
Fixed assets or sunk costs? An examination of retailers' land and property investment in the United Kingdom

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Abstract. In this paper I examine the policies of leading multiple retailers in the UK with regards to property development, ownership, and investment. The discussion is set in the context of recent work by Clark and Wrigley in which they seek to relate locational decisions and other elements of corporate strategy to the economic concept of sunk costs. This concept is shown to be relevant to the recent experience of some British retailers which have incurred irrecoverable costs through overpayment for 'premium' sites for grocery store development. More generally, property development and ownership have in recent years become important activities for leading retail firms. Policies to separate property ownership and management from the mainstream retail trading function appear to have been successful, but some companies have lost money through overambitious programmes of property development. The conclusion is that, though retail development inevitably incurs sunk costs both at entry and exit, these are for most companies outweighed by the long-term growth of land and property values in the United Kingdom. Sunk costs may therefore be of less significance than in other types of private enterprise.

Introduction

Much of the recent critical discussion of the corporate strategies of multiple retailers in the United Kingdom has focused on their land and property holdings. Though retailers are obviously in business principally to sell goods to consumers, they are also owners of many thousands of buildings, and some extremely valuable areas of land. A company's policies for land acquisition, valuation, and disposal can have major impacts on its balance sheet, and can become important influences on urban spatial change. And yet, with some exceptions which are discussed below, there has been surprisingly little interest in the topic from academic researchers in the United Kingdom. In this paper I attempt to redress the balance by examining critically the characteristics of major retailers' land and property holdings in the United Kingdom. In particular, the following questions are examined:

What is the extent of retailers' property and land holdings in the United Kingdom?

Are such holdings solely incidental to the retailers' main function, or are they a significant source of profit (or loss) in their own right?

In what ways may retailers' accounting and valuation practices obscure the effects of past misjudgments?

Should retailers' property and land holdings be regarded as 'sunk costs' which may inhibit growth and innovation, or do they distort the operation of the retail sector in other ways?

The issues which have stimulated this research focus can be summarised briefly. Wrigley (1992; 1994; 1996) has reviewed the recent history of multiple grocery retailing in the United Kingdom, drawing upon criticism by City of London analysts of, in particular, the companies Tesco Stores Ltd, J Sainsbury plc, Safeway Stores plc, and Asda Group plc (for example, Cr dit Lyonnais Laing, 1991; 1992a; 1992b, Kleinwort Benson, 1991). In their race for market domination, these companies purchased sites for new stores at prices well above those which would be offered by other commercial

users (see also Guy, 1995; Hallsworth, 1995; Hallsworth and McClatchey, 1994). This has led in turn to changes in accounting practices, such that these and other companies are now prepared to depreciate or write off part of their investment in supposedly overvalued land.

The companies mentioned thus far have essentially purchased land for their own use in developing new large stores. However, other retailers have also become involved in property ownership beyond their own operational requirements. Companies such as The Boots Company plc, Kingfisher plc, The Dixon Group plc, and the Burton Group plc all set up property development subsidiaries in the late 1980s, and initiated developments of entire shopping centres and other schemes, with varying degrees of success. Again, these activities have proved controversial amongst City analysts (for example, Goldman Sachs, 1989; Kleinwort Benson, 1989).

Wrigley (1992; 1996) has related such events to a more general discussion of the role of *sunk costs* in the analysis of urban and regional change. Sunk costs have been defined as "Costs which have been incurred in implementing a course of action or in the purchase of a piece of equipment that currently has a market value of zero ... In other words such costs are irrecoverable" (Ferguson et al, 1993, page 101). Ferguson et al (1993) use an appropriate example of mining activity, in which the costs of drilling a mine shaft are irrecoverable. Although not discussed, it is presumably the case that the mine shaft, if abandoned by the company concerned, would have no value on the open market.

Clark (1994) and Clark and Wrigley (1995; 1997) have examined ways in which the structure and management of large industrial corporations both affect and are affected by past commitments, in the form of the spatial configuration of production, and the existence of sunk costs which represent either past investment or penalties for future withdrawal from particular locations. The debate on sunk costs has been framed largely in relation to large multisite manufacturing corporations. However, Wrigley (1992; 1996) has attempted to apply this notion to retail activity, in particular the property assets of major grocery companies. One purpose of this present paper is to examine whether this approach can be applied more generally to the retail industry.

In this paper I discuss these issues in the following way. After a descriptive review of the current extent of UK retailers' land and property holdings, including ownership of property development companies, the utility of the 'sunk costs' concept is evaluated. Two opposing arguments are examined: first, that retailers' land and property holdings contain significant sunk-cost elements which cannot easily be recovered, and can inhibit the companies' performance; second, that these holdings are positive assets which are required for operational efficiency and may also allow future profit taking. These points of view are of course overstated, and not surprisingly it will appear that the true position lies somewhere between these two extremes. The exercise may, however, serve to correct against oversimplification of the issues concerned; and it will explore variations with type and size of retailer which are of interest in themselves.

