

Retail in London: Looking Forward

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1. Executive Summary

Retail is important for London for a huge number of reasons. It links producers and consumers, it provides employment, and it contributes towards London's economy. Retail fills the capital's streets with shops Londoners and tourists want to visit, it stimulates significant amounts of transportation and it provides demand for other sectors and types of activity.

This importance is reflected in the volume and fervour of the debate surrounding the future of retail. Readers are unlikely to be surprised that an internet search for "the end of retail" currently yields over 17m results displaying a range of different opinions. With all these conflicting and contrasting views it can be difficult to cut through the assertions and received, but often unchallenged, wisdoms to form a measured outlook.

This is a problem that the report you are reading attempts to solve. It does this by making use of a range of data-sources and analytical techniques while also surveying and appraising a wealth of research and opinion-pieces on the retail sector to come to a more balanced view. Through reading the report, you will gain insight into the changes retailers have already had to deal with, those they will be confronted by in the future and the adaptations they are making. The report will also help explain the implications for London of the evolution in the retail sector as well as what policy makers might do to help ensure this evolution produces the best possible outcomes for the capital.

In putting forward this balanced view of retail in London and its future, the report is able to argue that while retail is indeed evolving, over time this evolution will result in a retail sector that continues to fulfil a number of important roles for the capital but does so in a way that better matches the changing customers and environment retailers are faced with. For example, despite the emergence of E-commerce making it much easier for producers to sell directly to consumers, retailers will continue to be important as intermediaries between consumers and producers, given the array of skills and capabilities they have for fulfilling this role.

Likewise, the sector will still provide work for a huge number of Londoners but the make-up of these roles may shift a little towards increasingly important functions such as data analysis, ICT or logistics, though customer service will remain a significant area of focus for firms. Retail will continue to be a sizeable component of London's economy, particularly as firms have opportunities to implement productivity boosting technologies and take greater advantage of the potential complementarities between online and offline operations.

These complementarities along with the growth in retail demand expected are among the reasons why predictions of a fast and substantial reduction in the usage of physical space by the retail sector appear off the mark. It is, however, likely that some local areas may already have more retail space than they are likely to need given that leading retail areas seem set to continue furthering their advantages over less buoyant locations.

Changes to the geographical distribution of retail activity will not only have implications for land use in London, they will also have an effect on retail-related transport. The emergence of E-commerce also has implications for retail-related transport, making the issue quite complex, but overall, the expected growth in retail demand is the prime reason to believe retail-related transport will increase. Changes to the transport-intensity of retail activity are, however, more difficult to judge.

It is a little easier to form judgements on retail's role in attracting tourists and providing custom for other sectors. For example, although tourists will increasingly be able to access many of the retailers

and brands in London in their home markets, the enjoyable experiences and ever-changing variety offered by London's retailers seems likely to remain a tourist pull.

Anticipating changes to retail's sectoral links also appears a little more straightforward as, for example, the growing focus E-commerce places on delivery performance suggests logistics-related firms might become even more important for retailers that out-source logistics. Similarly, firms in ICT, construction and marketing may all grow in importance for the sector as they offer the skills needed for retailers to address many of their priorities, should they choose not to carry out these functions in-house.

There is another group, however, that will be important in facilitating retailers' adaptations to their evolving customer base and environment; policymakers. Through the levers of planning, skills and taxation policy, amongst other areas, policy makers from a wide range of organisations have the ability to help the retail sector adapt and in doing so, deliver the best possible outcome for London.

A flexible planning policy could help retailers adjust their property portfolios to maximise their productivity and consequently their contribution to London's economy. Flexible planning may also aid UK retailers in maintaining their international E-commerce advantages as it may help them generate the profits they need for ongoing investments. Another benefit could be that retail space in locations of declining viability can be converted to other, more productive, uses.

As always, planning will need to consider the wider impact of changes alongside the various benefits that planning flexibility may bring. These wider effects or spillovers may be particularly important for decisions relating to urban distribution centres, and similar facilities which retailers may seek to establish; as such facilities might not be easily accommodated in all parts of the capital.

Alongside planning, policy makers will have an important role in considering how to continue to meet London's infrastructure needs over the long term. This will be important for retailers as E-commerce has made good delivery performance a key goal; one that will be more difficult to attain if infrastructure doesn't keep pace with demand. Delivering this infrastructure will only be part of the challenge as it will be equally important to ensure it is used efficiently so that potential issues such as congestion and pollution are controlled.

Additional areas where policy can help include measures to alleviate skills gaps through the education system or through allowing suitable skilled immigration, and reforming the business rates regime. Retailers would be better placed to adapt and become more productive if the way in which they were taxed didn't encourage them to inefficiently economise on their use of physical space.

These policy considerations have been formed following a logical analysis of retail in London and its future prospects. Through reading the full report, you will be able to gain a better understanding of where these considerations come from and form your own view on how important they are.

2. Introduction

This report aims to provide an update on retail in London and its prospects for the future, particularly focussing on issues that might be relevant for policy development. Through analysing emerging trends affecting the retail industry and the implications these trends may have, this report should contribute to a renewed understanding of the role of retail in London and how policy might support this.

A number of research methods have been used in the report ranging from data analysis to mapping and spatial analytical techniques. The research also involved an extensive literature review drawing on a variety of publication types including; the retail industry press, academic research and reports by consultancy firms and other bodies.

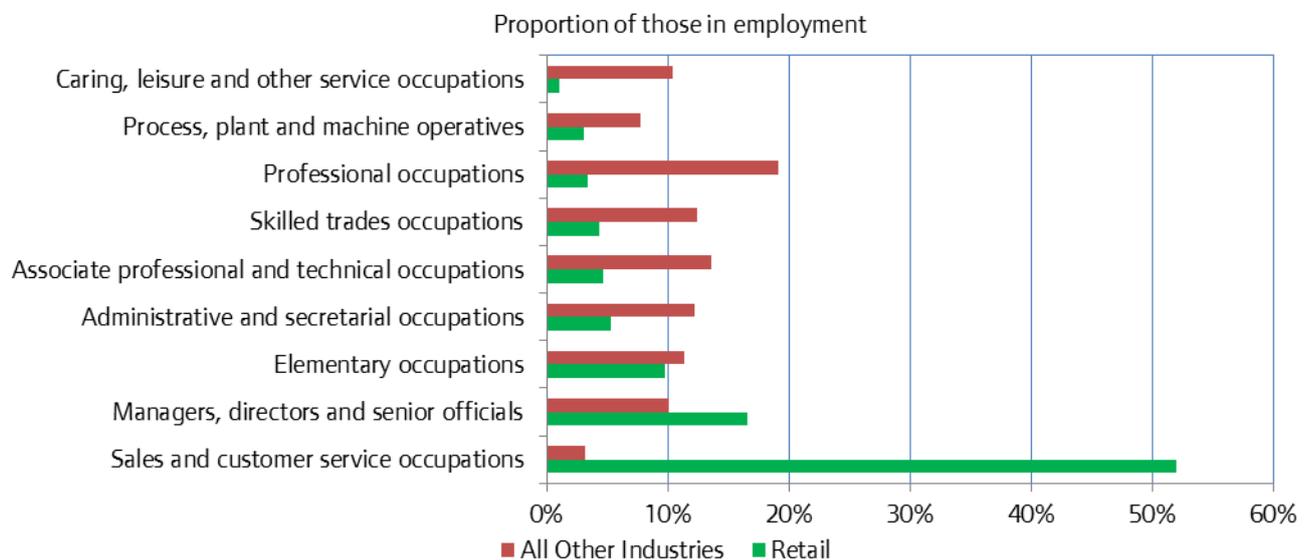
The report begins by briefly outlining the current state of retail in London touching upon retail expenditure and employment, amongst other useful contextual information. This is followed, in section 4, by a discussion of developments that are already affecting the retail sector or appear set to have an influence in forthcoming years. The responses retailers have made and are expected to make to these changes are examined in section 5, while the penultimate section of the report analyses what all of this means for the role of retail in London. The report then concludes by highlighting some key points to take away.

3. Retail in London Today

The retail trade sector performs a number of important roles for London including helping producers sell goods and consumers buy them, providing employment and contributing toward the vibrancy of London's high streets and town centres. This importance is reflected in the fact that the average London household spends around £160 on retail goods each week; over a quarter of their average weekly spending¹.

Such significant spending enables the retail sector to provide work for approximately 400,000 individuals in London². The majority of those employed in retail work in sales and customer service roles, but the sector also provides a significant number of managerial positions. In fact a greater proportion of those working in retail are managers than is the case in the rest of the economy, as shown in Figure 1.

Figure 1: Occupations of Retail Workers



Source: ONS 2011 Census

Not only does the retail trade sector provide a range of different occupations, it also offers many part-time roles and opportunities for younger people. For example, around 35 per cent of those in employment within the retail and wholesale trade sectors work part-time, relative to just 18 per cent in all other industries, while 21 per cent of those working in retail and wholesale trade are aged 24 or below, relative to around 9 per cent in all other industries³. These patterns suggest that the retail sector may play an important role in providing employment for younger people and those who want to work part-time. The sector also appears to be an important employer for women in London as around 54 per cent of retail employees are female compared to around 44 per cent of employees in the broader private sector in London⁴.

¹ ONS Family Spending 2013, average expenditure 2011 to 2013 - See section 9.1 for the definition of retail goods used

² ONS Business Register and Employment Survey: Retail Employment in 2013

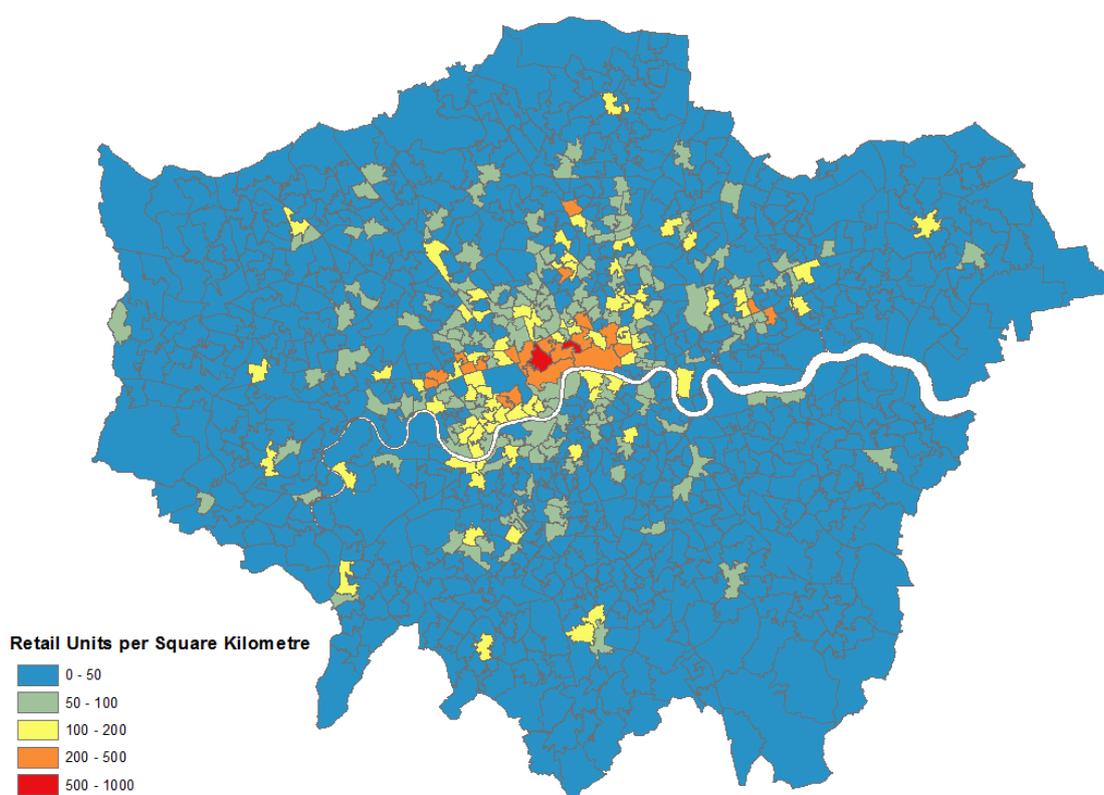
³ ONS 2011 Census, figures are for industrial section G: Wholesale and retail trade; repair of motor vehicles and motor cycles

⁴ London Business Survey 2014: Employees working in London businesses. Private sector is defined as all sectors except A, B, D, E, O, P, T and U (using SIC 2007 definitions)

Many of the employment opportunities that retail offers will be found in the approximately 43,000 retail trade establishments⁵ in London. As shown in Figure 2, these establishments are located all over the capital but there are also a number of areas which are densely packed with retail offerings, particularly in central London.

Unsurprisingly given the huge numbers of retail establishments in London, the sector accounts for around 17.0 million square metres of floorspace in the capital which is comparable to the floorspace usage of offices (26.7 million square metres) and industrial properties (21.1 million square metres)⁶. Westminster, Croydon and Kensington are the three boroughs with the largest amounts of retail floorspace while Richmond, the City of London and Barking and Dagenham have the least, but as Figure 2 highlights every borough has at least one area with more than 50 retail units per square kilometre.

Figure 2: Retail Unit Density of Middle Layer Super Output Areas in London, 2014



Source: ONS UK Business Counts, Local Units

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These retail offerings provide a wide range of goods including those needed on a day-to-day basis such as food and drink, referred to as convenience goods, as well as more significant purchases, often called comparison goods which can include anything from clothing to audio-visual equipment. Both categories of retail good account for around 13 per cent to 14 per cent of weekly spending by London households⁷, however, London households are not the only groups that make use of London's retail

⁵ ONS UK Business Counts, Local Units in 2014

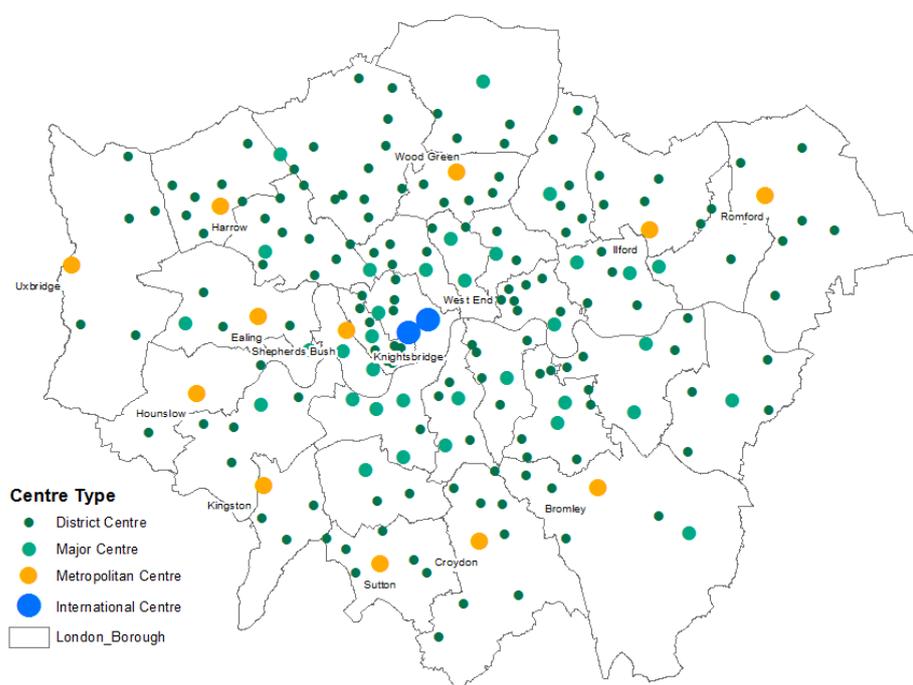
⁶ VOA Business Floorspace Statistics, 2012

⁷ The definitions used for convenience and comparison retail can be found in the annex (section 9.1)

offer as commuters and tourists also contribute significant spending. Experian (2013) estimates that the amounts spent on comparison goods by tourists and commuters make up around 9.5 per cent and 8.6 per cent of the estimated £18.6bn total yearly spend, respectively⁸.

Tourists are particularly important for spending in some of London's highest profile retail areas such as the West End and Knightsbridge (shown in Figure 3 as blue circles) where Experian (2013) estimates tourist spending accounts for 28 per cent and 26 per cent of expenditure respectively. Tourist spending is estimated by Experian to be even more important for the retail areas of Victoria Street in Westminster and Ealing Broadway, while the retail areas at London Bridge, and Liverpool Street and Bishopsgate receive a much higher than average proportion of spending from commuters.

Figure 3: Retail Areas in London



Contains National Statistics and Ordnance Survey data © Crown copyright and database right 2013 NB Stratford will be elevated to a Metropolitan Town Centre as a result of further alterations to the London Plan (Mayor of London, 2014)

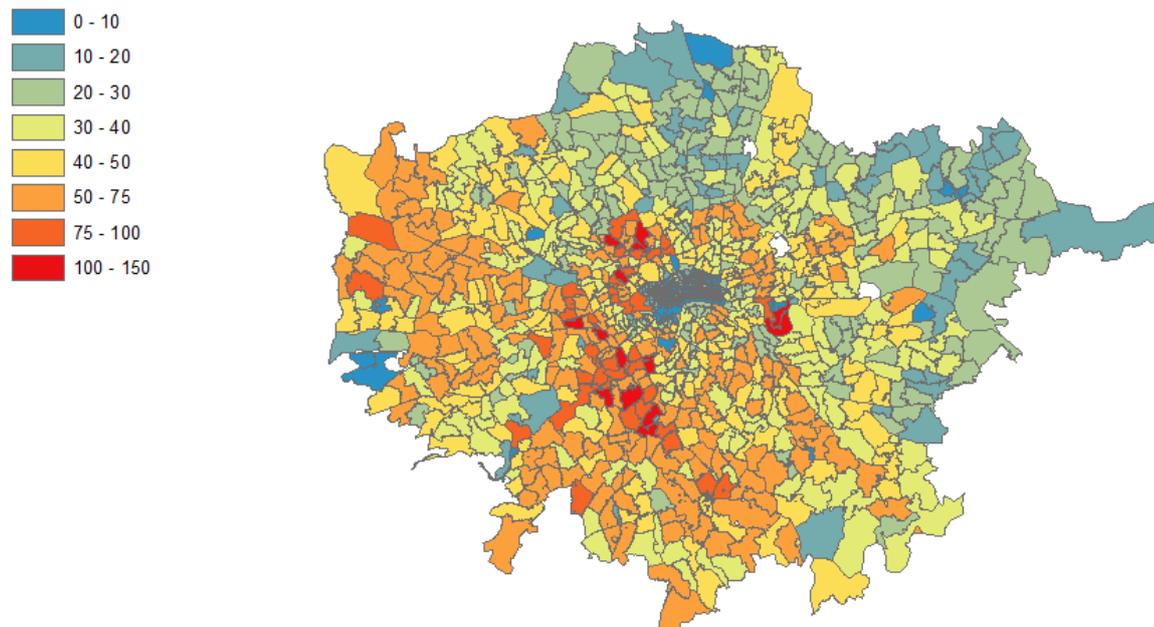
Much like the pattern of retail establishments, retail spending also appears to be unevenly distributed across London. Experian (2013) estimates of this spending, on a consumer residence basis, are shown in Figure 4 and display a somewhat different pattern to that of retail unit density. This is because although retail establishments are highly concentrated in central London, much of the spending power these establishments rely on appears to be located further from the centre, particularly in South and West London, though as previously mentioned tourists and commuters are important sources of spending too.

⁸ Experian (2013) Consumer Expenditure and Comparison Goods Floorspace Need in London. Estimated spend figures relate to 2011

The slight mismatch between the most retail-dense and spending-power-dense areas may make some contribution towards the substantial amount of shopping-related travel in London. Carrying out shopping and personal business was reported by TfL to be the purpose of around 20 per cent of journeys made by London residents using mechanised transport modes in 2011/12⁹.

