The cost of our ageing society

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Executive Summary

Populations are ageing in countries across the world and, as a result, the proportion of older people relative to working-age people is growing. Shifts in the proportion of older people to working-age people have ramifications for state spending on pensions, health care, long-term care and unemployment benefits.

- **In the UK:** age-related spending is projected to rise from an annual cost of 21.3% to 26.3% of GDP between 2016/17 and 2061/62, a rise of 5% of GDP (equivalent to a rise of around £79bn in today's money).
- **In the EU** [1]**:** age-related spending is projected to rise from an annual cost of 25% to 29.1% of GDP between 2010 and 2060, a rise of 4.1% of GDP.
- **In the UK:**
  - ➢ Annual spending on public pensions (state pensions, benefits and public service pensions) is projected to rise by 1.9% of GDP by 2061/62 (equivalent to a rise of around £33bn in today's money).
  - ➢ Annual spending on health care is projected to see the largest rise of all elements of age related spending, by 2.3% of GDP by 2061/62 (equivalent to a rise of around £36bn in today's money).
  - ➢ Annual spending on long term care is projected to rise by 0.9% of GDP by 2061/62 (equivalent to a rise of around £14bn in today's money).

The projections in this briefing evidence the challenges that the world is facing as demographics shift over the next century and old age dependency ratios increase. The following policy recommendations aim to contribute to the policy debate around addressing the challenges posed by ageing populations. The recommendations are aimed at decision makers across the world.

- **Governments need to prepare for uncertainty:** Policy makers today are being asked to prepare for a future about which there is a serious degree of uncertainty and therefore sustainable policies will be the ones which can adapt to unexpected changes.
- **Governments need to ensure pension systems are sustainable, allow for greater risk-sharing, and are less vulnerable to longevity risk:** The International Monetary Fund (IMF) warns that all governments must take action now to acknowledge their own exposure to longevity risk and develop greater risk-sharing between government, pension providers, insurers and individuals. Furthermore, measures should be implemented to ensure higher than expected levels of longevity do not threaten fiscal sustainability.
- **Linking retirement ages[2] to life expectancy can help protect pension system sustainability:** The European Commission (EC) has recommended linking retirement ages to life expectancy as

[1] EU incorporates all of the 27 European Member states including the UK

an effective way to ensure the sustainability of public pension systems while also protecting pensioners from suffering reductions in public pension (state pension) payments.

- **Across the world, people will need to continue to work longer:** People across the world will need to continue to work longer in order to sustain tax and benefit systems based on redistribution and to support themselves up until the age that they can access income through public pensions or savings. Governments will need to work hard to ensure that the labour market is accessible to older people. It will be important that governments explore ways of helping people in vulnerable groups to access the labour market.
- **Countries need to ensure there are safety nets for those who cannot work longer**: Serious consideration must be given to how to ensure that people who may have little chance of working up until higher retirement ages due to a lower healthy life expectancy or who are excluded from the labour market by a lack of suitable employment do not suffer deprivation as a result.
- **Governments across the world should consider how to create better conditions for health care innovation and development:** Investing in health care now and creating better conditions for innovation and development in health care could help manage the growing cost of health care in the future. However, this would incur greater immediate costs. Global sharing of good practice is vital.
- **Governments need to consider the impact of migration on projected dependency ratios:** Governments with high dependency ratios should carefully consider the potential impact of changes in immigration policy.
- **Addressing the needs of ageing populations will require ongoing investment in research and data collection:** Studies on the needs and resources of older people such as the English Longitudinal Study of Ageing will continue to be especially valuable to UK policy making.
- **Labour Market Adjusted Ratios** as called for by the European Policy Centre[3] could help Governments better understand the impact employment policies have on dealing with the costs of ageing. They take account of the fact that the old-age dependency ratio does not capture the fact that many people of working age are actually not working. Governments could usefully measure and publish Labour Market Adjusted Dependency Ratios to aid decision making on policy interventions which might help mitigate the cost of our ageing society. Women and people at risk of social exclusion are more likely to be unemployed than others; it will be important that governments explore ways of helping people in vulnerable groups to access and remain the labour market. Governments might wish to look at ways of helping women with children to be able to remain in the workforce, through development of child-care programmes and work with employers to ensure fathers can contribute more to raising children and women are not penalised for taking career breaks.

