



The Missing £Billions

The economic cost of failing to adapt our high street to
respond to demographic change

Cesira Urzi Brancati and David Sinclair

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ILC–UK
11 Tufton Street
London
SW1P 3QB

Tel: +44 (0) 20 7340 0440
www.ilcuk.org.uk

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Executive Summary

Older people are increasingly important consumers

The market for older consumers is large and growing fast: nearly 20 million people – 9.3 million men and 10.4 million women – are aged over 50 in the UK.ⁱ Approximately half of them are aged over 65 and one in seven is an octogenarian. According to the ONS, the number of people over state pension age is set to increase to nearly 14 million by 2030.ⁱⁱ

The growing number of older people means that this group of the population is an increasingly important part of our consumer economy: consumers aged 50+ spend a total of £314 billion a year, equivalent to roughly 43% of total household spending on consumption.ⁱⁱⁱ However, households headed by someone aged over 50 represent over 55% of the total number of households, and so it follows that older households are spending less than their younger counterparts. In this report we analyse some of the potential reasons for this and offer some tentative solutions.

Older people are “underspending” on goods and services

Previous studies - including ILC-UK's “Understanding Retirement Journeys” (2015); “Financial Wellbeing in Later Life” (2014) and “The Golden Economy” (2010) - have documented how consumption steadily falls with age. Furthermore, the decline in spending appears to be persistent over time and common to most western countries. The underspending phenomenon among older people has been described as the ‘retirement consumption puzzle’.

This report shows that for each year beyond the age of 55, average (equivalised) household expenditure on food and groceries, eating out, clothing, and leisure declines by approximately 1%. So, by the time consumers reach the age of 75, we can predict an overall drop in spending equal to approximately 17.1%. However, there are differences across spending categories: while consumers aged 75+ spend significantly less on clothing and leisure, they spend nearly the same amount of money on food and groceries, and eating out as consumers in their early fifties.

These findings confirm the trend already revealed in the ILC-UK's previous report, Understanding Retirement Journeys; the report analysed 10 years' worth of data from the Living Cost and Food Survey and concluded that it is mainly expenditure on so called “non-essential” items that declines as people get older, while expenditure on most essential items remains rather steady.

Older people also aren't getting out to spend as much as they would like

Not only do we spend less as we grow older; our research also finds that some of us don't go out as much as we would like as we age.

Based on original estimates from the English Longitudinal Study of Ageing (2014/15) (ELSA), the report reveals that only a tiny proportion of the 50+ engage in cultural activities, such as going to the cinema, theatre or museum at least once a month. Approximately 60% of the 50+ eat out at least once a month; and yet more than 40% of them would like to eat out more often. Ageing does not affect the frequency with which people go out – with the exception of going to the cinema; in addition, as we grow older, we want to go out less and less.

But do we want to go out less as we age because we are fully content with our lives and happy being at home watching TV, or are we forced to stay in because the environment is not fit for us?

Barriers to spending and cultural participation: financial constraints, poor health and connectivity

A lack of spending in old age isn't just down to a lack of income

Financial constraints and a decreasing income are likely to be two of the main reasons for a drop in spending; however, we find that financial constraints are less of an issue for older people.

In addition, regardless of where people stand in the income distribution, they still spend less as they get older. Middle earners show the largest drops in consumption – up to 30% – between the ages of 50 and 80+; by contrast, 80+ in the lowest income bracket spend on average only 10.7% less than the 50+ belonging to the same income group.

Poor health affects spending

Ageing is generally associated with a deterioration of health. But not all older people will see their health deteriorate at the same pace and to the same extent. While some 70 year-olds can still enjoy extremely good health and functioning,¹ others are frail and require significant help from others.

Health and the risk of its deterioration have been widely recognised as being important determinants of consumption and saving decisions. Having a mobility issue, such as a difficulty walking a relatively short distance, is likely to make a person less willing to leave the house, and thus less likely to spend or engage in social activities, especially in areas that are not specifically equipped for older people. Our estimates reveal that having a walking difficulty is one of the biggest barriers to consumption among those aged 50 and over. After controlling for all other socio-demographic factors, we find that people with a walking difficulty spend on average 14.5% less; however, having a walking difficulty does not have the same impact on all spending categories: it leads to 16% less spending on clothing, 15% less spending on eating out and 11.5% less spending on leisure; but has no association with spending on food and groceries. If we concentrate on those aged over 75, we find a smaller impact - on average 10.9% lower spending – but the estimates become less precise, because of the reduction in sample size.

Living in a rural area, lack of access to a car or the internet also affect spending

Older people living in rural areas may have to travel more to reach their local high street shops; they will thus be much more reliant on driving or public transport than their urbanite counterparts. Older people with mobility issues or arthritis are particularly at risk of losing out if they live in more rural areas, unless the route to their high street provides ample opportunities for resting or seating.

About a quarter of people aged over 50 (23.7% of those aged over 75) live in rural areas. However, we find that living in rural areas has a mixed impact on spending.

Having access to a car is associated with higher expenditure, and so is having internet access. Yet, access to the internet is low among older people living in rural communities.

What can we do?

Under consumption by older people presents a major economic challenge. As such, concerted policy action at a national and local level is justified. For businesses, there is a huge economic return from maximising access to the high street for the older consumer.

We focus our calls on the importance of ensuring that our built environment does not act as a barrier to consumption. It is vital that all communities, large and small, better understand the changing demographics of their inhabitants. We must better support the development of age friendly

¹ Ability to carry out everyday tasks.

communities which foster active ageing. An age friendly community will improve the opportunities for shopping, socialising, working, and volunteering for all ages.

The design of shops can prevent or encourage access to the high street and thus foster spending. Local transport infrastructure can also determine whether an older person is capable of even making the journey to their local high street, and the actual design of the high street itself could be reviewed in order to make it more accessible for an older population.

Making our environment more age friendly could offer an economic boost to UK GDP

Household spending is the largest component of aggregate demand, in most western economies, including the UK. By affecting consumption patterns, the age structure of the population is thus a crucial determinant of GDP. By removing barriers to consumption due to mobility issues, we could both improve the standard of living of people aged over 50, and give a boost to GDP.

We have calculated that if consumers aged over 50 with a mobility issue were to spend as much on eating out, clothing and leisure, as consumers of the same age and with the same socio-economic characteristics but without a walking difficulty, we could have an increase in annual spending between £470 million and £3.84 billion. Even if we just focus on those aged over 75, we could have a boost to the economy ranging between £66 million and £560 million a year.

- If we focus on the households headed by a consumer who is aged over 55, we would see a boost in consumption ranging between £0.3 billion and £2.6 billion;
- The boost among people aged over 65 would range between £0.2 billion and £2.0 billion a year;
- The boost in spending among those over 70 would range between £0.1 billion and £1.2 billion a year;
- And finally, the boost in spending among the 75+ would range between £66 million and £560 million a year.

About this report

There is growing interest in understanding how the built environment may act as a barrier to participation in society by older people. The ILC-UK report “The Golden Economy” highlighted a number of recurring problems that older people experience when in shops, particularly supermarkets: a lack of rest areas and seating making shopping tiring; a lack of adequate toilet facilities; poor store layout, and other issues.^{iv}

Over the past decade, the World Health Organisation has developed a global network of Age Friendly Cities, and the Age Platform in Brussels has led the development of a Covenant on Demographic Change pulling together a range of stakeholders including public authorities to **implement evidence-based solutions to support active and healthy ageing**. However, there has been limited study on the extent to which the environment we live and shop in might actually act as a barrier to consumption. Yet these barriers are documented in qualitative research. The ILC-UK 2010 report (The Golden Economy) highlighted qualitative research suggesting that, for example, **the lack of toilets and the lack of seating created a barrier to consumption**.

In this report we try to quantify the decline in consumption and spending on the high street among older consumers due to a series of barriers, such as poor health and lack of connectivity. To this end, we start by describing patterns of spending among consumers aged over 50, with a special focus on those aged over 75. We then summarise how often they go out, and whether they would like to do more. We continue by providing a detailed description of the health and connectivity barriers that this group of consumers face, and we finish by sketching a series of solutions, emphasising the potential role of the built environment.

Introduction

In most developed countries, including the UK, consumption accounts for over two-thirds of GDP. In these countries, a rising proportion of the population is approaching or past State Pension age; in the UK, there are approximately 12.4 million people over State Pension age, and the number is set to rise to nearly 14 million by 2030.^v The behaviour of older consumers is thus a topic of great relevance for the economic policy debate.

Several studies, among which the 2015 ILC-UK report “Understanding Retirement Journeys: Expectations vs reality”, have documented how consumption steadily falls with age, and how this decline appears to be persistent over time, and typical of most western countries. In addition, while financial constraints are likely to be one of the main reasons for a drop in spending, they appear to be less of an issue for older people, and therefore something else may be at work.

With this report, we investigate the impact of what we call ‘health barriers’ on consumption expenditure in retirement, as well as on participation in social and cultural activities. By health barriers we mean general poor health issues, such as having a long-standing illness, mobility issues, such as having a difficulty walking for $\frac{1}{4}$ of a mile unaided; and other health conditions or disabilities such as arthritis, poor eyesight, difficulty hearing and incontinence.

While health conditions are likely to have an impact on older consumers, they are not the only factors likely to determine consumption in old age. The report thus explores the impact on spending on what we call ‘connectivity barriers’. By connectivity barriers we mean lack of proximity to shops and amenities, especially for people living in rural areas; lack of access to a private means of transport, such as a car or a van; and lack of access to the internet.

Finally, the report explores the potential for addressing some of these barriers by changing the built environment. Despite the widespread prevalence of mobility issues among older consumers, a recent audit by the DisabledGo, endorsed by the DWP, found that a sizeable proportion of high street shops and restaurants have inadequate facilities for disabled people.^{vi} Supplying more seating or resting places for people with a walking difficulty or arthritis, and more toilets for people with incontinence issues may give older consumers an incentive to spending and going out more.

(Under) Consumption and social activities among older people

Older people are increasingly important consumers

The growing number and proportion of older people means that this group of the population plays an increasingly important part in our consumer economy.