Figure 4: Experian Estimates of Household Comparison Goods Expenditure, 2011

Experian Forecast of Retail Expenditure, 2011 £mn (2009 prices)



Source: Experian (2013) Consumer Expenditure and Comparison Goods Floorspace Need in London.

London residents are not the only important group for retailers as, although the retail sector does not generally count other businesses as customers¹⁰, it uses a range of other sectors as suppliers. Table 1 lists the top 15 sectors which supply UK retailers, highlighting the links between retail and other activities. These links appear particularly strong with construction firms, business services providers, producers and logistics-related firms.

⁹ TfL (2013) Travel in London Report 6. Mechanised modes do not include walking or cycling

¹⁰ The 2010 Input Output Analytical tables for the UK list total intermediate demand for retail trade services (except motor vehicles and motorcycles) as 0.

Table 1: Intermediate Consumption by Retail Trade, 2010

Sector	Proportion of Intermediate Consumption
Construction	23.6%
Real estate services, excluding on a fee or contract basis and imputed rent	11.2%
Services of head offices; management consulting services	10.2%
Financial services, except insurance and pension funding	5.6%
Land transport services and transport services via pipelines, excluding rail transport	3.9%
Advertising and market research services	3.6%
Electricity, transmission and distribution	2.8%
Computer programming, consultancy and related services	2.4%
Wholesale and retail trade and repair services of motor vehicles and motorcycles	2.1%
Bakery and farinaceous products	2.1%
Warehousing and support services for transportation	2.0%
Travel agency, tour operator and other reservation services and related services	1.9%
Other food products	1.8%
Processed and preserved fish, crustaceans, molluscs, fruit and vegetables	1.8%
Architectural and engineering services; technical testing and analysis services	1.8%

Source: ONS Input Output Analytical Tables, 2010. Excludes retail trade of motor vehicles and motor cycles

The prominence of logistics and transport services in retail's intermediate consumption is unsurprising given that goods transport is an important activity for the sector. The actual amount of travel in London which relates to retail goods transport is difficult to quantify but there are around 4.7bn vehicle kilometres performed by goods vehicles on London roads each year¹¹ and retail is likely to account for a significant proportion of this.

Warehousing is another activity strongly related to retail though again it is difficult to pinpoint exactly how much warehousing activity is retail-related. London has around 21.1m square metres of industrial floorspace¹² and a share of this will be warehousing used by or on-behalf of retailers, taking the physical imprint of retailing on London above the 17.0m square metres used as retail premises. Roger Tym & Partners (2011) suggests that around 35 per cent of London's industrial land is used for warehousing which would suggest there is around 7.3m square metres of warehousing in the capital though not all of this will be retail-related.

Retail, therefore makes a significant physical mark on London in addition to playing a vital role for the capital in many other ways. This section has briefly outlined this role by explaining that retail provides around 400,000 jobs, many of which provide opportunities for women, younger workers and those who want to work part-time.

Not only does London's retail offer provide jobs, it also enables residents of the capital and those travelling to London to purchase the goods they need. Within London, travelling to the shops accounts for a great deal of transport demand with 20 per cent of the journeys made by residents of the capital carried out for shopping and personal business purposes.

Retail doesn't just stimulate personal transport; it also requires goods transport with around 4 per cent of the sector's intermediate consumption going on land transport services. Unsurprisingly the sector also counts warehousing firms as key suppliers meaning that the direct and indirect physical imprint of London retailers goes beyond just the space used for stores. All of these ways in which retail plays a

¹¹ TfL (2013) London Freight Data Report: 2013 Update. Figures relate to 2011

¹² VOA Business Floorspace Statistics, 2012. Industrial floorspace also includes other uses such as factories or workshops, full details can be found [here](#)

role in London are summarised in Table 2, however, these roles may change over time and the next section will begin to outline why this may be.

Table 2: Summary of Retail’s Role in London and Impact on London

Recent Years
Linking consumers with producers
Providing employment, particularly for women, younger workers and those who want to work part-time
Contributing towards London’s economy
Filling high streets and major centres with shops people want to visit
Attracting tourists from the rest of the UK and the rest of the world
Stimulating significant amounts of personal and goods transport
Providing demand to other sectors of the economy such as construction, logistics and warehousing

4. The Changing Retail Landscape

The previous section described retail in London today, pointing out, for example, that the sector employs around 400,000 people spread across approximately 43,000 establishments. In getting to this stage, the sector has already been influenced by a number of changes, many of which look set to continue over the forthcoming years.

This section outlines these recent changes to the retail landscape and considers whether they may persist, evolve or possibly be accompanied by additional developments. The section is divided into two components which discuss the changing customer base for London's retailers and the changing environment they operate in.

4.1. Changing Customers

4.1.1. Growth in the Customer Base

London's retail firms have access to many more customers than in the past. In 2013 London's population stood at 8.4m, around 1.0m more than a decade ago and further growth is expected. The latest GLA population projections suggest that London's total population will increase by around 1.7m to approximately 10.1m people in 2036. This population growth is expected to be accompanied by a reduction in the average size of London households from 2.5 people per household to just 2.3, which suggests that the 1.7m extra people will translate into 0.9m additional households by 2036¹³.

Population growth has also occurred in recent years in the areas that surround London. This too is expected to continue with the South East region forecast to have an additional 1.5m people in 2036 relative to 2013, and the East of England an additional 1.0m¹⁴. Many of these individuals will make use of London's retail offer, further increasing customer numbers.

Yet more additional custom will come from growing tourist inflows. London has already seen significant growth in tourist numbers in past decades but GLA Economics' latest forecasts suggest that the capital will host around 55m additional visitor nights in 2036 (relative to 2011)¹⁵. Since these forecasts were made, changes to the UK Visa application process in China have been announced which should make it easier for Chinese tourists to visit the UK. At present there are already an estimated 1.3m Chinese visitors to Europe each year who do not include the UK in their itineraries¹⁶, so attracting some of this group could boost tourism inflows beyond the currently anticipated growth (UK China Visa Alliance, 2014).

The recent growth in the customer base London's retailers can cater for consequently appears to be a trend set to continue. This is because population growth is expected within the capital and in the regions nearby, and there are also expectations of increased inflows of tourism.

4.1.2. Altered Customer Characteristics

London retailers will not only have more customers but will deal with a customer set whose characteristics are changing over time. For example in London, as shown in Figure 5, the resident population is likely to change in composition with older people seemingly set to make up a larger share

¹³ GLA 2013 Round Demographic Projections, Central Scenarios

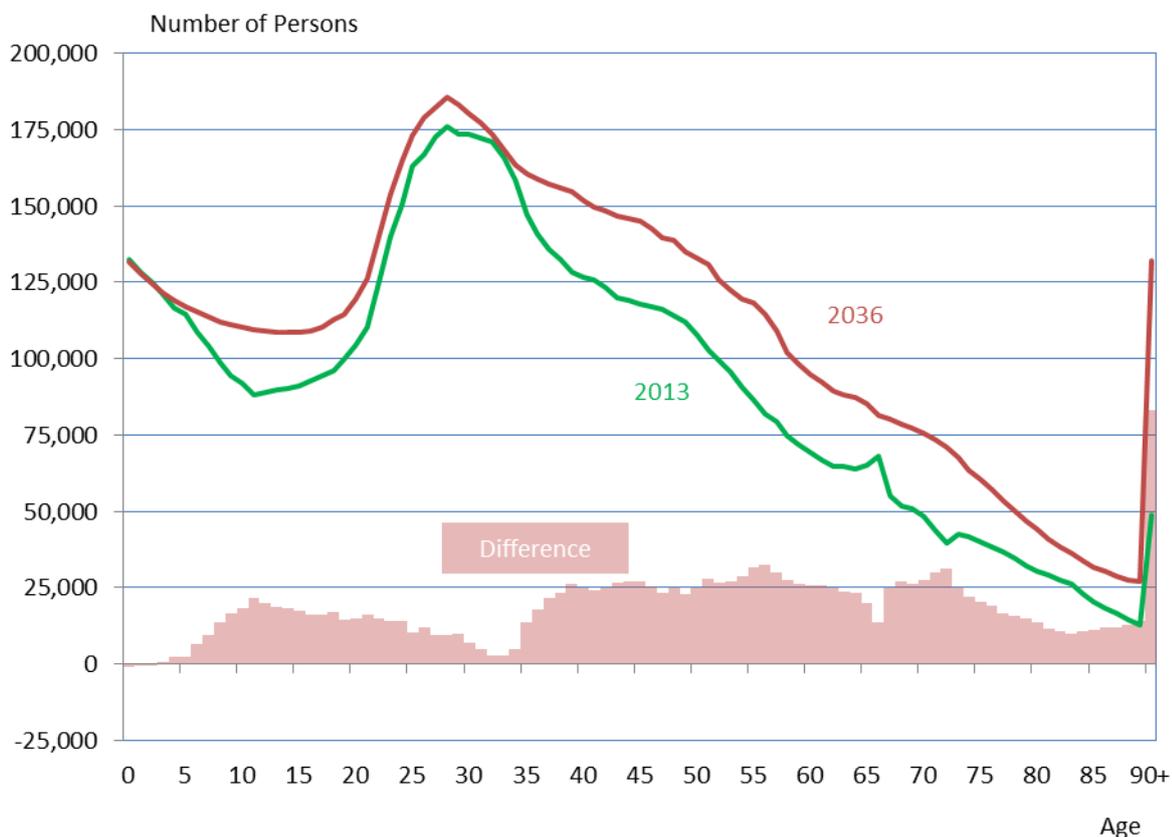
¹⁴ ONS 2012-based Population Projections

¹⁵ Kyte, S., & Moroney, S. (2013) - Understanding the demand for and supply of visitor accommodation in London to 2036

¹⁶ Estimate taken from UK China Visa Alliance (2014) Building on Progress: The case and recommendations for streamlining the UK visa application process for Chinese visitors

of the population. For example in 2013, around 0.6 per cent of Londoners were aged over 90 but by 2036 around 1.3 per cent of the capital's population are expected to be over 90¹⁷. Similar changes are expected in the South East and East regions where the populations are also expected to shift a little towards older individuals.

Figure 5: Forecast Population Change in London



Source: GLA 2013 Round Demographic Projections, Central Scenario

In addition to London consumers becoming older on average, they may also become richer. GLA Economics latest forecast¹⁸ for the total amount of household income in the capital predicts growth of between 2.2 per cent and 2.5 per cent each year for the years 2014 to 2016, a faster rate than the growth of population implying that households will become richer. Over the long term, household incomes have grown by around 2.4 per cent on average in the UK¹⁹ each year so if growth at similar rates was to occur up until 2036, that would entail an overall increase in household income of comfortably over 50 per cent by 2036.

If incomes do indeed grow over the forthcoming years, it will provide stark contrast to the past decade which has seen wages, the major component of most incomes, stagnate. For example, Levy (2013) estimates that wages in London in 2012 were at broadly the same level as 2002, when the effects of rising prices are taken into account, as declines since 2009 have offset the growth that occurred between 2002 and 2009.

¹⁷ GLA 2013 Round Demographic Projections, Central Scenarios

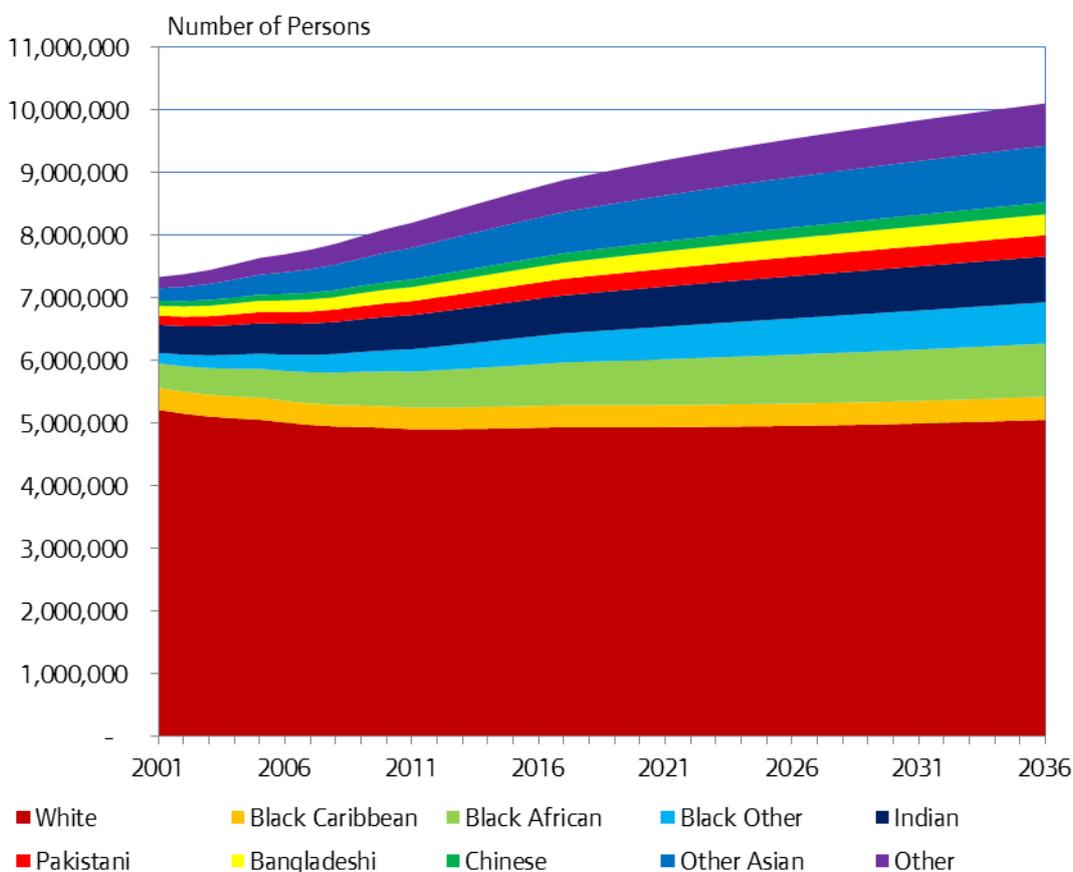
¹⁸ GLA Economics (2014) London's Economic Outlook: Autumn 2014 - The GLA's medium-term planning projections

¹⁹ ONS Equivalised disposable household income, 1977-2012/13 (2012/13 prices)

Other changes to the characteristics of the customer base for London retailers include increasing levels of education and better health. For example in 2013, around 42 per cent of the working-age population in London had a degree or above, compared to just 27 per cent in 2004, while 2013 saw only 235,000 London residents out of the labour force due to long- or short-term health problems compared to around 272,000 in 2004²⁰.

A final important change to note is that London has been becoming ever more ethnically diverse over the past few years. This trend is set to continue according to the latest GLA demographic projections which suggest that by 2036 roughly 50 per cent of London residents will be from Black, Asian and Minority Ethnic groups compared to around 42 per cent in 2013, as shown in Figure 6.

Figure 6: GLA Ethnic Group Projections until 2036



Source: GLA 2013 Round Demographic Projections, Central Scenario

The core customer set London’s retailers deal with appears to have changed in characteristics over the past few years with older people making up a larger share of the increasingly well-educated, diverse and healthy population. These trends look set to continue but the recent stagnation in incomes is expected to come to an end in the next few years.

4.1.3. Different Customer Behaviour

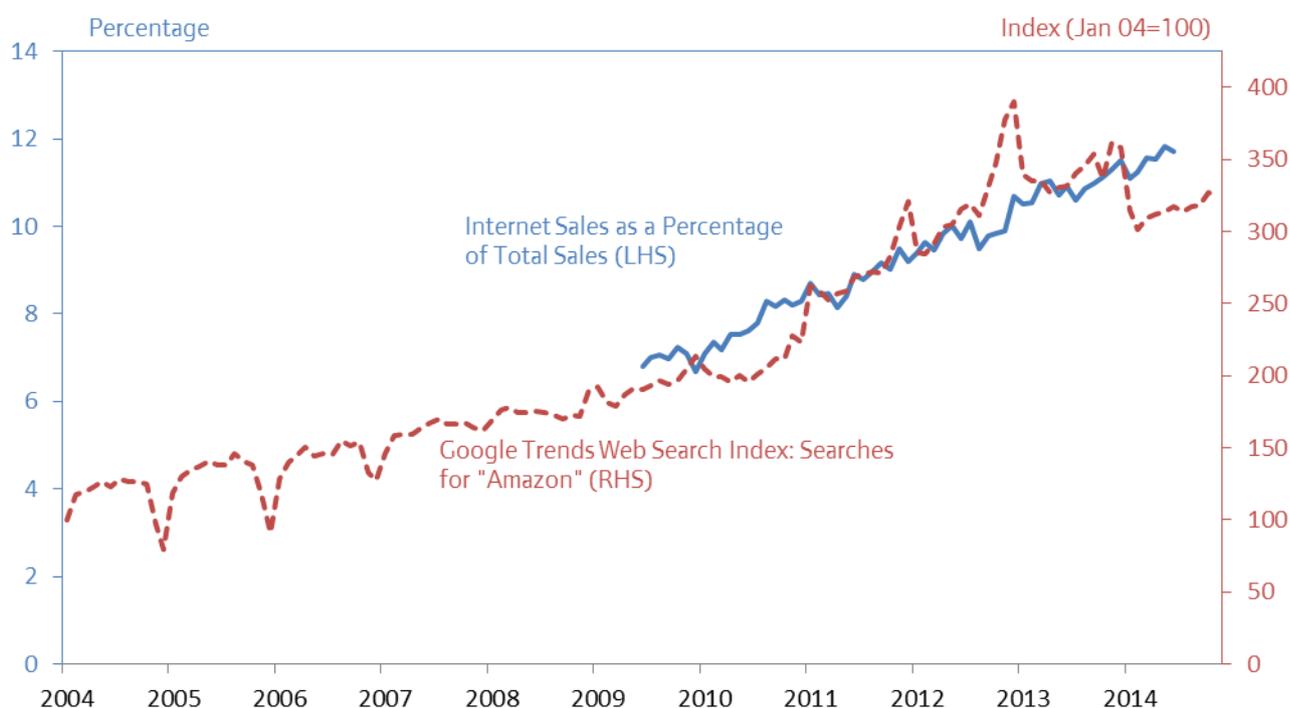
The changes in characteristics mentioned in section 4.1.2 have been coupled with changes in behaviour with individuals increasingly fragmenting their activities into separate elements which can be carried out at different times and in different places (Alexander, Hubers, Schwanen, Dijst, & Ettema, 2011).

²⁰ ONS Annual Population Survey/ Labour Force Survey 2004 and 2013

This type of behaviour has been made easier by advances in ICT and transport technology and within the context of retail, could involve breaking down the activity of purchasing a product into product discovery, product research and product payment phases. A consumer could conceivably discover a product through a friend’s recommendation on social media, research the product using their mobile phone while on the bus the next day and actually buy the product in-store at the weekend.

Clearly, there are many other possible combinations of channels through which consumers can now discover, research and purchase goods, and consumers have been fairly quick to embrace these new opportunities. Electronic and mobile-commerce (often referred to as E- and M-commerce) are two major new channels which have grown in importance in recent years. Data from the ONS suggests that online sales now account for around 11 per cent of sales values relative to just 7 per cent or so in 2010 and although official data do not go back beyond 2009, proxy measures suggest E-commerce may have been gaining market share at similar rates in earlier years (see Figure 7).

Figure 7: Growth in E-commerce



Source: ONS Retail Sales June 2014 and Google Trends. Both measures have been seasonally adjusted

Further growth is expected in consumers’ use of these channels which help facilitate them in fragmenting their shopping activity. Experian (2013) forecasts that special forms of trading, which include other non-store channels²¹ as well as online sales, will reach around 20 per cent of the value of comparison goods sold by the early 2020s, while they expect around 12 per cent of convenience goods to be sold using special forms of trading by the same year.

