Retailers and Deprivation: an exploratory study.

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Relationships between retailing and socio-economic deprivation have attracted academic and policy interest, notably focusing on health and diet (including 'food deserts') and retail-led regeneration. Recently, particularly after the economic downturn, declining high streets have been a concern. Yet as shop vacancies rose, especially in poorer neighbourhoods, expansion of certain trades perceived by some as anti-social became a concern: notably high-interest lenders and bookmakers operating high stakes gambling machines. Some suggest predatory motives and exploitation of the disadvantaged here, but with little evidence. This paper analyses locations of 'problematic' trades together with other businesses to establish the extent to which concentrations in deprived areas (defined by the English Index of Multiple Deprivation) exist. Several 'problematic' trades do appear concentrated in deprived areas, but so equally do conventional value retailers and poundshops. Areas for future research to clarify relationships are identified, but ultimately motive cannot be inferred from such analysis.

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Introduction.

Relationships between retail location and aspects of socio-economic deprivation have attracted increased attention in recent years, if in a somewhat unsystematic and fragmented manner, often focused on suggestions that certain types of service business may exploit disadvantaged consumers. Some of this attention has been academic but rather more was driven by debates around social policy. However linkages between academic research and policy making remain weak in these areas. In this paper the primary aim is to answer perhaps the most fundamental question for those seeking to bridge the gap between retail research and policy making with regard to disadvantaged communities: to what extent do retailers' locational strategies reflect socio-economic disadvantage? Answering that will require establishing comparators across a sample of service trades' locational strategies, particularly those sometimes hypothesised to target disadvantaged communities.

The next section presents a literature review and some recent background materials to contextualise current policy debates. That section, concluding with research questions, precedes a brief methodology section. Results and findings are then presented. The final section focuses on wider discussions and areas for future research. It is structured around considerations that could be seen as mediating factors influencing any relationship between retailer locations and area deprivation measures.

Literature Review and Contextual Issues.

Concern around retail and service provision in disadvantaged neighbourhoods has recently revived, refined and developed. From the mid-1970s, there were concerns that out-of-town developments offering cheaper prices might benefit the richer car-based shopper whilst being inaccessible to poorer members of society (Hillman, 1973). To Piachaud (1974) the key issue was if poor communities were having to pay more for their basic requirements. As concern for deprivation in Britain's inner cities increased in the 1970s, attention centred on the suitability of redevelopments within disadvantaged neighbourhoods (Benwell CDP, 1979) and retailing's role within national economic strategies (e.g. Enterprise Zones: Dawson and Sparks, 1982; Sparks 1987; Lavin and Whysall, 2004). Concern for the inner city also spurred responses from leading retailers (Tesco, 1980).

Whilst such concerns never disappeared, the 1980s were boom years for British retailing (Guy, 1994) and only after the recession of the early 1990s did issues around social disadvantage again draw significant attention from retail specialists. Since the 1990s, though, several related sub-themes have emerged concerning retailing in disadvantaged communities, notably around health and diet, the 'food desert' debate, and more holistic notions of retail-led regeneration. Most recently, particularly after the financial crisis presaged by problems of Northern Rock in autumn 2007, attention has focused on the decline of British high streets, which remains most marked in less prosperous neighbourhoods and regions (Goldfingle, 2014). Within the widely expressed worries about the growth of vacant properties, the apparent proliferation of certain uses seen by some as anti-social, and even having a parasitic relationship on disadvantaged communities, has become an issue.

Retailing, health and diet.

Caraher et al. (1998) researched dietary preferences of lower income groups, finding food choices were made more on grounds of cost and taste than health concerns, but such links begged questions as to what causality, if any, might be operating. Were such choices being made because there was a lack of healthier alternatives or in spite of them? Festing (1998) found food outlets in poorer areas stocked a relatively limited range of food products, with fresh fruit and vegetable availability a particular concern. Despite skilful budgeting there was evidence of a tendency to high fat/low fruit diets amongst low income families (Kempson, 1996). Tony Blair's New Labour launched a 'healthy neighbourhoods/healthy nation' initiative including a focus on improving shopping access in deprived neighbourhoods. A report of Policy Action Team 13 highlighted negative results of on-going retail change whereby increasingly large stores were less likely to locate in disadvantaged neighbourhoods, while smaller shops were being 'decimated' by large multiples (Department of Health, 1999). The Social Exclusion Unit (2003) saw a clear link between health and retail provision: "This lack of choice in the food that is within reach of people from disadvantaged communities can result in poor dietary habits and, consequently, poor health" (para. 1.24). Yet, paradoxically, hunger and obesity could coexist as problems in disadvantaged neighbourhoods (Cummings and Macintyre, 2006).

New store development was one possible response to such problems. Cummings et al. (2005) found such a development in a disadvantaged area to be "positive in providing not just improved food provision, but improved food choice, increased physical and economic accessibility and wider regeneration effects." (p. 298). However results from comparable interventions were neither wholly consistent nor straightforward (Cummins et al, 2005; Cummins and Macintyre, 2006). According to Wrigley, Warm and Margetts (2002), a major new store in a 'low-income, socially deprived, white area' of Leeds brought some dietary benefits for 'at risk' groups although fresh fruit and vegetable consumption remained low and changes were "likely to be at the margins" (p. 178). Research in Newcastle found less healthy diets characterised poorer households and deprived areas but relationships between healthy eating and local retail provision were unclear (University of Newcastle upon Tyne, 2003). Dawson et al. (2008) found in their Scottish study that accessibility to healthy foods depended more on the presence of larger stores than being in a deprived or affluent area. Focusing specifically on older consumers, Wilson, Alexander and Lumbers (2004) also could not identify simple relationships between food store access/usage and dietary quality.