According to our estimates from data in the Living Costs and Food Survey (2014), households headed by someone aged 50 and over spend approximately £314 billion a year. However, the 14.5 million households headed by someone older than 50 represent over 55% of the total number of households, while their aggregate spending amounts to approximately 43% of the total, which means that they are spending significantly less than their younger counterparts.

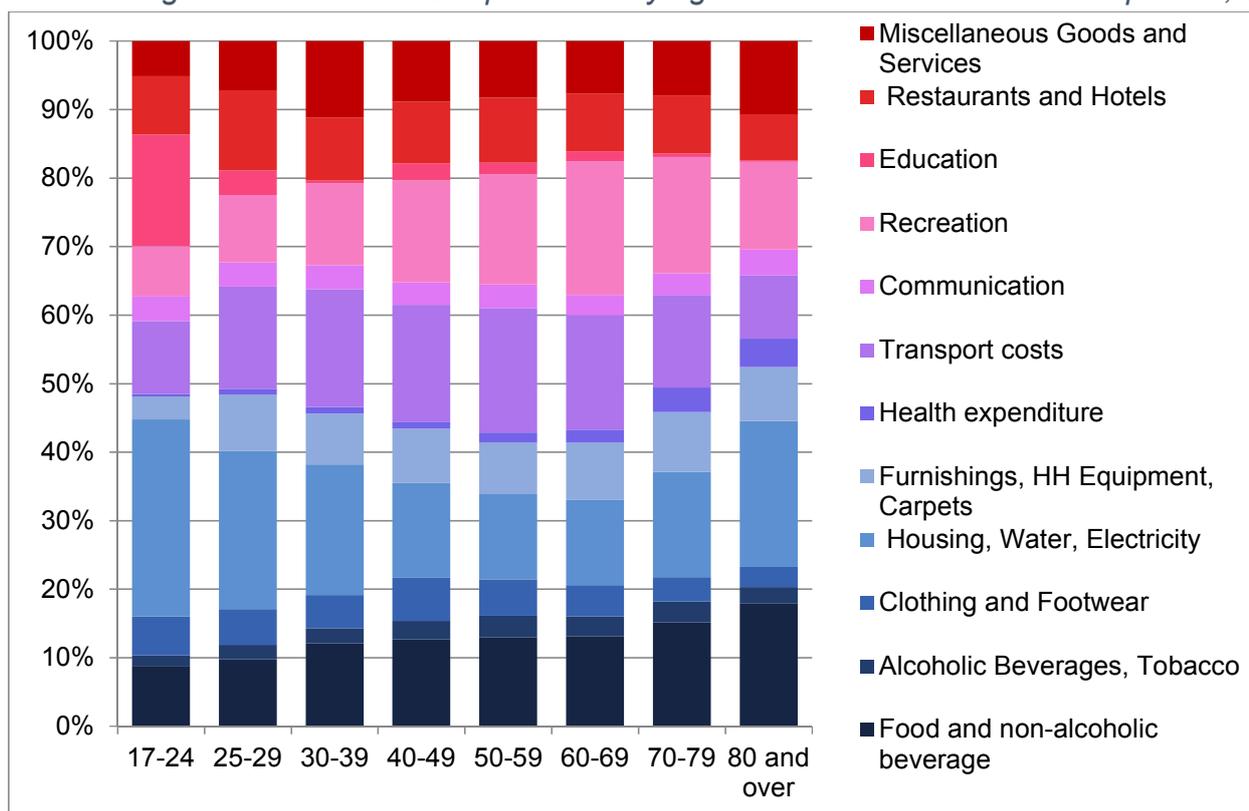
Table 1: Total household expenditure by age of the household reference person

Age of HRP	Number of households (in '000s)	Average expenditure per week	Aggregate expenditure per year (in £Billion)
17-24	842	£555.3	£24.32
25-29	1,699	£475.9	£42.05
30-39	4,351	£480.2	£108.64
40-49	5,149	£554.7	£148.53
50-59	4,983	£516.3	£133.79
60-69	4,350	£445.4	£100.75
70-79	3,127	£337.9	£54.93
80 and over	2,095	£228.3	£24.87
Total	26,595	£534.0	£738.48
Over 50	14,554	£382.0	£314 bn
% of total	55%	72%	43%

Source: authors' elaboration of Living Cost and Food Survey, 2014, and ONS population estimates. Data are weighted using annual weights.

If we look at a more detailed breakdown of household spending, we see that younger households spend substantially more on housing and bills as a proportion of total spending, while households headed by a 50/60 year old spend relatively more on recreational activities (Figure 1).

Figure 1: Categories of household expenditure by age of the household reference person, 2014



Source: authors' elaboration of Living Cost and Food Survey Data, 2014. Data are weighted using annual weights. For the actual values in £, please see appendix A.

Several studies, including ILC-UK's "Understanding Retirement Journeys" (2015); "Financial Wellbeing in Later Life" (2014) and "The Golden Economy" (2010) have documented how consumption steadily falls with age. In addition, the decline in spending by age appears to be persistent over time, and typical of most western countries, and has been described by economists as the "retirement consumption puzzle".

Older people are "underspending" on goods and services

In this report, we explore the role of poor health and lack of access to services to explain the fall in consumption as people age by conducting an in-depth empirical analysis of the English Longitudinal Study of Ageing (ELSA) 2014/15. We provide a detailed description of consumers aged over 50. Our analysis focuses on four categories of non-durable consumption expenditure: food & groceries; eating out; clothing; and leisure. The data are drawn from the ELSA, because, to the best of our knowledge, it is the only dataset containing detailed information of spending, as well as on health issues, internet access, access to a vehicle etc. However, unlike the Living Cost and Food Survey, the ELSA only provides information on the four categories mentioned above. We will then analyse cultural activities, such as going to the cinema, theatre or museums, as well as eating out, and map the extent to which participation declines with age.

Table 2 summarises weekly expenditure on each of the four categories mentioned above, by age of the household reference person. Because household composition varies as people age, since older households are less likely to comprise children, we account for it by adjusting the consumption expenditure using the OECD equivalence scale.^{vii}

Table 2: what do older consumers spend their money on?

	Food and groceries	Food out of the home	Clothing and footwear	Leisure	Total (all 4)
Age 50-54	£50.2	£50.1	£67.5	£49.8	£217.6
55-59	£51.7	£43.7	£61.3	£51.6	£208.3
60-64	£53.7	£52.1	£61.2	£50.3	£217.3
65-69	£53.7	£43.8	£57.4	£50.5	£205.4
70-74	£54.2	£42.0	£45.7	£41.9	£183.8
Age 75+	£51.9	£29.8	£37.6	£31.0	£150.3
Average	£52.6	£43.6	£55.1	£45.9	£197.1
Difference over 75 and 50-54	+3.4%	-40.7%	-44.3%	-37.7%	-30.9%

Source: own elaborations from ELSA wave 7; data are weighted using complex survey data weights.

According to our estimates from the ELSA (2014/2015) dataset people aged 50 and over spend on average £197 per week (in equivalised terms) on food & groceries, eating out, clothing, and leisure. People spend relatively more on food & groceries and clothing, and a somewhat less on food out of the home and leisure.

Households headed by someone aged over 75 spend approximately 30% less on the four categories than someone in their early 50s. Our estimates are also in line with findings of previous research; that is, even though overall spending tends to decline with age, there are differences across spending categories.

In summary, looking at the four spending categories above, we find that:

- Overall, households headed by someone aged 75 and over spend 30.9% less than households headed by someone in their early fifties.
- However, while spending on food and groceries remains constant at all ages, spending on eating out falls by over 40%; spending on clothes falls by over 44.3%; and spending on leisure by over 27%.

Isolating the impact of ageing on spending

The figures on household spending shown in table 2 do not account for many socio-economic factors which are likely to have an impact on consumption expenditure. Therefore, the large difference in consumption between 75 and 50 year olds may be due to other factors. To address this issue, we have run a series of multiple regressions to estimate the impact of ageing on consumption expenditure on food and groceries; eating out; clothing; and leisure; as well as total consumption. We have adjusted for gender, marital status, income, health barriers,^{viii} and connectivity barriers.^{ix}

The results (see appendix) indicate that ageing has a strong, negative impact on average expenditure regardless of other factors.

For each year past 55, average (equivalised) household expenditure on the 4 categories declines by approximately 1%. So, by the time consumers reach the age of 75, we can predict an overall drop in consumption equal to approximately 17.1%.

While ageing significantly affects spending on clothing and leisure, it does not appear to have a significant impact on food spending, confirming what is suggested by the unadjusted estimates of

table 2. In terms of the impact of age on eating out, we see a more interesting pattern: expenditure increases between the ages of 55 and 69, and then drops quite substantially.

In summary, spending does not fall on all consumer goods as we age. While consumers aged and over spend significantly less on clothing and leisure, they spend nearly the same amount of money on food and groceries and eating out as consumers in their early fifties.

These findings confirm what we had already established in our previous report, Understanding Retirement Journeys; the report analysed 10 years' worth of data from the Living Cost and Food Survey and concluded that it is mainly expenditure on so called "non-essential" items that declines as people get older, while expenditure on most essential items remains rather steady.^x

Older people also aren't getting out as much as they like

While we spend less with age, our research also reveals that some of us don't go out as much as we would like as we get older.

- Our estimates from ELSA show only a tiny proportion of consumers aged 50+ engage in cultural activities, such as going to the cinema, theatre, and museums.
- However, between a third and a quarter of these people would like to do more.
- Approximately 60% of consumers aged 50+ go out to eat at least once a month; and the proportion of people eating out remains pretty stable across all ages.
- However, roughly 40% of consumers aged 50+ would like to eat out more often.

Table 3 reveals a rather bleak picture, since only a tiny proportion of those aged over 50 engage in cultural activities, such as going to the cinema, theatre or museums at least once a month. Ageing does not affect the frequency with which people go out – with the exception of going to the cinema; in addition, as people grow older, they also want to go out less and less.

By far the most common activity is eating out, since approximately 60% of people aged over 50 eat out at least once a month. Frequency of eating out peaks around mid-60s and then declines after the age of 75. Yet, even at this age, at least half the population eat out relatively often (see table 4).