To merely focus on the proportion of sales made online would perhaps be to understate the extent to which ICT and fragmenting behaviour has changed, and will continue to change, the way consumers make purchases. This is because even where the final purchase takes place in a store, online research, recommendations and offers may well have played an important role in earlier stages of the purchasing activity. For example, PWC (2013) suggests that when buying consumer electronics, 23 per cent of the consumers surveyed prefer to research the products online before buying them in store. When added to

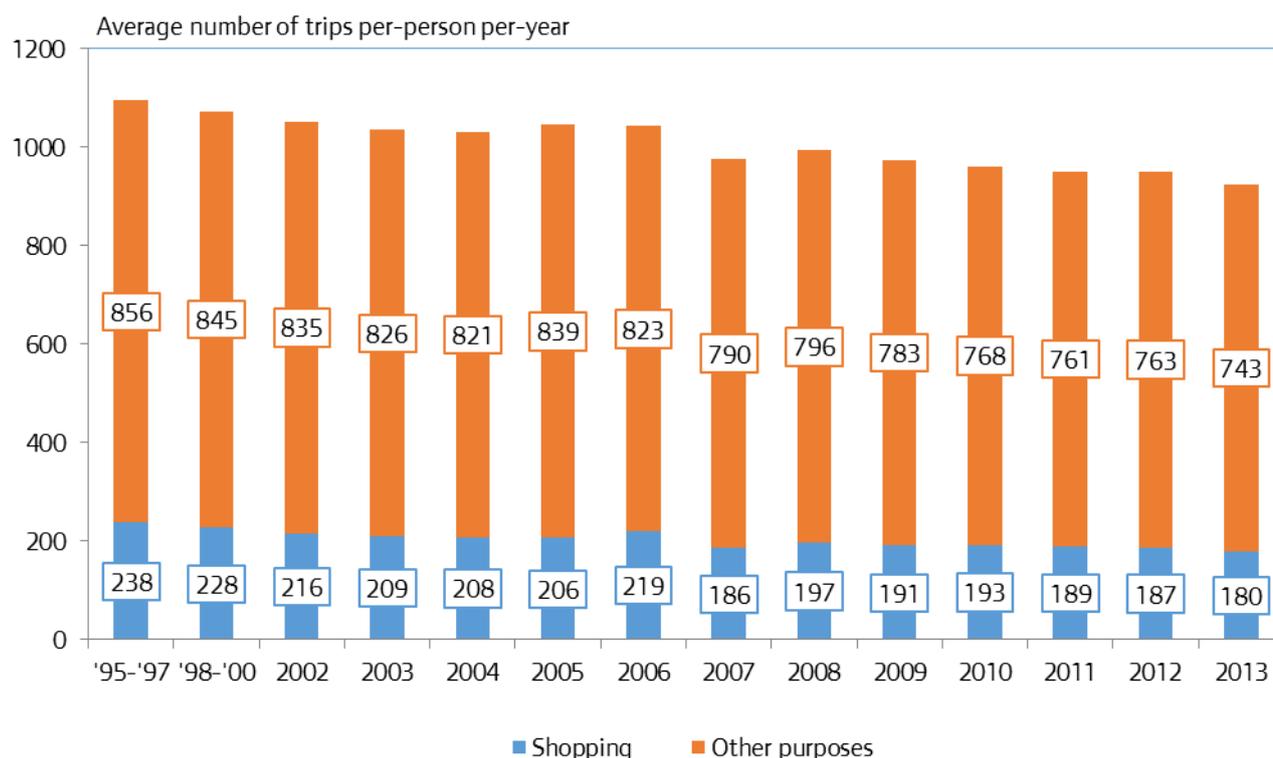
²¹ Markets, market stalls, door-to-door sales, telephone sales and mail order

the 40 per cent or so of customers that preferred to research and buy online, this means that the majority of customers in this segment are influenced by E-commerce.

The growth of E-commerce may have also been stimulated by other behavioural changes such as consumers becoming more frugal in their shopping habits as a result of the stagnation in wages mentioned in section 4.1.2. E-commerce is particularly compatible with a frugal approach to shopping as it allows consumers to search for the best available products and prices quickly and easily, however, frugality has also affected consumers’ offline shopping habits, encouraging use of discount retailers. Some commentators have cautioned that frugal shopping habits may not be immediately jettisoned even when incomes recover (Retail Week, 2014).

Another trend highlighted by some industry experts is the suggestion that consumers are now shopping for groceries more often (KPMG/Ipsos Retail Think Tank (2014), CBRE (2014), (Wrigley, 2014)). Although official data on this topic, which do not distinguish between different types of shopping trip, do not provide support for this claim (in fact quite the reverse - see Figure 8), the results of a recent smaller scale survey which focussed on grocery shopping trips presented in IGD (2014), did provide some support for this idea. Further support comes from some of the arguments put forward by industry experts in the recent House of Commons sessions on the retail sector (James (2014), CACI (2014)) and another small survey summarised in Shoppercentric (2014).

Figure 8: Shopping Trip Rates over Time



Source: DfT National Travel Survey

If grocery shopping frequency has indeed increased, such a trend could fit in well with the idea of consumers becoming more frugal as more frequent shopping could be consistent with consumers seeking out the best discounts or aiming to avoid waste. Increased shopping frequency could also be consistent with decreases in the opportunity cost of shopping given the real wage declines mentioned

in section 4.1.2²². There could, however, be other underlying reasons for this reported change, such as the fragmenting behaviour already discussed, and this means it is difficult to anticipate whether it may persist. If it is largely driven by frugality and the declining opportunity cost of shopping then consumers may abandon the practise as their incomes recover, however, if they are shopping more frequently in order to fragment their grocery shopping then they may continue to do so.

Other behavioural changes which may have had implications for retailers include consumer participation in the 'sharing economy' and consumer desires for experience retail. The difficult economic conditions customers have been dealing with may have partly driven emergence of the sharing economy, a term for arrangements where individuals rent out their surplus or under-used assets (PWC, 2013). The most well-known example of the sharing economy is Airbnb²³ which is primarily of relevance to the hospitality industry but there are examples of relevance to the retail sector²⁴. Those renting out their assets may benefit from some additional income while those paying to use others' assets may benefit from not having to purchase the item in the first instance, both of which may have implications for retailers.

Experience retail relates to shopping experiences which are enjoyable in their own right, rather than just being about successfully purchasing a desired good (Department for Business Innovation and Skills, 2013). The enjoyment of browsing and examining goods in person has always been an element of shopping trips, but with the emergence of E-commerce, consumers have more ways to buy goods so may be less likely to visit physical stores unless they provide an enjoyable experience (Hart and Laing, 2014). Consumers may become even more demanding regarding the quality of in-store experiences as technological advances continue to make the online experience better.

Overall, recent changes in consumer behaviour such as increased fragmentation of activities, consumer frugality, more frequent grocery shopping, use of the sharing economy and desires for experience retail will have been important developments for retailers. Most of these behaviour changes seem likely to persist in forthcoming years, however, consumer frugality may gradually become less commonplace and grocery shopping frequency could reduce if frugality was the main motivation for this change.

4.1.4. Summary

The customers that London retailers cater for have changed notably in recent years with population growth in London and the greater South East and increased tourism inflows adding to their number while other demographic trends have resulted in them being healthier and better qualified. These changes have, however, occurred against a backdrop of stagnant incomes and behavioural changes which have meant present day consumers have relatively frugal shopping habits and are increasingly fragmenting their shopping activity.

Many of these recent changes seem set to persist as, for example, further population growth and tourism inflows are anticipated as is a continuation in the growth of consumers using E-commerce and online product research. One aspect of the recent experience that seems less likely to persist is the subdued growth in incomes, however, even when income growth returns some consumer habits picked up in recent years may persist. Adapting to these customer changes will be a key concern for retailers

²² An argument could be made that decreases in the opportunity costs of shopping could have been even larger than those implied by data on real wages given that (as demonstrated in Blanchflower and Bell (2013)) the recent recession and recovery were associated with an increase in under-employment. Consequently, for more people, their real wage might have been an overestimate of the value they place on their time.

²³ A website through which individuals can offer their spare accommodation, whether this is a spare room or entire property, to the holiday letting market

²⁴ For example, RentMyItems.Com allows people to offer their spare tools and equipment to others

who will have to do this in an evolving environment. The next section outlines what this changed environment might entail.

Table 3: Summary of Changes to Customers

Recent Years	The Near Future
Substantial growth in population and tourist inflows	Continued growth possibly enhanced by increased inflows of Chinese tourists
Ageing of domestic customers	Continued shift toward older age groups
Stagnant incomes	Return of income growth
Improving health and education levels	Ongoing improvements to health and education
Increased diversity	Further increases in diversity
Fragmenting behaviour	Continued preferences for fragmenting
Frugality	Persistence of frugality in the shorter term, possibly reducing as incomes recover
Suggestions that the frequency of grocery shopping has increased	Persistent in the shorter term but possibly reducing as incomes recover. Alternatively, if it reflects fragmenting behaviour, it may continue
Some participation in the sharing economy	Growing awareness and use of the opportunities offered by the sharing economy
Desire for experience retail	Enjoyable experiences even more necessary for customers to visit stores

4.2. Changing Environment

4.2.1. Economic Conditions

The past few years have presented retailers with a very challenging environment to operate in. The UK's gross domestic product (GDP) declined by around 6 per cent from early 2008 to mid-2009 and only in the latter half of 2013 did the economy return to where it was in early 2008 (Office for National Statistics, 2014). Similarly, retail sales volumes were also very subdued during this period, as Figure 9 shows.

Figure 9: UK Retail Sales Volumes



Source: ONS Retail Sales October 2014. Data are seasonally adjusted

To combat this economic strain, interest rates in the UK have been very low for a number of years providing some respite to indebted firms facing difficulties. However, despite the low interest rates, the lending environment has not been favourable in many other respects in recent years; for example, the stock of lending to non-financial companies has been in continual decline since 2009, (Bank of England, 2014). Lending conditions appear to have been particularly difficult for smaller firms that have access to fewer lending channels and face loans that are priced at higher rates (Bank of England, 2014).

The most recent developments in the economic environment have, however, been a little more positive as UK GDP has increased in each of the last six quarters, relative to the preceding quarters (Office for National Statistics, 2014) and credit availability for small businesses has improved (Federation of Small Businesses, 2014). London has also experienced positive growth in output in recent quarters and the latest GLA Economics forecasts suggest this will continue throughout the forecast period which runs until 2016.

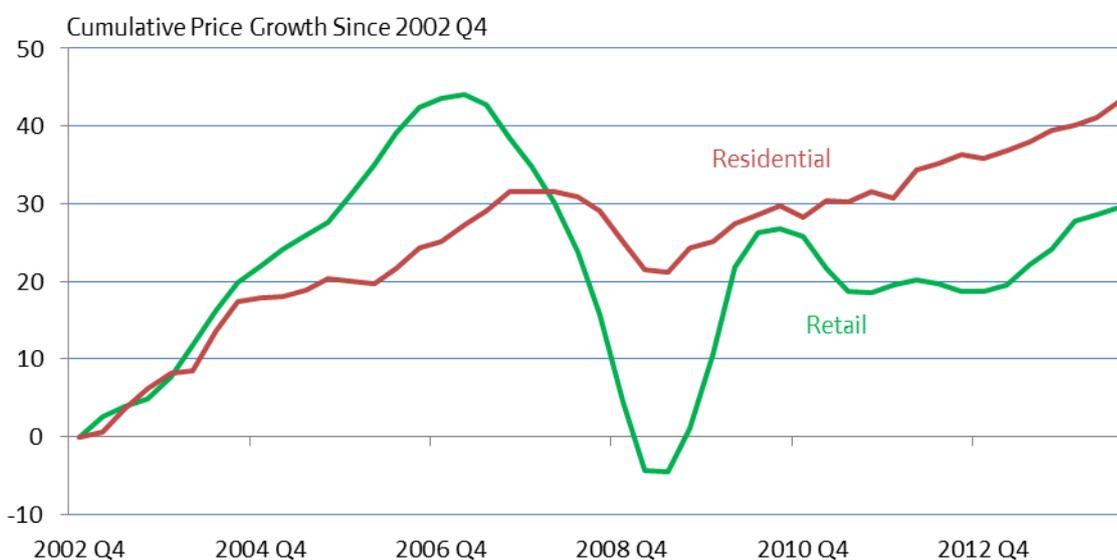
Continued growth in the economy and improvements in credit-access are likely to be beneficial developments for most retailers, however, as economic circumstances improve; the likelihood of the Bank of England increasing interest rates grows. Papworth (2013) argues that some firms in the UK have only survived the recent recession due to the prevailing low interest rates and forbearance by lenders, so when interest rates do begin to rise, these firms may begin to fail.

On the whole therefore, economic conditions have not been favourable in recent years though low interest rates will have provided some respite. These adverse conditions have slowly been improving and the tentative recovery underway looks set to continue, accompanied by eventual interest rate increases.

4.2.2. Property Market Conditions

The recent low interest rate environment may have played a role in another trend of relevance to the retail trade sector; the substantial increase in house prices that has taken place in recent years. This is one of the most noticeable and commented upon trends affecting London and it has implications for retailers as although retail property prices have also increased, their increase appears to be somewhat smaller than that of residential property, at least based on the UK data shown in Figure 10.

Figure 10: Evolution in Residential and Retail Property Prices



Source: DCLG Mix-adjusted House Prices and RCA/PD Commercial Property Price Indices

This difference in price growth may have increased the incentive for land owners to use their land for residential property rather than retail property (where planning regulations allow them). This incentive could be fairly strong as rough calculations based on figures relating to Hackney and Tower Hamlets in BNP Paribas (2012) and BNP Paribas (2013)²⁵ suggest that residential property values may be between two and seven times greater than retail property values in these boroughs²⁶.

Clearly property owners and developers' decisions about the best use for their land will be affected by many other factors, such as building or conversion costs, but this growing divergence between residential and retail property prices use may lessen the availability of retail space relative to a scenario where retail and residential property prices change at the same rate. This trend could conceivably persist as Savills (2014) forecasts cumulative house price growth of 22 per cent in London up until to 2017, which is marginally higher than the RBS (2014) forecast for central London retail of around 18 per cent growth and substantially higher than the RBS forecast for retail in London suburbs of around 1 per cent growth over the same period.

Overall, some owners of London property or land are likely to have had increasing desires to use these holdings for residential purposes. These desires may well get stronger as residential and retail property

²⁵ Community infrastructure levy viability reports for Hackney and Tower Hamlets

²⁶ Details of the calculation can be found in the appendix

prices are expected to continue to diverge, however, the planning system has and will continue to limit the extent to which these desires can be realised.

4.2.3. The Planning Environment

As mentioned above, a key moderating factor for any land use changes is the planning system. Prior to April 2014, conversions from retail to residential premises required planning permission but this changed following a recent DCLG consultation which sought views on allowing small shops to be converted to residential properties under permitted development rules, a much easier process (DCLG, 2014). The use of these permitted development rights is subject to a number of prior approvals from planning authorities (relating to subjects such as transport, flooding and shopping impacts²⁷) but as it represents an easing of the conversion process it could conceivably contribute to a loss of retail space in some areas given the potential financial incentives for changing use in London.

Planning clearly has a much broader effect on the retail trade sector than just affecting potential changes of use; it also has an influence on the size and location of sites planners make available to retailers. This in turn can influence the productivity that retailers using the sites are able to achieve. One relevant recent change in this area is the 1996 introduction of Town Centre First planning policies which, as the name suggests, aimed to concentrate new retail premises in existing town centres.

The effects of this policy on productivity are investigated in Cheshire, Hilber and Kaplanis (2014) which analyses data from a large retail chain to ascertain whether stores opened after Town Centre First increased planning restrictiveness are more or less productive. The paper's results suggest that this policy has had an adverse effect, substantially reducing the output of stores established during the more restrictive planning environment post-1996.

The paper argues this may be because such planning restrictiveness raises land costs, encouraging smaller stores to be established, and impinges on location choice, possibly forcing retailers to use sites with inconvenient layouts or inferior accessibility. The resulting stores may incur higher logistics costs, host smaller product ranges and have greater stock control issues than larger out-of-town alternatives. This is a view echoed by CBI (2014) which argues that looser US planning laws, which permit larger, more efficient stores, are part of the reason why the productivity growth of retail and other distributive trades in the UK has lagged that seen in the US.

One note of caution regarding these arguments, however, is that although being forced into compromising on location choice may harm productivity for the firm in question it could potentially protect other firms. For example, James (2014) argues that approval of large out-of-town retail stores can dampen prospects for the remaining retailers in town centres who may experience reduced footfall as consumers are attracted to the new development. Another potential motivation for such a policy could be facilitating access to goods through concentrating development in frequently well-connected town centre locations.

In terms of how planning restrictiveness may change in the coming years, the aforementioned introduction of permitted development rights provides one clue and, despite the fact that Town Centre First remains in place, there has been an additional recent development which gives reason to believe planning restrictiveness may decrease. This development is the introduction of the Business Rates Retention scheme for Local Authorities in 2013 which, as explained in the next section, may make Local Authorities more willing to allow development.

²⁷ See Department for Communities and Local Government (2014)

Overall, retailers have faced a relatively restrictive planning environment in recent years which has attempted to focus development in existing town centres. Planning regulations have been relaxed by allowing easier conversion of small shops to homes but there may also be less restrictiveness over future planning decisions as a result of business rates retention.

4.2.4. Business Rates Arrangements

The new Business Rates retention scheme has already changed how the public sector deals with Business Rate receipts in a way that should give Local Authorities stronger incentives to facilitate commercial property development such as the addition of new retail space. Under the new arrangements Local Authorities retain between 25 per cent and 50 per cent of growth in business rates revenue from new properties whereas in the past this growth would have been put into a central pot with all the other receipts and redistributed through a complex system of grants (Institute for Fiscal Studies, 2014).

As Local Authorities now receive direct and certain benefits from permitting new developments they are likely to become more permissive. This could help retailers secure sites more easily and gain permission to develop at locations that more closely match their preferences, both of which could be beneficial for their productivity.

Business rates policy is also relevant to the retail sector for a number of other reasons. Firstly, the nature of the tax, which is levied on property values, may affect retailers' operating choices by inefficiently discouraging them from using larger, more valuable premises which would attract a higher tax burden (Institute for Fiscal Studies, 2014). The method of setting the tax, which results in rates increasing broadly with inflation in-between revaluations, is also important to retailers. This is because the business rates due on a specific site do not immediately change to reflect the underlying profit-potential of that site. In an environment with relatively high inflation and weak demand, much like in recent years, a particular business property may incur higher rates despite offering less profit potential.

The recent change to the schedule of rateable values recalculation, which now means no revaluation will take place until 2017 (instead of 2015 as scheduled) is also relevant to retailers. This is because it may have provided London retail businesses with a temporary reprieve from facing a higher tax burden than they otherwise would²⁸ (Valuation Office Agency, 2012). Other temporary measures may have also provided some protection for retailers. These include the temporary introduction of a £1,000 business rate discount²⁹ (increased to 1,500 in the 2014 Autumn Statement³⁰) for retail properties with a rateable value below £50,000, the 50 per cent discounts for businesses moving into previously vacant units and the continuing enhanced rate relief for small businesses³¹.

Of these other effects of business rates on the retail trade sector, some clearly will change in the future, such as the various temporary measures and the delay to the recalculation of rateable values, while the nature of the tax and its effects on firm choices are unlikely to alter (though the review announced in the 2014 Autumn statement³² and the potential for further devolution³³ do offer some hope). This will mean that retail firms in London are likely to face higher business rates, once rateable

²⁸ As the rateable values of London retail properties have declined by less than other commercial property categories in the UK, their rates are likely to go up given that Business Rates are set to keep the real value of receipts stable over time (Valuation Office Agency, 2012).