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[2] In the UK we would normally talk about State Pension Age, not retirement age. But for consistency in a global context, in this report we use retirement age.

[3] http://web.docuticker.com/go/docubase/64250

- **It is important that governments recognise the contribution that older people make to society and the economy when considering policy interventions:** Governments must ensure that the wealth of skills and experience older people have are viewed as a positive resource when designing the policy environments of the future. Policies must focus on enabling active, healthy ageing rather than just tackling the costs of ageing.

Introduction

Populations are ageing in countries across the world and, as a result, the proportions of older people relative to working-age people are growing.

- **In the UK**: the old-age dependency ratio[4] is expected to rise from 28% to 47% (from around four working-age people for every person aged 65 and over to around two working-age people for every person aged 65 and over) between 2010 and 2060.[5]
- **In the EU**: the old-age dependency ratio is expected to rise from 28% to 58% (from around four working-age people for every person aged 65 and over to under two working-age people for every person aged 65 and over) between 2010 and 2060.[6]
- **Globally:** Between 2011 and 2060 the old-age dependency ratio is expected to rise from 16% to 42% (from more than six working-age people for every person aged 65 and over to just over two working-age people for every person aged 65 and over).[7]

Shifts in the proportion of older people to working-age people have ramifications for state spending on pensions, health care, long-term care and unemployment benefits.

In order to attempt to summarise the global costs of ageing, this briefing reviews current global projections of the cost of ageing over the next few decades, drawing on the European Commission's *2012 Ageing Report*[8] and the Office for Budget Responsibility's *Fiscal Sustainability Report, July 2012.*[9]

Firstly we look at macro factors impacting the costs of ageing, then projected costs of ageing society including age-related expenditure and finally conclusions and policy recommendations. An online survey conducted by ILC-UK, in conjunction with Milliman LLP, is also included in the Appendix.

Whilst this report focuses on the fiscal cost of an ageing society, **it is important that governments recognise the contribution that older people make to society and the economy when considering policy interventions:** Older people have a wealth of skills and experience to offer society and the labour market. Labour market participation at older ages is on the rise, many older people not in work contribute to society through unpaid caring and volunteering (carers of all ages contribute the equivalent of £119 billion every year in the UK),[10] and older consumers (aged 65 and over) spend on average, around £100bn per year.[11]

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[4] A measure of people aged 65 and over relative to those aged 20-64
[5] EC (2012)
[6] EC (2012)
[7] United Nations Population Division - World Population Prospects: The 2010 Revision - File 1B: Total population (both sexes combined) by five-year age group, major area, region and country, annually for 2011-2100 http://esa.un.org/wpp/index.htm
[8] EC (2012)
[9] OBR (2012)
[10] Carers UK (2011) *Valuing Carers 2011: Calculating the value of carers' support* www.carersuk.org
[11] Age UK (2010)