Paralleling that health-related research were studies of notional food deserts. While some disagreement existed as to quite what constituted a food desert, essentially the concept was of an area with little or no local (healthy) retail food provision (Wrigley, 2002; Clarke, Eyre and Guy, 2002). Shaw (2006) suggested food deserts could exist in diverse ways: financially, attitudinally and physically. Claims to have identified food deserts came from Northern Ireland (Furey, Strugnell and Milveen, 2001) and the West Midlands of England (Rex and Blair, 2003), while government-endorsed research appeared to confirm that many neighbourhoods had no or few food shops (Social Exclusion Unit, 2001).

Guy, Clarke and Eyre (2004) identified food desert characteristics in affluent areas of Cardiff, where high consumer mobility suggested little cause for concern existed, whilst in deprived areas the growth of food discounters had ameliorated problems and large numbers of independent and specialist outlets suggested that, quantitatively at least, true food deserts were limited in that city. Donkin et al. (1999) similarly found dense networks of small retail food outlets in deprived areas of London. However Pearson et al. (2005) found cultural influences, including age and gender, were more significant influences on fruit and vegetable consumption than prices or supermarket access in south Yorkshire.

Relationships between retail provision, diet and health were increasingly seen as complex (Hitchman et al., 2002), requiring 'more nuanced analysis' at the consumer or household level (Wheelan et al., 2002). Piacentini, Hibbert and Al-Dajani (2001) exemplified complex strategies adopted by disadvantaged consumers, and called for research that would:

> "… develop a better understanding of the social and personal benefits that can be delivered through retail and other service enterprises and … the consequences of this for the broader goal of empowering consumers who currently experience social exclusion." (p. 155).

Cummins and Macintyre (2002a) showed spatial variations in food availability and price ran counter to the food desert model with concentrations of shops in poorer areas. Shop-type rather than location or level of deprivation better predicted price and availability of a satisfactory diet.

Ultimately the existence of food deserts became questioned. Cummins and Macintyre (2002b) considered the concept a 'factoid', lacking a reliable evidence-base; later they would argue the term had "unintentionally led to such polarisation of views … as to be of limited further use" (Cummins and Macintyre, 2006: 683). Guy (2002) similarly concluded the term had outlived its usefulness. Hence, a few years into the new millennium, debates around the relationship between retail provision and dietary quality appeared to be shifting away from a spatial conceptualisation. Whilst concerns remained, they were increasingly focused at the individual and household rather than neighbourhood or city-district levels.

Retail-led regeneration.

Despite that shift, relationships between retail provision and area deprivation remained of research or policy concern. The urban regeneration agenda appeared to be increasingly focused on retailing with the emergence of the concept of retail-led regeneration (Dixon, 2005; Whysall, 2007). Paralleling 1990s concerns in Britain around food provision in inner urban neighbourhoods, in North America authors such as Ashman et al. (1993), Fisher and Gottleib (1995) and Alwitt (1995) identified similar problems and advocated radical, interventionist policies to address them. Alwitt and Donley (1997) suggested the problem was not one of inadequate demand not generating a supply side response, nor limited to the food sector, concluding that "retailers and service providers are underserving poor areas and are not responding to profit opportunities (i.e. are possibly discriminating against poor areas in site location)" (p. 162).

However the strategy guru, Michael Porter proposed a market-based solution to problems of the American inner city, arguing that socially-focused initiatives had been fragmented and failed:

> "… programs have treated the inner city as an island, isolated from the surrounding economy and subject to its own unique laws of competition.

> They have encouraged and supported small, sub-scale businesses designed to serve the local community but ill equipped to attract the community's own spending power, much less to export outside it." (Porter, 1995, p. 55).

Empirical support came via reports from PricewaterhouseCoopers and Initiative for a Competitive Inner City (1999) and Boston Consulting Group and Initiative for a Competitive Inner City (1998) which focused attention on the potential unmet retail demand in American inner cities. Such ideas were picked up by UK bodies including the New Economics Foundation (Ramsden et al, 2001), the British Retail Consortium (2001) and Business in the Community (2002). Governmental support followed via the 'Under-served Markets Project' (Office of the Deputy Prime Minister, 2004; Dunford, 2006) and the Greater London Authority (GLA Economics, 2005). Thus by the closing years of Tony Blair's Prime Ministership, there was momentum behind retail-led regeneration strategies which combined perceived benefits of public and private sectors:

> "Deprived areas can be seen as new markets with competitive advantages; their strategic locations, their often untapped retail opportunities ... and the potential of their workforce. …
> (This) demonstrates Government's belief that the private sector plays a key role in regenerating our deprived areas. Government cannot solve all the problems on its own." (Business in the Community, 2005, p. 1).

However, the economic downturn that followed in 2007/08 stifled that ambition. Yet for Instone and Roberts (2006) retail-led regeneration schemes themselves were problematic, potentially excluding disadvantaged groups and exporting commercial income from lower-income areas.