²⁹ Covering the period 2014 to 2016

³⁰ HM Treasury (2014) Autumn Statement 2014

³¹ A temporary increase of rate relief for businesses occupying low value properties was brought in during 2010 and has been renewed several times (Institute for Fiscal Studies, 2014). The 2014 Autumn Statement extended this relief until April 2016

³² HM Treasury (2014) Autumn Statement 2014

³³ London Finance Commission (2013) Raising the Capital

values are recalculated and the temporary protective measures cease. Around 60 per cent of retailers surveyed in London already feel business rates and taxes are having an adverse impact on their business³⁴, a proportion which may increase when rates rise, further encouraging firms to inefficiently economise on their property usage.

Business rates, as a tax on property values, have always steered firms towards using less valuable properties than they would if given a free choice and unless there are fundamental changes to the nature of the tax this will remain true. More positively for retailers, the enhanced incentive Local Authorities now have to permit development as a result of business rates retention will also remain but retailers will eventually lose the temporary protective measures they are currently benefitting from.

4.2.5. Labour Market Conditions

Alongside property, one of the other key inputs retailers use to make their businesses successful is labour. This is also an area where they face a changing environment in a number of dimensions such as skills, population growth, participation and immigration. As has already been noted in section 4.1, London's population has become increasingly well qualified but some involved in the retail sector are reporting skills shortages in certain areas of their operations such as developing E-commerce offerings and carrying out advanced analysis of customer data (Lewis (2014), Tod (2014)).

These emerging skills shortages may be lessened over time as more individuals choose to study related disciplines, perhaps in response to good employment prospects in these areas. There does seem to have been a somewhat beneficial change in this area with the number of students starting first degrees in science subjects around 3,500 higher in 2012/13 than in 2009/10³⁵, however, as UKCES (2014) explains, many other sectors are increasingly demanding staff with the skills to perform advanced analytical or computer-based tasks. This suggests the extent to which retailers will be able to address their skills shortages in forthcoming years is uncertain.

Other developments which may affect staff availability for the retail sector include the substantial population growth expected in the capital (see section 4.1) and the recent increases in participation rates in London. These increases have resulted in around 77 per cent of the working-age population in London being economically active compared to around 73 per cent ten years ago³⁶. One trend which may lessen the extent to which population growth helps labour availability for the retail sector is the ageing of the population, given that retailers have tended to rely on young people to fill a large proportion of their roles. Changes to either immigration policy or immigration flows involving London may also affect staff availability in the retail trade sector as around 14 per cent of those working in the retail sector in the UK are immigrants, a higher proportion than the manufacturing and construction sectors but substantially lower than the hotels and restaurants sector in which around 26 per cent of the industry are immigrants (Wadsworth, 2012).

In summary, retail firms have recently experienced some skills shortages in priority areas such as developing E-commerce offerings and analysing customer data. These skills gaps may lessen as more individuals are studying related subjects but these individuals will be in high demand which may mean recruitment continues to be difficult for some types of posts. General staff availability will be good as a result of the growing London population, but the changing age structure will mean that retailers may need to make greater use of older staff.

³⁴ London Business Survey 2014: Factors Affecting the Business. Data are collected at Local Unit Level

³⁵ Higher Education Statistics Agency

³⁶ ONS Annual Population Survey 2004 to 2014

4.2.6. Infrastructure

Over recent years London has welcomed a number of transport infrastructure improvements such as the East London Line extension, the redevelopment of Blackfriars station or the opening of the London Gateway deep-water port. These new facilities, as well as forthcoming additions including; road improvements, the rest of the Thameslink programme, Crossrail and the Northern Line Extension, and potential future schemes, such as Crossrail 2, High Speed 2, the Bakerloo Line extension and additional airport capacity, may have significant effects on London retailers.

One way in which infrastructure additions affect retailers is through changing the accessibility of various parts of London not only from the perspective of London residents, but also from the perspective of residents of the Greater South East and tourists to London. Alterations to the accessibility of different parts of London from the perspective of local residents can alter the competitive balance between different shopping areas as if travel times to a particular shopping area decrease, it becomes more attractive for shoppers to use and for retailers to operate in, possibly allowing it to gain market share³⁷. The same logic applies to tourists and residents of the Greater South East, if London becomes more accessible to them relative to other destinations, it may attract more custom.

London retail areas gaining market share from non-London areas would clearly be beneficial for retailers in the capital but there are other ways in which transport infrastructure improvements could have benefits. For example, they may contribute to reductions in journey times and journey time uncertainty, potentially lowering retailers' transport costs (as fewer driver hours will be required for a particular journey) and allowing retailers to reduce stock levels in response to having less uncertainty surrounding delivery times. Improvements to rail connections to and from London could also encourage retailers to shift loads from trucks to rail, potentially saving money as a result of the greater economies of scale rail transport can offer.

Transport infrastructure improvements may also have indirect effects on retailers through their impact on productivity and economic growth. If the amount of time people need to spend on their journeys decreases, then this potentially offers them additional time which they could use for leisure activities such as shopping or productive activities such as work. This additional activity could expand the size of the economy and result in additional demand for retail goods.

London's transport infrastructure improvements have therefore influenced the pattern of retail within London as well as potentially attracting additional customers from elsewhere as a result of accessibility improvements. Transport improvements also offer productivity benefits for the sector and for the wider economy and further benefits are expected given the extensive pipeline of improvements on the way.

4.2.7. Information and Communication Technology

In recent years, significant advances have been made in the production and performance of processors used in computing with some suggesting that the performance level one can expect from a certain level of expenditure, say £500, doubles roughly every two years (Koomey, Belady, Patterson, Santos, & Lange, 2009). This has encouraged the adoption and use of this technology both by firms and individuals and has spawned new and powerful computing-related product categories such as smart phones and tablet devices.

³⁷ An example could be the improvements in connections between Stratford and central London which may have supported retailing in the area

At the same time, the amount of content on, and communication through, the internet has been growing rapidly, with DOMO (2014) estimating that each minute, 48 hours worth of footage is uploaded to YouTube, 571 new websites are created and 204m emails are sent. This additional content and interaction has made use of the internet ever more attractive while the technological advances have made access ever more easy. Improvements in the connections speeds available have also opened the door for some product categories, such as music, video and games, to change from physical goods to information goods which can actually be moved from seller to buyer using the internet.

Unsurprisingly given all these advances internet usage has risen rapidly with over 80 per cent of households having access in 2013 relative to under 10 per cent in 1998 (Office for National Statistics, 2013). Usage of the internet by firms has also increased substantially in recent years with ONS data showing that more firms now have internet access, they are selecting faster connections and they are increasingly also using mobile broadband (Office for National Statistics, 2012).

Recent years have therefore seen increasing adoption and use of ICT by both firms and consumers. The persistence of advances in this technology suggests its influence will only increase with take-up likely to become almost complete and user experiences further enhanced.

4.2.8. Summary

Much like their customers, the environment retailers operate in has changed in recent years with economic conditions poor on most dimensions and house prices diverging further from retail property prices, potentially increasing desires to use land for homes rather than shops. Further challenges include the fairly restrictive planning environment retailers have faced for a number of years and the existence of skills shortages in some areas. More beneficial developments have come from the good general availability of staff and a number of temporary developments which have arguably softened the blow of business rates to an extent.

As was the case with the changes to their customers, some of these developments may persist and others may change. For example, house prices are expected to continue to grow faster than retail property prices and ICT is expected to advance further, but change is envisaged in economic conditions, with more favourable circumstances anticipated in the coming years. The new business rates retention scheme may reduce planning restrictiveness and similarly, skills shortages may be lessened by an increase in the number of students beginning scientific degrees. Changes to these trends will not all be favourable, however, as retailers in London seem likely to face a greater business rate burden once temporary protective measures lapse.

In addition to responding to aspects of the retail environment which have already been changing, firms will also be confronted by some new developments. These include a potential easing of the conversion process between retail and residential space and the addition of several significant infrastructure projects around the capital. The sector has of course already been adapting to both the customer and environmental changes mentioned as well as planning for additional developments. The next section outlines some of these adaptations, aiming to try and explain which of the customer and environmental changes have motivated them.

Table 4: Summary of Changes to Environment

Recent Years	The Near Future
Recession, tentative recovery, low interest rates but difficult lending conditions	Continued recovery and eventual interest rate increases
House price growth outstripping retail property prices	Widening divergence in the next few years
Town centre first policy imposing restrictions	Continuation of Town Centre First but possibly reduced restrictiveness as a result of business rates retention. Easing of conversions from shops to residences due to new permitted development rights
Some relief from the delayed revaluation of business rates and other temporary measures Distortion of decisions due to the nature of business rates	Increased business rates Continued adverse influence on decisions unless major reforms are made
Strong general labour availability but some skills gaps	Continued growth in labour-force and some narrowing of skills gaps, depending on competition between sectors for skilled workers
Developments such as the East London Line extension	Many further infrastructure improvements to rail, road and air
Advances in ICT, reductions in ICT costs and increased internet usage	Near full internet usage and further ICT advances

5. Retail Responses

The previous two sections have looked at London's changing retail landscape, outlining recent developments and aiming to describe potential forthcoming shifts. This section discusses how firms have responded to the changing retail landscape and also aims to look forward by discussing additional responses retailers may make in the future.

Many of the responses that retail firms have made will have been encouraged by more than one trend and are themselves linked in various ways. This makes it difficult to neatly separate the changes firms have made and explain their exact motivations. Instead this section attempts a broad categorisation of adaptations within the sector and aims to explain how they are linked and what their main motivational factors were. Toward, this aim, the first sub-section discusses the emergence of E-commerce.

5.1. Emergence E-commerce and Entry of Pure-Players

Advances in ICT, the increasingly well-educated population and consumers' growing preferences for fragmenting their activities presented an opportunity for a new type of retail firm to enter the market, the pure-players, firms which (initially at least) only sold goods online. The ability to enter the retail sector without taking out a lease on a shop clearly lowered the entry barriers to retailing and through encouraging the formation of new firms, made the sector even more competitive (Department for Business Innovation and Skills, 2013). This trend was enhanced further still as firms such as eBay and Amazon established E-commerce platforms³⁸ which meant individuals or firms could sell to customers without even having to establish their own website, let alone lease a store (Hagiu, 2006).

In addition to offering a lower cost method of entering the retail sector, the E-commerce business model provided new firms with advantages ranging from the obvious, such as providing product information more cheaply through online text and images rather than customer service staff, to the more subtle, such as being able to cheaply experiment with the productivity implications of different store layouts, given the online nature of their stores. For example, firms such as Amazon or eBay are able to randomly direct users to versions of their websites with marginally different designs. They can then compare earnings associated with customers exposed to the different designs in order to determine and then adopt the profit maximising website design (Haynes, Service, Goldacre, & Torgerson, 2012).

Other advantages that E-commerce has provided, many of which now seem entirely familiar and widespread, include the collection and dissemination of user reviews, the ability to create wish-lists and the use of algorithms in pricing and marketing³⁹. Some of these practises would have been possible for traditional retailers, for example loyalty card schemes would allow algorithmic pricing and marketing, but the online environment, with greater availability of customer data and lower 'menu costs'⁴⁰, improved their ease. Some of the E-commerce advantages, however, were entirely new and cleverly exploited both technology and human behaviour.

The emergence of E-commerce did not only benefit retailers; it had many advantages for customers that have helped it become increasingly popular. The ability to easily compare prices offered on different E-commerce sites is one major advantage and advances in mobile technology now mean

³⁸ Platforms, such as the Amazon or eBay marketplaces, provide the online infrastructure for sellers to easily establish an E-commerce presence

³⁹ Where firms use automated procedures to vary their prices and promotions according to customer characteristics

⁴⁰ Menu costs are the costs related to changing prices. In a physical store this may involve printing new labels and having staff walk around the store putting these in place. An online store could use a computer programme to set prices automatically or use other less costly processes

consumers can perform price comparisons outside of their homes, perhaps while inside physical stores. E-commerce also allows consumers to easily fragment their shopping process, provides access to a wealth of customer product reviews and in many cases cheaper prices (The Economist, 2013).

The pure-players were at the forefront of the use of online sales (for example Amazon was one of the first companies to start E-commerce activities as far back as 1995) but they were not the only firms active online even at the very early stages of E-commerce (Ellis-Chadwick, 2013). Some of the traditional retailers such as Tesco and Toys R Us adopted E-commerce very early on and over the years many more have followed suit. They have also been joined by a number of producers that have used E-commerce to sell directly to customers rather than using retailers as intermediaries.

The emergence of E-commerce as a mode of operation consequently can be seen to have opened up a range of opportunities for innovative retailing and lowered the barriers to entry in the sector. The ability to cheaply start a retail business by selling online is something that will continue to have implications for the sector and the advantages online retail offers to customers will remain greatly appreciated. Of course, E-commerce is not only used by pure-players, and the next section discusses how the movement of traditional firms into E-commerce is another important response of the retail trade sector to the trends outlined in section 4.

5.2. Movement of Traditional Firms into E-commerce

The vast majority of UK retailers are now selling online, motivated by similar factors to those which encouraged the emergence of the pure-players, but even though E-commerce has existed for approaching 20 years, some firms such as H&M or Morrisons, only moved online relatively recently (Ellis-Chadwick, 2013). For many of these traditional firms, their online activities were established and run as separate business units, an approach which involved significant investments by these retailers but often no initial benefit to sales (Tod, 2014).

The lack of sales increases for traditional retailers who moved online partly relates to online sales displacing sales from physical stores and although this is less favourable than generating additional sales from E-commerce, many retailers have viewed establishing an online presence as key to defending their existing positions (Gourlay, 2014). Investments in E-commerce which internationally-active firms have made for the UK market can also potentially be re-deployed overseas, given the advanced nature of E-commerce in the UK⁴¹. In such cases displacement may be viewed as slightly less concerning.

The entrance of traditional retailers into E-commerce has been another major adaptation the sector has made. It is likely that any major retailers that do not already have an online presence will look to establish one, while firms that have become experienced in the UK's mature E-commerce market may look to operate in additional countries. This ability to re-use investments overseas may also be relevant in the other direction, with international firms joining the UK market, contributing to the market adjustments which are discussed in the next section.

5.3. Market Adjustments

The emergence and growth of E-commerce has lowered barriers to entry in the retail sector, added a new set of firms to the sector and created new and attractive sales channels for customers to use. These developments have arguably placed additional pressure on sales from physical stores beyond the impact that stagnant incomes, difficult economic conditions and frugal shopping habits may have had independently.

⁴¹ For example, Ofcom (2014) reports that the value of business to consumer E-commerce is higher in the UK than other advanced countries such as France, Germany, Japan, Sweden, USA and Australia.

This expansion in purchasing options is likely to have made some contribution to the firm closures seen in the sector in recent years, though not all types of retailer will have been equally affected. For example, the majority of music and video sales are now online making life difficult for retailers with physical stores concentrating on these products (Verdict, 2012). Recent years have seen significant closures of retail firms in the UK with approximately 23,000 per year ceasing to trade on average between 2008 and 2013 which represents around 10 per cent of the firms active in the sector each year⁴².

Despite these closures, the total number of retail firms has actually increased recently, in London at least, as the number of retail enterprises in the capital in 2014 was around 3,000 higher than in 2011⁴³. Both London and the UK have, however, seen the size distribution of retail firms change. Specifically, the proportion of retail firms classed as micro businesses (with up to nine employees) fell between 2011 and 2014 while the proportion of retail firms classed as small (10 to 49 employees) or medium (50 to 249 employees) rose slightly. The share of large firms (with over 250 employees) remained broadly unchanged⁴⁴.

Although there have been small decreases in the share of retail businesses that are very small, micro businesses still make up around 91 per cent of retail firms in London and actually increased in absolute number between 2011 and 2014. Even if this shift towards larger firms continues, it is unlikely to change the broad size distribution of the retail sector very quickly.

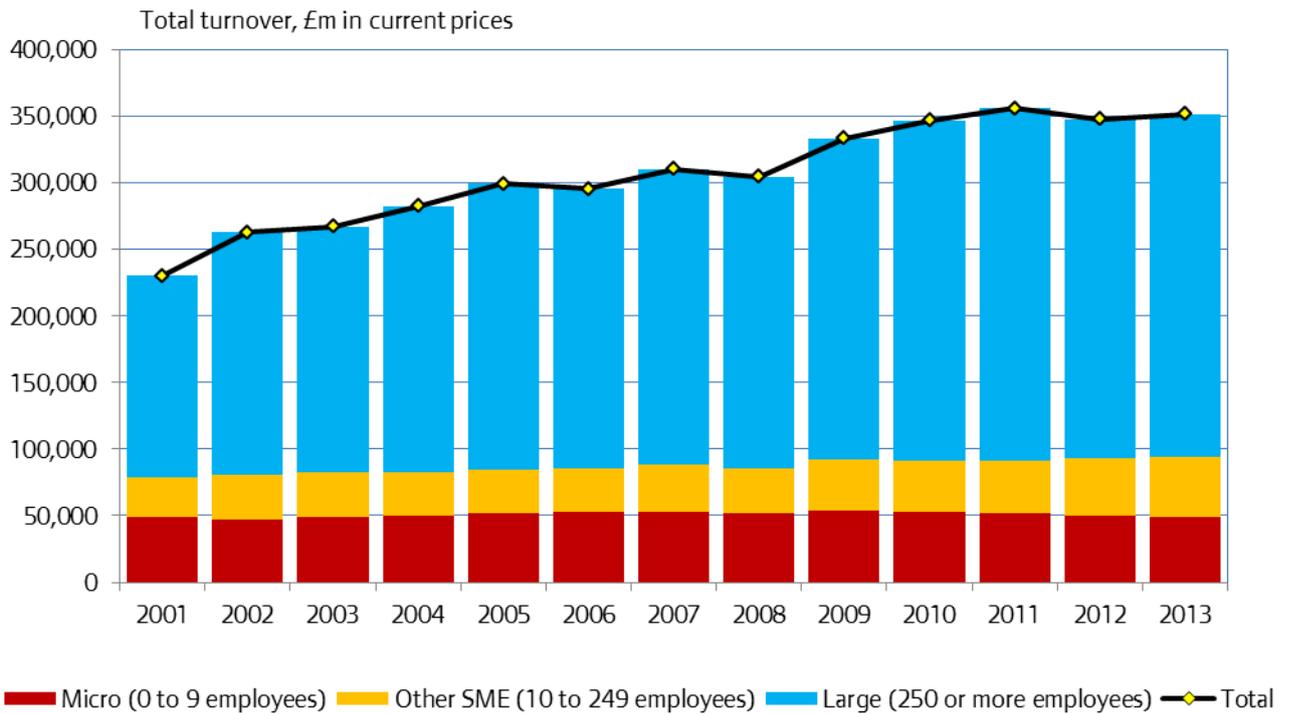
Consolidation is, however, more apparent when looking at turnover shares, as figures are available for a longer time-period and as turnover better reflects the share of spending different firms capture. Figure 11 plots turnover for UK retail enterprises over the last 13 years up to 2013 and it is clear that the share of turnover captured by the largest enterprises is far in excess of the share of enterprises they represent.

⁴² ONS Business Demography 2013

⁴³ ONS Business Counts – Enterprises, 2011 and 2014

⁴⁴ ONS Business Counts – Enterprises, 2011 and 2014

Figure 11: Total Turnover of UK Retail Enterprises



Source: ONS Interdepartmental Business Register

In addition, Figure 11 shows that the turnover share of large retail firms has been increasing as in 2001 around £152bn of the £230bn total was generated by firms with 250 or more employees while in 2013 firms of this size accounted for £258bn of the £352bn total. This means that the revenue share of large retail firms has increased from 66 per cent to around 73 per cent over the period, accompanied by a decrease in the revenue share of micro firms from around 21 per cent to 14 per cent⁴⁵.