It should be noted that this review is confined largely to UK retailers and the UK property market. The latter is characterised, when compared with North American markets for example, by high land prices, heavy involvement of financial institutions, and fairly strict regulation by land-use planning interests (Guy and Lord, 1991). Much retail property is held on fixed rental 'institutional leases'. The effects of these constraints on entry and exit from retail distribution all have potential implications for the extent and nature of sunk costs, but at the same time can contribute to a retailer's asset base. These implications are discussed in this paper.

Property holdings of UK retailers

This section describes the extent and nature of property holdings by major UK retailers. The term 'property' includes the buildings owned by retailers, the land on which the buildings lie, and any other land holdings.

Property holdings form a substantial part of the asset base of many retail firms. Liow (1995) has shown that, in 1991 in the United Kingdom, property formed on average 47.9% of the total gross asset value for companies in the 'food retailing' sector, and 32.0% of those in the 'stores' sector. These proportions were third and fourth, respectively, out of nine 'consumer goods sectors' reviewed by that author.

High levels of property ownership amongst retailers reflect both the need to consume land for purposes of storage and display of merchandise, and the intrinsically high value of much retail property. Though property assets are largely seen by the companies concerned as being incidental to their main purpose, they are nevertheless "often used as collateral for corporate debt to finance trading growth" (Liow, 1995, page 21).

The extent of property holdings among eighteen of the largest retail companies in Britain, as at March 1994, is indicated in table 1. In total, these companies owned land and property with a net book value of some £20.2 billion. Of the ten companies owning freehold land and buildings valued at over £500 million, five (Argyll Group plc, Asda, William Morrison plc, Sainsbury, and Tesco) are largely grocery specialists. The other five (Boots, Great Universal Stores Ltd, Kingfisher, Marks & Spencer plc, and Sears plc) are all largely 'high-street' retailers selling very wide ranges of goods.

Table 1. Ownership of land and buildings by eighteen major UK retail companies, 1994 (totals include overseas and/or nonretail properties). (Source: company annual reports.)

Company	Net book value ^a of land and buildings (£million)		
	freehold	long leasehold ^b	short leasehold
Tesco Stores Ltd	3313.1	473.9	101.2
J Sainsbury plc	2603.0	404.3	33.0
Argyll Group plc	1692.8	261.3	133.4
Marks & Spencer plc	1400.1	854.3	97.8
Asda Group plc	889.7	499.6	162.7
Great Universal Stores Ltd	888.3	143.9	29.6
Boots Company plc	677.1	123.0	24.4
Kingfisher plc	568.3	142.2	58.0
Sears plc	540.8	65.1	56.1
William Morrison plc	501.2	52.0	1.5
John Lewis plc ^c	426.2	253.1	68.5
Kwik Save Group plc	296.7	35.1	53.6
Burton Group plc	266.7	104.1	314.4
Isosceles plc	223.9	69.8	347.6
W H Smith and Son Ltd	188.0	12.6	7.7
Iceland Frozen Foods plc	149.6	9.9	56.6
MFI Furniture Centre Ltd	108.2	37.3	27.2
Storehouse plc	82.5	140.3	90.3

^a This does not usually represent a fully comprehensive up-to-date valuation of each company's land and property holdings (see text).

^b Fifty years or more to run from date stated.

^c Estimates are for 'land and buildings at cost or valuation'; total is 8.1% higher than total 'net book value' for the company's property holdings.

Two of these companies—Boots and Kingfisher—have important property company subsidiaries, whose property assets are included in the totals shown in table 1. This issue is discussed in the next section of this paper.

In order to be able to interpret these data, some principles of land valuation should first be discussed. In company accounts, it is normal to present property assets in terms of 'net book value' or 'net book amount'. This, in the first instance, amounts to the costs originally incurred in the purchase and, where relevant, the development of the land concerned. However, the so-called 'open-market value' of a company's property holdings is arguably a more accurate estimate of their worth as fixed assets. A view commonly held by retailers is that stated property assets in their balance sheets are underestimates of the open-market value of those assets. The longer that property is owned, the more likely it is that the open-market value of the land concerned will deviate from the net book value. For this reason, companies occasionally revalue their property assets. This is carried out in various ways. Inspection of recent company annual reports suggests that the grocery companies tend to use "directors'" (that is, internal) valuations which may relate property value partly to the net income obtained from the store (see table 2). These valuations are not necessarily used in the accounts to replace original cost valuations, and act more as a check on the accuracy of net book amounts. Other retailers, in contrast, use 'independent' valuations carried out by one of the major property surveying firms. The revalued assets then enter the accounts, to become 'net book values' in future years.

Property assets have two elements: the buildings and other developed features (for example, car parks) used by the retailer; and the land on which the development has occurred. The accounts also, where relevant, include land which is as yet undeveloped, but this is not usually distinguished from developed land in published accounts.

Table 2. Timing of revaluations of retail company assets (source: company annual reports for 1994).

Company ^a	Date or frequency of revaluation	Agency responsible
Argyll Group	ns	
Asda Group	1993/94	"directors"
Boots Company	1993	"the directors in conjunction with the group's own professional staff"
Burton Group	1990	ns
Great Universal Stores	annually	Collier Erdman Lewis
Iceland Group	ns	
Isosceles	1993	"directors"
Kwik Save	'at least once every five years'	"independent"
John Lewis	1993/94	"directors"
Marks & Spencer	1988	Gerald Eve
William Morrison	ns	
Next Retail Ltd	1990	ns
J Sainsbury	1993/94	"directors"
Sears	1993	Healey and Baker, Chesterton, and Jones Lang Wootton
W H Smith	1990	Edward Erdman
Storehouse	1993/94	"internal"
Tesco	1993/94	ns (internal?)

ns not stated.

