1. Introduction

In a time of rapid and complex evolution in the retail sector, securing the future of town centres has become a focus of attention in the UK. Centralised policies (for example, Improving high streets and town centres, DCLG, 2012a) and high profile reviews (such as Portas, 2011) demonstrate the high level of concern for and importance attached to the retail economy by politicians, shared by industry (for example, Morgan Stanley, 2012; BNP Paribas, 2012; Baldock *et al*., 2004; BCSC, 2006/7). There is concern that retail locations may be becoming obsolete, particularly with rising vacancy rates. This may be at unit, neighbourhood or even town levels. With Grimsey *et al*. (2013) finding 46.6 percent of retailers in the UK are classified as being in serious risk of failure, the problem of identifying obsolete retail locations, or those in danger of becoming obsolete, is an important one for the key stakeholders in town centres. However, clear conceptualisation of the vast complexity of factors underpinning the retail sector remains under-developed and often missing entirely from these various investigations.

This paper seeks to identify these factors and, drawing on this, develop a conceptual model of locational obsolescence to guide analysis and decision-making for the various stakeholders. The model seeks to disentangle locational obsolescence from other types, such as functional obsolescence, with a focus on distinguishing between cause and effect. It provides a clear conceptualisation of the complex nature of the inter-related driving forces behind locational obsolescence, culminating in a set of diagnostic criteria. The model provides a framework to enable future research to build a coherent evidence base for the development of policy.

2. The changing nature of retailing in the UK

Cities are complex and the built environment is a product of economic, political and social processes that evolve over time and across spatial entities; they are 'gradually transformed in a process of continual creative destruction and reconstruction' (Bryson, 1997, p. 1439, drawing on Massey, 1984; Harvey, 1978; Zukin, 1991). Such transformation can be seen within the retail sector due to, for example, retail business innovation; pressures from consumers; technological innovation; and political intervention with the actions of occupiers, investors and developers made within an economic and regulatory context (Bryson, 1997), alongside changes in consumer spending and behaviour; and central and business financial restructuring. Changes are apparent in waves of complementary and competing de- and re-centralisation and the consequent increasingly expansive retail offer. These combine to produce both business success/failure and planned up/down-scaling by multiples. There appears to be not only disequilibrium within already opaque and inefficient

markets, but perhaps a more recent structural shift within the retail sector, caused by a 'perfect storm' of economic recession, internet shopping and lease expiries in the period since 2008 (Distressed Town Centre Property (DTCP) Taskforce, 2013).

The complex retail sector comprises a hierarchy of town and city centres with significant variation in terms of both size and catchment; diverse micro-locations within these areas; and a varied and ever-changing range of formats. Within this complexity, formats and locations may be complementary or competing and stakeholders disparate in their actions and responses to change. Thus, understanding the supply of and demand for particular retail space requires an appreciation of the drivers of diverse users (both in terms of retailers and consumers), investors and developers. The relative viability of retail space has changed over time. Significant changes have taken place within the retail sector and the interaction of national (and global) trends with local socio-economic and market contexts provides a competitive environment within which a retail location may thrive or fail. Locations can be considered as individual units, part of a retail centre or even as whole town centres.

Identifying locations that may fail is imperative for all stakeholders; not only do the decisions made by investors and retailers require an understanding of the future prospects for a location, but also planners and others with an interest in town centres can use such information to target intervention or, alternatively, to allow change of use.

The starting point for this is an examination of the concept of locational obsolescence and its constituent parts within the literature; each then considered in the context of the retail sector. This review draws out the importance of the multiple factors that interplay in the retail property market and wider retailing sector, both longer term and more recent. It highlights the complex drivers of success or failure of retail locations. Section four builds on this to develop a model of retail locational obsolescence, to include resultant diagnostic criteria and definition to identify when a location may be considered obsolete for retail use. Section five provides a brief overview of attempts at intervention in the process of locational obsolescence, revealing the focus and extent of such efforts within the context of the model developed here. Finally, section six sets out a series of stages to enable operationalisation of the framework and thus guide future robust analyses of retail locational obsolescence.

3. Locational obsolescence

Locational obsolescence has not formed the primary focus of previous studies, but there is some agreement within the literature that it can be categorised as a contributory element of depreciation. Depreciation is itself variously described, but a definition that encapsulates the issues is 'the rate of decline in rental/capital value of an asset (or group of assets) over time relative to the asset (or group of assets) valued as new with contemporary specification' (Law, 2004, cited in Baum, *et al*., 2005, p. 7). Studies such as this and others by Wofford (1983), Wurtzebach and Miles (1984), Baum (1991), Baum *et al*., (2005) and Mansfield and Pinder (2008) see depreciation as an outcome, an 'effect', with underlying determinants. These determinants or 'causes' include locational obsolescence. This distinction is taken forward as it offers a separation between forms of obsolescence contributing towards depreciation.

An array of types of obsolescence has been referred to within the literature, such as economic; functional; economic and functional (as a single category); environmental; financial; obsolescence relating to physical structure, legal framework, social and aesthetic issues (as separate categories); control and statutory (as separate categories, similar to legal framework obsolescence); community; perceptional; physical deterioration; site; site and surrounding area; structural; style; technological; and, of course, locational (see Baum, 1989, 1991; Cowan *et al*., 1970a,b; Dokmeci *et al*., 2007; Golton, 1989; Khalid, 1992; Mansfield and Pinder, 2008; RICS, 2012; Williams, 1985). Some of these categories of obsolescence are used interchangeably by some authors – for example, Baum (1991) describes Wofford's (1983) use of economic obsolescence and locational obsolescence in this way and Wurtzebach and Miles' (1984) assert that economic depreciation and locational depreciation are economic obsolescence. Golton (1989) notes that types of obsolescence are not always discrete, but can be complex and over-lapping and the pattern of relationships between types can vary by building and over time. It is not surprising, therefore, to note that terminology has been found to be 'diverse' and 'imprecise' (Cowan *et al*., 1970b, p. 34) with Golton (1989) noting frustration at the confusion within the literature.

3.1 Definitions of locational obsolescence

In common with the other types of obsolescence, deterioration and depreciation identified in the literature, locational obsolescence is attributed several definitions. These are set out in Table 1, and are drawn from studies that variously explore property generally, the office or industrial sectors distinctly or which are from broader economic studies.