Some of this change may be attributable to shifts within the grocery sub-sector of retail, where a number of firms have rapidly enlarged their store portfolios through the addition of convenience stores and gained significant market share. CBRE (2014) suggests that the 'Big Four'⁴⁶ grocery retailers now have around 3,200 small convenience stores between them relative to just 900 or so in 1998, an increase of just under 9 per cent per year on average. This change is likely to be driven by factors such as the Town Centre First planning restrictions mentioned in section 4.2.3 and the reported increase in grocery shopping frequencies mentioned in section 4.1.3 and may well have made some contribution to the increases in the Big Four's combined market share of the grocery sub-sector, which is now above 70 per cent⁴⁷.

In addition to changes in the number and size-distribution of retail firms as well as changes to their market shares, there is some evidence that the adjustment within the sector has also had a geographical scope. The growth of E-commerce has been one motivation for this as competition from online sales may have stimulated the closure of less buoyant stores in less buoyant locations and because it allows retailers to have a national presence without a national set of stores (Portas, 2011).

⁴⁵ The share of other SMEs was around 13 per cent in both 2001 and 2013.

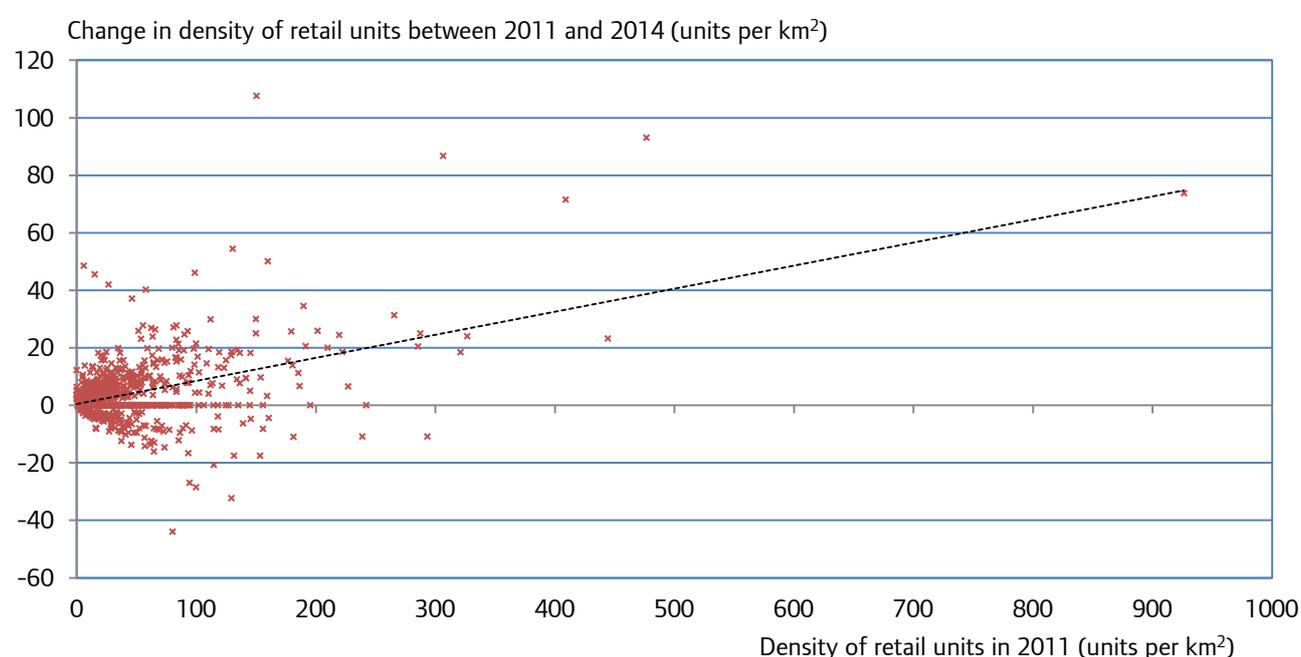
⁴⁶ Tesco, Asda, Sainsbury's and Morrisons

⁴⁷ CBRE (2014) Using Kantar Worldpanel data

Store closures can have spillover effects for other nearby premises as they may reduce footfall, potentially making changes of this nature self-reinforcing as remaining stores in declining locations will have an incentive to relocate to growing centres. If such a process persists, this could act to make retail premises more geographically concentrated as successful shopping areas grow by attracting new tenants and establishing new premises and unsuccessful ones shrink losing tenants and possibly retail space also.

Some of the processes behind this idea may be apparent in recent data. An example of this can be seen in Figure 12 which plots the density of retail units in 983 different parts of London⁴⁸ (covering the whole city) against the change in this density from 2011 to 2014. The chart suggests that the more retail-dense an area was in 2011, the greater the increase in density it is likely to have experienced since, suggesting that the best retail areas may be improving their attractiveness to consumers faster than other areas.

Figure 12: Retail Density and Changes in Retail Density



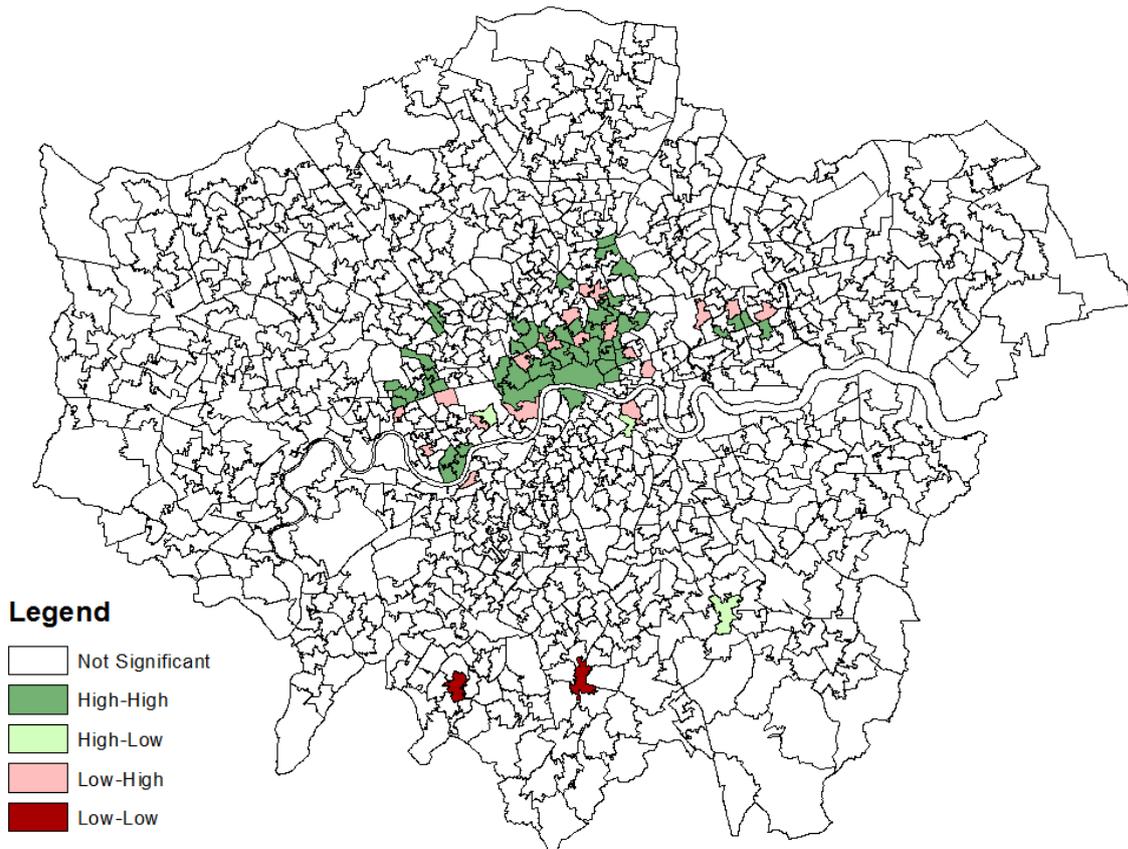
Source: ONS Business Counts 2011 to 2014 and Ordnance Survey

In addition to changes in retail-density appearing correlated, albeit relatively weakly, with initial retail densities, they also appear to be somewhat clustered. This can be seen in Figure 13 which shows clusters of areas that have experienced changes in retail density where these changes appear to be statistically linked to what has happened to neighbouring areas⁴⁹. For example, towards the centre of London there is a large cluster of areas shaded dark green and these are areas that have high increases in retail density which appear linked to the high increases in retail density experienced by their neighbours. It is also possible to see two areas in South London where the opposite is true, as these areas have experienced reductions in density which are correlated with their neighbours' experiences.

⁴⁸ Middle Layer Super Output Areas (MSOAs), using boundaries as of 2001

⁴⁹ This map shows the results of calculating Local Moran's I values and significance levels for each MSOA. An inverse distance squared spatial weight matrix was used. More details can be found in the appendix

Figure 13: Clustering of Retail Density Changes 2011 to 2014



Source: ONS UK Business Counts, Local Units, Contains National Statistics and Ordnance Survey data © Crown copyright and database right 2013

In general the pattern is for nearby areas to have similar experiences but there are some areas shaded in light red and light green that appear to be outliers relative to their neighbours. For example, those in light green have experienced large increases in density but are surrounded by areas where density has increased less than the average or decreased.

Despite the fact that increases in retail-density do appear to be clustered together and associated with initial retail densities, these changes (at least over the very short period for which data are available) do not appear to have increased the degree of retail clustering or concentration in London overall. This can be seen in Table 5 which uses two measures; the Moran's I ⁵⁰ which captures spatial correlation and a concentration ratio which, as the name suggests, is a measure of concentration⁵¹.

⁵⁰ For more information on the Moran's I see the appendix

⁵¹ The specific measure used captures the share of retail units that are in the largest 10 retail areas in any given year. Areas are defined as Middle Layer Super Output Areas (MSOAs)

Table 5: Measures of Retail Clustering and Concentration

	2011	2012	2013	2014
Moran's I - Unit Counts				
Non-Specialised Stores	0.14	0.15	0.14	0.13
Food Stores	0.12	0.12	0.13	0.14
Specialised Stores	0.26	0.25	0.25	0.25
Other Retail (Inc. Online Pure-Players)	0.25	0.27	0.27	0.24
Total	0.25	0.25	0.25	0.25
Moran's I - Unit Densities				
Non-Specialised Stores	0.34	0.35	0.33	0.32
Food Stores	0.19	0.20	0.20	0.21
Specialised Stores	0.35	0.34	0.34	0.34
Other Retail (Inc. Online Pure-Players)	0.29	0.31	0.32	0.29
Total	0.40	0.40	0.40	0.40
C1:10 - Unit Counts				
Non-Specialised Stores	7%	7%	7%	7%
Food Stores	10%	10%	10%	11%
Specialised Stores	20%	20%	20%	20%
Other Retail (Inc. Online Pure-Players)	21%	18%	20%	19%
Total	12%	12%	12%	12%

Source: GLA Economics analysis of ONS UK Business Counts, Local Units, Contains National Statistics and Ordnance Survey data
All Moran's I values are significant at the 1 per cent level

Moran's I values can theoretically range between -1 and 1 with negative values indicating a dispersed pattern and positive values indicating clustering. The Moran's I values therefore show that retail activity is clustered (particularly when densities are used, as these adjust for the variation in London MSOA sizes) but the degree of clustering appears to have remained very similar over the four years for which data are available. The concentration measures also display very little change over time.

Despite the absence of increases in clustering and concentration over the past four years, there are still reasons to argue that geography has been important in market adjustments in the retail sector. Over and above the patterns in Figure 12 and Figure 13, further evidence can be found by analysing information from the Local Data Company. Analysis⁵² of the locations and experiences of around 42,000 London retail units which were active in 2011 suggests that being within 1km of an International Retail Centre (as shown on Figure 3) was associated with having a significantly reduced risk of closure compared to all other retail units in the capital.

Retail units that were within 1km of a Major Retail Centre (as shown on Figure 3) were actually more likely to have closed than others while being proximate to Metropolitan or District Retail Centres did not appear to be associated with any differences in closure risk. The apparent advantage of being near the International Retail Centres is consistent with the idea that over time, the leading retail locations are strengthening their appeal relative to others though the picture could be more complex. For example, the fact that proximity to Major Centres (the third tier of London Plan retail area) was associated with increased closure risk but proximity to District Centres (the fourth tier) was not could be because these areas fulfil different functions. It could be that Major Centres fulfil similar functions to the International Centres so may lose customers and stores when the International Centres become

⁵² Full details of this analysis can be found in the appendix

relatively more attractive. District Centres on the other hand may have a different purpose, meaning they are less likely to be impacted.

These arguments reflect the reasoning in Experian (2013) which suggests areas with more shops, particularly if they are part of multi-location firms, are more attractive to customers. Figure 12 suggests that in general, the leading areas have had larger increases in retail-density since 2011 which would mean they are likely to have become even more attractive to consumers relative to lesser locations. These widening differentials in attractiveness are therefore part of the reason why Experian (2013) predicts that some boroughs are likely to need less retail floor-space in the future and others are likely to need more.

Similar predictions are made in Deloitte (2013) which argues that retailers' increasing focus on prime locations will mean that in the future there are fewer high streets as those in less desirable locations will be converted into other uses such as housing. Verdict and SAS (2012) and GVA (2012) both make a similar point in suggesting that some retailers are closing stores in non-prime locations while looking to increase the size of their stores in the best locations.

The process of adjusting store portfolios is likely to be necessary for a number of firms as many retail locations may have been established prior to or in the early stages of E-commerce and may no longer represent the choices firms or developers would make now. Similarly, as argued in Williams (2014), the actual amount of retail capacity individual retailers have may be something that no longer reflects decisions they would make now. The ability of retailers to adjust their portfolios might be one of the more important considerations for the sector as Griffith and Harmgart (2005) suggests that store openings and closings are an important driver of retail sector productivity.

One of the main arguments behind this is that when new stores are established this increases competition and results in less efficient stores closing. A second and important argument is that it is easier to ensure new stores are well aligned with existing consumer preferences and include the latest productivity enhancing technology than it is to retrofit existing stores to include such features. This second channel may be particularly important given that competition from E-commerce may pressure the less efficient stores out of the market anyway and that, as the next section will explain, stores may begin to fulfil slightly different functions in the future.

With regard to changes in store portfolios, some indications of the options firms will have open to them can be seen in the retail property development pipeline. Forthcoming developments will also have been influenced by other trends such as the expected population growth, the predicted recovery in incomes and London's infrastructure plans, in addition to the emergence of E-commerce and the market adjustment this has triggered. Experian (2013) lists a number of these forthcoming developments and many are extensions and developments near existing retail areas such as the Brent Cross extension or the development of the land North of Westfield White City, supporting to an extent the importance of geography in market adjustments.

Retail developments do not only look to expand existing high performing areas, however, they also seek to take advantage of new opportunities from changes to the accessibility of places or major additions of accommodation. Forthcoming developments that appear to be spurred on by changes such as these include additional retail premises near to the forthcoming Crossrail stations in central London, which are expected to add around 200,000 square metres to the stock of London retail space (Wehner, 2014).

If all the retail developments currently expected to be built are actually established, then according to Experian (2013) they should fulfil almost 570,000 square metres of London's forecast 940,000 square metre floor-space requirement for additional comparison goods retail space by 2036. The fact that

investors in retail property are planning to add so much capacity should caution against any extreme views regarding the impact of E-commerce on physical retailing, however, in addition to the introduction of new capacity, there is also likely to be the removal or vacation of some existing capacity as already noted.

In summary, market adjustments have clearly been an important way through which the retail trade sector has adapted in recent years with many firms exiting the sector and new firms joining. The sector has shifted slightly towards larger firms but the majority remain very small. The adjustment process has also had a geographical dimension with leading shopping areas likely to have become even more attractive to consumers relative to lesser locations.

Location choice and store portfolio decisions are likely to be areas of focus for retailers given the link between portfolio adjustment and productivity. It appears likely that the portfolio adjustment process may further strengthen the appeal of leading areas, given retailers seem set to focus on prime locations. The trend of increasing shares of larger firms also seems likely to persist but is unlikely to change the fact that most retail firms are very small.

Whether small or large, firms' decisions about their use of physical shops are likely to be influenced by their ability to exploit the potential complementarities between online and offline retailing. These online-offline complementarities may affect the amount and locations of shop space that retailers decide to use and are discussed in the next section.

5.4. Exploitation of Online-Offline Complementarities

With the movement of growing numbers of traditional retailers into E-commerce and the development of new E-commerce strategies and modes of operation, firms have become increasingly aware that online and offline operations can potentially benefit each other. Firms have not only become aware of the beneficial links between online and offline operations but have also sought to exploit these links driven by the financial pressure of operating multiple sales channels and by their customers' changing preferences.

One example of the potential complementarities firms can exploit comes from the click and collect model of online sales which involves consumers selecting and possibly paying for their goods online but collecting them in person from physical stores or collection points. By attracting online consumers to physical collection points, firms may support in-store sales as Creasey (2014) suggests that a significant proportion of consumers using click and collect points also make purchases in-store at the same time.

There are also complementarities going the other way as, for example, physical stores can facilitate online sales by acting as showrooms where consumers can physically inspect goods they are considering buying or as venues for events that help win custom (Amaze, 2013). Exploiting these types of complementarity is part of what commentators are calling the 'connected retail' or 'omnichannel' approach. This involves retailers using multiple online and offline channels in a coordinated way to benefit their customers. Other examples of the approach include practises such as helping customers to make online orders if they visit a physical store and the product they want is not in stock, or accessing customers' online purchase histories when they visit a physical store to offer them a more personalised service (Amaze, 2013).

Another way in which having online and offline operations can potentially be beneficial is through the ready-made distribution network that a portfolio of physical stores can represent. This is because the nature of the online marketplace makes price comparison easy and therefore encourages retailers to try and differentiate on service, and in particular delivery performance, rather than price (Deloitte, 2014). These fast and predictable delivery times are not always easily achieved by traditional retailers' existing

logistics arrangements, which in many cases entail a small number of large distribution centres located away from customer locations, making other arrangements, such as use of an existing store network, attractive (Deloitte, 2014).

Retailers are therefore seeking out alternative arrangements which can better achieve fast delivery times and deliver competitive advantage. These desires are fuelling demand for urban distribution centres and encouraging those retailers that have them, to use their existing store network as a distribution network (Deloitte 2014). Having an existing store network also offers an advantage in facilitating customer returns which is another important aspect of service quality for E-commerce customers.

The complementarities which multi-channel retailers are increasingly exploiting are encouraging pure-players to adapt their operations by adding a physical presence to exploit similar complementarities. Examples include Amazon's use of collection lockers in the stores of traditional retailers or Bonobos' arrangement with a traditional retailer which allows them to display their products in the traditional retailer's stores (Creasey (2014), PWC (2013)). A number of commentators and firms providing services to retailers predict this convergence between online and physical retailing will only increase over the coming years (Vend (2014); Sparrow (2014); Adie, (2014)).

As traditional retailers have moved into online operations and gained experience of this new sales channel, they have been better able to identify and exploit complementarities between online and offline operations. There are many examples but usage of store networks to improve online order delivery performance and implementation of click-and-collect to support in-store sales, are two significant examples. These complementarities have even encouraged some former pure-play retailers to establish a physical presence, however, having both online and offline operations can also create some adverse interactions as the next section will explain.