The costs of ageing are impacted by several factors

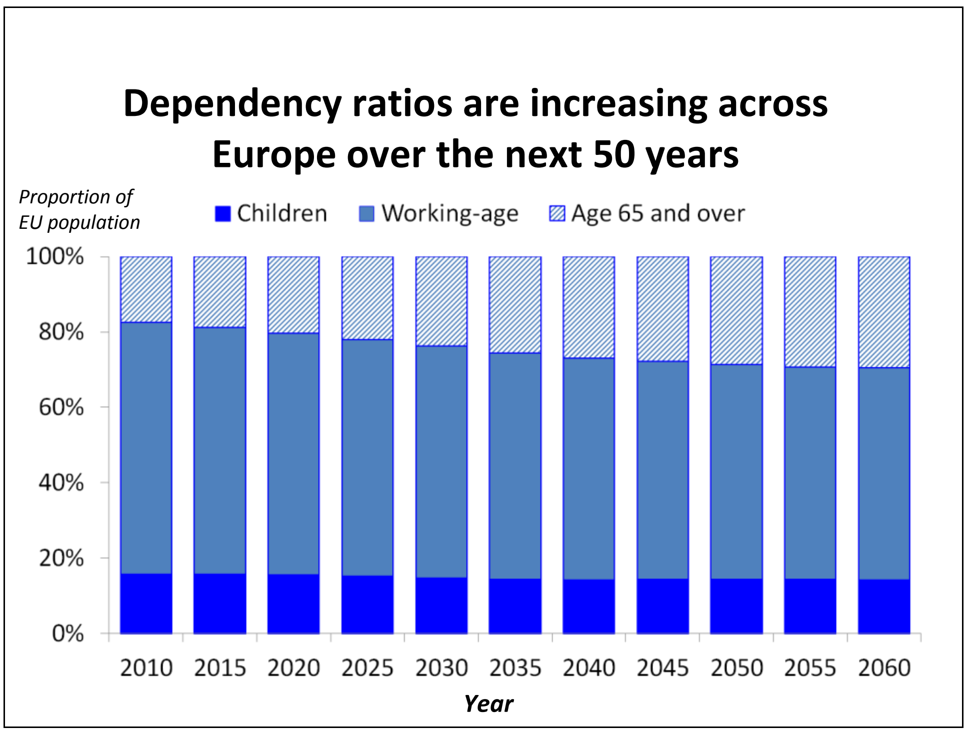
This section explores how the following factors impact the costs of ageing in turn:

- Changes in longevity, fertility and migration
- Trends in health care and long-term care
- Labour market participation rates and labour market exit ages
- The economy and GDP growth

Changes to longevity, fertility and migration impact the old-age dependency ratio

Demographic shifts caused by changes in longevity, fertility and migration impact the number of older people relative to the number of working-age people (and the resulting old-age dependency ratio). The greater the old-age dependency ratio, the more pressure there is on state systems to fund pensions, benefits, and health and care costs for older people.

Chart 1:[12] Projected proportion of EU population of Children (ages 0-14) Working-Age People (ages 14-64) and Older People (ages 65+) by year, 2010 to 2060



- **Longevity is expected to continue increasing:** Increasingly long lives impact the costs of pensions, health care and long-term care as individuals need to receive these benefits and services for longer. Globally, life expectancy at birth is projected to increase by 13 years during this century from 68 years in 2005/10 to 81 years in 2095/2100.

[12] EC (2012) Tables A9, A11, A12. EU 27 member states

- **In the UK**, life expectancy at birth is expected to increase by 7 years for men and 6.7 years for women between 2010 and 2060.[13]
- **Within the EU**, life expectancy at birth is expected to increase by 7.9 years for men and 6.5 years for women between 2010 and 2060.[14]

- **Fertility rates are increasing but are still lower than a 100% replacement rate of 2.1 births per woman per lifetime in the EU and the UK**: A reduction in fertility relative to the rest of the population has implications for future proportions of working-age people to older people. Global fertility rates are currently at 2.47 births per woman.[15]
  - **The UK** has a fertility rate higher than the EU average, at 1.94 in 2010, which is projected to fall to 1.91 by 2060.[16] The UK's higher fertility rate is partly due to the inward migration of women of child-bearing age from countries with higher fertility rates.[17] However, these projections are based on existing trends in migration and demographics. If the government were to pass legislation which had the effect of reducing the level of inward migration there could be fewer migrants of child bearing age which could in turn increase the dependency ratio in future.
  - **Throughout the EU** fertility rates are below a natural 100% replacement rate (of 2.1 children born per woman in their lifetime) however fertility rates are projected to rise slightly across Europe from 1.59 births per woman in 2010 to 1.71 births per woman by 2060.[18]
- **The UK is expected to receive around 8.6 million net migrants over the next 50 years, a yearly average of between 0.3% and 0.2% of the UK population:** Migration affects the size of the population within countries, and can reduce or increase the dependency ratio, depending on the age-structure of migrants.
  - The UK is expected to receive around 8.6 million net migrants over the next 50 years, a yearly average of between 0.3% and 0.2% of the UK population by 2060.[19]
  - The EU is expected to receive around 60.7 million net migrants over the next 50 years, a yearly average of around 0.2% of the EU population.[20] Inward migration can reduce the dependency ratio, as many migrants are of working age, however the EU would require a far greater level of net migration to maintain the current dependency ratio (an additional 11 million migrants by 2020).