Strongly consistent themes emerge from these diverse definitions. These suggest that locational obsolescence predominantly relates to factors extraneous to the building, including (economic) functionality; and environmental (surrounding area) and accessibility factors. A weaker theme that begins to emerge is the idea that the value of the land and the building can be separated (see Golton, 1989). The following section takes these themes forward and explores them within the context of causal factors identified in the literature. The discussion focuses on factors pertinent to the retail sector.

Table 1: Definitions of locational obsolescence

Definition	**Source**
loss in value due to factors outside the property itself	Wofford (1983), cited in Baum (1991, p. 57)
...resulted from the attributes of the functional activities in their environment	Dokmeci *et al*. (2007, p.158)
a loss in value due to factors external to the property	Wurtzebach and Miles (1984), quoted in Mansfield and Pinder (2008, p. 194)
occurs when the location of a building becomes less attractive to tenants due to lack of amenities ... and poor accessibility to the building	Khalid (1992, p. 2)
a building can become locationally obsolete when the economic activities in the area change	Medhurst and Lewis (1969), cited in Khalid (1992, p. 33)
where the building is no longer suitably sited for essential communication links to be satisfactorily maintained	Cowan *et al*. (1970b, p. 35)
the implications of location on [land and building] values	Golton (1989, p. 270)

3.2 Causes of locational obsolescence

The literature identifies a range of causes of locational obsolescence (with limited agreement) and some of the causes listed here are ascribed to other types of obsolescence by different studies. Inevitably the changing context of retail property provides much of these. Causes include, changing demand-side factors; a change in planning; changing economic and complementary user activities in the area; human perception and decisions; neighbourhood deterioration; changes in transport systems and new road systems and, therefore, traffic patterns and accessibility; 'site effects' such as neighbours, siting and immediate environs distinguished from 'wider location factors'; and the emergence of other areas with better locational advantages (see Medhurst and Lewis, 1969; Wofford, 1983; Shenkel, 1984; Baum, 1989; Golton, 1989; Raftery, 1991; Khalid, 1992; and Williams, 1985). Relating these factors to the themes of (economic) functionality and environmental (surrounding area) factors emerging above, it is proposed that the process of locational

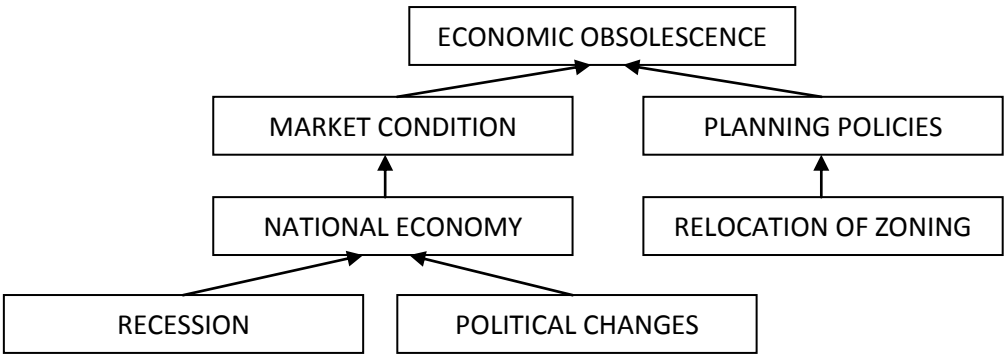
obsolescence begins with attributes of economic and environmental obsolescence and, furthermore, functional obsolescence, reflecting the importance of the retailer and consumer in the sector.

3.2.1 Economic obsolescence

Economic obsolescence centres on the lack of demand for goods and services from consumers and the intrinsically linked lack of demand for property by retailers. Khalid (1992) defines it in terms of the suitability of property for continuation of its intended (current) use having regard to economic conditions and planning policies (see figure 1). This concurs with Williams' (1985, p. 8) definition where economic obsolescence 'relates not to the form or condition of the building, but to the demand for the activity which is accommodated by it'. Similarly, the RICS (2012 p. 121) defines it as arising 'from the impact of changing economic conditions on the demand for goods and services provided by the asset'. An illustrative example given by RICS (2012) is where supply outstrips demand, regardless of the age and specification of the property, causing the value to fall.

Khalid (1992) and Salway (1986) extend their discussions of economic obsolescence and economic depreciation, respectively, to set out that there may be a change in the highest and best use of the land, if the land value is greater than the existing use value of the building (for its anticipated life). Thus, crucially for investors, a change in use may produce an increase in asset value but is only economically justifiable if costs are less than the latent value released. If this is not the case, economic obsolescence will be incurable (Wurtzebach and Miles, 1984).

Figure 1: Causes of economic obsolescence



Source: reproduced from Khalid (1992)

Economic obsolescence in retailing

Changes in the demand for retail property caused by drivers of economic obsolescence are the most complex explored here. As set out below, they include diverse areas such as population change and business innovation; they further include economic factors, market supply and demand as well as regulatory (planning) factors. Such factors may span multiple spatial scales but, as we suggest in the following model, they can be seen as representing structural dimensions within the retail sector.

Until recently, the post-war period was characterised by the continued expansion in demand for retail property, amounting to an increase in floorspace of around 43 million sqft in England over the period 1974-2012 (DTCP Taskforce, 2013). This was predicated on increased consumer spending, with shopping becoming a significant leisure activity for mobile consumers across a range of formats (see, for example, Bromley and Thomas, 1993; Gardner and Sheppard, 1989; Guy, 2007; Carmona *et al*., 2004; Grimsey, 2012). More recently, retail has become increasingly combined with other leisure activities for consumers in the larger malls, with both leisure floorspace and spend quadrupling in the 10 years from 2002 (Grimsey, 2012). There have been repeated waves of change in the sector and, following Schiller's (1986) earlier waves of retail decentralisation and evolution of formats, Pacione (2001) sets out what is termed a sixth wave of change, internet shopping, to include more recent multi-channel shopping, branded the 'ultimate level of decentralisation'. Evidencing its significance, on-line shopping already accounts for 10-12% of retail sales (ONS, 2012; DTCP Taskforce, 2013) while Colliers (2011) predicts that, by 2020, 20% of consumer expenditure will be online. These waves of change are driven by hugely different forces, at different spatial scales, with complex consequences. Identifying these elements driving economic obsolescence is important in order to develop a conceptual model that can be applied across a variety of situations and to individual cases.