^aSee table 1 for full company names.

It is uncommon even for land and buildings to be listed separately in company accounts. One exception is William Morrison, the grocery retailer: in their 1994 accounts, freehold land was valued at £151 million, and freehold buildings at £350.2 million.

One important indicator of a company's approach is the proportion of property which is owned freehold. A high proportion of freehold ownership should add to asset values, as leasehold property devalues over time, reaching zero value at the point of termination of the lease. Freehold ownership also protects the company from future increases in rents.

Table 3 shows this proportion for the eighteen retailers listed in table 1. Of the nine retailers owning over three quarters of their property freehold, five are grocery retailers. This reflects their policies of developing their own stores rather than leasing property (Guy, 1994). The other four in this group are essentially long-established 'high-street' retailers which have developed their own stores over periods of many years. Surprisingly, Marks & Spencer and John Lewis plc, two companies which otherwise conform to this latter category, show much lower rates of freehold ownership. The reason for this may lie in the frequent participation of these companies as 'anchor stores' within purpose-built shopping centres, which are typically developed by a property company or financial institution.

At the other extreme lie three companies with low proportions of freehold ownership. Two of these—Burton and Storehouse plc—have been exemplified by commentators (for example, Richards and MacNeary, 1991) as 'space bandits' which expanded rapidly in the mid and late 1980s through renting short-lease property in major town centres. For these and other such companies, rent payments have become a high proportion of total turnover, thus exposing the companies to the unfortunate effects of the combination of rising rents and falling revenues which characterised the 1988–92 period. The other company in this group—Isosceles plc—owns several hundred Somerfield, Gateway, and other small grocery stores, most of which are in traditional town and suburban shopping areas.

Table 3. Proportion of property owned freehold for eighteen major UK retail companies, 1994 (source: company annual reports for 1994).

Company ^a	Freehold as percentage of all property owned	Company ^a	Freehold as percentage of all property owned
William Morrison	90.4	Kingfisher	73.9
W H Smith	90.3	Iceland	69.2
J Sainsbury	85.6	MFI	62.7
Tesco	85.2	Marks & Spencer	59.5
Great Universal Stores	83.7	Asda Group	57.3
Boots	82.1	John Lewis	57.0
Sears	81.7	Burton Group	38.9
Argyll Group	81.1	Isosceles	34.9
Kwik Save	77.0	Storehouse	26.3

^a See table 1 for full company names.

Property subsidiaries of retailers

A number of UK multiple retailers own specialist property companies as subsidiaries. There are several reasons for this. First, the retailer may wish to separate its property-owning function from its retail function. In effect the retail stores are charged market rents by the property subsidiary. This may be a tactic to avoid criticism that operating margins are subsidised by freehold ownership (for example, Richards and MacNeary,

1991, page 14). A leading example of this practice was the formation of Kingfisher's subsidiary company Chartwell Land plc in 1988 (Goldman Sachs, 1989).

The second reason for starting up a property subsidiary may be to diversify the group's portfolio of activities. Property purchase and development take place largely separately from the group's retail activity. It may be financed externally or from the retail company's cash flow. Most retailer-owned property companies in the United Kingdom appear to have been set up for this reason. Examples include subsidiaries of grocery companies such as Tesco and Asda, and 'high-street' retailers such as Boots and Kingfisher. These subsidiaries have developed both retail and nonretail schemes, to a total value of over £1 billion (see table 4).

Table 4. Property subsidiaries of major UK retailers, 1994 (source: company annual reports for 1994).

Company ^a	Property subsidiary	Net assets (£ million)
Asda Group	Gazeley ^b	42.3
	Burwood House ^c	73.0
Boots Company	Boots Properties	774.6
Dixons Group	(6 subsidiaries)	133.0
Kingfisher Group	Chartwell Land	547 ^d
J Sainsbury	J Sainsbury Developments	32.4
Tesco	Tesco Property Holdings	ns
	Spen Hill Properties	ns
	Shopping Centres Ltd ^c	ns

ns not stated.

^a See table 1 for full company names.

^b Now named Asda Property Holdings.

^c Half share of company.

^d Value of 'Investment Portfolio'.

A third reason for the creation of property subsidiaries lies in the sale-and-lease-back deals which were common among grocery retailers in the late 1980s and early 1990s. These were originally intended to raise finance for the development of new stores: the retailer would in effect sell a number of completed stores to a property company, and lease back the store. The property company thus owned the land and the retailer continued to operate the store (see Guy, 1994; Wrigley, 1991).

There seems little reason to criticise the practice of setting up property subsidiaries in order to charge 'market rents' to the retail operation, indeed the performance of the Boots Company has been praised in this regard (Lane, 1995). However, the experience of property development under the other two headings discussed above has in some respects been unfortunate.