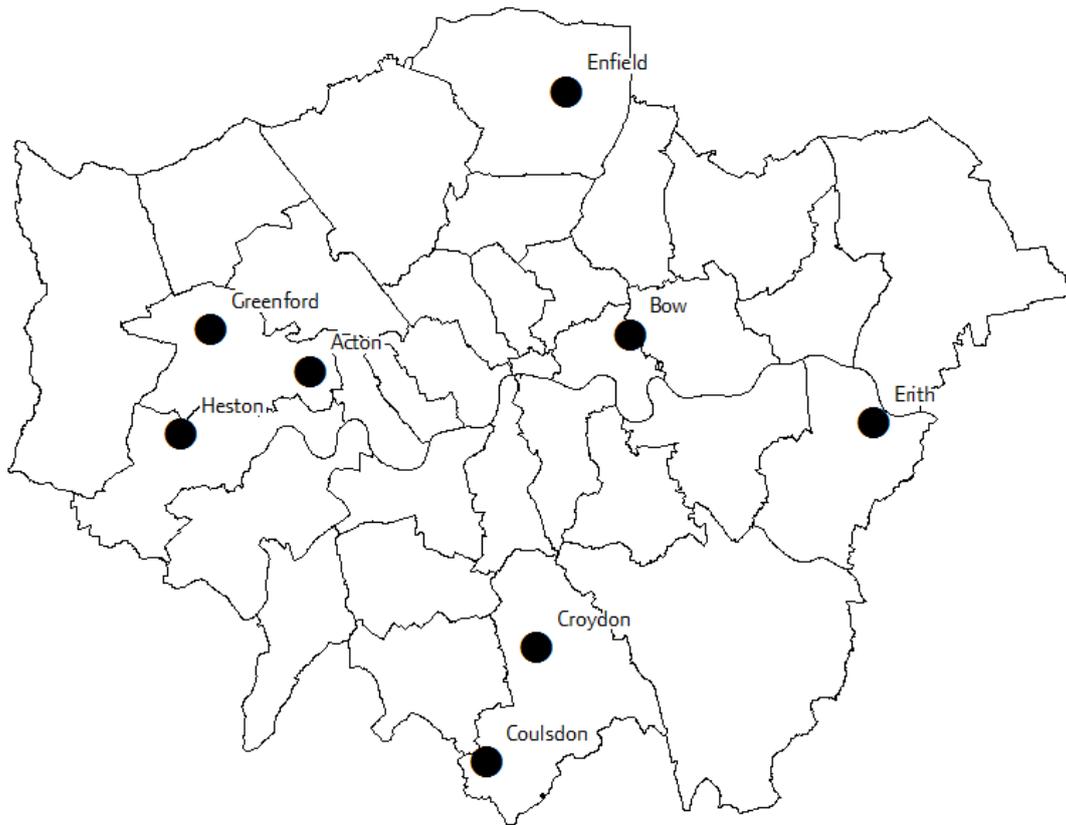
5.5. Awareness of Adverse Online-Offline Interactions

The addition of E-commerce activities to the store-based operations of traditional retailers has not only offered the opportunity to exploit complementarities but has also presented the challenge of adverse interactions. In the same way that retailers are aiming to maximise favourable online-offline interactions as doing so is beneficial financially and for customer experience, they are aiming to minimise adverse interactions.

One example of a potentially adverse interaction comes from fulfilling online orders in traditional physical stores. Although this offers advantages for online customers who benefit from the fast delivery times that stores (which tend to be near areas of population) can offer, it can present disadvantages for offline customers. For example, the more that a physical store is used to fulfil online orders, the likelier it is that customers shopping in-store may have their experience worsened by stock unavailability (as goods are taken to fulfil online orders) and congestion (as delivery vehicles increasingly visit the store).

Some retailers, particularly in the grocery sector, are aiming to avoid these potentially adverse interactions by introducing premises referred to as 'dark stores', a practise particularly common in and around London (Watson, 2014). Fulfilling online grocery orders is already considered to be expensive, for example Watson (2014) suggests the cost per order is between £15 and £20 (much more than typical delivery fees), so avoiding extra 'hidden costs' of order fulfilment is important. Dark stores, which are large dedicated distribution centres for online orders within which a combination of staff and machinery put together consumers' orders from the dedicated stock available, help achieve this by moving online order fulfilment to separate premises.

Figure 14: Dark Stores in London



Source: Information from Watson (2014). Locations are approximate. Dark stores bordering London include; Hatfield, Andover, Dartford, Aylesford and Crawley. The other dark stores in the UK are in Leeds, Nottingham, Tamworth and Birmingham

Not all firms are using these large dark stores; some are seeking to establish smaller urban distribution centres which are often better located, as smaller sites are easier to find. These urban distribution centres also help protect the in-store experience but are also particularly in demand as they can facilitate fast and predictable delivery times by virtue of their locations close to customers (Deloitte 2014).

The various new logistics solutions of multi-channel retailers are similar to the fulfilment centres used by pure-players such as Amazon who have had the advantage of establishing logistics arrangements largely from scratch, enabling them to create systems that are more suited to E-commerce. New logistics arrangements, however, aren't the only adjustment firms have made to minimise conflict between sales channels, some retailers have made changes to how they measure their staff's performance to better connect their online and offline channels. For example, store managers working for Dixons are now credited with online sales occurring within the vicinity of their store. The idea is to make them more willing to refer customers to the Dixons website if the particular item they want isn't currently available in-store (The Economist, 2013).

Measures such as these are just the first steps toward retailers implementing a truly omnichannel approach. Such an approach will require firms to have a 'single view' of many aspects of their business rather than the fragmented views they have currently (Cognizant, 2013). For example, firms may currently have several views of the same customer, possibly including some data on products they have bought online, some records of what marketing communication they have received and some data on products they have bought in-store while using their loyalty card.

Having these multiple views of the same customer may be problematic in some circumstances as it could lead to flawed service. For example, a customer could be sent marketing information relating to a product they have already purchased in-store. In addition to avoiding these problems, bringing multiple views together can enable firms to offer greater personalisation through all their channels as they would have a comprehensive perspective of how the customer interacts with their firm.

Consolidation of customer data is not the only element needed for an omnichannel operation, obtaining single views of products, stocks, orders, prices and promotions will also be aims of retailers that want to offer an omnichannel service (Cognizant, 2013). Some of these changes may yield quite minor improvements, for example, having consistent product information across all channels is unlikely to substantially improve customer experiences, but others could deliver significant benefits.

If a retailer has one monitoring system for all their stocks, for example, then they will be much better placed to make the best decision about which particular piece of stock should be used to fulfil any given requirement, whether this requirement is an online order or a shelf about to become empty. Similarly, being able to view and analyse all orders and purchases (whether online or in-store) at the same time will also help with planning and distribution (Cognizant, 2013). Implementing these changes will be a major challenge for retailers and will require them to achieve greater organisational integration (Tod, 2014).

As more and more firms have started using multiple sales channels and use of new channels such as E-commerce has increased, awareness of potential adverse interactions between channels has developed. Examples of these potentially harmful interactions include store-based online order fulfilment damaging the in-store experience and disjointed management of information leading to inconsistent customer service across different channels.

Firms have already started to develop some solutions to these problems, such as the introduction of dark stores, but they have further adaptations to make if they are to truly implement an omnichannel approach. A key area of focus may well be establishing single views of various aspects of their operations to achieve better organisational integration. This will be challenging but firms in the sector are, however, used to adapting as the next section will reinforce by discussing other adjustments they have made and may make in the future which are less directly related to the emergence of E-commerce.

5.6. Other Adjustments

Technological advances have been one of the driving forces behind the emergence of E-commerce but the increasing power and decreasing price of ICT equipment have also encouraged retailers to make greater use of this technology in their stores. A particularly visible and recent example of this is the introduction of self-checkout machines by many retailers. These devices can benefit the firms that use them, who may be able to reduce staffing levels or redeploy staff to different tasks. Customers also benefit from reduced queueing times.

Other examples of using ICT in-store include use of mobile and tablet devices as sale points or for product demonstrations (EE, 2014). These two specific measures may cut payment queues and improve customer service, respectively, but there will be other opportunities for retailers to deploy ICT in stores to make productivity enhancements. For example electronic shelf labels can make changing product prices quicker and simpler, while near-field communication technology can make it easier for customers to access product information and make payments.

There are also examples where in-store ICT offers the potential for retailers to move closer to an omnichannel approach. For example, retailers have been able to gain understanding of their customers'

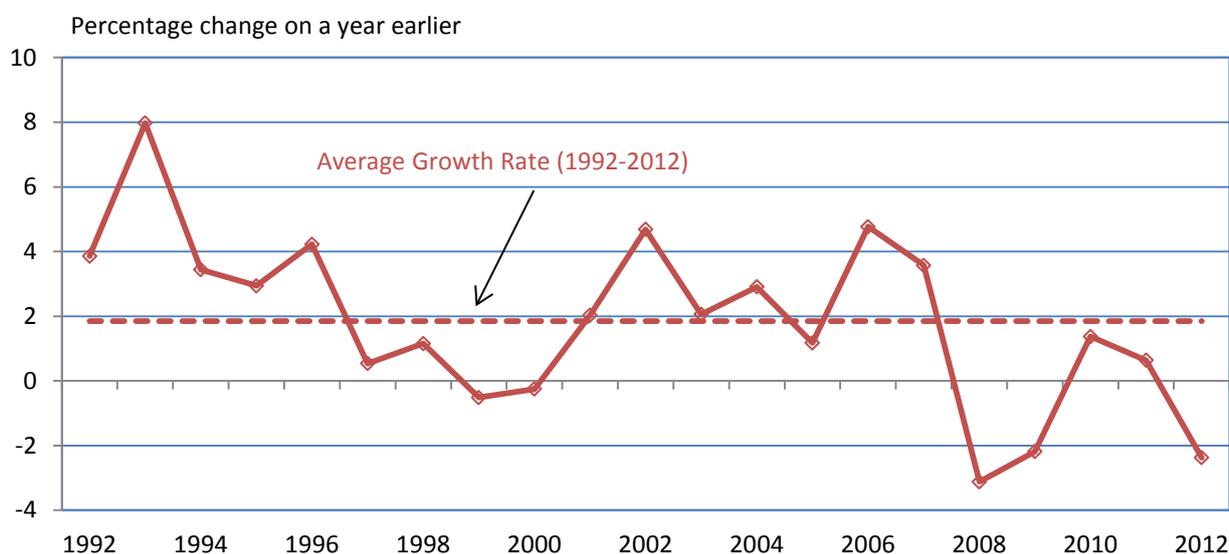
preferences over recent years through loyalty card schemes or online account profiles but may increasingly be able to add to this data and better exploit it through in-store ICT. One example is provision of in-store WiFi which may enable retailers to send out real-time marketing communications and promotions to shoppers as they browse.

The data that can be harvested from providing free in-store WiFi for customers can offer retailers insights regarding in-store footfall and browsing patterns which may enable productivity enhancing store reconfigurations (EE, 2014). Data capturing consumer activity outside stores is also becoming available to retailers as mobile phone providers look to sell the data they hold on their customers (EE, 2014). This data can also offer productivity benefits to retailers who can use it to learn more about their customers and make their marketing activity more personalised and effective.

Despite these enhancements that some firms may have already implemented, the recent productivity performance of the retail trade sector has been slightly worse than the sector’s average performance since 1992. Figure 15 shows that on average the sector has experienced productivity growth of approximately 1.9 per cent per year but since 2008 productivity growth has been below average, a pattern similar to the broader economy (Grice, 2012).

The existence of various technologies already mentioned that may benefit productivity as well as the knowledge that the sector has been adjusting to disruptive changes such as E-commerce, may provide some optimism that retail sector productivity will recover. Experian (2013) sets out three retail productivity growth scenarios which largely share this optimism with their central estimate suggesting sales density (a narrower measure of productivity than shown in Figure 15) will increase at a rate of 1.9 per cent per year with the report’s low and high scenarios associated with growth of 1.5 per cent or 2.5 per cent respectively.

Figure 15: Change in GVA per Hour in Wholesale and Retail trade, and Accommodation and Food Services



Source: ONS Multi-Factor Productivity Indicative Estimates to 2012

Technological change has been behind a number of adaptations that the retail trade sector has made in recent years such as the introduction of self-checkout machines. Despite these advances, retail sector productivity growth has been slower than average in recent years. There are, however, many further opportunities to deploy technologies to improve productivity such as near-field communication technology, in-store WiFi and real time marketing communications. This offers cause for optimism regarding productivity in the sector.

5.7. Summary

The previous sections have outlined how the retailers has already adjusted to recent changes they have faced These sections also aimed to set out expectations for further adaptations retail firms may make in response to the ongoing evolution of the London retail environment. These responses are summarised in Table 6 and are built upon in the next section which aims to analyse what they might mean for retail's future role in London.

Table 6: Summary of Retail Responses

Recent Years	The Near Future
Emergence of E-commerce and entrance of pure-players	Barriers to entry permanently lowered as firms can continue to launch or expand into the UK via E-commerce
Movement of traditional retailers into E-commerce	Re-use (where possible) of UK E-commerce investments overseas More international firms entering the UK market
Increases in the number of retail firms but shifts towards larger firms (particularly with respect to market shares)	Continued shifts towards larger firms but micro firms to remain the norm in terms of number (though turnover will remain concentrated in large firms)
Adjustments to store portfolios and entry/ exit of firms meaning that leading retail areas are likely to have furthered their advantages	Substantial additions of capacity in some areas and reductions in others contributing to greater geographic concentration Focus on ensuring new retail space is high quality and takes advantage of opportunities to enhance productivity
Some exploitation of online-offline complementarities	Greater awareness of complementarities and exploitation of these complementarities through an omnichannel approach
Emerging awareness of potential adverse interactions between online and offline channels	Growing awareness and avoidance of these interactions helped by greater organisational integration
Greater use of ICT in stores but relatively weak productivity growth	Further use of ICT and a return to more normal levels of productivity growth

6. Retail in London Tomorrow

Near the start of this report, section 3 outlined that retail plays a number of important roles for London ranging from helping consumers get the goods they want to providing employment. Many of these roles, which were summarised in Table 2, may evolve in the future as a result of the changes the retail sector has faced and the ways in which the sector has responded. These potential evolutions in the role of the retail sector in London are outlined in the following passages. The first considers retail's role as an intermediary between consumers and producers.

6.1. Retail as an Intermediary

As an intermediary, retail helps connect producers and consumers, enabling producers to sell their products and consumers to buy what they desire. The emergence of E-commerce may actually threaten this role to an extent. This is because E-commerce has lowered the barriers to entry to the retail sector and therefore may encourage producers to sell directly to customers. This is particularly true as retail platforms such as the Amazon marketplace allow producers to sell directly to customers without even establishing their own website, let alone establishing their own stores.

There are, however, a number of reasons to believe that such activity may not become particularly widespread. One reason is that, as explained in section 5.4, delivery performance is a key differentiating factor for E-commerce customers and firms currently operating as retailers may be better placed to provide fast and predictable delivery times. This is because they already have distribution channels set up which, even if based around physical stores, should allow them to quickly reach customers with goods. Producers are likely to have chosen their existing locations based on factors such as land costs and access to inputs rather than proximity to customers.

Another advantage that retailers may retain is that they will increasingly be able to exploit the complementarities between online and offline operations which are set out in section 5.4. Producers could of course invest to mirror the advantages of retailers by creating distribution networks and investing in some physical stores with showrooming functions, however, this may not be within reach of many producers. Even those that could afford investments to improve their ability to sell directly to customers may still prefer to utilise the expertise retailers have in dealing with customers.

Overall, therefore, retailers' role as an intermediary seems likely to remain intact although E-commerce may encourage some producers to sell directly to their customers.

6.2. Retail as an Employer

The retail trade sector currently employs around 400,000 people in London, with large shares carrying out customer service or managerial roles, and, as section 3 explained, the sector appears particularly important for women, younger workers and those who want to work part-time. Many of the adaptations made by the retail trade sector could potentially influence its role as an employer, not least the introduction of E-commerce, the significant market adjustments taking place and ongoing measures to improve productivity.

Some of the advantages of E-commerce, as outlined in section 5.1, relate to the ability of online information to fulfil customer service requirements that staff may otherwise need to perform. The same is true of some of the ICT deployment opportunities described in section 5.6. Considering these developments in isolation might suggest that the sector may need less labour, however, as outlined in sections 4.1.1 and 4.1.2 the customer base for London retailers is expected to increase strongly and incomes are forecast to grow, both developments which should support employment in retail.

The nature of competition in a post E-commerce world in which price transparency encourages competition on service may also caution against the idea retailers may need substantially less labour. Similarly the desire for experience retail, set out in section 4.1.3 is also likely to raise the importance of staff-based customer service. Given these factors, it is perhaps unsurprising that GLA Economics' latest employment forecasts predict that employment in the retail sector will grow by around 0.2 per cent per year in London⁵³. This prediction is backed up to some extent by findings from the London Business Survey which suggest that while most retail premises do not expect to change their employment levels in the next 12 months, 17 per cent expect to recruit additional workers, a larger share than the 4 per cent that expect to reduce staff levels⁵⁴.

The number of retail jobs is therefore expected to increase but there may be some changes in the types of job which need to be filled. The current dominance of customer service occupations within the sector seems unlikely to change much given the importance of service in securing and retaining customers, however, jobs involving ICT, data analysis and logistics may become greater priorities. This is because retailers aiming to use an omnichannel approach will need these skills to deliver an integrated customer experience and to create the level of organisational integration required in the background, as outlined in section 5.5.

These priority recruitment areas accord with the UK Commission for Employment and Skills' analysis of the sector which highlighted similar skill requirements (UKCES, 2014). The same report, however, raises some questions over the extent to which retailers will easily fill roles requiring advanced ICT or data analysis skills given the competition for these skills from other sectors that are more favourably perceived by job-seekers.

Other possible changes to the nature of retail jobs could include variations in working hours with potential for increased demand for staff covering non-standard hours. Customers' desires for fragmentation of their activities and of experience retail, as well as the focus on service quality that E-commerce has stimulated could all potentially increase demand for staff during non-standard hours. For example, firms able to immediately start the dispatch process on an online order placed at 3.00am will be able to achieve faster delivery times than firms with staff only working standard hours. Similarly, if a firm can provide online customer service assistants to answer questions throughout the evening they may be able to convert more browsers into purchasers.

In addition to the potential for some changes in the nature of retail jobs, the location of these jobs could conceivably change. Section 5.3 provides some evidence and arguments to suggest that the geographical concentration of retail could increase further and consequently influence the distribution of jobs in the sector. Major areas such as the West End or Stratford may become even more densely packed with shops while lesser areas may possibly become less attractive and account for smaller shares of retail employment.

The geographic pattern of retail jobs may also be altered by the continued growth in E-commerce that is expected and the adjustments firms make in response to this. For example online customer service roles could be performed from anywhere in the world giving firms the option to relocate these roles to areas offering cheap labour or land costs. Similarly, if firms increasingly use dedicated E-commerce fulfilment facilities such as the dark stores section 5.5 mentioned, then this too may move some jobs to lower labour and land cost areas, particularly where such areas are near major population centres.

⁵³ GLA Economics (2013) London Labour Market Projections

⁵⁴ London Business Survey 2014: Projected Change in Number of Employees

This may mean that as the retail sector continues to adapt over the coming years, some of the customer service and warehousing roles move out of London, however, as mentioned growth in retail employment is expected in London suggesting any loss of specific jobs is anticipated to be more than offset. The growing customer base and the creation of new ICT and data analysis roles are likely to be some of the factors that help achieve this offset.

One other aspect of retail's role as a provider of work is through the ability of people to start their own retail firms. As section 5.3 explained the majority of retail firms are very small and new firms are constantly entering the sector highlighting the fact that retail is the focus of much entrepreneurial activity. This is likely to remain true; however, firms may increasingly enter the sector by establishing an online sales channel first, rather than a physical channel. For many new firms the channel they use could be part of a sales platform that has already been established by a larger firm such as the Amazon or eBay marketplaces.

In the forthcoming years, therefore, retail will continue to play a very important role in London as an employer. Despite the potential for the advent of E-commerce to lead to job-shedding in the retail sector, the importance of customer service and a growing retail customer base are just some of the factors which support GLA Economics' expectations of positive retail employment growth.

The nature of retail jobs may change a little as although customer service roles will remain common, firms may increasingly need staff with expertise in ICT and data analysis. Job locations may change slightly too, with some types of role potentially becoming less common in London and lower profile shopping areas perhaps accounting for smaller shares of retail employment. Retail should remain a focus for entrepreneurial activity though new firms may increasingly begin by establishing online sales channels.