While some waves of change have been complementary to traditional retail space, retail warehousing and supermarkets have become increasingly competitive, with expansion in floorspace and the range of goods offered. Competition such as this is perhaps the most significant issue affecting the performance of towns and smaller cities (Carmona *et al*., 2004) and these changes have challenged and altered the retail hierarchy (Rees, 1987). However, business failures are increasingly affecting retail warehouse parks, prompting discussion of these areas becoming obsolete for retailing (Grimsey *et al*., 2013) and their evolution going full circle. As a consequence of competition for and change in consumer spending behaviour, it has been noted that, while larger city centres targeted by multiple retailers and also local/neighbourhood centres (that offer everyday and top-up needs) are supported by consumers, middle sized centres are losing customers and retailers (DTCP

Taskforce, 2013). Furthermore, population growth and increases in spending have not been even, with the DTCP Taskforce (2013) identifying notable differences around the regions of the UK. They set out that southern and eastern regions have seen significantly strongest population growth and positive change in GDP per capita. Grimsey (2012) draws these patterns together, asserting that the strategies of retailers and developers will exacerbate the North-South divide, as they target greatest consumer spending potential with larger retail developments increasingly concentrated in prosperous (southern) areas.

Colliers (2011) highlights a continuing widening gap between primary and secondary markets, noted previously by CB Hillier Parker (2001). More recent evidence suggests that not only large cities, but event retailing destinations and regional shopping centres are capturing a greater share of retail spend at the expense of smaller towns, reflecting a polarisation of consumer spending habits (Colliers, 2011) and 'retailtainment' driving continued growth in the larger centres (Grimsey, 2012). However, this polarisation is not one-dimensional, with the DTCP Taskforce (2013) identifying three aspects to this: dominant versus local/neighbourhood; prime versus non-prime; and discount versus luxury. Furthermore, the dominance of multiples in retail areas is forecast to contribute to increasing vacancy rates as they seek to rationalise their presence. As Barrett (2012a) reports, half of all high street leases are due to expire by 2015, with many retailers reported to be unlikely to seek whole-scale renewals due to larger catchment areas generated by larger stores now overlapping (Barrett, 2012b; Grimsey *et al*., 2013), with the planned retraction of stores further extending to retail warehouse parks (Kavanagh, 2011).

However, the scale and scope of the impact depends on the local context. The economic and social character of an area can be seen as a key influence on the vitality and viability of a retail location. It plays a large part in determining what retail provision is viable and will contribute to the extent to which competition might lead to problems in a retail location, either a street or a complete centre (Carmona *et al*., 2004; GVA Grimley, 2007).

There is also complexity in how town centres and edge of centre sites relate to each other and function together. Wrigley *et al*. (2009) and GVA Grimley (2007) find that edge of centre developments adjacent to prime areas can extend and benefit an existing town centre, with shoppers making linked trips due to the enhanced retailer draw. Wrigley and Dolega (2011) draw on Martin (2012) and use the concept of 'adaptive resilience' from complex systems theory to try and understand (and predict) the evolution of town centres post economic crisis and find that both the

diversity of small shops and the presence of major supermarkets contribute to the resilience of retail centres to economic shock.

Khalid (1992) includes planning policies as an important influence on (and possibly cause of) economic obsolescence. UK planning policies arguably changed most in the last couple of decades of the twentieth century, with the conservative market-led approach of the 1980s and subsequent reversal through the 1996 Planning Policy Guidance Note 6 (DOE, 1996) prioritising the 'vitality and viability' of town centres, with the associated sequential test, reaffirmed in the Coalition Government's National Planning Policy Framework (DCLG, 2012b). Thus, since 1996, policies have restricted the flow of out-of-centre development (Findlay and Sparks, 2007; Guy, 2007) with many retailers adjusting their requirements accordingly.

However, decreasing the proportion of out-of-centre development has not necessarily stemmed the overall decline of town centres (Colliers, 2011), with competition between localities for retail development (Guy, 2007). In-town shopping centres represent a significant challenge to developers in terms of: the lack of regular shaped sites; market conditions changing during drawn-out development periods (Maitland, 1990, cited by Guy 1994); the integration of the new development with existing centres (Breheny, 1988; Fraser, 1993, Crosby *et al*., 2005; Lowe 2005a,b); and car parking facilities in town centres (Guy, 1994). Similarly, Findlay and Sparks (2007) report concerns about the sequential policy from the perspective of retailers and investors because of site constraints in towns and development viability issues. There have been concerns that the sequential approach might create a barrier to entry that may prevent the opening of new stores of a scale competing with existing stores (Competition Commission, 2008). Despite these difficulties, a significant number of large town-centre retail schemes have been successfully developed, particularly during the 1990s and 2000s, in response to favourable market and investment conditions and evidence of a resurgence of consumer support for (some) in-town shopping.

Significantly the town centre first planning policy has applied to leisure, offices and cultural and tourism uses as well as retail, leading to mixed-use regeneration schemes such as West Quay in Southampton and Broadmead in Bristol. The role of individual planning authorities has also been noted in two respects; firstly, with pro-active authorities reflected in market signals that trigger development and, secondly, that good developer relations with those authorities can be important to successful development (Jackson and Watkins, 2011). Notably, successful schemes initially tended to be heavily concentrated in the major towns and cities (CB Hillier Parker, 2001), already thriving centres with healthy levels of consumer demand, a pattern entrenched in the financial and

economic crisis of the late 2000s onwards, further reinforcing the polarisation seen above. Indeed, BIS (2010), Colliers (2011) and AMT (2005) note the importance of diversity of employment to spread the risks and the danger of investing in an area reliant on a small number of employers, further exacerbating these patterns.