An obvious example of this has been the Burton Group, which decided in the late 1980s to invest hundreds of millions of pounds into shopping-centre development through its subsidiary Burton Property Trust. Its plans for up to 3 million square feet of town centre retailing were formulated on the crest of the property boom. Following the subsequent slump in property values, little of this planned development was actually completed, but the Trust lost money when it was forced to sell much of its recently acquired property in an attempt to stem the losses being made in many of the Group's retail divisions. In early 1994 the remaining four shopping centres owned by the Trust were sold to Prudential Assurance (Prudential Corporation plc) for £153 million. Up to this point the Group had already written off £340 million against its shopping centres and office blocks, which reflects the loss in value of these properties (Buckley, 1994).

The Dixon Group also abandoned its UK property investments in 1993, for similar reasons. The Group still own property in town centres in continental Europe.

The history of sale-and-leaseback deals has been less controversial, but some unintended outcomes have arisen. An example is the Burwood House Group (Burwood House Developments Ltd), which was set up in 1989 as a joint venture between Asda and British Aerospace plc. In 1995, the Asda Group spent £88 million in buying back British Aerospace's share of the company, at which point its property portfolio consisted of thirty-four Asda superstores, four shopping centres, and various other properties (*The Grocer* 1995a). It appears that the buyback was prompted partly by British Aerospace's wish to concentrate its property activities in business parks rather than a mixed portfolio (London, 1995). Asda's ownership of four shopping centres was thus an unintended consequence of previous property deals. The company subsequently sold the centres for £73 million (Waples, 1995).

As we move further away from the inception of these property subsidiaries in the late 1980s, their portfolios are likely to become less and less strongly related to the holding companies' core activities. This could ultimately increase the companies' desirability for 'asset stripping' hostile takeovers.

Policies for depreciating property assets

Policies for depreciation of these assets vary between companies. Until recently the normal practice was to value property at the cost originally incurred, until such time as an ad hoc revaluation was carried out. This indicates that the company would consider that the land and buildings concerned could be sold off at an amount equivalent to the historic cost or revalued estimate. This practice is clearly inadequate, however, in two situations: first, where property values generally are fluctuating substantially over short periods of time; and second, where property values (particularly land values) differ substantially for different retail uses. This is significant because it may restrict the number of potential purchasers of a property.

In the late 1980s, both of these situations arose. First, there was a rapid escalation of property values, reflecting sudden demand for good quality properties from investing institutions. In 1987–88, the capital value of retail properties was estimated to have risen by 42% (Hillier Parker, 1990). Subsequently, as capital values fell again (figure 1), retailers sought to dispose of some of their outlets in the face of stagnant consumer purchasing. This volatility in property values casts doubts upon the reliability

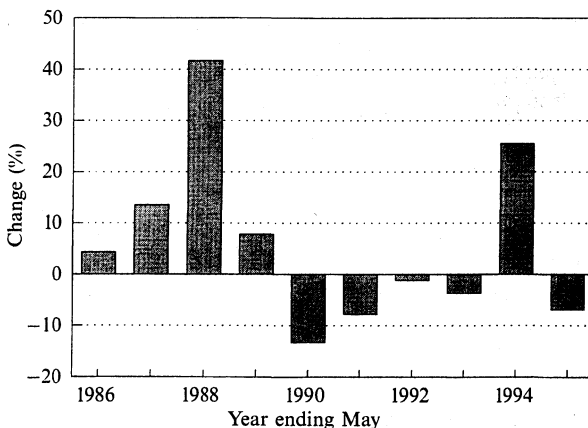


Figure 1. Changes in capital values for shop properties, 1986–1995 (source: Hillier Parker, various dates).

of stated assets in company accounts. Apart from the grocery retailers discussed above, most of the companies included in table 1 have not published the results of any recent comprehensive revaluations of their property assets. For example, Marks & Spencer had their freehold and long-leasehold stores revalued in 1982 and 1988, with no further revaluations up to March 1995. The main exception to this rule is Great Universal Stores, whose investment properties (that is, those for which the company is landlord rather than trader) are annually revalued by the surveyors Collier Erdman Lewis (table 2). As a result it is known that these properties fell in value by 15% in the year 1990/91, but have tended to increase slightly in most subsequent years (Great Universal Stores, various dates). Sears and W H Smith and Son Ltd have had their trading properties professionally revalued, in 1993 and 1990, respectively, resulting in upward movement of total value. The results of this process are obviously dependent upon the timing of the revaluation.

Second, an increasing differential arose between valuations for different types of retail activity. In particular, it became clear that some sites had been purchased, by grocery retailers, at a price well above that which an alternative type of retailer—or any other possible user—would be prepared to pay. City analysts (for example, Crédit Lyonnais, 1992a; 1992b) argued that such land should be depreciated in annual profit and loss accounts, such that the ‘premium’ paid to secure such sites was amortised over a reasonable period. It was also claimed that the specialised nature of large grocery stores made their disposal at cost improbable. The most likely fate for unwanted grocery stores would be conversion or redevelopment to nonfood retail warehouses, a use for which land and premises were in greater supply, and hence less valuable. Further discussion of this issue may be found in Wrigley (1996).