Concern for the High Street

British high streets have been under competitive pressure for decades from the growth of retailing in non-traditional locations (Schiller, 1986), and, from the mid-1990s, faced added challenges from online retailing (e.g. Amazon launched online in 1995). Despite failing to meet the more extreme initial predictions, e- and m-commerce have grown apace, not least in Britain (Kivilahti, 2012; Holland, 2013). Thus, by 2007/8 when the economic downturn, and notably the 'credit crunch', impacted, high streets were already facing difficult times. Retail vacancies in traditional locations became a major concern, with evidence that consumer behaviour was shifting fundamentally suggesting these were neither temporary nor exclusively cyclical problems. In May 2011 the coalition Government invited retail consultant and TV personality Mary Portas to undertake a review of high street issues and produce recommendations (Portas, 2011). The Portas Review was published in December 2011, to a mixed reaction. Critics felt the review offered little new, and took a conventionally narrow view of high streets as shopping destinations. Disappointed by Portas' contribution, former retail executive Bill Grimsey with a group of associates produced their alternative Grimsey Review in autumn 2013 (Grimsey et al., 2013). Less widely reported outside Scotland was a Scottish parallel to Portas, the Fraser Review (Fraser, 2013). Findlay and Sparks (2013), comparing the three reviews, found that despite differences of approach there was "much more that joins these three reports than separates them" (p. 456-D), concluding that there was an urgent need for action.

Extensive and pressing concern for high street decline was evidenced when over 400 locations were put forward for government-funded ‘Portas Pilots’ intended to test Mary Portas’ proposals. However since then there has been increasing disillusionment with the process, with Portas herself openly criticising the lack of commitment to her policies (Telegraph, 2014b; Findlay and Sparks, 2013).

Specific concerns on the High Street

High streets, especially in less affluent regions of Britain, continue to cause concern (Goldfingle, 2014). Yet within that wider matrix, concerns exist around specific trades. The rise of high interest loan businesses, often linked to activities like pawnbroking, is one particular concern. The counter-cyclical rise of these businesses, both on high streets and on-line, reflects a number of generic factors, often paralleling similar concerns in the USA (Stegman, 2007). The increased prominence of such businesses on traditional British high streets also reflected the availability of premises as vacancies increased and potential tenants became scarcer.

Several factors underpin the expansion of high interest lenders and pawnbrokers which, according to Collard and Hayes (2010), increased from some 800 outlets in 2003 to 1300 in 2010. Typically these businesses operate as lenders and pawnbrokers alongside offering a number of other services (e.g. gold buying, money transfers, foreign exchange, reloadable credit cards) which reflects their exploitation of economies of scope to generate multiple income streams, although little evidence exists to support any notion of cross substitution between product lines which differ by consumer segment (Office of Fair Trading, 2010: 18).

The principal factor driving recent expansion was the economic downturn, following the 2007’s ‘credit crunch’. Initially the credit crunch concerned inter-bank lending, but, after Northern Rock’s collapse (September 2007), spread to mortgage and consumer lending markets (BBC, 2009). However other factors were also at work. The Cheques Act 1992 made informally cashing cheques difficult, fuelling demand for ‘pay day loans’ and ‘logbook loans’, whereby a post-dated cheque is secured against future income or personal assets (e.g. private cars), typically at high interest rates. Contracting networks of post offices and high street banks further reduced local access to financial services and credit. Collard and Hayes (2010) found pawnbroking customers four times more likely to hold Post Office accounts than average consumers. Pawnbrokers Albemarle & Bond suggest 1.6 million British consumers lack bank accounts with another 4 million having bank accounts but lacking access to bank credit. Collard and Kempson (2005) suggested, even before the economic downturn, that 24% of poorer households had adverse credit records and 26% had been refused credit. Albemarle & Bond’s chairman could thus say “his business is really a ‘poor person's bank’ as many of his customers do not have a bank account and instead use Albemarle for a whole range of financial services, from loans to cheque cashing” (Independent, 2002).

Other factors also contributed to the growth of high interest lenders/pawnbrokers, however. Clearly the availability of vacant premises has been an enabling factor, as has the availability of retail-trained staff as other sectors of retailing declined. Several leading companies with a high street presence were able to grow using a franchised business model (e.g. The Money Shop, Ramsdens, Cash Generators) to access private financial reserves. Although most recently gold prices have fallen, a period of sustained high prices was important for the gold buying functions of these businesses. The absence of VAT on secondhand items aids the selling of unredeemed goods by pawnbrokers (goods by law are pledged for at least 6 months), as well as those businesses that employ non-pawnbroking (buy back) practices for purchasing second–hand goods (e.g. Cash Generators, CEX). Technology has also played its part. Internet pawnbroking is more accessible to remote communities, whilst also offering greater anonymity for customers who desire that. Additionally, the expansion of on-line businesses and especially those transacting used goods (notably eBay, but also Amazon) have helped condition consumers to those behaviours. However rapid technological change also has negative impacts for the trade in products that can rapidly obsolesce, and hence some traders prefer 'sale and buy back' deals over shorter periods (e.g. one month), exempt from the Consumer Credit Act, to traditional pawnbroking. Other negative considerations include the adverse images associated with some high lenders' advertising (Guardian, 2013; Telegraph, 2014).

