FUNDAMENTALS

Demographic strategy: the cost of unhealthy living

Raising the retirement age can help with the fiscal costs of living longer. But our unhealthy lives could force us to look at other options.

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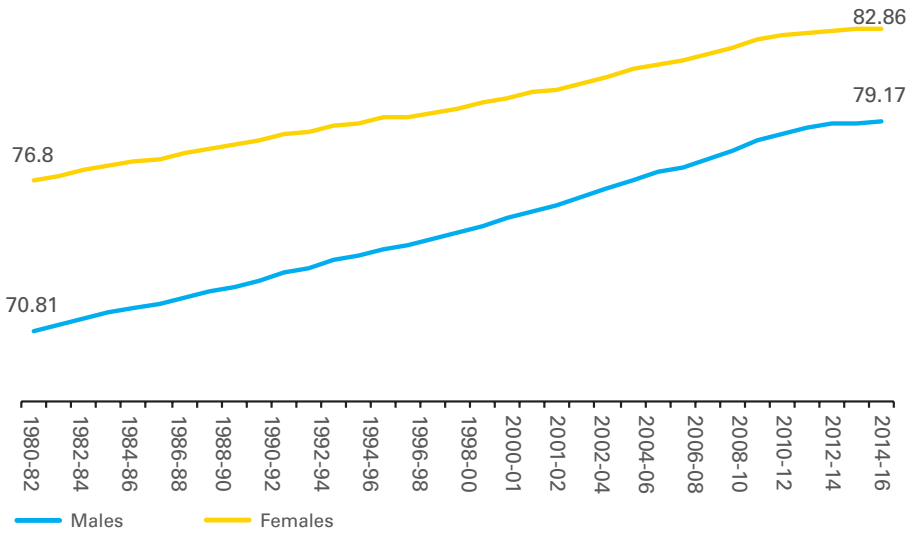
We've become used to rising life expectancy, yet lately statistics seem to show that the rate of improvement has slowed. What is more, our increasingly unhealthy lifestyles may be responsible. What challenges does this pose to policymakers and how can they tackle this trap?

CAN HUMANS LIVE FOREVER?

Humanity has experienced an exceptional revolution in the last century, with life expectancy rising near continuously to levels longer than ever experienced in human history. In recent years, however, the quest to live forever has suffered an abrupt setback – the rate of improvement in life expectancy in countries like the US and UK has consistently slowed (see our blog **Will our children live longer than us?**). Since around 2011, the Institute and Faculty of Actuaries has noted a decline in the rate of mortality improvement, with current rates of improvement the lowest observed since the data set was first estimated in 1977.

Figure 1: Can we live forever? Life expectancy at birth, UK, 1980-82 to 2014-16



Source: Office for National Statistics

THE PROBLEM WITH SLOW WALKERS

Demographers have shown that lifestyle is linked to longevity. In studying 'blue zones' (regions of the world where people live much longer than average such as Sardinia in Italy

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and Okinawa in Japan) researchers have noted that common features of lifestyle include moderate physical activity, a plant-based diet, no smoking and strong family ties and social engagement.

But most Western lifestyles seem to be failing to take on board the tangible tips on diet and exercise. Research from **Public Health England** has found that 41% of adults in England aged 40-60 walk less than 10 minutes at a brisk pace per month! PHE's research also shows that physical activity has declined over time, with people 20% less active now than they were in the 1960s, walking on average 15 miles less a year than two decades ago. In 2016, 26% of UK adults were classified as obese compared to just 15% in 1993 (source: **NHS**)

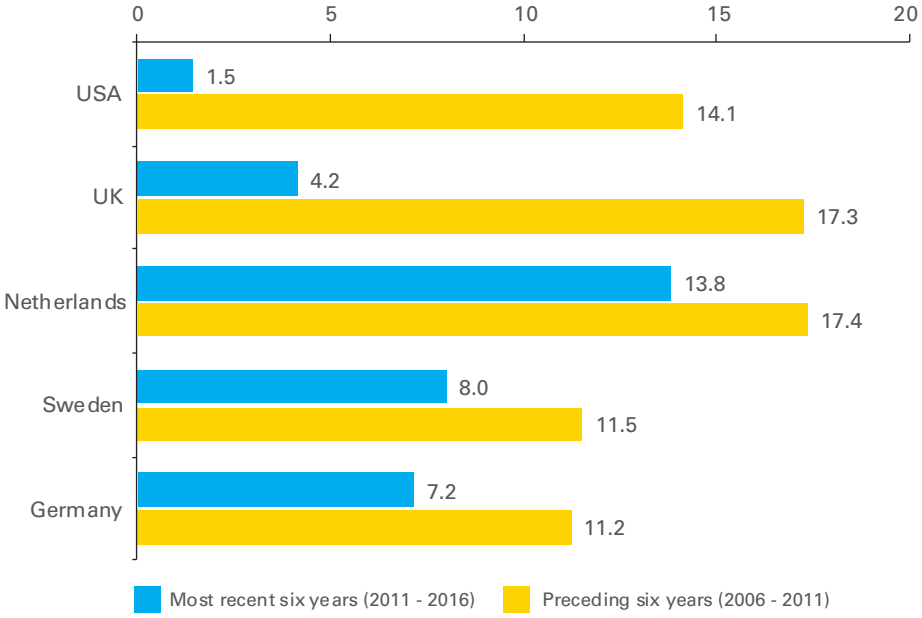
Surprisingly though, it seems that such unhealthy lifestyles impair our lives rather than necessarily shorten them – this is particularly true for obesity. Data from the Netherlands have shown that for adults obese at 55, life expectancy is only 1.4 years lower than for adults of a normal weight, yet they can expect to spend 5.9 years with physical disability.