The peak period for so-called ‘overvaluation’ of superstore development land was in the early 1990s, when the major grocery companies were still competing for good sites with planning permission but the remainder of the property market had virtually collapsed (Kleinwort Benson, 1991). Since 1992, however, typical prices paid for superstore sites have fallen to perhaps half of their former level (Guy, 1995). Nevertheless, some differential between food retailing and other retail uses still exists. For example, the Nurdin and Peacock plc wholesale distribution company were able in 1995 to sell the sites and buildings of three of their unsuccessful Cargo Club (Cargo Club Warehouse Ltd) ‘club warehouse stores’ to J Sainsbury, at a profit of £8.5 million altogether (*The Grocer* 1995b).

Table 5 shows the policies for depreciation of land and buildings adopted by leading grocery companies for the financial year 1993/94. It is clear that earlier criticisms by City analysts have been heeded to some extent: in most cases the value of buildings is depreciated, but practice regarding land depreciation is inconsistent. J Sainsbury, obviously aware of potential criticism, state their belief that “the aggregate open market value of Group properties exceeds net book value ... by a considerable margin” (Sainsbury, 1994, page 36). However, the company also took the unprecedented step of writing down £282 million to reflect “diminution of site value”. “Provisions for losses on realisation of surplus land and stores due for closure” totalled an extra £59 million. Asda and Tesco also wrote down substantial sums during 1993/94 in recognition of declining land values. The Tesco write-down of £85 million was intended to reflect the “estimated net realisable value” of land purchased in earlier years and now regarded as surplus to requirements. A detailed discussion is provided in UBS Global Research (1995).

The exception to this growing consensus is at present the Iceland Group (Iceland Frozen Foods plc), which does not depreciate either land or buildings. This is because:

“Freehold stores are mainly in high street locations, are maintained and regularly refurbished to a high standard, and are of a size which means that they have a wide range of alternative users. As a result, in the opinion of the directors, the difference between the residual values of such properties based on prices prevailing at their date of acquisition and their cost is immaterial” (Iceland, 1994, page 34).

In non-food retailing, the norm appears to be to value freehold land at cost or valuation, without depreciation. In many cases this view is also taken with respect to buildings. For example, Kingfisher states “The Group maintains its policy of not depreciating its freehold and long leasehold properties as the estimated residual values of these properties (which include out-of-town locations) is not expected to be materially different from their current carrying values” (Kingfisher, 1994, page 33).

Table 5. UK grocery companies' policies for depreciation of land and property, financial year 1993/94 (source: company annual reports).

Company	Annual depreciation (%)		Exceptional write-downs (£ million)
	freehold land	buildings	
Argyll Group plc	0	2.5	
Asda Group plc	2? ^a	2 or 5 ^b	153.9
Iceland Frozen Foods plc	0	0	
Kwik Save	ns	variable ^c	
William Morrison plc	1 ^d	1 ^d	
J Sainsbury plc	0	2	341.5
Somerfield ^e	0	2.5	28.8
Tesco Stores Ltd	4 ^f	2.5	85.0
Waitrose ^g	0	1–4	

ns not stated.

^a Only on “sites identified as having limited future food retailing potential”.

^b 5% rate for twenty “mostly older stores” only.

^c Only where “the estimated residual value, excluding inflation, will be less than the net book value”.

^d Increased to 2% for 1994/95 financial year.

^e Part of Isosceles plc.

^f Only where “the premiums paid for land [were] in excess of the alternative use value on acquisition”.

^g Part of John Lewis plc.

Leasehold properties are usually depreciated in straight-line manner over the period of lease, but in some cases this provision is made only for short leaseholds.

The treatment of short leases (typically twenty-five years in duration) in company accounts raises further issues. It appears to be normal practice to include any initial premium paid for the lease in the profit-and-loss account for the year concerned. Subsequent rent payments are also included in the profit and loss. However, in years when there is a surplus of retail property to let, retailers are often induced into occupying newly available premises through the so-called ‘reverse premium’, in effect a cash payment to the retailer. Companies thus include such payments in profit-and-loss accounts, much to the dismay of City analysts. A notorious example was the recently bankrupted Pentos plc chain, which in 1992 made £4 million profit, to which reverse premia contributed £6.3 million! (*Investors Chronicle* 1994). Other companies, however, such as Kingfisher and Argos UK Ltd, spread the benefits of reverse premia over a five-year period (*Investors Chronicle* 1994).

One further issue should be raised here, which concerns the ways in which major retailers justify internally their investment in property, particularly for new store development. A decision whether to go ahead with the construction of a new superstore, for example, rests on the likelihood of the initial investment being paid back, through enhanced income, over a certain period.

Typically, the land and development costs should be repaid over a fifteen-year period (Guy, 1995; Kleinwort Benson, 1991). If this is successfully achieved, the question arises of the significance to the retailer of the property's current market value. In one sense this is irrelevant, as the initial investment in land purchase and site development has now been paid back. It is therefore worth continuing to operate from a 'valueless' property even if revenues are low. A relevant example would be of Asda or Isosceles using old stores for discount grocery retailing [Dales Stores Ltd and Food Giant (Isosceles plc), respectively], in which operating costs are very low. Sales and profits may also be low, but the company is better off operating such stores than abandoning them altogether. The company may also wish to prevent the stores falling into the hands of a rival operator. None of this will enter into the company balance sheet, in which these old stores are still regarded as fixed assets.

