oil led to the Middle Eastern states becoming wealthier following the 'oil crisis', which in turn stimulated a growing overseas construction market. This was very important for contractors at the time.

The conclusion analyses recent trends and provides some pointers for the future of the property and construction sectors.

I

Theories of crisis

The aim of this chapter is to outline an analysis of the whole economy, in particular an explanation for crises of capital accumulation. Materialist analysis offers some of the most sophisticated accounts of crises, but these too display weaknesses. Using a synthesis of accounts a position is produced which overcomes the weaknesses as applied to contemporary society.

First of all a brief summary of material analysis is provided. This is to remind or introduce readers to the basic propositions. It is not an explanation or justification of these tenets.

Materialism

The law of value

People naturally have the ability to work, to transform raw material into items which are more useful than in their raw state.[1] Production, therefore, is the creation of use values. The potential development of the brain has permitted people to conceive of items prior to their production and assemble the materials necessary to produce that conceived use value. This distinguishes people from other animals whereby a goal is set subordinating the means to the achievement of that end, and in so doing overturning the cause and effect relationship.[2]

This ability to produce use values allows the material basis of society to be increased, an ability which is enhanced by the social character of people.[3] The means can be further subordinated to the end if items are made to help in the production of other use values. Production can, therefore, be broken down into two departments, one which produces the means of production, the second which produces the means of consumption. This use of tools and machines to make other items further increases the ability to increase the material living standards of society. As production has become more sophisticated the importance of social relations between people increasingly established the way in which production has

been carried out. In all production there is an underlying concept of the amount of labour required to make each item. The labour expended by labourers is embodied into the final use values. It is the amount of labour time which is needed in the production of each item that gives the item its value. If people cooperate in production, more can be produced with less effort. A greater number of use values are produced, but the labour time, and hence the value, is reduced. The use of other tools and machinery enhances the process of producing more use values with a reduction in the required labour time.

Capitalism is characterised by a set of social relations which define it as a distinctive mode of production. The key social relations are between capital and labour. Capital is represented by individual capitalists and their management, by a company or corporation or by the state and its management. They comprise the capitalist class, who have gained control over the means of production, which is legally enshrined in the ownership of property. But the possession of the means to produce items is not sufficient to undertake production. The capitalists are dependent on others who have the ability and are willing to undertake the work. Those who work are dependent on earning a living to feed, clothe, house and support themselves and their dependants, and they therefore sell their ability to work, their labour power, to the capitalists in exchange for wages. To the capitalists the ability to work is simply another factor of production, a use value like a raw material or a piece of plant, and it becomes their responsibility to combine these factors in work and manage the work process. The workforce imparts its labour power and thus increases the material basis of society by producing items which have more value embodied in them than in their raw state. The capitalists pay for all items according to their cost of production. The workforce is not produced, but its ability to work has to be renewed each day, week and month, so it is paid the cost of reproduction of its labour power. This is the wage, but it does not correspond to the total value of its work. The additional value, or at least a substantial portion of it, is not paid to the workforce but is locked up in the final items produced. This portion of value, which contributes towards increasing the material basis of society, is the surplus value, and is owned by the capitalists because they have the right of ownership of all the items produced in their factories. The workforce, therefore, receives the value of its labour power which is socially established for its reproduction, while the capitalists receive the surplus value as a gift from the workforce by virtue of the capitalist ownership of the means and results of production. This is the nature of 'exploitation' and is a social relation which is simultaneously antagonistic and one of mutual dependence, which gives capitalism its distinctive

and contradictory character, the needs of the dominant class being satisfied at the expense of the subordinate class.

Productive capital is aided by other capitalist agencies which perform facilitative functions. Those that loan money capital help capitalists to maximise their expansion of production with an amount of initial capital in return for a share in the final profits in the form of an interest repayment. Landowners and building owners, as will be seen in chapter 3, demand shares in the form of rent for the use of their land and buildings. The rent is paid prior to the production, a point of confusion because it appears the rent is paid for the land rather than for its use. There are merchants, who perform the sales functions for the productive capitalist. They too take a share of the surplus value. The state taxes surplus in order to provide things that are not sufficiently profitable for private capital but are essential to production and hence for the reproduction of capital as a whole. The state also indirectly and sometimes directly controls capital. The surplus value is shared between a number of individuals, agencies and nations, and the capitalists undertaking production are prepared to concede these divisions of function because they neither have the capital nor the expertise to carry out all these functions. There is a degree of cooperation, therefore, between all these capitalist agencies.