[13] EC (2012)
[14] EC (2012)
[15] Central Intelligence Agency, USA, World Factbook, October 2012 https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html
[16] EC (2012)
[17] Guy Goodwin's (Director, Population and Demography Statistics, Office for National Statistics) evidence to The Select Committee on Public Service and Demographic Change, 5 July 2012 http://www.parliament.uk/documents/lords-committees/Demographicchange/ucPSD050712Ev1.pdf
[18] EC (2012)
[19] EC (2012)
[20] EC (2012)

Governments need to consider the impact of migration flows on the dependency ratio

The above projections are based on assumptions about the level of inward net migration the UK and EU will receive over the next 50 years. Changes in levels of immigration can impact both the proportions of people of working-age and women of child-bearing age, which could in turn impact projected dependency ratio level. Governments in countries with high dependency ratios should think carefully about the potential impact on dependency ratios of immigration policies.

Trends in health care and long term care impact the costs of ageing

Older people are more likely to suffer ill health than younger people.[21] As a result of a growing older population, increasing longevity and a greater coverage of public health care within the EU from the 1960s and 1970s[22] the pressure on public health care funding is likely to continue growing. Public health spending in the EU currently accounts for 14.6% of total government spending,[23] around 7.1% of GDP.[24]

Labour market participation rates and exit ages

A low old-age dependency ratio does not necessarily mean that the burden on working people is reduced unless many of the people of working-age are actually in work

Another way of measuring the degree of dependency in a country is by looking at proportion of people who are not in work as a proportion of the total population.[25] In the UK 42.6% of the population were not in work in 2010. This is expected to increase to 47.5% by 2050. Within the EU as a whole, the proportion of the population out of work is expected to grow from 47.7% in 2010 to 56.3% in 2050.[26] While more people are expected to work until older ages in future, as explored below, efforts need to be put in to tackle unemployment amongst those of working age. People in particular groups such as women and people at risk of social exclusion are more likely to be unemployed; it will be important that governments explore ways of helping people in vulnerable groups to access and remain the labour market. Governments might wish to look at ways of helping women with children to be able to remain in the workforce, through development of child-care programmes and work with employers to ensure fathers can contribute more to raising children and women are not penalised for taking career breaks.[27]

Labour Market Adjusted Ratios, as called for by the European Policy Centre[28], help understand the impact employment policies have on dealing with the costs of ageing. They take account of the fact that the old-age dependency ratio does not capture the fact that many people of working age are actually not working. Governments could usefully measure and publish Labour Market Adjusted

[21] EC (2012)
[22] EC (2012)
[23] EC (2012)
[24] EC (2012) p.466
[25] Guerzoni, Zuleeg (2011) the Labour Market Adjusted Dependency Ratio
[26] Guerzoni, Zuleeg (2011)
[27] Guerzoni, Zuleeg (2011)
[28] http://web.docuticker.com/go/docubase/64250

Dependency Ratios to aid decision making on policy interventions which might help mitigate the cost of our ageing society.