The sunk costs issue

At this point I wish to return to the issue of sunk costs and their utility as a device for evaluating corporate retail strategy. A brief theoretical discussion is followed by some empirical examples from the recent UK retail experience.

Clark and Wrigley (1995, page 207) distinguish three types of sunk cost. *Setup* sunk costs are irrecoverable costs of an initial investment: in the example used earlier, of drilling the mine shaft. *Accumulated* sunk costs arise during normal working, for example, costs of draining water from the shaft. *Exit* sunk costs arise when the project is abandoned, for example filling-in or continued maintenance of the now disused mine shaft, for safety or environmental reasons.

Sunk costs are often associated with the start of a new venture, and are thus related to the wider topic of barriers to entry. It is in the interest of established companies in any field of activity to try to manipulate the market such that sunk costs are high for a new entrant. Sunk costs may also occur where a firm changes its mix of factors of production, or its product mix, or locational pattern. They can be a significant factor in decisions to go out of business altogether, in which they form an element of exit costs (Rosenbaum and Lamort, 1992). This is partly a result of 'one-off' costs associated with the changes themselves, but also because previous investments in, for example, personnel training, are not realised.

It is important to realise that sunk costs are not necessarily wasted (Clark and Wrigley, 1995). They form an essential part of a firm's corporate strategy: either initially, or during periods of expansion or change, or even on exit from the market. In this connection Wrigley (1996, page 131) states: "... the valuation of a capital asset is more than just an accounting issue. It is also a strategic issue involving considerations related to the competitive strategy of the firm and the likely actions of its competitors".

Clark and Wrigley's recent work (1995; 1997) also involves a useful modification of the original simple concept, which helps to relate it to property matters. Sunk costs are not held to be absolute losses made on initial investment: rather, they refer to the proportion of initial or subsequent investment which is not recoverable.

In the context of land development, sunk costs may thus be associated with loss of value of land, as well as apparently irretrievable costs such as land preparation and building construction (although it should be noted that these investments may

increase land value and are hence in part recoverable). Land itself almost always has positive value, and is included as a 'fixed asset' on company balance sheets. Land values can fluctuate substantially over time, and valuation itself is an imprecise science. Empirical analysis of this type of sunk cost is thus likely to be difficult.

Sunk costs and retail property

The importance of sunk costs in the development, operation, and abandonment of retail stores can now be discussed, albeit with the emphasis on building and land costs and values rather than other aspects of retailing. The most important issues concern setup and exit sunk costs.

Setup costs, in the form of land and development costs for new stores, can absorb much of the profits generated by successful retailing, and sometimes require extra borrowing, rights issues, etc (Guy, 1994, chapter 7). However, the threat of substantial setup costs also deters newcomers to retailing, especially if existing companies have already captured the best locations for that type of operation. In a survey of retailers in the northeast region of the USA, "capital requirements" and "availability of store locations" were held to be the two most effective barriers to entry into retail markets (Gable et al, 1995, page 217).

Setup costs should not be seen simply as a one-off capital expenditure. They continue over time, as indicated in the Clark and Wrigley (1997) model of the changing functional value of an asset (see figure 2). The six stages may be summarised, in the context of retail development, as follows.

- (1) Purchase price: this would include land price plus costs of site preparation, construction, and fitting;
- (2) Market value: this would represent the value of the newly developed site to other companies involved in similar types of retail activity, as might be derived in an auction sale, for example;
- (3) Production value: this would derive from the company's internal valuation, related for example to the net present value of the future net income stream from the store (Cowton and Pilz, 1995; Guy, 1995);
- (4) Flex value: this would represent the value of the developed site to the highest bidder, whether a retailer of similar type, a different type of retailer, or a nonretail organisation;

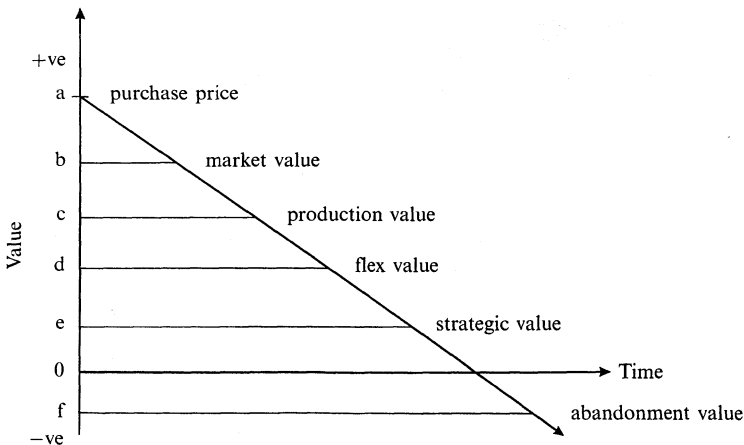


Figure 2. Functional value of capital (source: Clark and Wrigley, 1997).