The appropriation of surplus value by the productive capitalist is not sufficient to maintain production. The surplus value has to be realised into the money form. The money pays for the wages, the renewing of raw materials and plant, pays the interest and rent, leaving sufficient for the capitalists to live and sufficient to accumulate for future expansion. In order to realise surplus value into money the produced items are placed on the market as commodities for sale. Purchasers will buy the commodities for their usefulness in production or consumption. The ability to buy these commodities is limited by their ability to pay. The price at which commodities are sold is the exchange value, and the exchange completes the circulation of capital through the realisation of surplus value. The original capital advanced can be replaced and a portion is accumulated as profit. The capitalist starts with money capital, itself a commodity produced for its use as a means of exchange, and ends the turnover with money capital. From the viewpoint of the capitalist the usefulness of the commodities produced is irrelevant providing they can be sold, the sole objective being capital accumulation. Capitalists must operate within this *law of value*, and accumulation is not therefore a direct function of the amount of surplus value they each appropriate. The deviation of prices from value affects the transformation of surplus value to profits.

Rates of profit have a tendency to average out between the producers in one sphere or sector of production. Different capitalists carry out their

production at different levels of sophistication. Those with more plant and machinery and less labour will have a lower rate of profit compared to capitalists with a larger proportion of labour, which alone is productive of surplus value. Those with an average composition will yield an average rate of profit, the tendency being that others will sell their commodities in competition and thus yield an average rate of profit. Capitalists with high rates of profit will tend to transfer, through competition, some of their profits to those with lower profit rates so that an average rate is earned by all the capitalists in the end. Total profits still equal total value and an average rate of profit is formed within one sector.

This process also occurs between sectors and nations,[4] which operates to form a general rate of profit. The general rate of profit will not only reflect the level of sophistication of production but is also weighted according to the distribution of capital invested in each sector and nation. Should a general rate of profit be achieved, then capitalists will sell their commodities at their cost price plus an average rate of profit which is called the price of production.

The deviation of prices of production from value only helps to obscure the social relations based on the law of value. The deviations between price and value occur between individual capitalists, sectors and nations, the total value equalling the total prices of production for capital as a whole according to the theory, although these arguments are the subject of controversy.

Prices of production will tend to equal their respective values, thus producing an equalisation of the general rate of profit. This is induced through competition. Capitalists are not only competing to realise their surplus value, a process which forms the average and general rate of profit, but capital is also competing for investment outlets. Where above average rates of profit are being achieved capital will flow in at the expense of spheres where below average rates of profit are being achieved. This produces a tendency towards bringing all capitals into line in terms of their sophistication, in other words their ratio of plant to labour power, and so an average composition of capital and average profits will result. The formation of average profits equalises the general rate of profit to bring prices of production equal to their values in each sphere.

Where average profits are being earned, the market value of commodities will equal the value. Should demand increase, however, the price of the commodity demanded will rise above the market value. Under conditions of stability, this must mean the demand for another commodity goes down and the market price will fall below the value. The explanation for this lies not in the equation of supply and demand, but in the conception of value and total prices equalling total values. Supply and

demand can only operate according to the total value produced and in circulation at one time and according to the total ability to pay, whether from wages or from realised value in the hands of capitalists, for commodities which are historically circulating.[5] An increase in the demand for a commodity will allow the producer to increase the rate of profit, in other words to receive a surplus profit over and above the average profit. This process will of course enter into the formation and equalisation of the general rate of profit (unless interrupted by the formation of absolute rent, which is discussed in chapter 2) through competition with regard to investment and with regard to sales.

The formation and equalisation of the general rate of profit are, however, constantly subject to change as new technologies, new machinery, new ways of working and new wage levels are introduced in the sphere of production, while interest rates and the absolute and relative demand for commodities change in the sphere of circulation. These dynamics of capital ensure that tendencies remain merely tendencies, rather than infinite laws.

Expanding capital accumulation

There are a number of ways in which production, and hence reproduction, can be expanded. The first way is through the use of labour. Capitalists can lengthen the work day or working week. This increases the overall value produced and thus increases the overall surplus value the capitalists appropriate. This assumes that wages are paid for the extra effort in the same ratio of value to surplus value or that the ratio is increased in the capitalists' favour. The way this operates can be disguised by reaching agreement on basic rates of pay versus overtime payments, and is further complicated when apparent rises in pay become reductions when related to the rate of inflation. A similar effect is achieved if the working day or week remains the same but more is produced in the same time. This intensification of labour can be obscured when basic wage rates are kept down but superficially excellent bonus schemes or piecework operate as the norm. There are, however, limits to these options because the lengthening of the working day or the intensification of labour comes up against physical and mental fatigue and resistance in the workforce. If these methods are pushed too hard then the reproduction of the workforce can be threatened, particularly when there is a shortage in the supply of labour, a situation which is most likely to arise if demand is high and expansion is in full flow.