Increasingly, high interest lenders have attracted criticisms in recent years, raising the spectre of increased government legislation, notwithstanding some evidence that pawnbrokers are perceived by their consumers as an attractive, familiar form of high-cost credit (Woodcock and Cheung, 2010). A report by the Office of Fair Trading (2010) stressed the limited options open to users of high interest loans, who lacked consumer power given ineffective competition between suppliers. Despite high administrative costs resulting from relatively small and shorter-term loans, profit levels were seen as higher than expected in a competitive market. Agencies such as the Centre for Responsible Credit continued to press for support for alternative lending media (e.g. credit unions) and better availability of small bank loans. In November 2013, it was announced that a cap on interest rates would be introduced in Britain (Reuters, 2013). However, when such caps have been variously employed in States of the USA, the results have remained controversial (Mayer, 2013), while a UK review also could not show unequivocally that interest rate restrictions reduce borrowing costs, especially for those on low incomes (Personal Finance Research Centre, 2013). A key concern is that caps may force desperate borrowers into the hands of unscrupulous 'loan sharks'.

Betting shops have also raised concerns. While betting shops posed problems for retail planners ever since they were legalised in 1961, recently their perceived proliferation has greatly increased interest and concern. Berry (2013) identified three main objections to betting shops: that they fuel gambling addiction, the largely anecdotal evidence that they attract anti-social behaviour, and that emerging clusters of betting shops damage local economies in general and high streets particularly. Their recent growth is directly linked to the growth of Fixed Odds Betting Terminals (FOBTs) - touch screen roulette machines found in betting shops across Britain. Sheerman (2013) claims a FOBT player can lose up to £18,000 in one hour, gambling up to £100 per play every 20 seconds. Sheerman claims numbers of such machines have grown at a rate of 22% since 2008/09, accounting for 49.4% of bookmakers' income in 2011, up from 39.9% in 2008. Significantly, Sheerman, a Labour MP, wrote this under a headline arguing 'the government should take action to protect customers from what may be the predatory targeting of the disenfranchised'. Similarly, the Responsible Gambling Trust has argued that 'people living in areas of high deprivation … may have a greater risk of harm than those who do not' (Responsible Gambling Trust, 2014). However attempts by local authorities to limit betting shop growth have stalled in the courts, and an increasingly politicised debate continues around the need for intervention and regulation (BBC 2013a, 2014; MailOnline 2014). Nor are relationships between socio-economic deprivation and gambling problems simple, although one study concluded that:

> ‘It appears, on this evidence, that whilst those who live in deprived areas may be no more likely to gamble than others, those who do are at greater risk of experiencing some problems with their behaviour. This has the potential to contribute further to health inequalities already known to exist in these deprived areas, and highlights a wider group of those potentially vulnerable to harm.’ (Health & Social Care Information Centre, 2013 :15)

However, that study took a wide definition of gambling (including e.g. the National Lottery and other lotteries and scratchcards).

The disadvantaged consumer.

Underpinning these debates is a general concern for disadvantaged consumers which can be variously predicated. For some the main problem is consumers’ lack of marketplace power (e.g. Office of Fair Trading, 2010), but others perceive predation by profit-driven businesses (Sheerman, 2013). In the banking sector, Harrison and Gray (2010: 440) claim to identify:

> “… a concerning circumstantial link between the increase in informed lenders, reduced costs of data and analysis, and consumer debt … and this is supported by organizational intent. If banks have shifted away from viewing long-term customers as highly profitable, and are seeking those who will yield high interest in the short term, then the very information that assesses risk for the finance sector potentially also yields information about the consumers who are likely to yield high interest from debt.”

There seem, then, bases for concern that vulnerable consumers may be exploited by sophisticated businesses: Hill (2002, 2010) wrote of businesses ‘stalking the poverty consumer’, for example. While the consumers that banks might target through sophisticated data analysis might not be typical consumers of a pay-day loan or frequent FOBT players, there seem considerable grounds for concern here.

The marketing literature addressing disadvantaged customers has considerable history, notably in the USA (Andreasen 1975). In Britain attention to this topic increased after the millennium in the retail and marketing literature (Piacentini, Hibbert and Al-Dajani, 2001; Williams and Hubbard, 2001; Woodliffe, 2004), although Woodliffe (2007) suggests this is limited in comparison to work by retail geographers. Synthesising those contributions, Woodliffe (2007) suggests that conceptualisations of disadvantage among consumers is concerned with a lack of choice, typically as a result of characteristics such as age, low income, ethnicity or limited personal mobility. Disadvantage is seen as heterogeneous, although many studies have focused on one source, such as ethnicity, disability, age, unemployment or a lack of mobility, notwithstanding that many consequent disadvantaged groups are interrelated and membership of groups may overlap. Hence Bromley and Thomas (1993) found carless households in South Wales also frequently to be elderly, unemployed or female. Drawing on several sources, Woodliffe (2007) also emphasises that different forms of disadvantage differentially affect shopping behaviour, but this can be moderated by the existence of support mechanisms and individual coping strategies.

Synthesis and Research Questions.

Patently, then, complex relationships between retailing and consumer disadvantage are of academic and policy interest. Less clear is whether commercial businesses actually target, let alone exploit, disadvantaged groups or neighbourhoods. There are linked themes here. One is the impacts of certain trades on traditional shopping centres in disadvantaged neighbourhoods; the other is the extent to which certain businesses (e.g. high interest loan providers, betting shops) exploit opportunities in disadvantaged neighbourhoods to target vulnerable consumers. The latter question is one where some critics have already assumed such predatory motives in the activities of certain traders, but evidence to underpin those assumptions is quite limited beyond anecdotal sources or individual (and potentially extreme) examples (cf. BBC, 2013b).