The targeting of these larger centres by developers not only clearly reflects their detailed market analysis but also, more recently, the increased risk adverse nature of the lending market. Although the availability of finance for development is, of course, particularly pertinent to the current market, with the DTCP Taskforce (2013, p. 33) stating that, 'post financial crisis, the traditional funding models for town centre redevelopment are no longer fit for purpose', the role of finance has long been recognised as key in models of the development process (see, for example, Healey and Barrett, 1990; Barrett *et al.*, 1978). The movement of capital searching for the best returns was largely responsible for the volatile nature of development and the ready supply of capital for property development during the 1980s and contributed to the subsequent property crash, especially from banks as they substantially increased their involvement in the property development market (Brown and Matysiak, 2000; Ball, 1994; Ross Goobey, 1995), a phenomenon repeated in part in the mid to late 2000s. Perhaps regardless of market circumstances, development finance will be biased towards prime property (Brown and Matysiak, 2000), again further entrenching the pattern of polarisation.

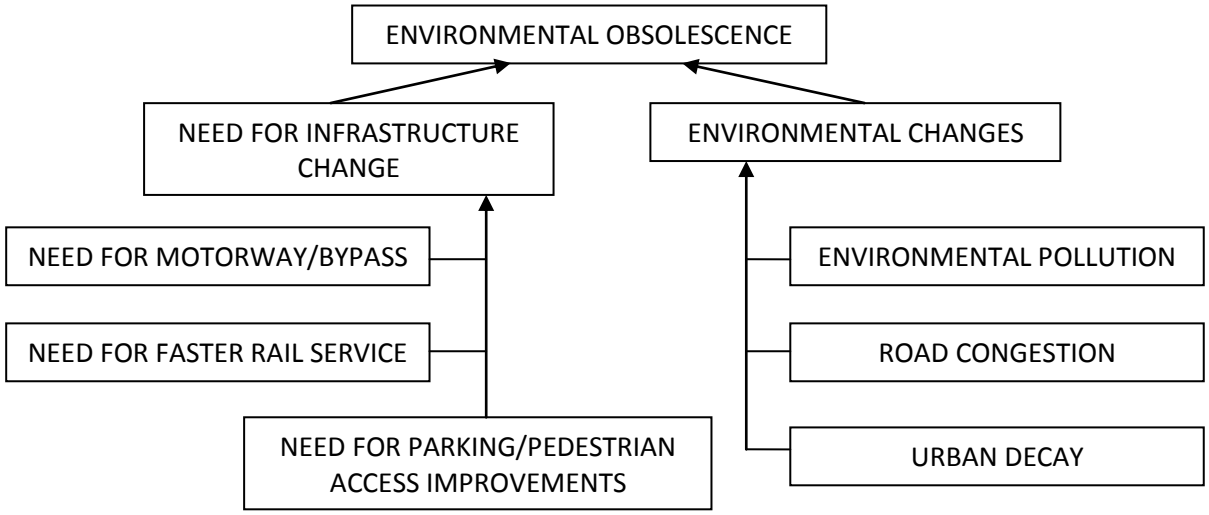
The role of the planning system of course extends beyond new development. Initially relating to secondary areas, but more recently extending in scope, there has been discussion about the possibility of changing the use of retail sites in areas where there is concern that retail is no longer a viable use, discussed further below. In 2000, Roger Tym and Partners' scoping study on secondary shopping emphasised the need to consider the extent to which it is possible, or desirable, to manage the promotion and decline of different types of secondary shopping locations (Roger Tym, 2000). More recently, Findlay and Sparks (2010a, p.3) suggest that in some places 'shrinkage of prime or secondary [retail] space may be appropriate' in order to 'focus and maintain retail continuity'. The scope of the drivers of economic obsolescence within the retail sector is significant and complex, as are the effects and the challenges they represent.

3.2.2 Environmental obsolescence

Khalid (1992) describes how environmental obsolescence relates to conditions in the surrounding area and that these may cause the property to be unfit for its current use. As Golton (1989, p. 271) notes, it concerns 'the degree of match between the building use and environment' and, as the

environment becomes devalued, so does the property as measured in economic terms. Baum (1991, p. 64) agrees and sets out that environmental obsolescence is 'the diminished utility and hence value of property due to negative environmental forces in the surrounding area', to include changing use or unattractive neighbouring buildings. Although developed for the office sector, interpreting Khalid's model, set out in Figure 2, for the retail market, the two categories of causal factors can be interpreted as making it difficult/impossible for consumers to travel to the property (infrastructure) and unpleasant to be at the property (environmental changes). This overlaps with the RICS' (2012) interpretation of 'environmental factors', which highlights the importance of the current and future surrounding area to the continued current use of the property. However, the RICS (2012) includes the role of local and national planning policies in affecting the continued current use within their consideration of environmental factors, which represents a blur with Khalid's distinctions. While Khalid (1992) did not consider economic or environmental obsolescence beyond the production of the models set out in Figures 1 and 2, on the grounds that they are incurable and/or difficult to forecast, their relevance to locational obsolescence in the retail property market seems clear. Indeed, as Golton (1989) sets out, if negative changes occur with respect to accessibility or the environment, land values can be reduced, a contributory element of locational obsolescence. Environmental obsolescence also highlights the importance of consumer behaviour and the attractiveness of the property/area to the consumer in maintaining the current use as the highest and best use of the building and site.

Figure 2: Causes of environmental obsolescence



Source: adapted from Khalid (1992)