(5) Strategic value: this would represent the value of the developed site to the company itself, in the event of closing down its operations—possibly in denying its use by competitors for a similar purpose;

(6) Abandonment value: this is negative and represents the costs of clearing the site prior to some new (re)development.

Two qualifications should be made with regards to this approach, as related to retail development. First, the various types of value would normally coexist, instead of representing stages over time, as shown in figure 2. This is recognised by Wrigley (1996, page 130). The property industry itself distinguishes several types of land and site value which can exist simultaneously. These include two terms already discussed in this paper: 'net book value' reflects mainly the initial site purchase and development costs, and 'open market value' is equivalent either to 'market value' or 'flex value' as defined above, according to circumstances.

Second, the diagram shows a steady decline in value through the six stages. This would normally be appropriate so far as buildings themselves are concerned, although even here value can be enhanced by the injection of new capital in the form of refurbishment. However, so far as site values are concerned, an increase over time is more probable, simply through the well-known argument that land is a finite commodity and one in which there are typically delays in the supply-side response to increased demand. Land-value increases also derive from supply-side shortages which occur as the result of regulation by the land-use planning system. Indeed, investment in land and property by the major financial institutions is contingent upon assumptions of long-term increases in value (Guy, 1994, chapter 4).

Furthermore, it can often be the case that 'flex value' is higher than 'market value', because land is not always put to its optimum use economically: that use which should generate the greatest value of discounted net income streams (Harvey, 1992, page 33). The unfortunate experiences of the major grocery companies, quoted by Wrigley (1996) in his discussion of sunk costs in retail development, would appear to be exceptional and brought on by too rapid a rate of expansion in previous years.

The Wrigley and Clark model needs therefore to be adapted to the case of retail development (figure 3 and figure 4). Separate trajectories through time are necessary for the site and the buildings thereon. Two possible trends are shown for site values, one of steady appreciation, appropriate perhaps in the United Kingdom to a city centre site (figure 3); and the second, in which an overpriced site purchased by a grocery retailer reverts to a lower market value. However, there is no further decline, as 'flex value' and 'market value' become equal (figure 4).

At this point, elements of strategic investment practice amongst major retailers should be noted. Typically the costs of initial investment in new store development are expected to be repaid, out of trading income, over a period of say fifteen to twenty years. At the end of this period the initial costs are held to have been paid off in full (Guy, 1995; Kleinwort Benson, 1991). Thus the setup sunk costs are eventually dissipated through this type of accounting device.

The 'abandonment' stage of the model also requires comment. This clearly brings in the question of exit sunk costs. Two types of situation need to be considered; first, that where the retailer owns the site and property concerned. It could be argued that the company can sell the site at market value and thus any exit costs refer only to demolition or adaptation of the building. However, any company operating in a highly competitive market such as grocery retailing must beware of making a well-located site available to a competitor. For example, at the time of the initial 'invasion' of Britain by deep-discount grocery retailers, rumours arose of established retailers attempting to prevent the sale of abandoned supermarket premises to these discounters

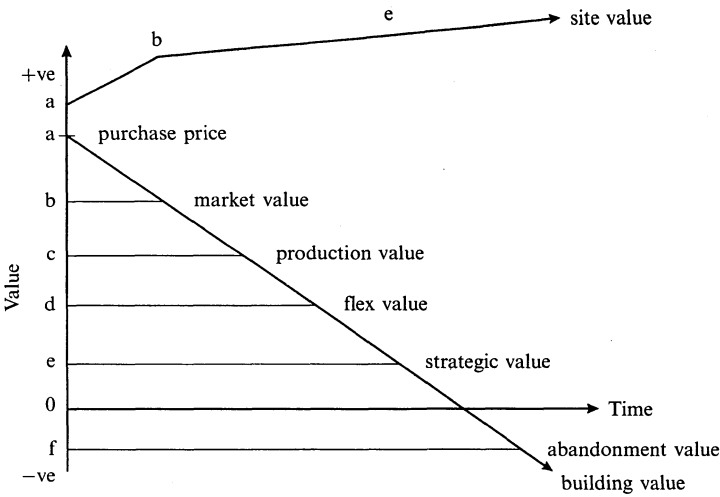


Figure 3. Retail case: building and site values over time.

(*The Grocer* 1990). This (if truly the case) was just one of a number of obstructive tactics used against these newcomers to the market (Gascoigne, 1992).

The second situation (more common in British retailing) is where the company leases premises from a ground landlord. Most retail premises are held on 25-year leases and the retail tenant bears responsibility for assigning the lease (that is, finding a replacement tenant) if it wishes to quit. The situation occurs both in town centres and in out-of-centre developments such as retail parks. To assign leases can be difficult when the level of demand for premises from other retailers is modest, and companies may continue to operate stores at a loss rather than face the problem of assignment. Another tactic is to 'sell' a large number of stores simultaneously to another retailer [more correctly, assign the leases, sell the remaining stock at valuation, and hope to receive some payment for (a) the value of the unexpired lease, and (b) 'goodwill' if the trading name remains unaltered]. Typically, the amount received in the 'sale' is far less than the notional value of the rented properties, as shown in the company's balance sheet.