Thus this study sets apparently simple initial targets, seeking to answer the following questions:

- Are uses such as pawnbrokers, high interest lenders and bookmakers significantly concentrated in deprived neighbourhoods?
- How do such uses' locational patterns compare with discounters or retailers in general?

The next section sets out a methodology to address these questions.

Methodology

Area-based conceptualisations of deprivation attract criticism for implying sub-areas are relatively homogenous, whereas deprived households can exist in relatively affluent neighbourhoods, and vice versa. This leads Woodliffe (2007: 18) to conclude:

> "To truly understand the dynamics of consumer disadvantage in a specific shopping environment and to identify policy consequences, research, preferably qualitative, must be conducted in the identified area".

However, notwithstanding the appeal of that argument when seeking to understand in depth the varied, detailed nature of individual circumstances, conversely when taking a wider view to establish comparability across localities and individualised situations, a more quantitative approach has merit. Despite critics (Deas et al, 2003; Schuurman et al, 2007), the Index of Multiple Deprivation is the most obvious basis for such comparison. As Rae (2009: 1860) argues:

> "The distribution of funding for spatial policy interventions and the identification of local need in England are closely tied to an area-based deprivation index that has become the *de facto* measure of deprivation: the Index of Multiple Deprivation 2004 (IMD) … a very effective small-area evaluation tool which produces a relative measure of deprivation for each area of England."

However use of this scale immediately limits on the scope of the research since, while similar indices exist for Scotland, Northern Ireland and Wales, and despite efforts to integrate these, they are not mutually compatible (Payne and Abel, 2012).

IMD 2004 is a potentially powerful tool, based on seven 'domains' of deprivation: income (5 measures), employment (6), health and disability (4), education, skills and training (7), barriers to housing and services (7), living environment (3) and crime (4). Each domain is weighted between 22.5% (Income, Employment) and 9.3% (Barriers to housing/services, crime, living environment). For consistency with the 2001 Census, indicators relate to that year (although unfortunately that is not consistent with retail outlet data employed here). Outputs exist for all 32,482 Super Output Areas in England (Office of the Deputy Prime Minister, 2004).

Retail location data were collated from 37 retailers' web sites between December 2013 and February 2014. Retailers were sampled through a combination of convenience sampling (determined by available lists of store locations with postcodes), and purposive sampling whereby categories and types of retailers (high interest lenders, bookmakers, discount retailers etc. as well as 'control'/comparator examples) were chosen. In a small number of retailers, different store formats are identifiable within a chain (e.g. Next, M&S). Details of the samples obtained are shown in Table 1. It is difficult to ascertain exact levels of sampling as retailers rarely give numbers of stores in England (as opposed to more usual UK figures which consequently form the basis for Table 1). The aim was to collect as large a sample as possible in each case, although that will have varied for a number of reasons:

- The accuracy of retailers' sites appears to vary. Inputting lists of extracted postcodes into the GeoConvert web site for analysis revealed small if inconsistent numbers of errors (probably never more than 1-2%). Some postcodes had been erroneously recorded on retailers' sites. Commonly these were straightforward and easily corrected typographic mistakes (as numbers confused with letters (e.g. 0/O, 1/I). Other errors were correctable by searching other web sources (including the Post Office's *Postcode Finder*). Nonetheless this still suggests that some errors were accepted as actual, but incorrect, postcodes.
- Some post-2004 redevelopments were not compatible with IMD2004 (e.g. developments associated with the London Olympic Games site). These never related to more than one or two per retailer, however, and in some cases pre-2004 postcodes were substituted.
- The main source of incomplete location sets is probably the format whereby retailers present store locations. Some produce comprehensive lists, and these are considered 100% samples in Table 1. Others only list numbers of outlets closest to a specified location. In such cases the aim was 'saturated' data collection by inputting numerous and proximate locations but sometimes these attempts at exhaustive data collection apparently failed marginally to identify all stores, as shown in Table 1.

Ultimately it is felt that the level of sampling here is consistently high (i.e. >93%), providing a more than adequate basis for analysis; in many cases samples can in fact be assumed to be entire populations. The GeoConvert website (geoconvert.mimas.ac.uk/) was employed to allocate Deprivation Indices to postcodes

Findings.

Table 2 presents preliminary results in terms of average and median values of IMD2004 for each retailers' locations by Super Output Areas (SOAs). Proportions of retailers' outlets in the 20% most and least deprived SOAs were also calculated. There appears considerable variation in these values, with the contrast between Waitrose (median 13.4 and having 25% of stores in the 20% least deprived SOAs) and Perfect Home (median 53.0; 83.6% in 20% most deprived SOAs) quite marked.

Treating all 37 retailers' outlets as a single, consolidated population (n=15,534) from which individual retailers' samples were drawn allows simple Z-statistics and accompanying probabilities to be calculated. The hypothesis to be tested here is that any sample (i.e. retailer) mean is significantly higher than the overall mean:

> *H_1: The mean deprivation score for a retailer's locations is higher than the mean of all sampled store locations.*

The population mean here is clearly not a mean of all possible or existing English store locations, and indeed given the purposive sampling of such as pawnbrokers/high interest lenders (7), bookmakers (2), 'poundshops' (4) and other discounters, the likelihood would be that *if* such stores do target deprived areas, those locations could be over-represented in the total sample. However, that would imply accepting H_1 at $p<0.05$ is more rigorous than implied.