Environmental obsolescence in retailing

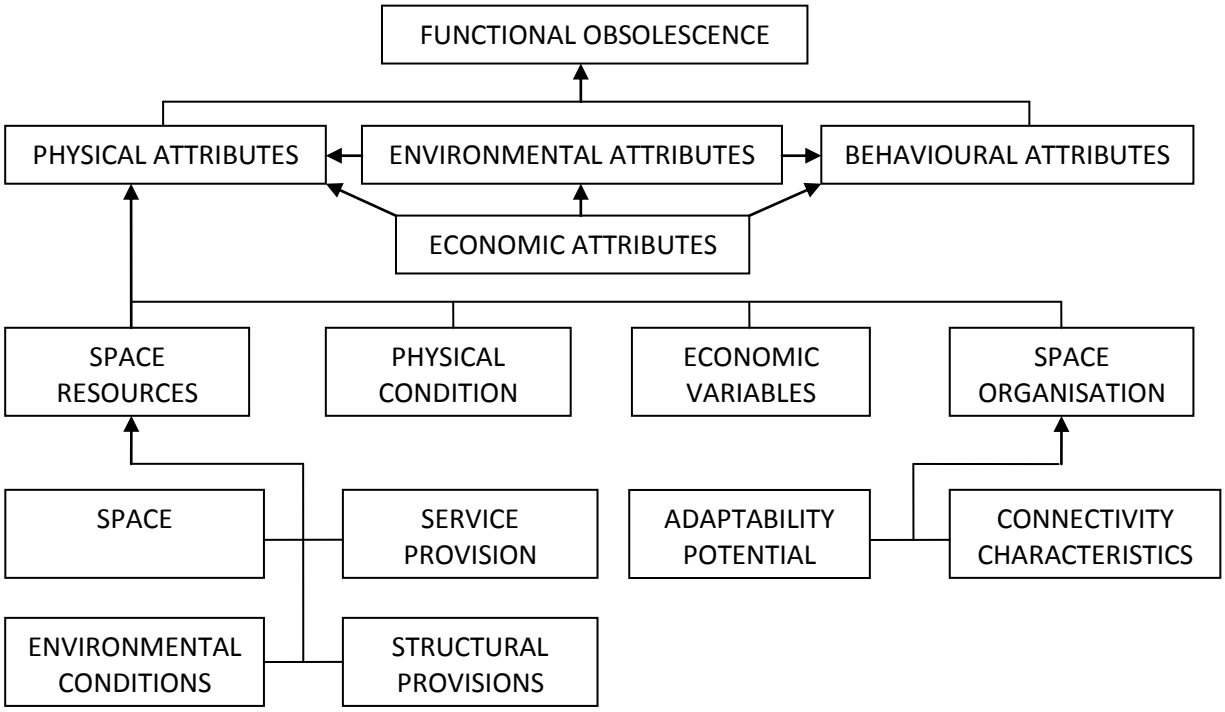
In terms of building a model, this contributory factor within locational obsolescence brings in aspects of urban decay and lack of adequate infrastructure, extrinsic to the subject property but within the local area. These factors are not unique to the retail sector, but their importance is perhaps amplified where an alternative retail destination is available to the shopper that means that they do not have to experience urban decay and congestion in the local environment, with easier access to the retail destination. The impact of these issues on a location will, in part, depend on actions taken to address them by the different stakeholders.

3.2.3 Functional obsolescence

In many ways, symptoms of functional obsolescence are a consequence of economic obsolescence, but with the focus on the users and how they relate to buildings. The inherent links are recognised by Cowan *et al*. (1970a) and Williams (1985). Attributes of economic obsolescence, such as technological change, are external factors and can cause internal (functional) obsolescence (Golton, 1989). For example, business innovation and technological change can affect the functional qualities of a building (Golton, 1989), while changing social patterns can affect how users interact with a property (Williams, 1985). This resonates with the RICS (2012 p. 120) where functional obsolescence occurs 'where the design or specification of the asset no longer fulfils the function for which it was originally designed' and with Mansfield and Pinder (2008, p. 197): 'a property is in its existing form [is] unable to support the contemporary functional demands of occupation'. Williams (1985, p.5) agrees and describes that 'the function of a building is to provide an environment within which an activity may be efficiently and comfortably accommodated in order that the objectives of the user may be fulfilled'. She goes on to set out that this can be remedied, subject to cost.

Cowan *et al*.'s (1970a) study acknowledges that the behavioural (user) and physical (building) characteristics underpinning functional obsolescence are affected by social and physical environmental factors, with the effect of the economy underpinning the attributes and interactions. These are shown diagrammatically in Figure 3. This highlights the importance of the user interactions with the largely intrinsic physical attributes (such as space/size and flexibility) underpinning functional obsolescence.

Figure 3: Causes of functional obsolescence



Source: developed from Cowan *et al*. (1970a)

Functional obsolescence in retailing

Functional obsolescence relates to factors intrinsic to the stock/property itself. In the retail sector, illustrative examples are electronic stock control and centralised warehousing (technological change and business innovation, both causes of economic obsolescence) that led to a degree of functional obsolescence through retailer demands for better service areas to accommodate delivery vehicular access that older properties in traditional locations have struggled to meet. Additionally, population changes (such as income levels and working patterns, classified as underpinning economic obsolescence) affect the patterns of demand for property from the user and investor markets, in turn underpinning functional obsolescence in existing stock. Thus, functional obsolescence can be due to lack of design, investment or planning inputs or to access/connectivity constraints.

As noted above, the forecast is for continued growth and diversification in on-line shopping by consumers, including the evolution of e-tailing through the use of mobile-phones into m-commerce. This may reduce demand for space by retailers (Grimsey *et al*., 2013), with the comparison goods sector (notably electrical, but also clothing, footwear, books and music) predicted to be most affected losing 12.5% of store sales, whereas the convenience sector is forecast to lose only half of this (GVA Grimley 2007). E-tailing is different from other waves of retail decentralisation and its

longer term effects are unclear. Although, as the DTCP Taskforce (2013) and Grimsey (2012) report, it is likely to involve a net loss of demand for retail selling floorspace and thus necessitate a rethinking of retail capacity models, it does not represent a fall in business for retailers and, for the smaller retailer, can in fact mean the opposite. Bricks and mortar retail space will still be important as part of a multi-channel offer, but Colliers (2011) suggests that some rationalising and repositioning is inevitable. The function of some retail units might change and e-tailing might lead to further pressure for out-of-town or edge-of-town sites to facilitate easy collection, returns and customer support, with expansion in the warehousing and retail logistics sector.

In addition, larger store sizes are demanded by the multiple retailers characterising the sector. This has implications for smaller towns and some locations within major towns (Carmona *et al*., 2004; Baldock *et al.*, 2004; Powe *et al*., 2009). As Findlay and Sparks (2010a) point out, the retail property available does not necessarily correlate to that which is demanded, with older town centre properties 'seen as hopelessly old-fashioned in ... the accommodation that they offer' (Morgan and Walker, 1988, p. 1), clearly now a long-term issue.