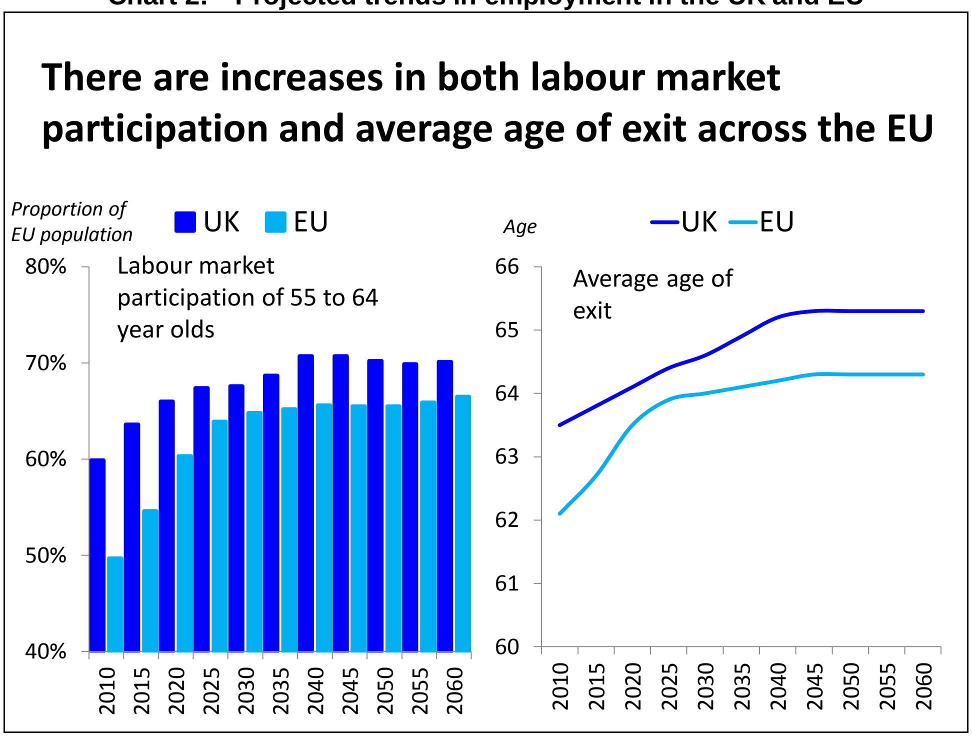
Participation rates at older ages and the average age of labour market exit are increasing

Higher participation rates and later average ages of exit from the labour market have positive implications for the state and the individual's ability to fund later life. The longer that people spend in work, the longer they have to save for retirement and the shorter their retirement will be, relative to their working life. A later average age of exit can also increase the number of people in work, relative to the number who are retired, making it easier to fund pensions, benefits and health and care costs from current taxes.

Overall, labour market participation at older ages (ages 55 to 64) is expected to increase within the EU from around 50% to around 67% between 2010 and 2060. Within the UK, the proportion of 55 to 64 year olds in work is expected to increase from around 60% to around 70%. The average age of exit is also projected to increase from around 62 to around 64 within the EU and from around 64 to around 65 within the UK between 2010 and 2060. [29]

People across the EU and in many countries across the world will need to continue to work longer in order to sustain tax and benefit systems based on redistribution and to support themselves up until the age that they can access income through public pensions or private savings.

Chart 2:[30] Projected trends in employment in the UK and EU



[29] EC (2012)
[30] EC (2012) Appendix tables UK and EU

The global economic downturn has posed extra challenges for both the state and the individual in funding the costs of ageing

The global economic downturn has impacted both the ability of the state and the individual to fund the costs of ageing. As a result of the financial crises which started in around 2007, many countries have been suffering economic downturns which have affected employment and productivity, reducing tax intake whilst also making it harder for governments to meet their debt obligations.

Governments under financial strain are also facing increasing difficulties in funding public (state and public sector) pension systems for growing populations of older people who are living longer. [31]

The global economic downturn has also impacted the ability of individuals to fund their own retirements as:

- many people are facing unemployment, reductions in wages, or reductions in hours worked, therefore making it harder to afford to invest a portion of their income into retirement savings.
- some of those who have saved in pensions, especially Defined Contribution pensions, have also faced decreases in the value of their fund size due to a lack of growth in the economy.
- many of those reaching retirement have found that the value of a pension annuity they can buy with their fund has decreased from more generous, pre-downturn levels.
- Price inflation has been high, especially for pensioners who spend the majority of their income on basic goods and services (such as food and energy) which experience greater increases than other goods and services.

GDP growth (which can be used as a measure of how the economy is faring) is expected to be low over the next few decades. In the EU, overall GDP growth is expected to be around 1.4% per year on average between 2010 and 2060[32] in comparison to an average yearly growth of 2.5% for the ten years between 1997 and 2006,[33] before the financial downturn.