Table 3: Proportion engaging in social activities at least once a month

	Cinema	Eat out	Art galleries/ museums	Theatre
Age 50-54	11.1%	57.2%	3.7%	4.3%
55-59	6.3%	55.6%	4.2%	3.7%
60-64	8.6%	64.9%	5.3%	5.5%
65-69	7.7%	64.0%	6.8%	7.7%
70-74	7.2%	63.3%	5.1%	5.8%
Age 75+	5.9%	54.3%	4.0%	4.8%
Total	7.9%	59.4%	4.7%	5.2%

Source: own elaborations from ELSA wave 7; data are weighted using complex survey data weights.

The proportion of people who would like to go to the cinema more often declines from 45.9% for people in their early fifties to 27.6% for people aged 75+. Going to museums appears to be the activity that fewer people wish to do more of, and yet between a third and a quarter of people aged 50+ wish to visit museums and art galleries more often. Approximately half of the people in their early fifties would like to eat out more often, as opposed to 41% of people aged 75+.

Even though the proportion of people who want to do more declines with age (table 4), there is still a sizeable number of people aged 75 and over who would like to go to the cinema more often (about 1.2 million people) or to eat out more often (1.8 million).

Over a million people aged 75+ would like to go more often to art galleries and museums, and nearly 1.8 million people aged 75+ would like to go to the theatre more often. We also found that older women would like to go out more often than men, and especially to the theatre.

Across all age groups (50+), the activity that most people wish they would do more is going to the theatre.

Table 4: Would you like to do any of these social activities more often?

	Go to the cinema more often	Eat out of the house more often	Go to museums more often	Go to the theatre more often
Age 50-54	45.9%	51.6%	37.3%	51.4%
55-59	39.2%	46.7%	37.7%	46.6%
60-64	34.5%	36.7%	29.5%	42.3%
65-69	29.2%	35.3%	25.3%	38.6%
70-74	26.2%	36.9%	24.7%	38.2%
Age 75+	27.6%	42.8%	23.8%	39.0%
Total	34.5%	42.3%	30.2%	43.1%

Source: own elaborations from ELSA wave 7; data are weighted using sampling weights.

Recap

In summary, while consumer spending decreases as people get older, there are differences across categories. Expenditure on food and groceries remains pretty stable over the lifecycle, expenditure on eating out, clothing and footwear, and leisure activities declines quite dramatically. And this holds true even after taking into account an array of socio-demographic characteristics and income.

In terms of participation in social and cultural activities, such as eating out, or going to the cinema, theatre or art galleries, we find that it tends to decrease as people get older. While our results reveal that the proportion of people who want to do more also decreases with age, there is still a substantial minority who are not happy with how often they go out.

In focus: What does the economic theory have to say about the retirement consumption puzzle?

The Lifecycle/permanent income hypothesis is the standard economic theory adopted to explain patterns of consumption and saving over time. It suggests that over the course of one's life, an individual will build up assets during his/her years spent working and run the assets down in retirement, so that consumption remains relatively stable over a life span. The underlying idea is that, by saving and running down assets, people have some kind of control over their standard of living, rather than letting fluctuations in income dictate how much they can consume. (Modigliani and Brumberg, 1954; Browning and Crossley, 2001; Deaton, 2005)

Because the greatest drop in income generally occurs at retirement, people save during their working lives mainly to avoid a sharp fall in consumption, and thus in their standard of living, at retirement. In reality, many older households experience a decline in consumption when they retire, so the economic literature has offered a list of useful explanations for the "retirement consumption puzzle".

Explanations reconciling theory and facts can be broadly divided into two categories: those that focus on "excessive savings prior to or after retirement" and explanations that focus on "inadequate savings prior to retirement". With respect to excessive savings, the most prominent theories are centred on the role of uncertainty giving rise to precautionary savings, and imperfections in the capital markets limiting households' ability to save and borrow over time. Theories on inadequate savings highlight some lessons from behavioural economics arguing that, in general, people may suffer from a lack of self-control and spend too much at young ages, therefore entering retirement with less than optimal savings and consequently having to reduce consumption. Inadequate savings can also be due to poor financial capability, as argued by the founder of the "Global financial literacy centre" Annamaria Lusardi (Lusardi and Mitchell, 2006; Lusardi, 2011).

Barriers to spending and cultural participation

Financial constraints, poor health and lack of connectivity

In this section, we analyse different potential barriers to consumption in old age. We start by summarising some of the evidence on financial constraints and spending. We then look at health issues, such as having a long-standing illness, having a difficulty walking, and other health conditions or disabilities such as arthritis, poor eyesight, difficulty hearing and incontinence. Finally, we look at ‘connectivity barriers’, i.e. a lack of proximity to shops and amenities, especially for people living in rural areas; lack of access to a private means of transport, such as a car or a van; and lack of access to the internet.

A lack of spending in old age isn’t just down to a lack of income

Entering retirement generally means a substantial reduction in earnings, thus we may be tempted to believe that older people consume less simply because they earn less. However, consumers in their 60s and 70s report having financial constraints a lot less frequently than their younger counterparts, as shown in table 5. Clearly, people’s perceptions of whether or not they have enough to spend are not an accurate gauge of the relationship between income and consumption, but they do reveal something about people’s disposition and aspirations.

Table 5: how often people find they have too little to spend on their needs

	Never	Rarely	Sometimes	Often	Most of the time
Age 50-54	26.2%	26.9%	29.8%	10.3%	6.8%
55-59	37.0%	23.8%	23.9%	8.4%	6.8%
60-64	43.7%	29.4%	20.1%	3.6%	3.2%
65-69	47.9%	30.4%	15.9%	4.0%	1.7%
70-74	50.4%	25.7%	18.9%	3.5%	1.6%
75-79	52.1%	24.8%	18.6%	3.2%	1.4%
Age 80+	58.3%	22.5%	15.4%	2.0%	1.8%
Total	42.8%	26.5%	21.3%	5.6%	3.8%

Source: own elaborations from ELSA wave 7; data are weighted using sampling data weights.

In table 6, we map the relationship between household income, expenditure and ageing in a more objective way using data from the LCFS by detailing average spending by age category and income quintile. The estimates suggest that – perhaps unsurprisingly – differences in income are a crucial determinant of how much people spend at all ages. However, spending falls as people get older regardless of their position in the income distribution.

It is worth noticing that the largest drops in consumption are to be found in the middle income quintiles, with people aged 80 and over spending approximately 30% less than people in their early 50s; by contrast, octogenarians in the lowest income quintile spend on average only 10.7% less than their younger counterparts belonging to the same income group.

Table 6: total household spending by age group and income quintile

	Age 50-59	60-69	70-99	Age 80+	Difference 80s vs 50s
I quintile (Median = £198)	£154.6	£190.5	£157.4	£138.0	-10.7%
II quintile (Median = £322)	£234.1	£244.6	£198.7	£164.5	-29.7%
III quintile (Median = £415)	£255.9	£259.6	£254.2	£185.5	-27.5%
IV quintile (Median = £527)	£328.0	£379.7	£323.9	£226.7	-30.9%
V quintile (Median = £752)	£447.2	£482.0	£489.5	£336.4	-24.8%
Difference I vs. V quintile	-65.4%	-60.5%	-67.9%	-59.0%	

Source: own elaborations from LCFS, 2014; data are weighted using sampling weights. Both consumption and income values reported are adjusted for household composition using the OECD equivalence scale.

Since financial constraints can only partly explain the decline in consumption as people get older, we now turn to other potential barriers, namely poor health and lack of connectivity.

Introducing health barriers

Ageing is generally associated with a deterioration of health. But not all older people will see their health deteriorate at the same pace and to the same extent. While some 70 year-olds can still enjoy extremely good health and functioning, others are frail and require significant help from others. According to the World Health Organisation (WHO), common conditions in older age include hearing loss, cataracts and refractive errors, back and neck pain and osteoarthritis, chronic obstructive pulmonary disease, diabetes, depression, and dementia.^{xi}

We focus on health conditions that may represent a barrier to consumption or more frequent engagement with cultural activities.

In particular, we explore:

- **Difficulty walking for ¼ of a mile unaided.** Having a mobility issue, such as a difficulty walking a relatively short distance, is likely to make a person less willing to leave the house, and thus less likely to spend or engage in social activities, especially in areas that are not specifically equipped for older people.
- **Self-reported long-standing illness.** Poor health may cause an increase in spending, both on medical costs and non-medical but health related costs such as extra heating or aids and adaptations for the house; but poor health can also impose constraints on spending opportunities and therefore cause a decrease in consumption.
- **Disabilities such as arthritis, poor eyesight, difficulty hearing and incontinence** will affect people's ability to perform everyday tasks, and thus may have an impact on spending depending on how well they are addressed by the build environment.

How widespread is poor health among older consumers?

Estimates from the ELSA 2014/15 reveal that nearly 1.5 million people aged 75+ suffer from a long-standing illness; among them, about 1.1 million find it difficult to walk 1/4 mile unaided; furthermore, 1.1 million older people have been diagnosed with arthritis.

Approximately 5.4 million people aged 50+ in England have difficulty walking 1/4 mile unaided; 60% of the people aged 50 and over who have a walking difficulty are women.

The incidence of walking difficulties rises with age: while only 2 in 5 men and 1 in 4 women aged 50-74 have a walking difficulty, half of all over 75s have the same issue.

Estimates in Table 7 show how widespread poor health and mobility issues are, especially among people aged 75 and over.

Table 7: Health barriers: long-standing illness, walking difficulty, poor eye sight, hearing difficulties, incontinence, arthritis

	Aged 50-74		Aged 75+	
	Proportions	Population	Proportions	Population
Long-standing illness	48.4%	1,492,926	66.7%	1,493,722
Difficulty walking	21.8%	672,434	50.6%	1,133,168
Arthritis	29.9%	922,283	50.0%	1,119,732
Poor eye sight	11.0%	339,301	21.3%	477,006
Hearing impairment	29.2%	900,691	48.1%	1,077,182
Incontinence issues	12.7%	391,739	21.7%	485,964

Source: own elaborations from ELSA wave 7; data are weighted using complex survey data weights.

Poor health conditions are interrelated

As people age, they are more likely to experience several conditions at the same time. To assess the extent to which mobility issues and other health barriers may have an impact on spending and engagement in cultural activities we need to identify the interrelationships between the different health barriers.