An alternative is to employ more people in order to increase output. This again reaches limits according to the availability of labour and skills

in the market place. A high demand for labour can push up wages and hence increase the value of labour power, placing it on a higher level of reproduction. This may be justified from the point of view of capital because the rate of capital accumulation can still be increased. Another limit may be reached by the restricted capacity to take on more labour, plant and machinery without constructing or renting another factory. The expansion must be a sustained one to justify this move for the capitalist. The operation of plant and machinery in existing premises limits the possibility of intensifying the use of labour because sophisticated machinery often dictates the method, speed and place of work. Even though machinery can limit the intensification of labour under existing conditions, it can provide for the expansion of production on a very large scale with new investment.

The use of machinery can involve expansion by using the same methods or can reconstitute the labour process by using different methods.[6] This expansion through investment in machinery has been referred to as increasing the sophistication of production, but this needs clarification because of its crucial importance to one crisis theory in particular and its bearing on the remainder.

All investments made by capitalists appear as different forms of capital from their point of view because all appear to contribute equally to the eventual realisation of profit and hence continued capital accumulation. This appearance gives capitalists the impression that it is the act of investment, and putting the investment to work, which produces the profit and therefore is the result of their own efforts. Investments in buildings, raw materials, machinery and wages are all capital expenditure. Labour power is exchanged for wages, but to capitalists labour power is a capital, variable capital, because its size and contribution can be changed according to the prevailing conditions. The variation will depend on demand in the market for commodities and on conditions for the commodity, labour power. Capitalists will be able to respond to these variations according to whether the workforce is employed casually, on a subcontract or contract basis.

Constant capital is the converse of variable capital comprising the means of production. Once investments have been made in buildings, raw materials and machinery capitalists are committed to using them unless they are to be written off or sold off. The degree of flexibility to manipulate these overheads becomes increasingly restricted the higher the level of investment in constant capital.

Constant capital is bought by capitalists for its use value in their production; however, each cycle of production does not use up all the constant capital. The raw materials are consumed in production. Electricity

and other utilities are consumed while the buildings and machinery suffer wear and tear, thus yielding some of their use value, and therefore value, into the production process. The consumption of the means of production does not yield any additional surplus value to these capitalists, the surplus value already being realised by the producer of the means of production through sale to other capitalist users.[7] The constant capital which is not yielded up in one turnover of capital is fixed capital, although the use value of fixed capital will be yielded up in subsequent turnovers unless left to deteriorate naturally. Buildings and civil engineering works are amongst the most durable items of fixed capital, in contrast to coal or electricity which is rapidly or instantly consumed. Depending on the durability of fixed capital, allowances have to be made for the replacement of the constant capital consumed. Buildings and machinery will not be replaced for some time, but their replacement costs will be high and so capitalists will calculate the rate of depreciation, set up a sinking fund to ensure the money capital is available or arrange facilities to borrow money to replace them.

Constant capital is labour power expended in other production processes sold to the user at their value. The variable capital is labour power being expended in one production process, while the constant capital is labour already embodied in commodities. This can be conceived as living and dead labour respectively, the balance between the two being described as the organic composition of capital. The higher the investment in constant capital or dead labour compared to variable capital or living labour, the higher the organic composition of capital. The significance of increasing the organic composition of capital is that the material basis of society can be increased beyond that which can be achieved by intensifying labour, lengthening the working day or employing more variable capital. The potential for increasing the mass of surplus value increases with a rise in the organic composition, and hand in hand with this the rate of exploitation or rate of surplus value increases also.[8] This, then, is the basis for expanding capitalist production.

The entire process of expansion can be enhanced by speeding up the circulation of capital once it leaves the factory gates. There is also a relationship between constant and variable capital in the sphere of circulation, whether this is commerce, banking or functions performed by the state. The organic composition in these spheres will relate either to the organic composition of their respective production processes or to the total national composition of capital where specific production processes cannot be linked, as in the case of many state operations. The mutual dependence of production and circulation is important not only in producing and realising surplus value, but also in the composition of capital.