6.3. Retail in London's Economy

A substantial share of London's economic output is provided by the retail sector which, when taken together with wholesale trade and repair of motor vehicles (as statistics necessitate) accounted for over £26bn of gross value added in 2012, which is about 8 per cent of the total for that year⁵⁵. The latest GLA Economics forecasts anticipate positive output growth in the broad group of activities within which retail falls. This growth is expected to be 3.1 per cent in 2014, 2.2 per cent in 2015 and 1.5 per cent in 2016.

Many of the trends and adaptations discussed support the idea of growth in the retail sector; not least the expected increases in population and disposable income that are mentioned in sections 4.1.1 and 4.1.2. The plans of retailers and developers for additional capacity, mentioned in section 5.3, also point towards optimism for growth prospects but there are other arguments too.

For example, greater exploitation of the complementarities between online and offline sales channels (outlined in section 5.4) may help retailers improve their fortunes. The same is true of retailers better avoiding adverse interactions between online and offline channels (section 5.5) and making greater use of ICT and customer data analysis (section 5.6).

The ability of UK retailers to redeploy their E-commerce investments for use in overseas markets could also be beneficial for the economic contribution of retail to London as some of the profits may flow back into the UK and to London. However, the same is also true in the opposite direction as E-commerce has made it easier for international firms to enter the UK market and potentially capture some of the available custom. Other risks to growth prospects for retail could come from planning

⁵⁵ ONS Regional GVA, 2012

restrictions inhibiting retailers' property portfolio adjustments or skill shortages making it difficult for firms to successfully implement the omnichannel approach they are aiming for.

Overall, retail will remain an important part of London's economy with growth in the economic output of the sector expected in the next few years.

6.4. Retail's Use of London Space

Section 3 reported that retail premises take up 17m square metres of London floorspace and are present all over the capital. The section also suggested that a significant share of the 21m square metres taken up by industrial uses (which includes warehousing) may also be related to retailing. Many of the trends discussed, however, point to changes in the way the retail sector will use physical space.

The emergence of E-commerce, described in section 5.1, is clearly of relevance for the land use of retailers as it has allowed new firms to enter the sector and supply customers all over London without the need for any physical stores. It also offers the same opportunity to existing firms that expand into E-commerce potentially allowing them to economise on their use of stores.

The complementarities between online and offline retailing mentioned in section 5.4 provide some countervailing force against store closures as does the expected population growth in the capital mentioned in section 4.1.1. Firms do appear likely to adjust their store portfolios, however, and for some these adjustments will entail closures (The Economist, 2013). Even if many individual firms do decide to reduce their store portfolios, entrance of new firms and expansion of others will also take place, particularly as some former pure-players are establishing physical capacity, and this will support demand for retail space. Demand could also be supported by retailers that are looking for new sites that allow them to take advantage of new opportunities to enhance their productivity.

Experian (2013) provides the most comprehensive forecast of the demand for retail space currently available and suggests that London will need an additional 0.9m square metres of comparison goods retail space by 2036, implying that they expect the effects of population and income growth to more than offset any E-commerce induced reductions in store portfolios. The report, however, also points to spatial differences in these retail floorspace requirements with some boroughs seemingly requiring less retail space than they currently have.

This expectation for changes in the spatial pattern of retail space in London does somewhat match recent developments. For example, section 5.3 demonstrated that the leading retail areas have improved their retail offer (by increasing retail density) in the past three years to a greater extent than lesser shopping areas. Patterns such as this and the desire of some firms to adjust their property portfolios could mean that some retail areas become less viable over time. This may be particularly true as some of the temporary measures protecting retail firms from facing higher business rate burdens, mentioned in section 4.2.4, lapse in the coming years, further encouraging firms to reduce their property use.

Where shopping areas do become less viable, land or property owners may increasingly want to convert to other uses such as housing, a desire which section 4.2.2 explained may be strong anyway in some locations. The planning system will prevent this in many cases, but if the recently introduced permitted development rights allowing conversion of shops to homes (outlined in section 4.2.3) are used in any great number, conversions of this sort may become more common.

In addition to changes in the use of shop space by retail firms, there are also likely to be changes in the use of warehousing space by retail firms. This may be stimulated by trends such as changes in the roles

of stores, growing awareness of potential adverse online-offline interactions and the focus E-commerce has placed on delivery.

Section 5.4 suggested that stores may begin to take on more of a showrooming function in some cases, potentially holding very limited stock for display purposes and relying on stock held elsewhere to fulfil orders. A change such as this could increase demand for warehousing space which could also potentially be boosted if firms that currently dispatch orders from stores, move their order fulfilment elsewhere to protect the in-store experience.

Beyond these changes in demand for warehousing space, the drive for fast and predictable delivery times may change the desired locations for this warehousing space. Specifically, firms may increasingly want warehouse space near to their customers so they can offer delivery options that will be appealing. This may mean firms which have previously used warehousing far away from London aim to establish premises within or close to the capital in order to be near the huge concentration of wealthy customers it holds.

Another potential change in retail's use of physical space could be greater sharing of facilities, particularly where firms use their stores more like showrooms which are less demanding of space. Further potential for sharing of facilities could come from multi-retailer click and collect points or consolidation centres where shipments from multiple retailers are bundled (Deloitte, 2014).

There are likely, therefore, to be substantial changes in retail's use of space in London. E-commerce has offered firms the ability to reduce their use of shop space but complementarities between online and offline retailing as well as growing retail demand will weigh against this to some extent. In fact the best available forecast suggests that shop floorspace will actually increase but behind this there is likely to be a great deal of variation.

An increase in the geographic concentration of retail has already been apparent in recent years and this seems likely to continue as secondary locations become relatively less attractive. This trend may mean some locations currently have more retail space than they will need, potentially freeing up space for other uses which can benefit the capital and supporting the viability of shopping areas that remain.

Retail does not only use physical space in the form of shops, as warehouses and distribution facilities are also important assets for retailers. The emergence of E-commerce will have implications for this type of land use as well. The possibility that store functions may change a little and the awareness of adverse online-offline interactions may spur warehouse demand, while demand for leading delivery performance may relocate this demand. This could be particularly relevant for London as firms seek warehouses and distribution facilities which are near their customers, something which may encourage them to establish facilities in or near the capital.

6.5. Retail as a Tourist Attraction

Section 3 explained that tourists account for almost 10 per cent of the spending on comparison retail goods in London, with shopping locations such as the West End or Knightsbridge particularly popular with tourists. Tourist inflows are expected to increase substantially, as outlined in section 4.1.1, and London's retail offer should continue to be one of the motivations for travel.

Despite the fact that overseas consumers from all parts of the world will increasingly be able to purchase goods online from all the brands and shops that London offers (particularly as firms redeploy the E-commerce facilities they have established for the UK overseas), there are several reasons to believe London's retail offer will continue to be appealing to tourists. For example, as London-based retailers adapt to consumers' desires for experience retail and provide ever more enjoyable in-store

experiences, the appeal of visiting these stores may increase. Kyte (2012) argues that some of London's leading retail areas are already viewed as tourist attractions in the same light as other locations such as the British Museum or Tate Modern so improvements to the in-store experience they provide may enhance their reputation further.

Another reason why London's shopping areas may continue to be appealing to tourists is the increase in retail density they have experienced which is outlined in section 5.3. As the leading shopping areas have become more densely packed with retail premises they offer even greater potential for consumers to visit multiple stores in one visit and physically examine goods they may want to purchase. The substantial scale of retail firm formation in London may also help support its attractiveness for tourists who may be drawn to the idea of visiting the latest new retailers.

Overall, the growth of E-commerce and the ability of firms to re-use their E-commerce investments overseas may reduce the extent to which tourists need to travel to London to buy goods from their favourite brands. Many tourists will, however, still visit London's retail areas because of the enjoyment they will get and this may become increasingly true as firms look to provide experience retail. The attractiveness of London retail to tourists may be further supported by the increase in retail density of the leading shopping areas and the continual entrance of new firms to the sector.

6.6. Retail as a Motivation for Travel and Transport

Section 3 set out that around one fifth of trips London residents make using mechanised modes of transport are for the purpose of shopping and personal business. Added to this is likely to be a substantial share of the 4.7bn vehicle-kilometres of goods transport carried out in London.

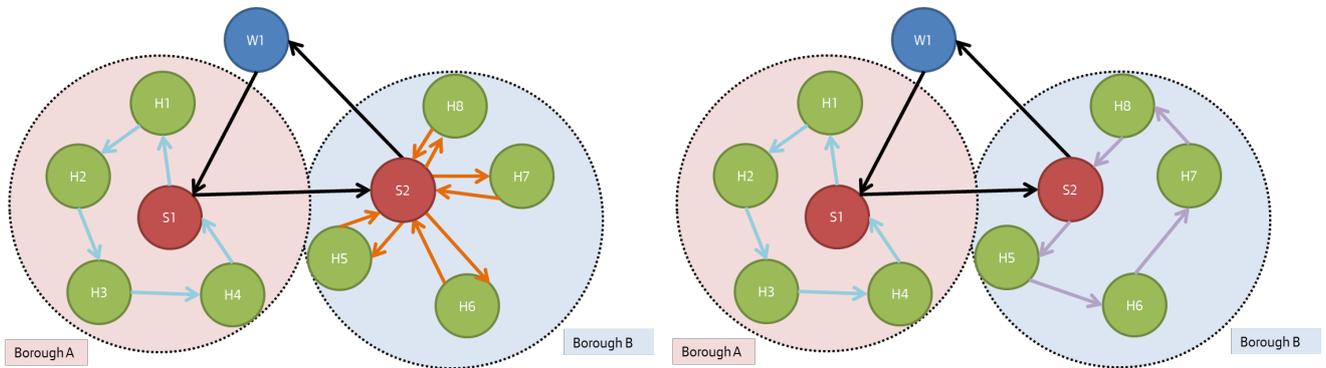
Many of the trends outlined earlier in the report could have implications for retail-related transport. E-commerce is one example as online orders mean consumers can buy goods without travelling anywhere, though they may still visit stores if they use click and collect or want to physically inspect the products. Even when consumers don't travel to stores to complete a purchase, their purchase will still have some transport implications as a delivery vehicle will need to bring the goods to their home. This illustrates how the impact of further growth in E-commerce on the transport intensity of retail is more complex than it may seem.

Even when considering a simple and highly stylised example (as shown in Figure 16), the impact of the introduction of E-commerce on transport depends on a number of factors. For example, if a firm introduced E-commerce with a relatively slow delivery approach in an area where shoppers previously used private transport, this could reduce the number of journeys, as is the case when comparing panels 1 and 2 of Figure 16. However, if instead a firm introduced a fast delivery E-commerce offer in an area where people previously used public transport then the amount of travel could go up (for example, compare panels 1 and 3). Further complexity could come from the potential for customers to visit stores even when ordering online, perhaps to inspect or return goods, as shown in panel 4.

Figure 16: Complexities of Retail Related Transport Demand

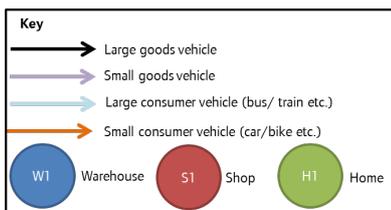
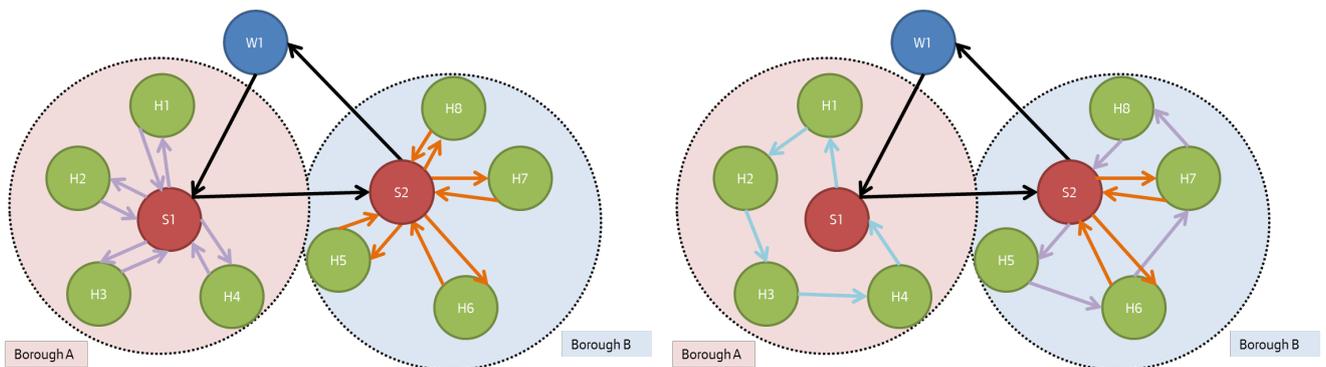
Panel 1: Prior to E-commerce

Panel 2: E-commerce with relatively slow delivery in Borough B



Panel 3: E-commerce with fast delivery in Borough A

Panel 4: E-commerce with slow delivery in Borough B. Some customers travel to stores anyway to examine or return goods



This simple diagram highlights how the extent to which consumers or goods are consolidated into transport modes can affect whether the introduction of E-commerce might make retail more or less transport-intensive. In the simple diagram, if consumers travelled to and from shops in large vehicles but this travel was replaced by retailers directly delivering goods in small vehicles (panels 1 and 3), then the number of trips would increase. The opposite would be true if unconsolidated consumer travel was replaced by consolidated delivery travel (panels 1 and 2).

The reality is of course more complex as consumers often visit multiple shops on the same trip. This may mean that E-commerce might not actually reduce the number of trips consumers make but could shorten them instead (as consumers only need to look for products they can't or don't want to buy online). Even if a consumer can eliminate an entire shopping trip, the multi-shop nature of many trips may mean multiple firms dispatch delivery vehicles to the consumer whereas without E-commerce the individual may have consolidated the various products into one return journey.

The potential for differing degrees of consolidation introduces considerable ambiguity into the consideration of how E-commerce may affect the transport-intensity of retail⁵⁶. The issue of whether a consumer purchasing a product online definitively stops making any journeys in relation to that specific purchase is perhaps less ambiguous.

This is because the exploitation by retailers of complementarities between online and offline channels may encourage consumers to continue to visit shops even when they do not make a purchase there. For example, if (as section 5.4 suggests) some firms use their stores more like showrooms or event spaces then consumers may still travel to stores to examine products or enjoy events even if they don't need to visit the store to obtain the goods they want. This type of behaviour also fits in well with the consumer desires for experience retail that are mentioned in section 4.1.3 and means that a scenario like panel 4 seems more likely than one resembling panel 2.

There are other complexities Figure 16 cannot show such as the potential for consumer behaviour to influence the transport intensity of retail if delivery charges aren't linked to delivery costs. Even if retailers are able to pass on their overall delivery costs through product prices, if consumers aren't clearly and directly affected by the costliness of their ordering behaviour, they may not take this into account when ordering (Browne, 2001). For example, if a consumer is offered free delivery they may make multiple small orders over the course of a month as and when they desire various products. If, instead they have to pay a delivery charge which includes a fixed component then they may consolidate their orders to spread this fixed cost. Consequently, E-commerce could actually change customer behaviour in a way that stimulates travel.

E-commerce could also conceivably stimulate travel through increasing return rates as consumers may be more likely to return goods they haven't physically inspected before buying. Such an effect might be particularly common if retailers offer free returns as, much like free deliveries; this might distance consumers from the costs they are triggering for retailers.

In the longer term, delivery and returns policies that mean a retailer isn't making sufficient profit would not be sustainable. Firms may therefore adjust by changing the way they charge for deliveries but they will also adjust through adapting their business processes and the physical locations they use.

Their adaptations to business processes will include measures such as those mentioned in sections 5.5 and 5.6. In particular if firms achieve greater organisational integration and are able to establish single views of their inventory then they will be better able to optimise the transport they use in order to serve their customers, potentially meaning they become less transport intensive over time. An example could be that a firm with a fragmented view of inventory sometimes fulfils orders with stock currently located further from the customer than necessary but if they establish a comprehensive view of their stock this would be unlikely to happen.

Adaptations to retailers' physical locations would also aim to economise on transport, amongst other goals, so may have a dampening effect on the transport intensity of retail. An example of this could be that a retailer which has recently expanded into E-commerce may currently dispatch orders from their existing warehouses which may be well positioned for access to stores but perhaps less well-located for serving customers directly. Instead they could establish a new warehouse in a location better suited to its new function.

The extent to which retailers' adaptations make them less transport-intensive over time will depend on other priorities they have. If fast and predictable delivery times become even more important in gaining

⁵⁶ This is without even considering the emissions implications of any changes – which would be desirable if possible

custom, as section 5.4 suggests may be the case, then retailers may happily use smaller vehicles and more direct journeys to achieve these characteristics.

Overall therefore, it is difficult to make firm predictions about how changes in retail may affect transport in London. E-commerce will clearly have many effects on transport in London but this report is not alone in being unable to form a judgement over their net effect, Becker, Brummelman, & Demkes (2002), Visser, Nemoto, & Browne (2014) and Browne (2001) all similarly point out that the transport implications of E-commerce are difficult to pinpoint.

There are two major points which are worth noting, despite the lack of certainty over net effects, which are that retailers will clearly look to economise on transport where they can but that this may not always fit in with customer preferences. Retailers will want to lower their costs by using less transport as a result of achieving greater organisational integration and optimising their physical locations but if consumers increasingly desire fast and predictable delivery times, firms may become more transport-intensive to achieve this.

Even if it is not possible to say much about the transport-intensity of retail, sections 4.1.1 and 4.1.2, outline that retailers are likely to have more customers with more disposable income. This means that even if transport intensity remains unchanged, the retail sector may motivate more travel in London over time. This may have implications for firms that provide transport and logistics services for retailers, something which the next section discusses.

6.7. Retail as a Customer for Other Sectors

Section 3 pointed out some of the other sectors that retail makes significant use of which included construction, land transport and warehousing amongst numerous others. Many of the trends and adaptations that have been analysed suggest that there may be some changes in the pattern of retail purchases from other sectors, though the extent of some of these changes may depend on the degree to which retail firms out-source certain activities rather than performing them in-house.

Logistics activity is a clear example of this as section 5.2 highlighted the growing complexity and importance of retail firms' logistics arrangements. E-commerce has meant firms' distribution networks no longer simply end at their stores but instead reach out to consumer homes and possibly back again to incorporate product returns. This added complexity has been accompanied by added importance given the role of delivery performance in E-commerce competition. These developments suggest retail firms may spend more on logistics activity though this spending might not always leave the retail companies.

This is because the growing importance of offering predictable and fast deliveries might actually increase the attractiveness of having in-house transport and logistics capabilities as if firms have their own means of transport they hold full control over when orders are dispatched and what routes they take. Having in-house logistics capabilities may also help firms achieve the single view of inventory which section 5.5 suggested might be important in establishing a truly omnichannel approach. The trade-off to such an arrangement could be extra expense relative to using third-party providers that can potentially consolidate shipments from multiple clients to achieve higher capacity utilisation.

The greater focus of retailers on logistics is likely to also include warehousing and storage. These may become areas of additional spending as well given that firms may want to alter their warehousing arrangements to help achieve fast and predictable delivery times. Section 5.5 points out that another factor which may stimulate demand for warehouse or distribution facilities is the desire to protect in-store experiences by taking online order fulfilment elsewhere. Similarly the potential for store functions to change slightly (outlined in 5.4) may have knock-on effects for warehousing too. Out-sourcing of

warehousing and storage, may be governed by similar principles to transport out-sourcing as dedicated facilities would give retailers more control of deliveries and possibly help them unify their stock information but may offer reduced scope for consolidation.

Another type of activity retailers may spend more on in the future is development and use of ICT in their businesses. Table 1 in section 3 suggested that around 2.4 per cent of retail firms' purchases from other sectors go to computer programming and related firms but this could conceivably increase over the coming years. Firms' desires to provide a seamless experience for their customers spanning multiple channels will require significant investments in ICT both for the systems consumers see and for the systems in the background which enable retailers to provide this seamless service.