To this end, we have carried out an in depth analysis of the ELSA data and found that having a walking difficulty is associated with poor eyesight, hearing difficulties, incontinence issues, and, above all, arthritis (see results in the appendix).^{xii} According to our estimates, people who were diagnosed with arthritis are four times as likely to have a walking difficulty as people without arthritis; people with poor eyesight and incontinence issues were twice as likely to have a walking difficulty, while people with a hearing impairment were 1.3 times as likely to have a walking difficulty. Having a walking difficulty is also associated with lower income, which may compound problems.

The implications are therefore quite clear: the design of facilities aimed at removing barriers created by poor health needs to account for coexisting health conditions.

Despite the recognised importance of designing well the facilities older consumers wish to access, the recent DisabledGO audit has found high streets in Britain to be ill-equipped to meet the needs of older, disabled people, and raised concerns from the DWP.^{xiii}

Poor health has a negative impact on consumption

Health and the risk of its deterioration have been widely recognised as being important determinants of consumption and saving decisions. Axel Börsch-Supan and Konrad Stahl write that older people, particularly in very old age, may find themselves physically constrained in their consumption possibilities, because of deteriorating health causing mobility issues (Börsch-Supan and Stahl, 1991).

Having a mobility issue, such as a difficulty walking a relatively short distance, is likely to make a person less willing to leave the house, and thus less likely to spend or engage in social activities, especially in areas that are not specifically equipped for older people.

According to our estimates, *having a walking difficulty is one of the biggest barriers to consumption among people aged 50 and over*; after controlling for all other socio-demographic factors, we find that people with a walking difficulty spend on average 14.5% less than those without such an impairment. However, having a walking difficulty does not have the same impact on all four spending categories: it leads to 16% less spending on clothing, 15% less spending on eating out and 11.5% less spending on leisure; but has no association with spending on food and groceries. If we concentrate on the 75+, we find a smaller impact - on average 10.9% lower spending – but the estimates become less precise because of the reduction in sample size (estimates in appendix).^{xiv} *Having a long-standing illness does lead to slightly lower spending on eating out (minus 6%),* but has no impact on the other spending categories. We found no association between having a long-standing illness and spending among people aged 75 and over.

People aged 50+ with poor eyesight spend 9-10% less on leisure and eating out. By contrast, hearing difficulties and incontinence do not seem to have an impact on spending.

Even though older people are less likely to indicate lack of money as a limitation to spending, we do find that for those aged 75+ income is the strongest driver of expenditure.

Poor health has an impact on social and cultural participation

The first section of the report has shown that people engage in social and cultural activities less often as they get older; we thus carry out an empirical analysis to assess the drivers of the decrease in participation (estimates in appendix).^{xv}

Since higher income is associated with higher spending, we may be tempted to conclude that income is also a driver of social and cultural activities, such as eating out, or going to the cinema, theatre or museums; however, we could not find a significant association between income and activities, suggesting that other forces might be at play.

Our analysis shows that people aged 50 and over with a walking difficulty are less likely to eat out, or go to the cinema, theatre or museums at least once a month. We have also found that poor eyesight is a barrier to eating out or going to the cinema at least once a month.

Despite the frequent calls for more public toilets, we cannot find a significant impact of having problems with incontinence on the actual frequency of going out; however, it is positively associated with the desire to do more, therefore incontinence may act more as a psychological than a physical barrier to going out.

Connectivity barriers: living in a rural area, lack of access to a car or the internet

Retail shops are one of the basic services in sparsely populated areas. However, their existence is not to be taken for granted. In order to survive, small rural shops need a minimum number of customers; and to keep their customers, they need to be able to adapt to customers' needs and stay competitive. Given the relatively high proportion of people aged 75 and over living in rural areas, it then follows that shops in those areas should try to be as accessible as possible to that segment of the population.

Older people living in rural areas may have to travel more to reach their local high street shops; they will thus be much more reliant on driving or public transport than their urbanite counterparts. Furthermore, older people with mobility issues or arthritis are particularly at risk of losing out if they live in more rural areas, unless the route to their high street provides ample opportunities for resting or seating. Research suggests that reduced mobility will lead to reduced accessibility and hence fewer opportunities to participate in society and enjoy social interactions; in addition, a reduction in mobility is thought to have a negative impact on people's quality of life.^{xvi}

Online shopping may be a solution to replace basic high street shopping for those who face health or other barriers. According to the ONS, in 2013 e-commerce sales amounted to over £500 billion. However, despite the rising importance of the internet for every day consumption, people over the age of 75 are still less likely to regularly access it, as our next estimates will show. Furthermore, while internet access may offset some of the reduction in spending opportunities, it cannot compensate for the fewer cultural opportunities in sparsely populated areas.

We focus on connectivity barriers such as:

- **Living in a rural area.** Since there are fewer shops and amenities, living in a rural area can be seen as a barrier to spending and consumption.
- **Not having access to a car/van** when needed, as a driver or a passenger. Even though driving remains the most common form of transport for older people, many inevitably must stop on account of ill health, at which point accessing shops and engaging in cultural activities may become more problematic.
- **Not having internet access.** In theory, even disabled people can get all the goods and services they need by shopping online. However, whether or not they actually do is an empirical question that we can address in the following chapter.

How widespread is a lack of connectivity?

In table 8 we describe the presence of connectivity barriers for people aged 50 to 74, and 75 and over. We also show the proportion of people with the lowest connectivity, since they both live in a rural area and do not have access to a car or the internet.

The proportion of people aged 75 and over, living in rural areas is very similar to the proportion of younger people, aged 50-74 (23.8% vs. 25%); however, fewer older people have access to a car (75.9%), and therefore one in six people aged 75+ live in a rural area and do not have access to a car. Even though the proportion is quite low, as it only represents 3.8% of the English population aged 50+, it still means that approximately 168,000 people may find it really difficult to access their high street.

Access to the internet is still quite low among older people: while only 15% of people aged 50-74 has no internet access, the figure rises to 56.2% among the 75+. Furthermore, access to the internet is even lower among older people living in rural communities, since approximately half the people aged 75+ who live in rural areas do not have internet access, for a total of approximately half a million people.

Table 8: Connectivity barriers: living in a rural area, access to a car/van, access to the internet

	Aged 50-74	Aged 75+
Lives in a rural area	25.0%	23.8%
Has access to a car/van	89.2%	75.9%
Lives in a rural area, but has no access to a car	1.1%	3.8%
Has no access to the internet	15.0%	56.2%
Lives in a rural area, but has no access to the internet	3.0%	12.2%

Source: own elaborations from ELSA wave 7; data are weighted using complex survey data weights.

But do connectivity barriers affect spending among older people?

Living in a rural area can influence spending patterns

Older people living in rural areas may face particular difficulties in accessing facilities. Rural areas tend to be less densely populated than urban areas, and generally have fewer shops and amenities, so that residents may have to travel further to get what they need.

However, our estimates suggest that living in rural areas has a mixed impact on spending. It is associated with 12.1% less spending on clothes and 7.8% less on leisure activities, regardless of age, income, health barriers, and having access to a car. By contrast, people living in rural areas spend on average 7.2% more on eating out than those who live in urban areas (see appendix).

Having access to a car can boost spending

Having access to a car is associated with higher expenditure on all categories, except for clothing. However, as we mentioned in the previous paragraph, a substantial number of older people who live in a rural area have no access to a car, which means that they will spend less than they otherwise could, given their level of income and other characteristics.

Research carried out by Musselwhite and Haddad also indicated that access to a car satisfies more than simple accessibility needs and is often seen as a means to get independence and control, better quality of life, comfort and security.^{xvii}

Access to internet can boost spending

According to our estimates, over 56% of people aged 75+ have no access to internet, as opposed to 15% of the people aged 50-74. Lack of internet access is associated with 28% lower spending, even though we cannot infer causality.

As technology and commerce become increasingly interlinked, more could be done to provide older people with access to the internet and to help them use it safely.

People aged 50+ who don't access the internet spend 28% less than those who do. However, we should be very cautious when interpreting these figures, because we have not established a link of causality, which means that simply providing older people with internet access will not automatically translate into higher spending.

And do connectivity barriers limit engagement in cultural activities?

Living in a rural area means fewer cultural activities but more eating out

The extent to which living in rural areas is likely to be a barrier to participation in social and cultural activities across the older population depends on a combination of factors. On one side, the sheer number of cinemas, museums, theatres or restaurants in the area will determine whether people find it convenient to go out; on the other, it will depend on whether those areas are appropriately equipped for the needs of older people.

According to our estimates, living in rural areas is associated with lower engagement, since people aged 50 and over who live in rural areas are less likely to go to the cinema, theatre or museums. However, it may not be too much of an issue for cinema and theatregoers, since they don't appear to want to do more (see appendix). Conversely, older people living in rural areas who don't go to museums and art galleries often would like to do so. People who live in rural areas eat out more often, and appear to be satisfied with how often they go out, which suggests that rural areas need more art galleries and museums, rather than more pubs and restaurants.

Car access (slightly) affects participation in cultural activities and eating out

Having access to a car means that people can go to the cinema more often, even though the effect is rather small. It also means that they can eat out more often, regardless of their income, and socio-demographic factors, so it is probably due to ease of access.

No internet access results in lower participation in social and cultural activities

Finally, a lack of internet access means that people miss out on all social and cultural activities, and especially eating out, since it is associated with a lower probability that they engage in any of them often. In addition, people who do not have access to internet are also less likely to want to do more.

The ILC-UK report, 'Understanding Retirement Journeys' illustrated how watching TV was one of the main activities older people engaged in, and that the hours spent in front of the TV increased with age; given these findings, we may be tempted to conclude that people who do not have internet access and do not go out very often spend most of their time watching TV. However, we do not have enough information to say whether they are content, or rather, they are just used to a long-term inactivity and therefore unable to wish for more.

Recap

Poor health and mobility issues have negative impact on consumer spending on: food & groceries, eating out, clothing & footwear, and leisure. We estimate that, *all else equal*, people with a walking difficulty spend on average 14.5% less than those who have no trouble walking. Other health barriers, such as poor eyesight, hearing difficulties and incontinence, have smaller to zero impact on spending, even though people with poor eyesight spend 9-10% less on leisure and eating out.