Table 2 clearly reveals some polarisation of results. At one end of the scale of probabilities are perhaps 11 retailers who ($p > 0.95$) seem to have no significant tendency to locate in deprived areas. The composition of this group is interesting since several different types of retailers are represented. At the extreme are Waitrose and M&S food outlets, both probably containing large numbers of non-traditional outlets. Both, for example, have many outlets in motorway service station or off-centre retail park outlets. Contrastingly there are also 'traditional' high street retailers here; most notably the group contains Boots whose numerous health and beauty outlets constitute the most ubiquitous retail presence of all the samples. Waterstones, the book retailer, Clinton Cards , Specsavers and Next might also be seen as conventional high street retailing, if the latter also have numbers of outlets on retail parks and the like. The presence of discount grocers Aldi and Lidl is interesting, since these were initially seen as chains that might target low income groups but increasingly have been seen as repositioning to the middle market and beyond (Brooks, 2013). However there are also here chains which have attempted to build a reputation on lower prices (Specsavers, Bargain Booze). From the standpoint of this paper, the presence of the Coral bookmakers chain here is noteworthy, suggesting they cannot on this evidence be accused of targeting deprived neighbourhoods.

At the opposite end of the scale are some 20 retailers who demonstrate a higher than average (for these samples) propensity to locate in deprived areas (i.e. $p<0.05$). For all these H_1 can be accepted: the mean deprivation score for each retailer's locations is significantly higher than the mean of all store locations. These include 5 established retailers who, if not portraying themselves as 'hard' discounters are clearly positioned at the value end of the market: Farmfoods, Iceland, Wilkinsons, B&M and Primark. Excepting Game, the UK's largest games retailer, the remaining chains are worthy of further discussion in the context of this study. They fall into 4 categories, with only the first discussed not subject to criticisms for high interest rate credit deals:

- The 4 'poundshops' in this study (including 99pStores; also Poundstretcher, Poundland and Poundworld) need little explanation, trading as they do on fixed low prices and tight margins. Conceivably their business models may also require low overheads (e.g. property costs). That they have an apparent propensity to locate in the more disadvantaged areas of England is probably therefore predictable and understandable, if providing something of a benchmark against which to compare the other store groups which produced similar results.

- The 5 high interest loan and pawnbroking businesses (The Money Shop, Cheque Centre, H&T, Ramsdens, Albemarle & Bond) offer a range of services from traditional pawnbroking through loans (pay day loans, log book loans etc.), to gold buying etc. While the balance of these functions varies between the businesses, essentially these constitute the most prominent high street manifestation of the controversial high interest loans sector that was highlighted previously. Consequently this provides empirical support for the assumption that they tend to locate in more deprived areas.
- Related to those are three businesses that specialise in dealing in secondhand goods. Cash Generator, alongside offering gold buying, pawnbroking and various loans and other financial services, offer a 28 day buyback facility. Items such as video and audio equipment, games and games consoles, computers, jewellery, power tools, musical instruments and the like are bought for cash with the assurance that they can be bought back within 28 days. Cash Generator suggests it is the high street equivalent of e-bay. Cash Converters similarly offers a range of services (personal, payday and log book loans, pawnbroking, cheque cashing etc.), but again has a strong emphasis on buyback activity. This international business, originating in Australia, has described itself as the largest retailer of second hand goods across the world. Three quarters of its 220 UK stores are franchisee-owned. CEX (originally Complete Entertainment Exchange) first opened in London in 1992. In February 2014, it operated 236 UK stores of which 137 were franchised. It also operates stores in Spain, USA, Ireland, India and Australia. The core business is to buy, sell and exchange technology and entertainment products including mobile phones, video games, DVDs and Blu-ray movies, computers, digital electronics, TVs and monitors, and music CDs. All three businesses also operate online.
- The remaining two businesses sell goods on credit. BrightHouse claim to be:

  > "… the nation's leading rent-to-own retailer. Providing top brand household goods on low weekly, fortnightly or monthly payments and quick & simple credit. With over 280 stores, we serve over 250,000 customers across the UK. BrightHouse offers a range of top brand technology, from Smart 3D LED TVs and laptops, to the latest washing machines, as well as stylish sofas and bedroom furniture." (Company website, 11.2.14).

  Similarly PerfectHome sell household goods largely on credit, emphasising their "total payment plan price and representative APR 29.6% … is the lowest in the pay weekly/monthly sector and is comparable with many store cards" (Company website, 11.2.14). Yet both businesses are criticised on consumer websites (e.g. www.consumeractiongroup.co.uk). Boggan (2013) reported being able to buy a TV immediately for £1,788.15 at BrightHouse, or paying over 156 weeks at 64.7% interest, resulting in a total cost £3,432. Hence for critics, these businesses have much in common with high interest lenders.

In summary, a mix of retail businesses emerges that are more likely to locate in areas of higher deprivation. Some, whilst trading at the value end of the market, are established and accepted elements of the English high street (e.g. Wilkinson, Iceland, Game, Primark). Then there are ‘poundshops’, unashamedly trading on low price. Alongside are also to be found the high interest lenders, pawnbrokers, ‘buyback’ stores and credit-based household retailers. Thus while there is convincing evidence that high interest lenders and related businesses are more prone to locate in disadvantaged areas (and it should be noted that, for example, betting shops appear not to be so), the same can be said for several well established and non-controversial businesses.