The review above has provided an overview of the causes of locational obsolescence, grouped into economic, environmental and functional obsolescence, as they are variously defined in the literature[1] and found in retail. These will be important components of the model. The influence of the user market (consumers and retailers), the investor market and also the developer market is

[1] As introduced above, it is important to consider the separation of the value of the land from that of the buildings within locational obsolescence. Salway (1987) highlights that there can be a dynamic relationship between building value and land value, citing building deprecation as impacting on returns (due to obsolescence and physical decay impacting negatively on rental growth and/or remedial capital injections suppressing net returns) while land values may rise for an alternative use. Golton (1989) confirms the importance of alternative uses of the land to the investor in his definition of site obsolescence. There may be rising latent value for the re-use of the land, which can only be realised through vacancy and the regulatory context, such as a planning permission for a change of use. Baum (1991) describes existing use value as a function of site and buildings values and, while building values decrease in real terms over time, the values of the two elements can change independently, with site values a function of changing demand and supply conditions such as economic, property market, property sector-specific and local sub-market activities. Cowan *et al*. (1970b) highlight that redevelopment must only take place where the value of the redeveloped property outweighs the costs and existing use value.

clear and this, again, must be reflected in the model. The objectives and actions of actors within each market, including politicians, local authorities and other stakeholders will have an impact on the viability of a location.

4. A framework for identifying retail locational obsolescence

The following section draws on the review above and presents a conceptual model of retail locational obsolescence. It sets out how the attributes of the three underlying categories of obsolescence can combine to cause retail locational obsolescence, how they operate within multi-spatial scales and across markets. The model includes diagnostic criteria to enable identification of when a location may be described as locationally obsolete within the retail sector, with the section subsequently culminating, therefore, in a definition.

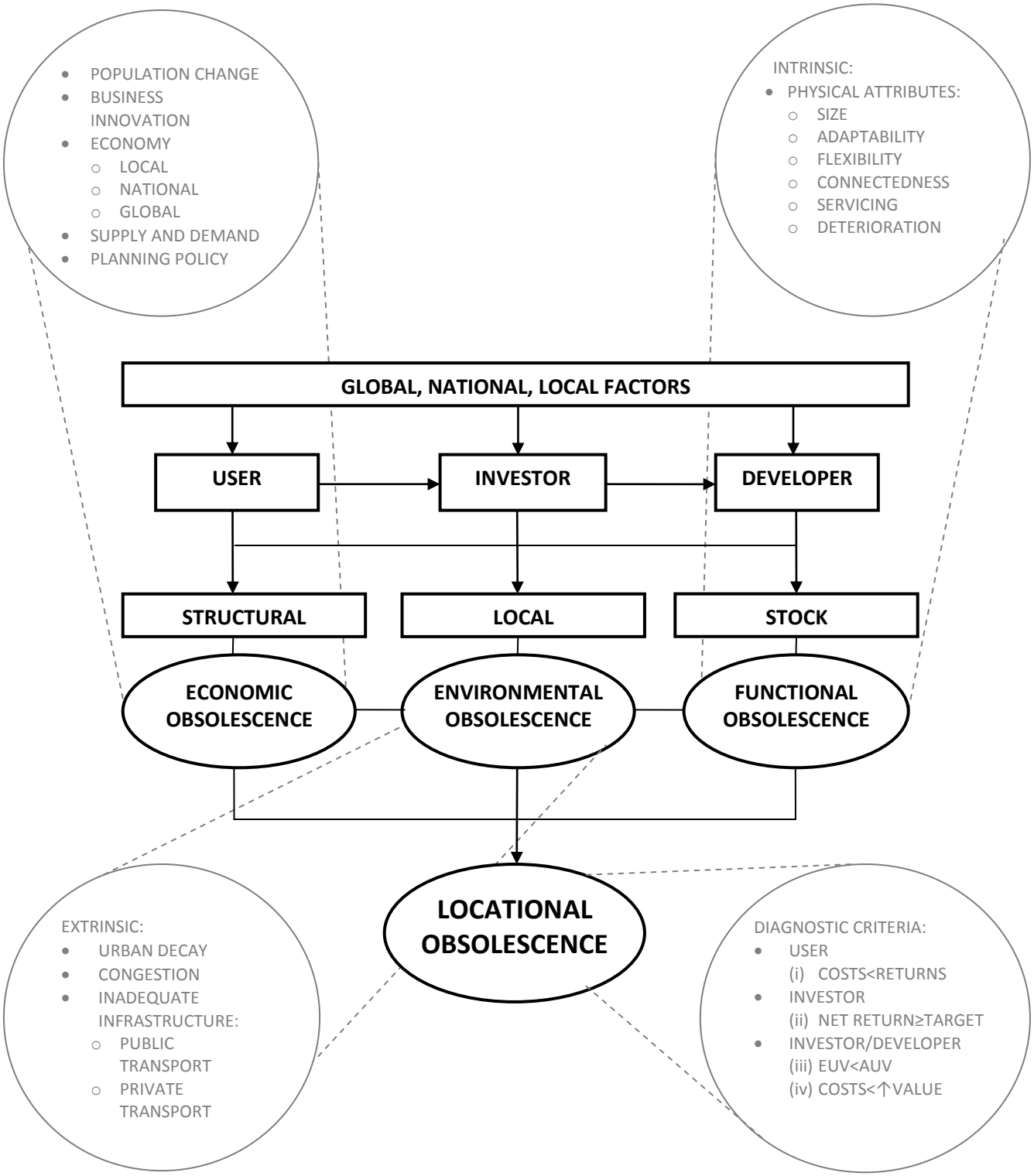
The conceptual model of retail locational obsolescence is presented in Figure 4. The user, investor and developer markets operate within the context of external (and internal) factors, represented as global, national and local factors. This symbolises the evolving nature of these markets and encapsulates much of the detailed literature explored above. The interactions between the markets are also depicted. As these markets evolve, they are shown to impact on the retail property market at various levels, shown here as structural, local and stock levels, shown to equate to the economic, environmental and functional obsolescence categories reviewed above. The conceptual model sets out illustrative examples of attributes of each of these categories of obsolescence, further showing that the latter two can be distinguished by extrinsic and intrinsic factors. The links between the categories are shown.