Firms may look to external companies to help them create leading ICT systems given the relative shortage of these skills (mentioned in 4.2.5) may make it difficult to establish sufficient levels of capability in-house. As with all decisions over whether to out-source a particular activity factors such as firm size and the complexity or specificity of requirements will play a role in the actual decisions of specific retailers (Thouin, Hoffman, & Ford, 2009).

The property portfolio adjustments which section 5.3 suggests retailers will want to make may continue to support the significant share of input spending that retailers use on construction services. This is because firms may want to adjust their locations to better match their new ways of operating. They may also want to establish new stores or re-model old stores to make use of new productivity enhancing technologies available to them. The significant pipeline of retail development that section 5.3 suggests is expected to take place also supports the idea that retailers will continue to direct a substantial share of their input spending toward the construction sector.

Another sector which retailers may make more use of is advertising and marketing. The growing availability of customer data mentioned in section 5.6 will be a major reason for this. Firms may also be attracted to the idea of sending real time marketing information to customers' mobile devices to encourage them to make purchases. Consequently firms that can facilitate this may be in demand.

Overall, retail will remain an important customer for many other sectors though the extent to which firms perform some functions in-house may affect this. It is, however, worth noting that the vast majority of retail businesses in London are very small (as explained in section 5.4) so may be less able to justify establishing in-house capabilities in a wide range of non-retail activities.

In terms of the specific sectors that may become more important for retailers, those related to logistics activity (such as transport or warehousing) appear to be prime candidates; particularly given the focus E-commerce has placed on delivery performance. ICT will be another key supplier sector for retailers as their desire to move towards an omnichannel approach will entail significant ICT investments. Property adjustments suggest construction will remain important while the growing availability of customer data may make advertising and marketing another area of focus.

6.8. Summary

The previous sections have outlined how the changing retail landscape and the adaptations firms are making in response to these changes may affect the role retail plays for London. This discussion is summarised in Table 7 and forms the basis for the conclusions offered in the final section.

Table 7: Summary of Retail's Changing Role in London

Recent Years	The Near Future
Linking consumers with producers	Still an important intermediary but producers better able to sell directly to consumers
Providing employment and opportunities particularly for women, younger workers and those who want to work part-time	<p>Providing even more jobs than currently with a greater share of roles possibly involving ICT, data analysis and logistics</p> <p>Potential for more working during non-standard hours and for the location of jobs to change</p> <p>E-commerce will continue to make it even easier for entrepreneurs to start a retail business</p>
Contributing towards London's economy	Further growth in the economic output of the retail sector as firms re-use E-commerce investments overseas and implement productivity improvements over time
Filling high streets and major centres with shops people want to visit	<p>Individual retail firms may make downward adjustments to their store portfolios though there are complementarities between online and offline retail which may dampen this</p> <p>Growth in the sector as a whole suggests that overall space usage will go up but not in all locations</p> <p>The geographic concentration of retail may increase possibly freeing up space (in some locations) for other uses</p> <p>Possible increases in warehousing space though some of this may be in regions just outside of London that are well placed to serve the capital</p>
Attracting tourists from the rest of the UK and the rest of the world	Retail to attract and be visited by growing numbers of tourists, particularly the leading shopping areas which have become even more retail dense
Stimulating significant amounts of personal and goods transport	<p>Growth in the sector as a whole likely to increase the amount of transport it stimulates but changes in transport intensity much more ambiguous</p> <p>Focus on delivery performance could conceivably prevent the transport-intensity of retail from falling but other factors more difficult to judge</p>
Providing demand to other sectors of the economy such as construction, logistics and warehousing	<p>Logistics related activity to become an area of greater focus alongside ICT, construction and advertising</p> <p>Much of this will benefit other sectors as the majority of retail firms are very small so may lack the resources to expand into other areas, making them likely to out-source</p>

7. Conclusions

The previous section analysed how the role of retail in London may change over time as a result of the adaptations the sector has made to fit in with the retail landscape it now faces. If these changes do indeed take place, they are likely to occur relatively slowly, giving policy makers the time to help ensure a good outcome for London. This section aims to offer some considerations for how policy makers might do this.

One of the potential ways policy makers could help the changing role of retail to have beneficial implications for London is to utilise a flexible approach to planning decisions. Retailers are likely to want to make adjustments to their property portfolios, possibly closing stores in some secondary locations and opening or expanding stores in more buoyant locations.

If planning constraints prevent these changes, the implications for retail productivity could be problematic given the links between productivity and portfolio adjustments outlined in section 4.2.3. If London retailers are frequently unable to make the adjustments they require then the sector may not contribute to economic growth as strongly as it could.

Other implications could be that London retailers are less able to generate the profits they need to fund investments that would bring them closer to the omnichannel model they are aiming for. Such an inability to invest could risk London and UK retailers losing the global E-commerce advantages they currently enjoy as a result of the maturity of the UK E-commerce market.

A flexible approach to planning might also benefit London by helping space retailers no longer need to be converted into more productive uses. Section 5.3 suggested that some locations may already have more retail space than they are likely to need. In these locations vacant retail premises are likely to fulfil a better function for London if converted to other uses such as housing. The extent to which such flexibility would be beneficial is highlighted by the substantial price differentials between residential and retail property which suggest significant economic value can be unleashed by suitable conversions.

Some beneficial conversions may happen without planning if the permitted development rights mentioned in section 4.2.3 are used, but beyond this, planning still has a significant role to play. There may be some concerns over the extent to which conversions inhibit entrepreneurial activity in the retail sector, but as section 5.1 suggested, the emergence of E-commerce has permanently lowered the barriers to entering the retail sector meaning it will still attract substantial entrepreneurial activity. An argument could even be made that entrepreneurs may have a better chance of success if they start by using E-commerce rather than leasing a shop given the opportunities it offers for experimentation and iteration towards a successful business set up.

Another potential concern could be that conversions from retail to residential may make high streets less vibrant but this too should not cause excessive worry. One reason is that genuinely vibrant high streets that provide the enjoyable experiences should benefit from the consumer desires for experience retail outlined in section 4.1.3. Another reason is that inhibiting the conversion of retail units to other uses may not protect vibrancy at all, but instead may result in high streets full of vacant units. There could also be an argument that allowing certain secondary locations to transition toward different functions could support the viability of alternative shopping locations nearby.

This is not to say that the spillover effects planning decisions may have on those not able to directly influence the decisions should be ignored, as this is one of the main purposes of the planning system, but rather to highlight the potential implications for those the planning system restricts. The role of

planning in ensuring spillovers are reflected in land use outcomes will be important in all decisions but may be particularly relevant for decisions relating to warehousing and distribution premises.

Section 6.4 suggested that demand for urban logistics centres and similar facilities may go up given the focus E-commerce has placed on delivery performance. Given that such facilities will be associated with substantial traffic flows and may operate round the clock to offer the best possible delivery performance, they may not be easily accommodated in all locations.

The growing importance of delivery performance to the retail sector points towards a second clear consideration for policy makers. This is how to continue to ensure London's infrastructure needs are met over the coming years. Section 4.2.6 mentioned a few forthcoming projects (which are part of a much larger set of future investments) and delivering these will help the retail sector continue to give customers the service they want.

Linked to this is perhaps a less immediately obvious policy consideration, however, the focus on delivery performance and its potential implications for the transport-intensity of retail make it even more important for policymakers to ensure London's transport infrastructure, and particularly the road network, is used efficiently. Efficient use of London's transport infrastructure could help delivery vehicles in the capital remain able to make prompt and predictable deliveries. Related to this, it will also be important that emissions continue to play a part in retail-related transport decisions.

It will also be important for policy to support the availability of skilled workers for the retail sector. Controlling emissions and air quality may actually be beneficial for this as it will help maintain the high quality of life offered by London and desired by the high-skilled workers that can fill the logistics, ICT and data analysis roles that section 4.2.5 suggested would grow in importance. Policy can also support this in other ways such as ensuring the education system delivers more individuals with the skills needed and that the immigration system allows retailers to address genuine skills gaps with overseas workers where necessary.

One final policy consideration that is apparent is to reconsider the nature of business rates. The main reason for this is that, as section 4.2.4 explains, the tax in its current form inefficiently discourages retail firms from making best use of property. The relatively infrequent revaluation periods can also be problematic as they can result in short-term divergence between the tax burden associated with a property and the underlying profit-potential of that property. The review of business rates announced in the 2014 Autumn statement⁵⁷ and the potential for further devolution of this tax, as recommended by the London Finance Commission⁵⁸, both offer some hope that progress could be made in the coming years.

Overall, therefore, there is much that policy makers can do to ensure the changing role of retail in London produces the best possible outcome for the capital. One of the key aspects of this will be taking a relatively flexible approach to planning decisions without ignoring the important spillover effects of such decisions. Meeting London's infrastructure needs will also be vital if the sector is to reach its potential but while doing this policymakers should ensure infrastructure users consider their impact on others. Finally policy makers should help address skills gaps in the retail sector and consider reforming business rates.

⁵⁷ HM Treasury (2014) Autumn Statement 2014

⁵⁸ London Finance Commission (2013) Raising the Capital

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9. Appendix

9.1. Definitions used for the estimate of retail spending by average London households

Table 8: Definitions used for the estimate of retail spending by average London households

ONS Category Code	ONS Category Name	Comparison	Convenience	Other
1.1	Food		1	
1.2	Non-alcoholic drinks		1	
2.1	Alcoholic drinks		1	
2.2	Tobacco and narcotics		1	
3.1	Clothing	1		
3.2	Footwear	1		
4.1.3	Net rent			1
4.2	Maintenance and repair of dwelling			1
4.3	Water supply and miscellaneous services relating to the dwelling			1
4.4	Electricity, gas and other fuels			1
5.1	Furniture and furnishings, carpets and other floor coverings	1		
5.2	Household textiles	1		
5.3	Household appliances	1		
5.4	Glassware, tableware and household utensils	1		
5.5	Tools and equipment for house and garden	1		
5.6.1	Cleaning materials		1	
5.6.2	Household goods and hardware	1		
5.6.3	Domestic services, carpet cleaning and hire/repair of furniture/furnishings			1
6.1.1	Medicines, prescriptions, healthcare products and equipment	1		
6.1.2	Spectacles, lenses, accessories and repairs			1
6.2	Hospital services			1
7.1	Purchase of vehicles			1
7.2	Operation of personal transport			1
7.3	Transport services			1
8.1	Postal services			1
8.2	Telephone and telefax equipment			1
8.3	Telephone and telefax services			1
8.4	Internet subscription fees			1
9.1	Audio-visual, photographic and information processing equipment	1		
9.2	Other major durables for recreation and culture	1		
9.3	Other recreational items and equipment, gardens and pets	1		
9.4	Recreational and cultural services			1
9.5.1	Books	1		
9.5.2	Diaries, address books, cards etc.	1		
9.5.3	Newspapers		1	
9.5.4	Magazines and periodicals		1	
9.6	Package holidays			1
10.1	Education fees			1
10.2	Payments for school trips, other ad-hoc expenditure			1
11.1	Catering services			1
11.2	Accommodation services			1
12.1.1	Hairdressing, beauty treatment			1
12.1.2	Toilet paper		1	
12.1.3	Toiletries and soap		1	

12.1.4	Baby toiletries and accessories (disposable)		1	
12.1.5	Hair products, cosmetics and electrical personal appliances	1		
12.2	Personal effects			1
12.3	Social protection			1
12.4	Insurance			1
12.5	Other services			1
13.1	Housing: mortgage interest payments council tax etc.			1
13.2	Licences, fines and transfers			1
13.3	Holiday spending			1
13.4	Money transfers and credit			1

9.2. Calculation of the Price Ratio Between Residential and Retail Property

Table 9: Calculation of the price ratio between residential and retail property

		Hackney	Tower Hamlets
Data Sources <i>(BNP Paribas 2012 and 2013)</i>		Link	Link
Rents per square foot <i>(data taken from reports)</i>	Retail warehouse	£12	/
	Supermarket Retail	£8	/
	Retail City Fringe	/	£15
	Retail Elsewhere	/	£8
Yields <i>(data taken from reports)</i>	Retail warehouse	8%	/
	Supermarket Retail	8%	/
	Retail City Fringe	/	7%
	Retail Elsewhere	/	8%
Capital value <i>(rents over yields)</i>	Retail warehouse	£150	/
	Supermarket Retail	£100	/
	Retail City Fringe	/	£214
	Retail Elsewhere	/	£100
Property Sales Values per square foot <i>(data taken from reports)</i>	Min	£400	£380
	Max	£700	£700
Ratios <i>(residential values over retail values)</i>	Largest <i>(max residential over min retail)</i>	7	7
	Smallest <i>(min residential over max retail)</i>	3	2

Source: GLA economics analysis of BNP Paribas data

9.3. Moran's I and Local Moran's I

Figure 13 plots statistically significant values of the Local Moran's I. This statistic is calculated for each area and aims to assess how similar or dissimilar each area is to its neighbours (in terms of changes to retail-density) and whether these patterns appear different to what would be expected if retail densities were randomly distributed across London.

Assuming each area has at least one neighbour, there are three main outcomes that are possible for each location. They can display no significant spatial pattern (which is the case for many of the areas in Figure 13), they can be part of clusters (which are similar to their neighbours) or they can be outliers (which differ from their neighbours). There are two types of cluster and two types of outlier as shown in Table 10.

Table 10: Cluster and Outlier Types

	Fast increase in retail-density	Slow increase or decrease in retail density
In a neighbourhood experiencing fast increases in retail-density	High-High Cluster	Low-High Outlier
In a neighbourhood experiencing slow increases or decreases in retail-density	High-Low Outlier	Low-Low Cluster

Table 5 includes values for the Moran's I, a global measure of spatial autocorrelation. Unlike the Local Moran's I, which is calculated for every area, the Moran's I is a summary measure calculated for an entire set of areas, in this case the 983 MSOAs in London. The values range from -1 (indicating perfect dispersion) and 1 (indicating perfect clustering). Moran's I values can also be statistically insignificant which would indicate that the overall spatial pattern does not appear to differ from what might be expected from a random arrangement but this is not the case for any of the values in Table 5 which are all significant.

The calculation of both the Moran's I and the Local Moran's I values is only possible when the way in which different areas relate to each other has been specified as this determines which MOSAs are part of the 'neighbourhood' for a given MSOA. In theory many possible relationships could be used, for example, MSOAs in the same borough could be considered neighbours, but in this report distance has been used to capture the relationships between different areas.

Specifically, the report assumes that the degree to which one MSOA is the neighbour of another depends inversely on the squared distance between them. This effectively means that MOSAs that are very near to an area in question are part of its neighbourhood to a much greater extent to those a little further away. This decision was taken so that the degree of retail clustering could be analysed at a spatial level that seems relevant to decisions about shopping trips. This is because it seems reasonable to argue that the further away two MSOAs are, the less likely a consumer is to visit them as part of one shopping trip. It also seems reasonable to assume that each additional metre becomes even more of an inhibitor (to areas being part of the same shopping trip) as the total distance increases.

Specifying the relationships between different areas when carrying out Moran's I or Local Moran's I calculations is, however, not an exact science and can always be debated. For more details on both these measures, including formulae, please see Fischer & Wang (2011).

9.4. Econometric Analysis of Local Data Company Data

The analysis in section 5.3 uses data from the Local Data Company (LDC) which capture the location and function of thousands of commercial premises. The entire sample includes over 130,000 cases where each case is a combination of a firm and location as, for example, a location may host one firm which closes and is later replaced (meaning that location is the subject of two cases).

This sample was filtered down to remove all non-retail functions and so that only cases that were active in 2011 were included. This means that all the cases involve occupants that were established in or

before 2011 which, in combination with the removal of non-retail firms, reduces the number of cases to around 42,000.

Though all of these cases were active in 2011, not all of them remained active and this is the focus of the analysis which aims to explain the factors that were significantly associated with cases closing between 2011 and October 2013. The factors included in the analysis are outlined in Table 11.

Table 11: Factors Included in Econometric Analysis

Factor	Reason	Source	Variable definition(s)
Number of years of operation as of 2011	Longer established shops may have better prospects (e.g. they may have built up a reputation, may be used to the demands of the market etc.)	Local Data Company	Number of years since the LDC reported opening date
Average house prices in the MSOA where the premises is located	This should reflect the affluence of the most local consumers	Valuation Office Agency (via the GLA MSOA data Atlas)	Natural log of mean house prices in the relevant MSOA in 2012 ⁵⁹
Population in the area where the premises is located	This should reflect the size of the domestic consumer base in the local area	ONS Mid-Year Estimates (via the GLA MSOA data Atlas)	Natural log of population in the relevant MSOA in 2011
Employment in the area where the premises is located	This should reflect the size of the commuter consumer base in the local area	ONS Business Register and Employment Survey (via the GLA MSOA data Atlas)	Natural log of employment in the relevant MSOA in 2011
Shop Type	Different shop types may be at varying closure risks independent of location (e.g. some may be more affected by competition from E-commerce)	Local Data Company	Two dummy variables for whether the shop was comparison or convenience retail. The third category (food) was the reference category
Proximity to leading shopping areas	Being proximate to leading shopping areas should benefit footfall and viability given consumers are likely to be more attracted to shopping areas with many different premises	Local Data Company, London Plan and Ordnance Survey	Four dummy variables for whether the premises was within 1km of a; <ul style="list-style-type: none"> – International Centre – Metropolitan Centre – Major Centre – District Centre The fifth category used as the reference category included premises that were not within 1km of any of these centre types

⁵⁹ 2011 data were not available

The factor of most interest is whether proximity to leading retail centres is associated with any differential risk of closure; the other factors were included in the process in order to better isolate any association between closures and locations. This issue was addressed by using econometric estimation techniques⁶⁰ to analyse the associations between the factors in Table 11 and whether or not the retail premises in the sample had closed between 2011 and late 2013. The results are summarised in Table 12.

Table 12: Econometric Analysis Results

Factor	Association with probability of closure	Significance Level
<u>Number of years of operation as of 2011</u>	Lower probability	1%
<u>Average house prices in the MSOA where the premises is located</u>	Higher Probability	5%
<u>Population in the area where the premises is located</u>	Higher probability	5%
<u>Employment in the area where the premises is located</u>	No significant association	
<u>Shop Type</u>		
Convenience (relative to food)	Lower probability	1%
Comparison (relative to food)	Higher probability	1%
<u>Proximity to leading shopping areas</u>		
Within 1km of International Centre (relative to premises further than 1km from all centre types)	Lower probability	1%
Within 1km of Metropolitan Centre (relative to premises further than 1km from all centre types)	No significant association	
Within 1km of Major Centre (relative to premises further than 1km from all centre types)	Higher Probability	5%
Within 1km of District Centre (relative to premises further than 1km from all centre types)	No significant association	

As section 5.3 explained, proximity to an international centre was associated with lower probabilities of closure relative to being further than 1km from any centre type. Being within 1km of a major centre was actually associated with a high probability of closure. These results should be interpreted with a degree of caution and alongside all the other evidence and arguments presented in section 5.3.

This is because it is beyond the scope of this paper to carry out an academic-standard econometric analysis and consequently the modelling performed is relatively informal. Amongst the weaknesses readers may want to bear in mind are; alternative model specifications might have been more

⁶⁰ Logit and probit models were used given the dependent variable was binary (1 if the case had closed and 0 otherwise). Standard errors were clustered at the MSOA level. Signs and significance levels were the same in both the probit and logit models. Full results are available upon request.

appropriate⁶¹, limited sensitivity analysis has been carried out and the selection of variables was not the result of a systematic review of academic evidence on the topic.

Despite these weaknesses (which are not exhaustive), the analysis should be of use when taken alongside the rest of section 5.3.

⁶¹ For example the data could have been transformed to a panel and then a hazard model used.

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