Discussion and directions for further research.

Several caveats attend the results presented here, suggesting mitigating factors that may require further consideration.

- Does the size of a retail chain interact with the measures of deprivation employed? Some of the more extreme results in terms of median/average values result from analyses of smaller chains (e.g. Ramsdens, PerfectHome). Might some form of ‘regression to the mean’ be at work? Even if a hypothetical chain had a clear strategy to target more or less deprived neighbourhoods, as that chain expanded it could be inevitable that less extreme (in terms of the scale of deprivation) locations would be occupied, and hence the overall distribution would be increasingly less extreme in central tendency.
- Regionalisation may impact average deprivation measures given marked differences exist between English regions in terms of deprivation indices (Department of Communities and Local Government, 2010). Regionalism often reflects a business’s origins. Pawnbrokers Ramsdens, established in 1987 in Stockton-on-Tees, is strongly represented in Northern England, Scotland and Wales. Despite its advertised claim that ‘There’s a branch near you’, Ramsdens has no branches in southern England; outlets in Lincoln and Chesterfield were the most southerly English presence in early 2014. Regionalisation may reflect a retailer’s history; compare, for example Asda and Waitrose with their northern/southern origins. It may reflect growth through merger or acquisition. Thus pawnbrokers Albemarle & Bond, founded in Bristol although now based in Reading, has a strong presence in southern England, but in 2007 acquired the Leeds-based pawnbroker Herbert Brown, making it now also strong in Yorkshire and Humberside. Does having a concentration of stores in a more deprived region differ from targeting deprived locations across a range of regions?
- Similarly, a business’s locational portfolio may reflect its history. Longer established chains may have opened in formerly prosperous locations that have latterly suffered decline, as with some industrial towns of northern England perhaps. ‘Locational inertia’, reflecting such as property ownership or long-term lease arrangements, may mean a store remains open, and indeed still profitable, in a location that would not meet current strategic priorities.
- What is the appropriate spatial scale for such analyses as are undertaken above? Analyses here have been undertaken at the finest spatial scale of postcode level/SOA. However a store’s custom will be drawn from far beyond that highly localised area. Classic central place theory suggests the ‘range’ of a good varies by retail function (Berry, 1967), implying no single scale is appropriate to all chains. A small Bargain

Booze store with limited parking would be expected to draw trade more locally than an Asda supercentre with extensive parking provision, while quite different patterns again might characterise such as a large city-central M&S outlet. Moreover, assuming parking to be a key influence, then inter-urban location might also be a consideration: even within a single chain the catchment of a store located on a peripheral retail park is likely to differ compared to a town centre store with restricted car access and limited/expensive parking. Thus while there are reasons to suggest that the scale of spatial analysis might impact analyses of the type undertaken here, there is also the likelihood that no single scale of analysis will be equally appropriate for all types of retailing and services.

- Reference has been made here to the locational strategy of a retail chain, yet even that concept may need some caution. The issue of history again suggests that the current portfolio of stores may reflect past priorities and strategies that are no longer held, not least when mergers or takeovers have occurred. Strategies anyway may involve a number of sub-strands, as where a single chain operates a number of fasciae or formats, each with its own strategic objectives. The notion of strategy presupposes centralised decision making and control, but as noted previously, such as high interest lenders have grown by employing franchising. While this brings advantages in increasing access to capital, it may also constrain locational choices for centralised decision makers if the ‘supply’ of potential franchisees is uneven in spatial distribution, effectively diluting the extent of central control to a function of selecting from a range of (limited) alternatives.
- Different strategic considerations may be at work in a chain other than simply targeting a certain consumer segment. For large scale, food-based retail perhaps logistics may be a determining factor. The economics of access to and from existing Regional Distribution Centres may constrain location selection. Contrastingly for a financial services business, where much of the ‘traffic’ between central management and branches could be online, such considerations would be of little import. Beyond logistics, other strategic considerations that impact site selection could include human resource considerations (especially when a large labour-force is required) and the prestige associated with certain locations that retailers may seek.

Finally, the general measure of deprivation (IMD2004) used here is a composite measure, amalgamating a range of indicators of deprivation. Possibly from a retailers’ perspective seeking to provide such as financial services (e.g. pay day loans and the like) it might be more appropriate to focus on specific elements of deprivation, and perhaps most obviously the income and employment domains.

The analysis presented here is exploratory, but necessary, in order fully to understand if retailers do or do not target localities according to deprivation. However as outlined in the seven points above, there is ample scope for further, more focused analysis. Each can be seen as calling for further research, in some cases of a different nature. For example, might qualitative research with decision makers shed light on aspects of strategy highlighted here? Other priorities for future research might involve extending the range of retailers studied. Would it be more appropriate to compare high interest lenders with other financial service providers? It could also be possible to parallel these analyses with studies in other parts of the United Kingdom, since comparable Indices of Deprivation exist for other parts of the UK:

would similar results emerge from analyses of Scotland, Northern Ireland and Wales? Clearly, although an exploratory study, there are potentially many future directions for related research.