We also find that connectivity is crucial. While living in rural areas has a mixed impact on spending, having access to a car or the internet translate into substantial higher spending. Similarly, a lack of internet access leads to a significant drop in spending across the four categories. Access to the internet is particularly low among people aged 75 and over living in rural communities, and therefore expanding digital inclusion may translate into higher spending across this age group.

Addressing the barriers

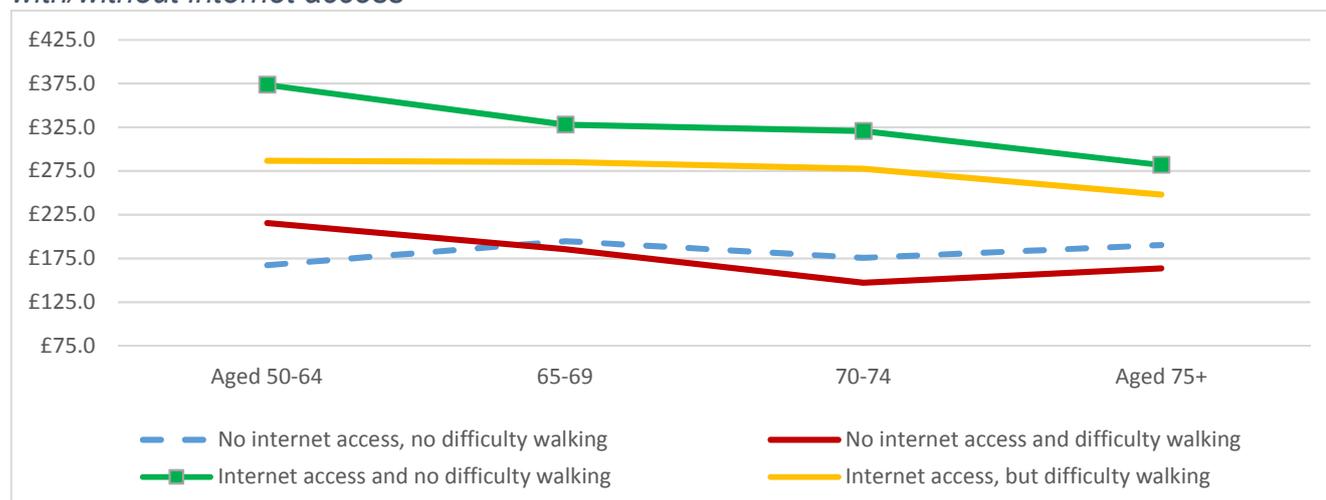
In the previous sections, we have shown that health and mobility issues, such as having a walking difficulty, are associated with a severe drop in spending among people aged 50 and over. We have also shown that access to the internet or a vehicle, such as a car or a van, are associated with higher consumption and higher engagement in social and cultural activities. In this section, we will try to understand the extent to which changing the built environment or having access to the internet may offset the fall in spending due to mobility issues. It should be stressed that the figures are purely indicative and do not imply a causal impact.

Can internet access offset the fall in spending due to a mobility issue?

In theory, internet access may mitigate the fall in spending due to a walking difficulty, since people who have trouble walking could shop online. To ascertain whether this is the case, we estimated the combined impact of internet access and having a walking difficulty on total spending (on food and groceries, eating out, clothing and leisure) allowing for other health and socio-economic factors.

The results plotted in Figure 2 show that, indeed, having internet access makes a huge difference for people with a walking difficulty. The lines we should focus on are the one named “No internet access and difficulty walking” and the one named “Internet access, but difficulty walking”. As the graph clearly shows, the economic benefits of having internet access are huge for people with a walking difficulty, and tend to increase as they age: while people aged 50-64 with a walking difficulty and no access to the internet spend on average £215 a week on the four items mentioned before, people in the same age group with a walking difficulty who can shop online spend on average £286, that is up to £70 more. The difference peaks at age 70-74 when having access to the internet means that people with a walking difficulty may be able to spend an additional £130 per week. And yet, older people are more likely to be digitally excluded.

Figure 2: Weekly expenditure by age group, for people with/without walking difficulties and with/without internet access



Source: own estimates from ELSA wave 7

However, increasing access to the internet among older people may not be that straightforward, and it is likely to involve more than simple technological advancements, as pointed out by a recent study on internet use across the UK.^{xviii} According to the study, policy interventions aimed at both increasing and widening internet access and use will be ineffective unless they address socio-economic and educational inequalities.

The role of the built environment

We have shown that people with a walking difficulty spend significantly less on clothing, eating out and leisure. In addition, they are more likely to say that they wish to eat out more, which seems to suggest that restaurants may not be adequately equipped to help people with mobility issues. Providing more resting places for people with a walking difficulty or arthritis and more toilets for people with incontinence issues may therefore give an incentive to going out more and participating in social and cultural activities.

Despite the widespread prevalence of mobility issues among older consumers, a recent audit by DisabledGo, endorsed by the DWP, found that a sizeable proportion of high street shops and restaurants have inadequate facilities for disabled people. In their sample of 27,000 retail outlets, a fifth had no access for wheelchair users, a third had no accessible toilets, two thirds had staff with no disability awareness training and only 15% had hearing loops for shoppers with hearing impairments. Restaurants also fared poorly, with 40% not having an accessible toilet, only 23% providing large print menus for those with vision impairments and nearly half of all restaurant staff having not received disability awareness training.^{xix}

Lifetime neighbourhoods

The growing policy and industry interest in the older consumer has been paralleled by a rising interest in the built environment and the extent to which it can act as a barrier to participation in society by older people. 'Towards Common Ground' - Help the Aged's manifesto for lifetime neighbourhoods - highlighted the evidence on what makes an age friendly community and set out a call to action.^{xx} The UK Government in the same year published 'Lifetime Homes, *Lifetime Neighbourhoods*', exploring how communities needed to adapt to our ageing society.

According to the Help the Aged Manifesto, the main components of a lifetime neighborhood include basic amenities within reasonable reach; safe, secure and clean streets; public seating; and public toilets among many others (see final section for a full list).

Age friendly communities

Lifetime neighbourhoods are one aspect of a more comprehensive strategy focused on older people's needs within the community, with the ultimate goal of creating communities which are 'age friendly'.

An age friendly community is a place that "adapts its structures and services to be accessible to and inclusive of older people with varying needs and capacities".^{xxi} These structures and services could include the following:

- Improving the availability of places to rest: it is difficult for many older people to walk around their local area without somewhere to rest.
- Improved walking facilities for older people, including walkways with wide pavements; well-designed stopping places, which encourage older people to engage in social activities, and provide incentives for walking; well-designed weather shelters, that protect older people from the wind and rain;
- Improved street environment with better street lighting and removal of unnecessary obstructions from streets;
- Certification schemes for age-friendly businesses;
- More accessible toilets; the availability of clean, conveniently located, well-signed, disabled-accessible toilets is generally regarded as an important age friendly feature of the built environment.
- Improved access to public transport such as buses, taxis and trains;

- A secure environment: feeling secure in one's living environment strongly affects people's willingness to move about in the local community, which in turn affects their independence, physical health, social integration, emotional well-being, and consumption possibilities.

Can we boost the economy by adapting the build environment to suit older people's needs?

Over the past decade the World Health Organisation has developed a global network of Age Friendly Cities and the Age Platform in Brussels has led the development of a Covenant on Demographic Change pulling together a range of stakeholders including public authorities to **implement evidence-based solutions to support active and healthy ageing.**

There has however been limited study aiming to quantify the extent to which the environment we live in and shop in might actually act as a barrier to consumption.

Yet these barriers are well documented in qualitative research. The ILC-UK's 2010 research (The Golden Economy) highlighted qualitative research suggesting that, for example, **lack of toilets and lack of seating created a barrier to consumption.**

The Golden Economy highlighted research which revealed a number of recurring problems that older people experience when in shops, particularly supermarkets.

- A lack of rest areas and seating making shopping tiring.
- A lack of adequate toilet facilities.
- Poor store layout (particularly narrow aisles and poor shelf signposting) making shops difficult to navigate and goods hard to find.
- Shelves at a height that are difficult to reach (high and low), a particular problem for those with limited mobility and dexterity.
- Deep trolleys which are difficult to get shopping out of (and scarcity of the shallow trolleys that are designed to mitigate this problem).

Recap

Older people are more likely to have walking difficulties. In addition, they are also more likely to be digitally excluded. And yet, the economic benefits of having internet access could be huge for people with a walking difficulty, as, according to our estimates, they could spend an extra £70 per week. But digital inclusion is only one way to support the needs of older consumers. We need to strive to create age friendly communities, by addressing poor health and connectivity barriers.

Making our environment more age friendly could offer an economic boost to UK GDP

Household spending is the most important part of aggregate demand; it amounts to approximately two thirds of GDP in most western economies, including the UK. By affecting consumption patterns, the age structure of the population is thus a crucial determinant of GDP. By removing barriers to spending and creating age friendly communities we may be able to both help older consumers enjoy a more comfortable retirement, and provide a much needed boost to the economy. Providing places to rest and more seating could mitigate mobility issues and boost consumer spending.

People with a walking difficulty or arthritis clearly need plenty of places to rest. It is therefore imperative to provide appropriately placed and designed seating at places where people may have to wait and along pedestrian routes.

The 'Manual for Streets' (Department for Transport, 2007a) (Paragraph 6.3.33 on Page 70) says seating should be provided every 100 m to provide rest points and to encourage street activity. Seating should ideally be located where there is good natural surveillance.

While we cannot say for sure that providing more seating will lead to higher spending among those with a walking difficulty, we can engage in a thought exercise and calculate the total boost to the economy if people with a walking difficulty could spend as much as their counterpart who have no trouble walking, regardless of income, connectivity barriers, age and other health issues.

We have shown above that having mobility issues is associated with a severe drop in spending – minus 13.6% on eating out, 15.9% on clothing, 12% on leisure - regardless of income and other socio-demographic factors.

We then estimate that if households aged over 50 with mobility issues were to spend as much on food, eating out, clothing and leisure, as people of the same age and with the same socio-economic characteristics but without a mobility issue, we could have an increase in annual spending between £0.5 and £3.8 billion.

If we focus on the households headed by a consumer who is 55+, we would see a boost in consumption ranging between £0.3 and £2.6 billion; whereas, if we look at the 65+, we would quantify the boost as ranging between £0.2 and £2.0 billion a year; the boost in spending among the 70+ would range between £0.1 and £1.2 billion a year; and finally, the boost in spending among the 75+ would range between £66 and £560 million a year (see table 9).