Put another way, our life expectancy may no longer be rising as fast as before, but the increasing prevalence of chronic disease suggests that our number of healthy years is actually declining.

COUNTING THE COST OF AGEING

The 'demographic dividend' of longer life has very obvious benefits, although there are costs to society – particularly fiscal pressures – as pensions are paid for longer and healthcare costs typically rise with age.

Figure 2: Average annual increases in life expectancy, weeks

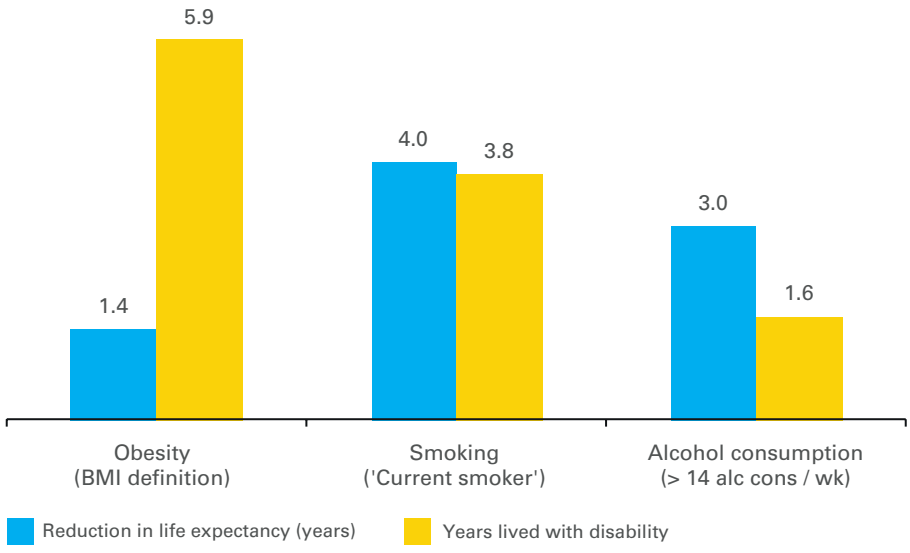


Source: ONS analysis of Human mortality tables

Unhealthy lifestyles may actually be exacerbating this trend, as life expectancy is largely unaffected by chronic diseases, although the period of illness rises rapidly, requiring expensive medical interventions for a growing number of years.

A case in point would be diabetes. Like many chronic diseases, it can be caused by genetic factors although rising prevalence is associated with our changing lifestyles. Globally, 425 million people worldwide currently have diabetes – this number is expected to rise by 48% by 2045. Diabetes has been described as a 'pandemic' fuelled by growing rates of obesity – the US Centre for Disease Control reports that 87.5% of

Figure 3: Life expectancy is not yet declining, healthy life expectancy is



Source: Bart Klijis, BMC Public Health (2011) - Obesity, smoking, alcohol consumption and years lived with disability: a Sullivan life table approach

adults diagnosed with diabetes were overweight or obese (defined by a body mass index exceeding 25). The global market value for insulin – the key drug for treating diabetes – is estimated to be around US$38 billion annually. To put this into context, the NHS estimates that around 10% of its budget is spent on treating diabetes and related complications, which could rise to 17% over the next 20 years given current trends.