Within the retail property market, as attributes of economic, environmental and functional obsolescence combine, this can lead to the development of locational obsolescence. This is depicted to often be a gradual process, although some authors describe circumstances where a location can become obsolete almost instantaneously (Mansfield and Pinder, 2008; Salway, 1987; Baum, 1991). The conceptual model sets out four key criteria to be considered when diagnosing if a location is obsolete within the retail sector, the end of the process of obsolescence. It is proposed that, if all four criteria are violated, the location is obsolete. The first two criteria are, in turn, in the user market the retailer must be able to carry out a profitable business from the property; and, secondly, in the investor market, returns must be equal to or greater than the target rate. These may be in conflict if, for example, the rental level required by the investor to achieve the target rate of return means that the tenant is unable to generate a profit from the premises. In this situation, an

alternative occupier may be appropriate or, alternatively, rental levels may need to be revalued with a focus on rent as an economic surplus, with an accompanying reconsideration of the investor's return target, to include either over a longer time-frame or from an alternative investment opportunity. Whilst this is a difficult situation, it is not uncommon within changing economic circumstances. It does not, however, mean that a property is locationally obsolete. Where these two criteria are violated for the existing use, before a site can be considered as locationally obsolete in the retail sector, two additional criteria must be considered, both in the developer market. Thus, the third criterion is that, within the sector, an alternative retail use can be identified that has a higher value than the existing use (and, therefore, by necessity does not violate the first two criteria); and, in this circumstance, the fourth criterion is that the release of this latent value outweighs the costs involved. If all four criteria are violated, then the property may be described as locationally obsolete within the retail sector and this then provides the definition that:

> *continued use of the location in the retail sector is no longer viable.*

Figure 4 Conceptual model of Retail Locational Obsolescence



5.0 Intervention

This section provides a review of some of the diverse interventions that have sought to protect and reinvigorate retail locations. The focus of the interventions are related to and located within sections of the conceptual model, thereby identifying the extent of the interventions. Interventions are seen to have been undertaken across spatial scales and different stakeholders. Many of the interventions are seen to address environmental issues although almost certainly the aim is to mitigate economic obsolescence.

In response to perhaps the largest structural shift in the sector, the development of large, planned decentralised shopping centres, initially institutional investors in traditional high street locations saw the value of their investments fall as key anchor tenants, such as Marks and Spencer and the John Lewis Partnership, relocated to new out-of-town developments (Balchin *et al*., 1995). As a consequence, investors recognised functional obsolescence within their central stock in the light of the modern centres and undertook refurbishments and other local initiatives (examined below) to protect their assets and compete for key tenants. This active asset management is equally relevant to secondary retailing, with more recent and ongoing recommendations to address both functional and elements of economic obsolescence, including rethinking lease structures with investors retaining repairing liabilities and the provision of business support services; such initiatives requiring a hands-on approach to investment and asset management (Baldock *et al*, 2004; Grimsey *et al*., 2013). However, where an investor owns single high street unit(s), there is limited scope for effecting change in the wider area/offer, without forming alliances with neighbouring landlords and/or retailers. Such initiatives, which span several decades, include the public sector and are examined below. Their importance remains relevant through, for example, the Government recently announcing plans to give property owners a greater role in the management and revitalisation of high streets (DCLG, 2014).

A common response to threats to the vitality and viability of town centres has been through the introduction of town centre management (TCM) schemes, bringing together public and private sectors to improve the quality of existing town centres, originally to try to minimise the effect of out-of-town competition (Grail, 2001; see also the Association of Town and City Management (ATCM)). TCM pre-dates, but was further promoted by, the 1993 revised PPG 6 and is a co-ordinated attempt to draw together stakeholders in the 'search for competitive advantage' (Warnaby *et al*., 1998, p. 17). TCM is aimed at co-ordinating a more effective use of existing public resources, providing a lever to secure private sector investment, providing a new policy and resource priority and providing a

vehicle for community participation and mobilisation (Donaldsons and Healey and Baker, 1994). Donaldsons and Healey and Baker (1994) found that initially there was often limited financial support and involvement for TCM from the private sector, while Jackson (2006) suggests that the guidance has been subject to varied interpretation in different areas. Business Improvement Districts (BIDs) share similar characteristics to TCM schemes, in that both are based on partnership and have the aim of providing the conditions to increase visitor numbers and to encourage inward investment (Cook, 2009). The focus of such schemes of course varies through time and across locations, with the balance between centralised and localised targets ranging from the public realm (environmental obsolescence) to responses across all categories contributing to locational obsolescence.

It may be that some of these schemes have been responsible for averting the decline of retail areas (Grail, 2001; ODPM, 2003, 2004) and Jackson and Watkins (2005, 2007) found that, in part, they positively affected investors' market perceptions and, therefore, investor demand. The response, attitude and actions of a local planning authority are also seen as key to the viability of a retail location (Jackson and Watkins, 2011). However, intervention may not succeed if it fails to take steps to address a sufficient range of types of obsolescence. Dokmeci *et al*. (2007) set out that, while steps such as pedestrianisation and environmental improvements are identified as necessary to address some elements of retail locational obsolescence, they are insufficient to secure the required private sector property investment and improvements. They identify these as incentives, but stress that they are not sole catalysts for the required larger scale development and intervention.

There is a plethora of other ideas for reinvigorating town centres reported in the literature. For example, the literature reviews by Findlay and Sparks (2010b, 2011) highlight the importance of markets in attracting trade to town centres and report suggested initiatives including loyalty cards for market towns. Many of these initiatives have been suggested in recent reports (such as Portas, 2011) often requiring bottom-up leadership and coordination, and also time to become established and successful, a commodity often in short supply. In addition, assessment of the success of such schemes is limited and difficult. The Lockwood Reports claim to demonstrate that TCM has played an important role in enhancing the health and vitality of Britain's towns and cities (Lockwood, 2001, 2003). However, while Thomas and Bromley (2002) demonstrate that reinvestment can help a middle-ranking town to recover from the effects of retail decentralisation, such studies are exceptional and Balsas (2004) notes there have been few studies to assess the success of efforts to revitalise centres, or to monitor their progress. Hogg *et al.* (2007) found that it is, in any event, not

always possible to determine whether positive outcomes can be attributed specifically to TCM activities.

The focus of intervention has shifted and Findlay and Sparks (2011) suggest there is a need for more research on potential planning responses to retail vacancy patterns. For instance, it might be the case that policies to protect town centres are an impediment to a change of use from retail to residential use in redundant retail space. Grimsey (2012) suggests that innovative thinking is needed for high streets, moving away from traditional notions of retailing towards community uses for those areas where decline is too severe and, he believes, irreversible. Findlay and Sparks (2010a) highlight the importance of managing vacancies through frontage policies and control of use classes. Options might include asking whether units are located in the right place in terms of future retail requirements. Moreover, any significant rezoning of retail space will have to negotiate the complex multi-owner environment that characterises most retail centres (Colliers, 2011). Imaginative re-use may be an alternative to rezoning for secondary shopping areas. Options previously identified include niche markets, exploiting character/personality, supporting independent retailers and attracting selective new development (CB Hillier Parker, 2000).