Table 9: How much more overall spending per year could there be if people did not have a walking difficulty (or if the issue was taken care of)?

	Lower Bound	Predicted additional spending	Upper Bound
Age 50-54	£63.9m	£230.3m	£568.4m
55-59	£80.9m	£248.8m	£656.1m
60-64	£87.7m	£239.3m	£660.6m
65-69	£97.8m	£267.1m	£740.8m
70-74	£75.4m	£260.5m	£649.9m
Age 75+	£66.0m	£223.3m	£563.3m
Total	£0.46bn	£1.47bn	£3.84bn

Source: own elaborations using estimates from ELSA wave 7 and ONS population estimates.

Helping consumers with a walking difficulty could boost annual spending on eating out by up to £1.1 billion (see Table 10); on clothing by up to £1.7 billion (see Table 11); and on leisure by £1.1 billion (see Table 12).

Table 10: How much more household spending on eating out per year could there be if people did not have a walking difficulty (or if the issue was taken care of)?

	Lower Bound	Predicted additional spending	Upper Bound
Age 50-54	£20.7m	£66.8m	£159.0m
55-59	£24.7	£67.6	£171.8
60-64	£30.3	£74.2	£197.8
65-69	£30.9	£75.3	£201.2
70-74	£26.7	£82.7	£199.1
Age 75+	£21.8m	£65.8m	£160.2m
Total	£0.16	£0.43	£1.09

Source: own elaborations using estimates from ELSA wave 7 and ONS population estimates.

Table 11: How much more household spending on clothing per year could there be if people did not have a walking difficulty (or if the issue was taken care of)?

	Lower Bound	Predicted additional spending	Upper Bound
Age 50-54	£28.8m	£105.0m	£259.8m
55-59	£35.8	£110.6	£292.3
60-64	£36.8	£101.7	£281.9
65-69	£41.9	£115.1	£319.9
70-74	£30.0	£105.0	£262.7
Age 75+	£28.4m	£96.9m	£245.2m
Total	£0.20	£0.63	£1.66

Source: own elaborations using estimates from ELSA wave 7 and ONS population estimates.

Table 12: How much more household spending on leisure per year could there be if people did not have a walking difficulty (or if the issue was taken care of)?

	Lower Bound	Predicted additional spending	Upper Bound
Age 50-54	£14.4m	£58.6m	£149.6m
55-59	£20.4	£70.5	£192.1
60-64	£20.5	£63.3	£180.9
65-69	£25.0	£76.7	£219.7
70-74	£18.6	£72.9	£188.1
Age 75+	£15.9m	£60.5m	£157.9m
Total	£0.11	£0.40	£1.09

Source: own elaborations using estimates from ELSA wave 7 and ONS population estimates.

Recap

The economic benefits of eliminating barriers due to poor health are potentially huge. If consumers aged over 50 with a mobility issue were to spend as much on eating out, clothing and leisure, as consumers of the same age and with the same socio-economic characteristics but without a walking difficulty, we could have an increase in annual spending between £470million and £3.84 billion.

Even if we just focus on those aged over 75, we could have a boost to the economy ranging between £66 million and £560 million a year.

What can we do?

In 2010, the Government Business Department (BIS) undertook a project and produced a report on the barriers to consumption among older people. The report sought to take advantage of the economic opportunities presented by an ageing population.

The report was quietly published and the agenda seemingly forgotten by both central and local Government.

Yet this report highlights that under consumption by older people presents a major economic challenge and opportunity. As such, concerted policy action at a national and local level is justified. For businesses, there is a huge economic return from supporting the consumption needs of older consumers.

There has been much research on older consumers and how the private sector can better engage. The ILC-UK's Golden Economy (2010) report highlighted the need to focus on:

- Product design
- The retail environment
- Payment mechanisms
- The digital divide
- Consumer protection
- Marketing and the media.

Whilst much remains to be done to better support and engage the older consumer, there has been some significant progress on this agenda since 2010. In our view, inclusive design is now mainstream, the digital divide has narrowed and industry has begun to wake up to the potential of the older consumer.

In focus: What is inclusive design?

The British Standards Institute (2005) define inclusive design as: 'The design of mainstream products and/or services that are accessible to, and usable by, as many people as reasonably possible ...without the need for special adaptation or specialised design.'

Inclusive design could be anything from larger buttons with clearer print on device controls to wider doors and step free access. In the case of the built environment, inclusive design implies a community which is as accessible to most of us, without the need for adaptations.

Instead we focus our calls in this report on the importance of ensuring that our built environment is seen as a solution to under-consumption due to health and mobility issues. In particular, the widespread prevalence of arthritis and walking difficulties and the fact that the latter are associated with a drop in consumption, highlight the importance of providing plenty of appropriately placed and designed seating.

It is vital that all communities, large and small, better understand the changing demography of their inhabitants. We must better support the development of age friendly communities which foster

active ageing. An age friendly community will improve the opportunities for shopping, socialising, working, and volunteering for all ages.

The design of shops can prevent or encourage access to the high street and thus encourage spending. In addition, local transport infrastructure can determine whether an older person is capable of even making the journey to their local high street; however, the actual design of the high street itself can be reviewed in order to make it more accessible for an older population.

Many older people will need an environment where they can rest or where they can feel safe, without worrying about potential adverse impacts on their health.

In 2008, Help the Aged published a manifesto for lifetime neighbourhoods. (Towards Common Ground). The manifesto set out 10 priorities for communities for all ages.

- Basic amenities within reasonable reach
- Safe, secure and clean streets
- Realistic transport options for all
- Public seating
- Information and advice
- Lifetime homes
- Older people's voices heard
- Places to meet and spend time
- Pavements in good repair
- Public toilets

Designing cities and towns according to this manifesto could offer a significant economic as well as social return.

We believe:

- Local communities should work towards making their environment an age friendly community.
- Local authorities and businesses should work to ensure that their premises and their broader community does not create barriers to consumption for older people. Access to seating and places to rest are vital.
- Local authorities and businesses should work together to find innovative ways of adapting (and funding adaptations to) the local environment to support an increasingly older consumer.
- Central Government does have a significant economic incentive to intervene. Planning law should encourage and support local authorities and businesses to make their cities age friendly.

Recap

Under consumption by older people presents a major economic challenge and opportunity. The design of shops can prevent or encourage access to the high street and thus encourage spending. Designing cities and towns in a way that responds to the needs of older people could offer a significant economic as well as social return.

Appendix A: Data and Approach

Data

This report quantifies the potential gains from a more inclusive silver economy. By carrying out an in-depth empirical analysis of large representative datasets, it sets out to answer the following question: to what extent could we give a boost to the economy by making the high street more accessible to older people?

The report first estimated the relationship between spending and ageing, using the Living Cost and Food Survey, 2014. In particular, it summarised equivalised household expenditure on the 12 categories included in the COICOP classification.²

To understand potential health and connectivity barriers to spending in old age, we elaborated household and individual level data drawn from the English Longitudinal Survey of Ageing (ELSA) 2014/15. The ELSA is a unique and rich resource of information on the health, wellbeing and socio-economic circumstances of the English population aged 50 and older. In particular, we focus on expenditure and social/cultural activities and potential barriers to shopping more or going out more.

Information on spending in the ELSA dataset is grouped in these four categories:

1. Household spending on food and groceries;
2. Household spending on food out of home;
3. Household spending on clothing and footwear;
4. Household spending on leisure activities.

Information on social activities in the ELSA dataset describes how often people go to:

1. The cinema;
2. Museums and art galleries;
3. The theatre;
4. Eat out/restaurants.

Besides the frequency, people also report whether they would like to do more of each activity. We can then isolate the proportion of consumers who do not engage in all the cited activities very often, but would like to do more.

In terms of barriers, we look at poor health and lack of access – both in terms of proximity to shops and amenities and in terms of internet access. In particular, we focus on:

- *Health barriers*
 - Difficulty walking for ¼ of a mile unaided;
 - Self reported long-standing illness;
 - Disabilities such as arthritis, poor eyesight, difficulty hearing and (urine) incontinence.
- *Connectivity barriers – living in a rural area, access to a car and to the internet*
 - Living in a rural area
 - Having access to a car van when needed, as a driver or a passenger;
 - Not having internet access.

² Classification of Individual Consumption According to Purpose; the 12 categories are: Food and Non-alcoholic Drinks; Clothing and Footwear; Housing, Water, and Electricity; Health expenditure; Transport; Alcohol and Tobacco; Recreation and Culture; Restaurants and Hotels; Communication; Education; Household Goods and Services; Miscellaneous Goods and Services.

Approach

We first estimate average household spending and average frequency of social activities for different age groups, differentiating between couple and non couples. We then looked at the distribution of household spending for people who faced/did not face barriers.

We then run a series of multiple regressions to isolate the impact of health and other barriers, adjusting for income and other socio-demographic groups.

Finally, we used the estimates obtained through our regressions to calculate the potential boost to the economy that may materialise if at least some of the barriers preventing older consumers from spending were removed.