More fundamental, though, are questions of causality and purpose. While this form of analysis has shown that certain types of business have a statistically significant higher propensity to locate in more disadvantaged areas, that says nothing about motives. The question remains: are retailers who prioritise locating in areas of high deprivation predators or simply targeting demand? That question suggests a different sort of research, a qualitative research to explore motives, morals and purposes. Yet typically websites of high interest lenders and related businesses used for this research prominent portray concerns for ‘responsible lending’; several critical press stories cited here also carry denials of anything other than ‘customer service’ objectives by the businesses concerned. While alternative approaches might promise deeper insights, they might still leave us wondering if such businesses are exploiting market disadvantage while claiming to meet demand. Given that, simply to establish which businesses show a propensity to locate in more deprived areas represents some advance in our understanding, if not necessarily of retailer motives.

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(n.b. all websites were accessed on 25th and 26th February, 2014)

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Table 1: Data Capture and Sample Estimates.

	All locations available?	Retailer's claim of UK outlets (a)	UK outlets identified (b)	Number outlets processed	Assumed % sample≠
Albemarle & Bond	No	130 + 42 = 172	171	170	99.4
Aldi	No	500 in Oct 2013	508	424	99.9
Argos	No	740	693	558	93.6
Asda	Effectively*			467	100
Bargain Booze	Effectively*			498	100
Boots	No	'close to 2500'	n.a.	1997	-
BrightHouse	No	Over 280	282	230	99.9
B&M	No	Over 370	367	267	98.0
Cash Convertors	Yes			212	100
Cash Generator	Yes			179	100
CEX	Yes (visual) ≭			205	100
Cheque Centre	No	Not known		227	-
Clinton Cards	Yes			339	100
Coral	No	1700+	1676	1479	96.0
Farmfoods	Yes			196	100
Game	Yes			261	100
Iceland	No	800 in Sept 2013	822	667	100
H&T	No	192	192	171	100
Ladbrokes	No	2293 (GB)		1716	-
Lidl	Effectively*			459	100
Marks & Spencer	No	766		634	93.1
The Money Shop	No	'over 500'	542	449	99.0
New Look	No	Not known	537	454	-
Next	Yes			423	100
PerfectHome	No	64	63	55	98.4
Poundland	Yes(visual) ≭			373	100
Poundstretchers	Effectively*	Over 400'	404	280	100

Poundworld	Effectively*			158	100
Primark	Yes (visual) ≯			128	100
Ramsdens	Yes			70	100
Specsavers	Yes			508	100
TK Maxx	No	277 (with Ireland)	276	224	99.6
Waitrose	Yes			300	100
Waterstones	Effectively*			231	100
Wilkinsons	no	374	370	334	98.9
99pStores	Yes (visual) ≯			191	100

Notes:

≠ Where not assumed 100% and calculable, = column ‘b’ as % of column ‘a’.
* e.g. where a list can be searched up to 400 miles from a central location.
≯ in these ‘visual’ cases a complete map of locations to used source outlet locations.

Table 2: Summary statistics and z-test results.

	Mean	Median	N	z statistic	1-tailed probability
Waitrose	16.18	13.40	300	-14.59	> 0.9999
M&S Food	17.28	11.64	356	-14.73	> 0.9999
Boots	25.84	21.78	1997	-13.33	> 0.9999
Bargain Booze	26.71	23.97	498	-5.56	> 0.9999
Coral	28.11	25.21	1479	-6.56	> 0.9999
Waterstones	28.81	24.39	231	-1.99	0.9769
Next	29.00	26.74	423	-2.47	0.9933
Aldi	29.19	24.79	424	-2.26	0.988
Specsavers	29.42	25.95	508	-2.18	0.9854
Clinton Cards	29.49	25.60	339	-1.71	0.9559
Lidl	29.71	25.84	459	-1.72	0.957
M&S main	30.44	28.23	278	-0.65	0.7443
New Look	30.49	28.00	454	-0.78	0.7796
Ladbrokes	31.20	28.42	1716	0.15	0.4379
Argos	31.53	29.02	558	0.52	0.300
Asda	32.32	29.39	467	1.44	0.0742
TKMaxx	32.67	31.09	224	1.29	0.0978
Iceland	33.08	30.41	667	2.83	0.0024
Poundstretchers	33.55	32.80	280	2.28	0.0116
99pStores	34.30	33.83	191	2.46	0.0068
Wilkinsons	35.42	32.54	334	4.41	< 0.0001
Poundland	35.42	34.09	373	4.66	< 0.0001
Game	35.48	34.17	261	3.95	< 0.0001
The Money Shop	36.35	34.76	449	6.22	< 0.0001
Primark	37.34	35.37	128	3.95	< 0.0001
B&M	37.91	36.22	267	6.24	< 0.0001
CEX	38.04	35.53	205	5.57	< 0.0001
Farmfoods	38.61	41.12	196	5.89	< 0.0001
Cheque Centre	39.19	36.44	227	6.84	< 0.0001
Cash Convertors	39.26	38.91	212	6.66	< 0.0001
BrightHouse	41.79	40.37	230	9.10	< 0.0001
Poundworld	41.83	40.28	158	7.57	< 0.0001
H&T	41.95	40.84	171	7.97	< 0.0001
Ramsdens	42.70	44.03	70	5.45	< 0.0001
Cash Generators	43.06	40.09	179	8.99	< 0.0001
Albemarle & Bond	44.14	43.24	170	9.55	< 0.0001
PerfectHome	52.06	52.98	55	8.74	< 0.0001
All Outlets	31.14	28.23	15534		