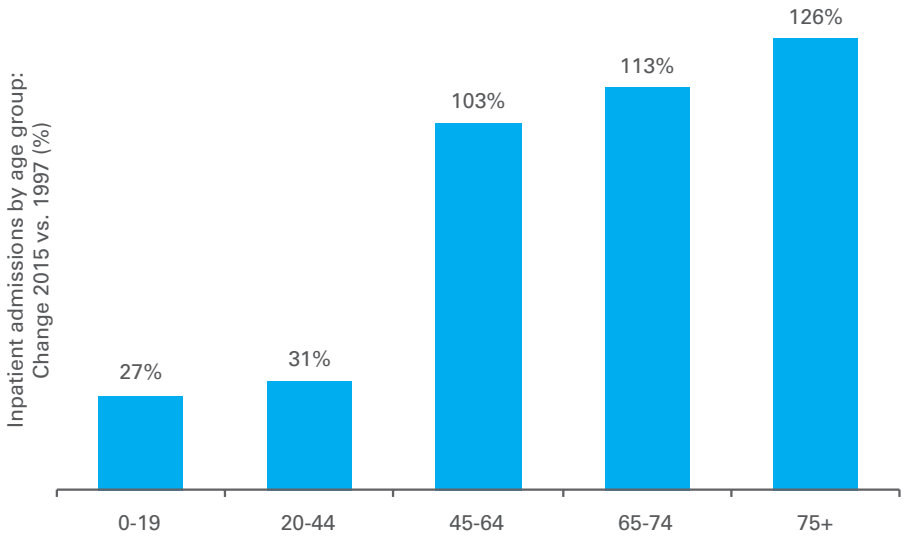
More generally, healthcare costs typically rise as we grow older, while chronic diseases are particularly expensive to treat, so the cost of healthcare is rising not just because society is ageing but due to the growing burden of treating complex lifestyle-related conditions.

For policymakers, this poses something of a paradox. We know that life expectancy is longer for the affluent – in the UK at 65, life expectancy is 23 years for men with high income, normal health and healthy lifestyles, compared to just 12 years for those with low income, ill health and unhealthy lifestyles. With a fixed age of retirement across society, the burden of these rising costs may fall on the working poor who will contribute for the same number of years, while having fewer years to benefit. How do we fund these rising costs in a socially equitable way?

POLICY PREDICAMENT: OPTIONS AND POLITICS

As we outlined in our article, **Ageing and wrinkles in public finances**, there are four potential policy responses – borrow more, raise taxes, pay for less or spend better and finally require people to work for longer. We look at each in turn.

Figure 4: Inpatient admissions by age group in England



Source: LGIM calculations based on data from NHS Digital, 'Hospital episode statistics'.

1. Increased borrowing

Public sector borrowing appears the most politically expedient option, given it lacks any concentrated opposition today as it imposes liabilities on future generations (some of whom are not born yet!). Beyond these inequitable consequences, borrowing is regarded as a 'quick fix' as ever rising debt is unsustainable. Unhealthy living may speed the conclusion that a more comprehensive solution is required.

2. Higher taxes

Raising taxes is the obvious corollary of spending more, however it has never been politically easy. Ironically, the efficacy of this policy option may also be changing – according to the ONS, those over 55 hold 65% of the total wealth in society, while tax is typically focused on income rather than wealth. Raising income taxes would ask a proportionately smaller group of younger workers to pay for a wealthier older generation to receive spending from the state – beyond fairness considerations, the working population may simply be too small to raise enough cash.

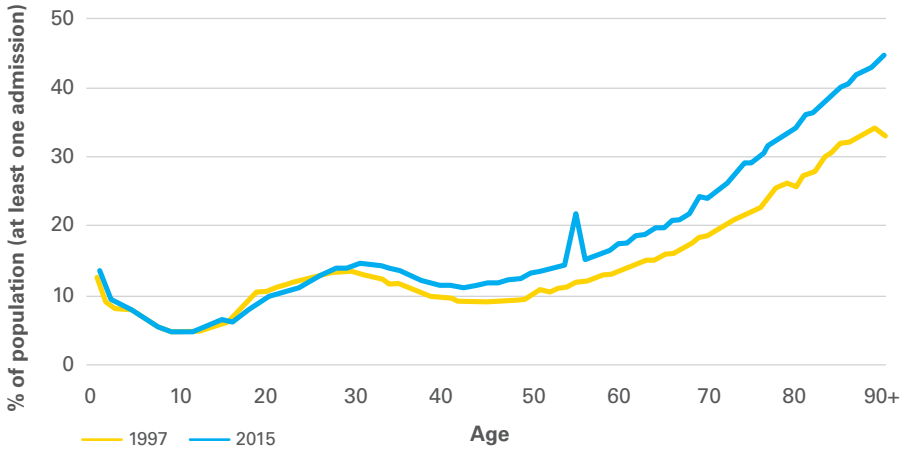
Currently the retired also receive a number of tax exemptions that do not apply to working people, such as exemption from National Insurance contributions. But taking away such tax privileges from a very politically engaged group isn't obvious politics.