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Appendix B: Estimation results

Equivalised household consumption – COICOP (Classification of Individual Consumption According to Purpose) by age of the household reference person

	50-59	60-69	70-79	80 and over	All ages
Food and non-alcoholic beverage	£38.1	£40.0	£38.1	£32.6	£35.8
Alcoholic Beverages, Tobacco	£9.9	£9.1	£7.6	£4.1	£7.8
Clothing and Footwear	£15.3	£13.9	£8.9	£5.3	£13.7
Housing, Water, Electricity	£40.5	£40.4	£40.4	£41.2	£46.9
Furnishings, HH Equipment, Carpets	£23.0	£25.8	£21.8	£14.4	£22.0
Health expenditure	£4.3	£5.9	£8.6	£6.5	£4.5
Transport costs	£55.1	£49.4	£32.7	£16.0	£45.1
Communication	£10.4	£9.3	£8.1	£7.0	£9.5
Recreation	£48.1	£59.7	£42.5	£22.9	£41.7
Education	£4.2	£3.9	£1.3	£0.5	£4.9
Restaurants and Hotels	£27.7	£25.3	£20.8	£11.9	£25.3
Miscellaneous Goods and Services	£24.3	£23.4	£20.1	£19.7	£24.3
Total	£300.9	£306.0	£250.7	£182.1	£281.6

Likelihood of having a difficulty walking 1/4 mile unaided (odd ratios reported)

VARIABLES	(1) Difficulty walking 1/4 mile unaided
Age group (50-55 = baseline)	
55-59	1.082 (0.192)
60-64	0.994 (0.162)
65-69	0.935 (0.152)
70-74	1.288 (0.213)
Age 75+	1.903*** (0.304)
Female	0.924 (0.062)
Single	1.044 (0.084)
Natural logarithm of Income	0.672*** (0.037)
Difficulty hearing	1.339*** (0.089)
Fair/poor eyesight	2.105*** (0.196)
Problems with incontinence	2.043*** (0.170)
Has arthritis	4.201*** (0.279)
No access to internet	1.875*** (0.146)
Living in a rural area	0.862* (0.066)
Has access to a car	0.761*** (0.074)
Constant	1.214 (0.461)
Observations	6,680
Pseudo R-squared	0.2004

Robust standard errors are clustered at the household level;

**** p<0.01, ** p<0.05, * p<0.1*

*Impact of socio-economic variables on equivalised log Spending -
multiple regression results (sample 50+)*

VARIABLES	(1) Food and groceries	(2) Eating out	(3) Clothes	(4) Leisure	(5) Total (all 4)
Age group (55-59 = baseline)					
50-54	-0.040 (0.031)	0.051 (0.063)	0.071 (0.072)	-0.029 (0.060)	0.012 (0.043)
60-64	-0.015 (0.024)	0.133*** (0.047)	-0.048 (0.059)	-0.020 (0.047)	-0.005 (0.033)
65-69	-0.025 (0.023)	0.089* (0.048)	-0.070 (0.061)	-0.085* (0.049)	-0.054 (0.033)
70-74	-0.033 (0.027)	0.052 (0.052)	-0.218*** (0.066)	-0.093* (0.052)	-0.098*** (0.035)
Age 75+	-0.013 (0.025)	0.034 (0.052)	-0.204*** (0.065)	-0.222*** (0.054)	-0.171*** (0.035)
Female	0.003 (0.010)	-0.019 (0.019)	0.053** (0.024)	-0.007 (0.020)	0.031** (0.014)
Single	-0.028 (0.018)	0.188*** (0.036)	0.300*** (0.048)	0.286*** (0.039)	0.054** (0.026)
Natural logarithm of Income	0.124*** (0.013)	0.390*** (0.032)	0.357*** (0.034)	0.285*** (0.031)	0.325*** (0.022)
Health Barriers					
Difficulty walking 1/4 mile unaided	0.005 (0.017)	-0.136*** (0.034)	-0.159*** (0.044)	-0.120*** (0.036)	-0.145*** (0.023)
Difficulty hearing	-0.008 (0.013)	-0.005 (0.025)	-0.007 (0.033)	-0.006 (0.027)	-0.004 (0.017)
Fair/poor eyesight	0.022 (0.020)	-0.104** (0.042)	-0.044 (0.056)	-0.096* (0.050)	-0.065** (0.029)
Problems with incontinence	0.034* (0.018)	0.053 (0.034)	0.052 (0.047)	0.011 (0.038)	0.051** (0.024)
Long-standing illness	-0.014 (0.014)	-0.052* (0.027)	-0.034 (0.035)	-0.024 (0.029)	-0.045** (0.019)
Has arthritis	0.002 (0.014)	-0.050* (0.027)	-0.009 (0.036)	0.017 (0.030)	0.007 (0.019)
Lack of access					
No access to internet	-0.063*** (0.016)	-0.198*** (0.035)	-0.158*** (0.044)	-0.258*** (0.040)	-0.280*** (0.024)
Living in a rural area	0.012 (0.016)	0.072** (0.032)	-0.121*** (0.042)	-0.078** (0.035)	-0.032 (0.022)
Has access to a car	0.066*** (0.022)	0.134*** (0.047)	0.057 (0.062)	0.148*** (0.050)	0.183*** (0.031)
Constant	3.148*** (0.089)	1.102*** (0.208)	1.733*** (0.228)	1.941*** (0.200)	3.099*** (0.144)
Observations	6,566	5,323	4,536	5,104	6,657
R-squared	0.057	0.135	0.081	0.088	0.236

Robust standard errors are clustered at the household level; *** p<0.01, ** p<0.05, * p<0.1

*Impact of socio-economic variables on equivalised log Spending -
multiple regression results (people aged 75+)*

VARIABLES	(1) Food and groceries	(2) Eating out	(3) Clothes	(4) Leisure	(5) Total (all 4)
Female	-0.005 (0.021)	-0.071 (0.044)	0.128** (0.064)	-0.082 (0.057)	0.006 (0.032)
Single	-0.025 (0.033)	0.319*** (0.071)	0.392*** (0.099)	0.491*** (0.091)	0.097** (0.049)
Natural logarithm of Income	0.103*** (0.028)	0.411*** (0.056)	0.438*** (0.081)	0.311*** (0.070)	0.302*** (0.041)
Health Barriers					
Difficulty walking 1/4 mile unaided	0.041 (0.027)	-0.076 (0.058)	-0.148* (0.079)	-0.121* (0.069)	-0.109*** (0.040)
Difficulty hearing	-0.006 (0.023)	-0.109** (0.048)	0.018 (0.065)	0.007 (0.061)	-0.023 (0.034)
Fair/poor eyesight	0.011 (0.034)	-0.112 (0.072)	0.069 (0.107)	-0.048 (0.101)	-0.062 (0.051)
Problems with incontinence	0.030 (0.030)	0.115* (0.064)	0.098 (0.096)	0.021 (0.086)	0.065 (0.045)
Long-standing illness	-0.020 (0.028)	-0.034 (0.058)	0.022 (0.081)	0.014 (0.070)	-0.012 (0.042)
Has arthritis	-0.006 (0.025)	-0.069 (0.053)	-0.011 (0.071)	0.044 (0.068)	0.008 (0.037)
Lack of access					
No access to internet	-0.039 (0.026)	-0.087 (0.055)	-0.200*** (0.071)	-0.171** (0.070)	-0.248*** (0.038)
Living in a rural area	0.010 (0.031)	0.118* (0.062)	-0.024 (0.086)	-0.103 (0.083)	-0.013 (0.043)
Has access to a car	0.078** (0.034)	0.145* (0.080)	0.080 (0.104)	0.228** (0.110)	0.225*** (0.051)
Constant	3.234*** (0.183)	0.927** (0.364)	0.865* (0.518)	1.377*** (0.457)	2.971*** (0.259)
Observations	1,647	1,207	950	997	1,678
R-squared	0.041	0.108	0.071	0.076	0.161

*Robust standard errors are clustered at the household level; *** p<0.01, ** p<0.05, * p<0.1*

Probability that the person does each activity at least once a month -
 probit regression results (average marginal effects reported), people aged 50+

VARIABLES P(X=1)	(1) Goes the cinema often	(2) Eats out often	(3) Goes to museums often	(4) Goes to the theatre often
Age	-0.024	0.018	0.007	-0.001
Female	0.024*** (0.006)	0.062*** (0.011)	0.005 (0.005)	0.015*** (0.005)
Single	0.058*** (0.011)	0.070*** (0.017)	0.032*** (0.009)	0.046*** (0.009)
Natural logarithm of Income	0.039*** (0.007)	0.119*** (0.013)	0.021*** (0.005)	0.040*** (0.006)
Health Barriers				
Difficulty walking 1/4 mile unaided	-0.018** (0.009)	-0.097*** (0.017)	-0.026*** (0.007)	-0.033*** (0.006)
Difficulty hearing	0.009 (0.007)	0.025** (0.013)	-0.010* (0.006)	-0.007 (0.005)
Fair/poor eyesight	-0.029*** (0.009)	-0.060*** (0.020)	-0.006 (0.009)	-0.020** (0.008)
Problems with incontinence	0.027** (0.011)	-0.013 (0.018)	0.005 (0.008)	0.013 (0.008)
Long-standing illness	-0.018** (0.008)	-0.011 (0.014)	-0.006 (0.006)	0.007 (0.006)
Has arthritis	-0.012* (0.008)	0.004 (0.014)	-0.018*** (0.006)	-0.001 (0.006)
Lack of access				
No access to internet	-0.031*** (0.008)	-0.113*** (0.017)	-0.035*** (0.006)	-0.047*** (0.005)
Living in a rural area	-0.022*** (0.007)	0.033** (0.015)	-0.012** (0.006)	-0.016** (0.006)
Has access to a car	0.020* (0.011)	0.087*** (0.022)	0.004 (0.010)	-0.006 (0.010)
Observations	6,125	6,541	5,978	6,182
Pseudo-R squared				

Robust standard errors are clustered at the household level; *** p<0.01, ** p<0.05, * p<0.1

*Probability that the person wants to do each activity more often -
probit regression results (average marginal effects reported), people aged 50+*

VARIABLES P(X=1)	(1) Wants to go to the cinema more	(2) Wants to eat out more	(3) Wants to go to museums more	(4) Wants to go to the theatre more
Age	-0.007*** (0.001)	-0.005*** (0.001)	-0.005*** (0.001)	-0.003*** (0.001)
Female	0.081*** (0.012)	0.032** (0.013)	0.043*** (0.012)	0.143*** (0.013)
Single	0.029* (0.016)	-0.041** (0.017)	0.055*** (0.016)	0.002 (0.017)
Natural logarithm of Income	-0.001 (0.010)	-0.080*** (0.011)	-0.006 (0.010)	-0.019* (0.010)
Health Barriers				
Difficulty walking 1/4 mile unaided	0.013 (0.017)	0.099*** (0.017)	0.004 (0.016)	-0.020 (0.017)
Difficulty hearing	0.015 (0.013)	0.012 (0.014)	0.045*** (0.013)	0.038*** (0.014)
Fair/poor eyesight	0.029 (0.020)	0.053** (0.021)	0.025 (0.020)	0.028 (0.021)
Problems with incontinence	0.044** (0.018)	0.042** (0.018)	0.036** (0.017)	0.052*** (0.018)
Long-standing illness	0.027* (0.014)	0.026* (0.015)	0.029** (0.013)	0.043*** (0.015)
Has arthritis	0.047*** (0.014)	0.027* (0.014)	0.021 (0.014)	0.027* (0.015)
Lack of access				
No access to internet	-0.055*** (0.016)	0.031* (0.018)	-0.093*** (0.015)	-0.120*** (0.017)
Living in a rural area	0.013 (0.014)	-0.006 (0.015)	0.043*** (0.014)	0.024 (0.015)
Has access to a car	-0.029 (0.021)	-0.058*** (0.022)	0.016 (0.020)	-0.014 (0.022)
Observations	6,026	6,035	5,865	6,185
Pseudo-R squared	0.0291	0.0415	0.0245	0.0312