Indeed, the National Planning Policy Framework encourages a change of use from retail to residential development on appropriate sites (DCLG, 2012b, para 22) and warns against the long term protection of retail floorspace: applications for 'alternative uses of designated land or buildings should be treated on their merits having regard to market signals and the relative need for different land uses' which includes reviews of the role and function of retail centres, including any trends in performance. This policy shift has continued, with the Chancellor announcing a consultation and changes to allow 'further flexibilities between use classes to support change of use from certain … retail uses to residential use to increase responsiveness within the planning system' (HM Treasury, 2013, p.41; HM Treasury, 2014), although this relaxation seems to be lacking coordination (Grimsey *et al*., 2013). Crucially, at this stage there is limited evidence that such an intervention is appropriate to target the complexities of the causes of retail locational obsolescence, concentrating instead on the symptoms. It may be that relaxation of the regulatory environment allows the private sector to assess viability of the retail sector in key locations and the model presented here will provide a robust framework for such analysis. With respect to the diagnostic criteria, of course they do not all need to be violated for the location to be taken out of the retail sector, but this will only be possible where an alternative use has greater value than retail use and this value is higher than the costs of realising it. Investigation into this will reveal whether this route is appropriate and which

stakeholders need to be engaged to enable its realisation. The final section provides a summary and also sets out steps to enable the practical operationalisation of the model to assist in the development of a research agenda for policy and targeting of resources, across public and private sectors.

6.0 Conclusions and research agenda

Locational obsolescence is a particular concern for the retail property sector. It has not been addressed in previous studies as the emphasis has been on other aspects of depreciation. The current study has developed a conceptual model of retail locational obsolescence; this provides a framework for the disentanglement of contributory types of obsolescence and of cause and effect within the process of locational obsolescence. From this it can be seen that retail locational obsolescence may be defined as the circumstance where a combination of economic, functional and environmental obsolescence combine to ultimately lead to a position where there is no viable retail use within the user, investor or developer markets. The context for this is a dynamic retail market and a complex web of underlying socio-economic, market and regulatory factors.

Cowan *et al*. (1970a, p. 2) highlight that, while notions of obsolescence are established, these 'concepts of obsolescence are rendered impotent for lack of operational applications'. Further, they set out that conditions vary, changes occur over time, systems and actors can have high degrees of tolerance and flexibility and, thus, absolute failure is rare. Therefore, viewed here within the process of locational obsolescence, they assert that there is no single diagnostic factor or symptom within a study of obsolescence and, thus, 'multi-causation is giving rise to multi-effects' (Cowan *et al*. 1970a, p. 8). It is within this complex, diverse and evolving backdrop that actors need a framework to guide the systematic analysis of the process of retail locational obsolescence across the diversity of formats, locations and stake-holders within the retail hierarchy, more so when overlaid with factors such as varying and changing geodemographic and economic characteristics. Drawing on this, one of the principles embodied within the development of the conceptual model is that it should be capable of forming a framework for application within research. The following factors are presented to suggest stages in which the framework can be operationalised in future research.

1. Causation

The conceptual model depicts 'global, national and local factors' feeding into the user, investor and developer markets. Two elements are important within this. First, an assessment of these factors will begin to enable a distinction to be made between cyclical patterns and structural changes, with

the latter irreversible through intervention and adaptation required instead. Secondly, this will help focus the level, or spatial scale, of appropriate intervention and, thus, which stakeholders should be involved.

2. Manifestation

As causal factors filter through the user, investor and/or developer markets, changes in the retail sector will manifest as either structural, local or stock-specific factors, as depicted in the model and categorised as economic, environmental and functional obsolescence, respectively. Identification of attributes of these categories of obsolescence will enable assessments to be made of not only appropriate intervention, but also the degree of progress towards the area ultimately becoming locationally obsolete as the different categories of obsolescence combine.

The application of central guidance, produced with the aim of aiding the monitoring of the 'health' of a retail area, has been documented and may provide some means of assessing indicators of categories of obsolescence, to include retail uses (and changes in these) and vacancies; physical environment, crime and safety; accessibility; property market indicators such as rents and yields. Interpretation of these data may not be straightforward, but the use of the model to provide a framework for analysis will provide valuable context. However, as suggested by Cox *et al*. (2000), there may be further work needed to provide a consistent method of defining and operationalising the indicators suggested by DCLG (2009) and BIS (2010) and explored for specific locations by Carmona *et al.* (2004), AMT (2005), Countryside Agency (2001) and Powe *et al.* (2009), for example.

3. Intervention

Perhaps the most important factor underpinning attempts by government, industry and other stakeholders to consider retail locational obsolescence is to explore opportunities for intervention. As noted in section 5, a variety of initiatives have been set up in response to threats to the vitality and viability of town centres, with the introduction of town partnerships, often including town centre management schemes and BIDs. However, without a robust framework for determining the appropriateness of such schemes in individual locations, including an assessment of causation and manifestation, it may be that attempts at intervention are misplaced. Thus, a key part of future research should be assessment of the success of such schemes, an area noted to lack attention (Balsas, 2004) and to prove difficult (Hogg *et al*., 2007). Similarly, the identification of sites, sub-markets or wider areas for wide-scale change of use requires clear and robust analysis of retail locational obsolescence.

To conclude, the conceptual model of retail locational obsolescence provides, for the first time, a framework and definition to guide the identification of locations that are obsolete, or may become obsolete within the retail sector. More than this, it provides an accessible representation of the complexities of the retail sector, including the spatial scale of causes of change, the range of stakeholders involved and the level at which contributory classes of obsolescence impact on retail locational obsolescence. Thus, if locational obsolescence is to be explored in any meaningful way, research must be explicitly situated within such a model, or framework, to enable assessments of validity, extent and generalisability to be made. Looking at existing literature, almost without exception, individual studies lack this context, most especially in the often weak examination of causes presented. This is important as, if intervention is to be attempted, or policy developed coherently, it is vital to explore the causes to appropriately focus resources.

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