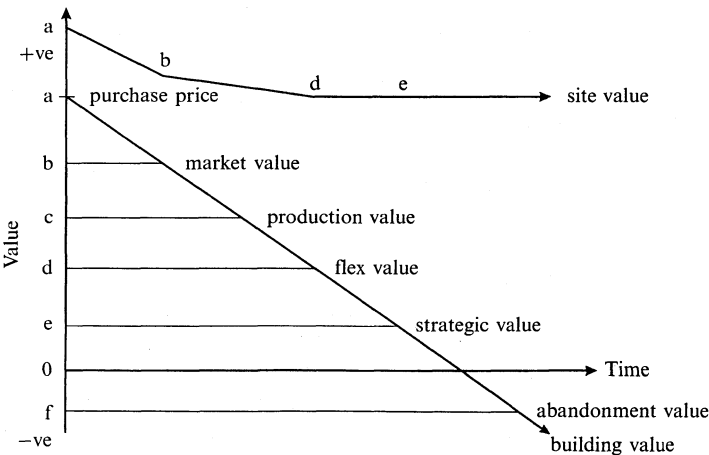


Figure 4. Grocery store case: building and site values over time.

Recent examples in the United Kingdom include the 'sale' of several hundred stores by Sears and other retail companies to the Facia company (Facia Ltd), which itself went into receivership in early 1996. Facia appeared to have 'bought' hundreds of high-street shops at very low prices, but was not sufficiently capitalised to be able to pay the enormous rent bill which resulted. Sears itself claimed, following the collapse of Facia, that "the costs of the business with Facia were around the same as it would have cost to close the loss-making chains" (that is, nearly 400 shoe shops) (Fairbairn, 1996).

A second recent example concerns the Do It All chain of 195 retail warehouse stores owned jointly by Boots and W H Smith. Many of these stores are relatively old and poorly located, and the chain is seen by analysts as uncompetitive in a saturated market for 'do-it-yourself' products. The only viable solution in the long term was seen as closure of many of the stores concerned. It is alleged that a proposed management buyout would have involved a 'sweetener' of £150 million to the new owners, in order to compensate for costs of closure. Instead, W H Smith decided to pay Boots £50 million in order to release themselves from part ownership. Boots would then use this money as provision against the closure of sixty of the worst stores (Randall, 1996). Clearly these stores are unattractive to other retailers in this field (that is, they have little market value), and also have little flex value because of their outdated design and poor location.

Conclusions

In this review of UK retailers' recent experiences of land acquisition and property development I have suggested several general conclusions which might themselves form the foci for further research. First, it seems that some of the major retailers have performed no better than other property interests in the United Kingdom. A pattern of overambitious land or property purchases at the peak of the market, followed by 'fire sales' during the trough in land values, has been observed. The three largest grocery retailers have ended up writing off this excess in land prices, and the 'high-street' retailer Burton has also lost hundreds of millions of pounds on abortive shopping-centre developments. On the other hand, Boots, Kingfisher, and William Morrison are examples of companies which appear to have increased their asset base sensibly and avoided serious losses.

Of interest also is the reluctance of certain companies to accept analysts' (and hence, institutional shareholders') criticisms of their accounting methods regarding land valuation. This recalls Schoenberger's (1994) more general exposition of the failings of 'corporate strategists' to respond to the sometimes very clear signals that 'corporate strategy' is going badly wrong. Most of the grocery companies have now admitted both that they have paid too much for their land, and that their property assets should be expected to depreciate because of the likely difference between initial 'market value' and subsequent 'flex value'.

A more general finding, however, is that most retailers' property holdings can rightfully be regarded as appreciating assets rather than as sunk costs. Clearly some sunk costs must be incurred in new store development, purchase of existing buildings, and abandonment of operations. But the land itself, and often the buildings if owned freehold, are likely to appreciate in value in the long term. The grocery industry, although of great interest and significance in its own right, is not typical of retailing; nor was the late 1980s and early 1990s typical of retail and property-market conditions in general (Barras, 1994).

At the same time, it appears that retail companies which hold most of their premises on short leases can be vulnerable to substantial exit sunk costs if the market

is stagnant for their particular type of property. Here, the costs of closing a large number of stores in a short period can seem a worse option than continuing to incur trading losses.

In short, the question whether property investment by retailers (in developing stores for their own use or otherwise) includes a significant 'sunk costs' element cannot be determined generally. In theory, all property development should enhance land value, and therefore its costs are completely or very largely recoverable. In practice, companies can incur extra and nonrecoverable costs. Even the most prudent company may be prepared to pay more for a site than its market value, because a higher bid price obtains the site more easily, and can be justified if the return on investment is positive (Guy, 1995). Other companies may expand too fast, acquiring second-rate premises at unrealistically high rent levels. Subsequent contraction can be difficult to achieve and extremely expensive.

However, in a regulated land market such as that in the United Kingdom, in which prime retail land is scarce, asset values for retail property are always likely to be maintained in the long term. The flexibility of many retailers with regards to their buildings requirements can also create a viable resale market (or a ready market for relets, which helps maintain the value of shopping centres owned by a landlord). In a less regulated land market, such as most areas in the United States, sunk costs are much more likely to form a real threat for many property developers and retailers.

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