*Robust standard errors are clustered at the household level; *** p<0.01, ** p<0.05, * p<0.1*

Probability that the person wants to do each activity more often -
 probit regression results (average marginal effects reported), people aged 75+

VARIABLES P(X=1)	(1) Wants to go to the cinema more	(2) Wants to eat out more	(3) Wants to go to museums more	(4) Wants to go to the theatre more
Female	0.128*** (0.024)	0.055** (0.027)	0.050** (0.025)	0.161*** (0.027)
Single	-0.043 (0.030)	-0.092*** (0.033)	0.056** (0.029)	-0.046 (0.032)
Natural logarithm of Income	-0.026 (0.023)	-0.114*** (0.028)	-0.017 (0.023)	-0.020 (0.026)
Health Barriers				
Difficulty walking 1/4 mile unaided	0.005 (0.027)	0.122*** (0.029)	-0.005 (0.026)	-0.040 (0.030)
Difficulty hearing	0.016 (0.024)	0.011 (0.027)	-0.014 (0.023)	0.016 (0.026)
Fair/poor eyesight	0.016 (0.032)	0.036 (0.035)	-0.015 (0.031)	0.015 (0.035)
Problems with incontinence	0.048 (0.030)	0.063* (0.034)	0.035 (0.031)	0.088*** (0.033)
Long-standing illness	0.022 (0.028)	-0.004 (0.031)	0.027 (0.027)	0.004 (0.030)
Has arthritis	0.030 (0.025)	0.030 (0.028)	0.031 (0.025)	0.064** (0.028)
Lack of access				
No access to internet	-0.060** (0.026)	0.030 (0.029)	-0.088*** (0.026)	-0.102*** (0.028)
Living in a rural area	-0.012 (0.028)	-0.021 (0.031)	0.040 (0.027)	0.008 (0.031)
Has access to a car	-0.035 (0.034)	-0.006 (0.036)	0.055* (0.030)	-0.006 (0.036)
Observations	1,445	1,456	1,400	1,502
Pseudo R-squared	0.0283	0.0417	0.0234	0.0340

Robust standard errors are clustered at the household level; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

End Notes

ⁱ ONS population estimates, 2015.

ⁱⁱ ONS (2015).

ⁱⁱⁱ Our estimates from the Living Cost and Food Survey, 2014. Estimates from survey data may differ from estimates in the National accounts as they do not include imputed rents.

^{iv} http://www.ilcuk.org.uk/index.php/publications/publication_details/the_golden_economy_the_consumer_marketplace_in_an_ageing_society

^v ONS (2015).

^{vi} DWP response to DisabledGo audit; press release available at: <https://www.gov.uk/government/news/government-concerned-at-shocking-evidence-of-the-inaccessibility-of-the-british-high-street-to-disabled-people-despite-their-200-billion-spending>

^{vii} Income corresponds to wages, benefits, and investment income when people are working and private/public pension plus investment income when they are not. The (modified) OECD equivalence scale assigns a value of 1 to the head of household, 0.5 to each additional adult member, and 0.3 to each child.

^{viii} Health barriers include: difficulty walking ¼ mile unaided; difficulty hearing; fair/poor eyesight; limiting self-reported health problem.

^{ix} Connectivity barriers include: no access to internet, living in a rural area, not having access to a car.

^x Non essential items include: Alcohol and Tobacco; Recreation and Culture; Restaurants and Hotels; Communication; Education; Household Goods and Services; Miscellaneous Goods and Services. Essential items include: Food and Non-alcoholic Drinks; Clothing and Footwear; Housing, Water, and Electricity; Health expenditure; Transport.

^{xi} <http://www.who.int/mediacentre/factsheets/fs404/en/>

^{xii} Analysis consisted of a logistic regression estimating the odds of having a walking difficulty controlling for age, gender, (natural logarithm of) income, having a difficulty hearing, fair/poor eyesight, problems with incontinence, arthritis, living in a rural area, access to a car, and access to the internet.

^{xiii} DWP response to DisabledGo audit; press release available at: <https://www.gov.uk/government/news/government-concerned-at-shocking-evidence-of-the-inaccessibility-of-the-british-high-street-to-disabled-people-despite-their-200-billion-spending>

^{xiv} Multivariate regression estimating the impact of socio-demographic variables and health and connectivity barriers on spending. The dependent variables are: the natural logarithm of equivalised household spending on food & groceries, eating out, clothing and footwear, and leisure; the control variables are: age, gender, (natural logarithm of equivalised household) income, walking difficulty, having a difficulty hearing, fair/poor eyesight, problems with incontinence, arthritis, living in a rural area, access to a car, and access to the internet.

^{xv} Results report the marginal effect after probits regressions estimating the impact of socio-demographic variables and health and connectivity barriers on social activities. The dependent variables are: the probability of going to the cinema at least once a month, the probability of eating out at least once a month, the probability of going to the museum at least once a month, and the probability of going to the theatre at least once a month; the control variables are: age, gender, (natural logarithm of equivalised household) income, walking difficulty, having a difficulty hearing, fair/poor eyesight, problems with incontinence, arthritis, living in a rural area, access to a car, and access to the internet. For each category, we also estimated the probability of wanting to do more controlling for the same variables.

^{xvi} Musselwhite and Haddad (2010).

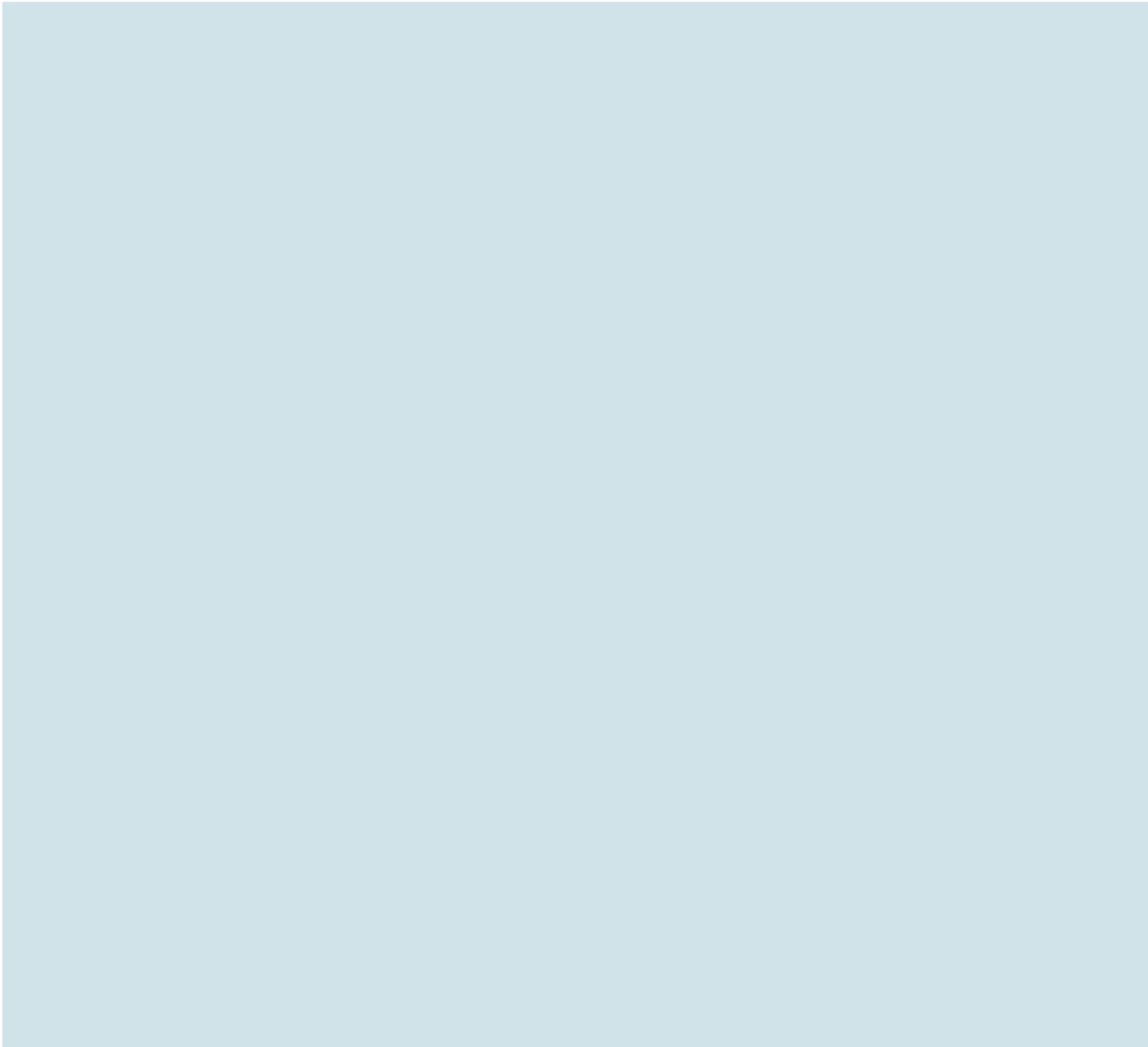
^{xvii} Ibid.

^{xviii} White and Selwyn (2011).

^{xix} Ibid.

^{xx} Towards Common Ground. Help the Aged (2008).

^{xxi} WHO (2007). http://www.who.int/ageing/publications/Global_age_friendly_cities_Guide_English.pdf?ua=1



ILC-UK
11 Tufton Street
London
SW1P 3QB
Tel: +44 (0) 20 7340 0440
www.ilcuk.org.uk