3. Austerity and efficiency

Looking beyond the obvious fiscal levers, trying to pay for less or spend more efficiently are potentially plausible policy options.

The 'passive' policy response – try to pay for less – that we have seen so far is effectively a form of rationing, whereby services are hard to access either through waiting times or reduced entitlement. Social care is arguably the most contentious area of this 'passive' policy, as social care costs are not met by the NHS, rather means-tested provision is provided by local authorities to those with less than £23,250 of assets – as a result an increasing proportion of social care

Figure 5: Percentage of population (England) by age who had at least one inpatient admission (age 0 omitted)



Source: LGIM calculations based on data from NHS Digital, 'Hospital episode statistics'. Population figures come from the ONS.

costs are met privately. The challenge with such a system is that it removes an efficient risk-sharing mechanism – arguably the key benefit of a centralised health care system is that we are each effectively 'insured', which currently does not apply to social care. Yet again, it's also very unpopular!

A more politically appealing option is the 'active' approach of trying to spend more efficiently. Healthcare providers are increasingly being incentivised to manage the total cost of a condition rather than paid for individual drugs or procedures as a way of improving outcomes at lower cost. Health insurance companies have been taking a similar approach with their members, reducing the cost of cover for those members who take active steps to improve their health such as visiting the gym.

As our colleagues in the technology thematic group highlighted in **Artificial intelligence gets real**, by using millions of historic patient records, artificial intelligence technology such as IBM's Watson may be able to better diagnose illness than conventional screening, while also prescribing a more appropriate treatment plan. Remote monitoring by connected devices, particularly in chronic diseases such as diabetes, may also enable a patient to be prioritised at an earlier stage, reducing the severity of illness and the cost of treating it. Better diagnoses, treatment plans and patient monitoring all have the potential to reduce the labour intensity of healthcare too.

The increasing power of technology to incentivise, diagnose and monitor patients has incredible potential to drive better efficiency and efficacy; however this approach will require long-term commitment across a diverse range of strategies to yield results. For politicians, the temptation may be to favour the passive policies that are extremely effective at saving money today.

4. Working for longer

Having seen life expectancy extend by around 24 years since 1925 (source: **ONS**) when the retirement was originally defined as 65 for men, it seems entirely logical that the retirement age could be raised to slow the rise in dependency ratios and also shorten the number of pensionable years, thus reducing the total costs.

Again this lever may be less effective than you'd think at first glance. An inequality paradox exists – those who have the greatest ability to work for longer may have the least need to, given the affluent can expect to live longer on average. Notably technology also generally means the physicality of work is declining, which should enable us to work for longer, however this is least true for those with the lowest skills – service jobs like hospitality and cleaning are hard to automate, seeing some of the highest growth rates at lowest pay and are amongst the most physically demanding jobs.

The challenge of incentivising the affluent, who are able to continue to work and contribute, may not be insurmountable. Employers who can make work pay, not just through remuneration but also a stimulating and flexible job may be able to retain older talent. According to Spencer Stuart, a head-hunter, the average FTSE 150 chair is 64.5 years old, implying that a significant number are older than the state pension entitlement age.

Working for longer isn't just open to the chair of the board – an increasing number of companies are adapting to suit older workers. BMW has made changes to its production plants including more ergonomics controls, flexibility to sit instead of stand and screens which are easier to read, offering a more age-neutral environment. Greater

flexibility in work schedules has also helped retain staff at companies like Michelin, the tire manufacturer, where a gradually phased retirement is encouraged and CVS, the US health care provider, which has offered a 'snowbird' programme to allow employees to relocate from northern states to warmer climes.

INVESTMENT CONCLUSIONS: FROM FISCAL RISKS TO HEALTHCARE OPPORTUNITIES

In theory, raising the retirement age is the bluntest tool available for curtailing fiscal pressures. In reality, unhealthy lifestyles may make this unachievable and unfair. Given the growing political divide around how to build a fair pension system which balances the physical demands of work against a rising retirement age, the temptation to borrow to plug the fiscal hole may prove irresistible. To avoid spending pressure translating into higher real borrowing costs for states, our lifestyles and healthcare require a technology revolution – it's uncertain whether this will arrive soon enough to curtail inflationary pressures of unfunded spending commitments.

Beyond the policy predicament, considering the options suggests there may be a number of compelling investment opportunities. We view the solution providers in healthcare as an attractive seam, reflecting the 'win-win' nature of potentially improved outcomes for patients at reduced cost. Structurally, we'd also see those companies able to best tap talent across the age spectrum as likely to be advantaged as we enter an era of a declining workforce.