[31] EC (2012)
[32] EC (2012)
[33] Real GDP growth rate - volume. Percentage change on previous year. EU27 countries - http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tec00115

What is the cost of ageing across the world?

This section explores current projections of the costs of ageing. These projections are based on demographic and economic assumptions as well as assumptions around employment, migration and health outcomes that may not represent what will actually happen in the future. These projections do not take into account future government policies, such as further increases in retirement ages, which could reduce the costs of ageing.

We focus on the costs of ageing in the UK and the EU, and look at global cost issues where possible. It is difficult to project the global costs of ageing because of the lack of data from developing countries.[34]

What is the potential overall cost of ageing across the UK and in the EU?

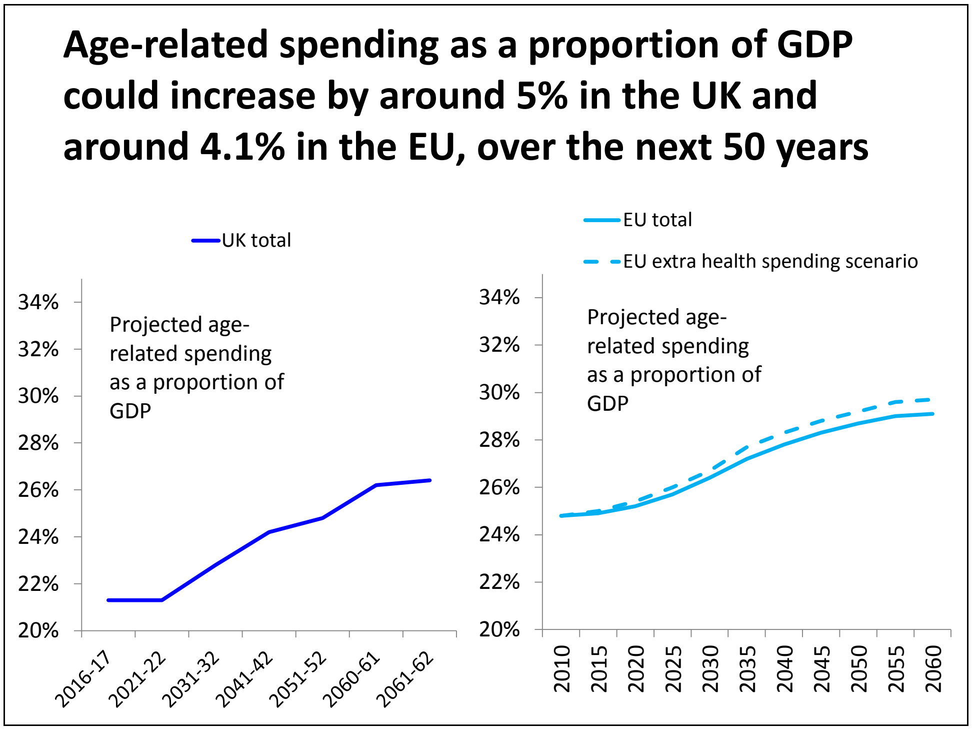
- **In the UK:** age-related spending is projected to rise from an annual cost of 21.3% to 26.3% of GDP between 2016/17 and 2061/62, a rise of 5% of GDP[35] (equivalent to a rise of around £79bn in today's money).[36]
- **In the EU:** age-related spending is projected to rise from an annual cost of 25% to 29.1% of GDP between 2010 and 2060, a rise of 4.1% of GDP.[37] However a scenario which assumes greater resources devoted to development within health care projects could see age-related spending in the EU rise to as much as 29.8% of GDP, annually, by 2060.[38]

Across the EU, countries which were projected to have lower increases in age-related spending were those who had instituted policies reducing the generosity of their public pension (state pension), raising the age at which people can claim a public pension (State Pension Age in the UK) and reducing access to early-retirement schemes.[39] In general, EU countries that have introduced policies to promote longer working and reduced the generosity of the indexation and accrual rates of their public pensions, have lower projected future costs of ageing.[40]

However, reducing public expenditure is not the only solution to the challenge of ageing populations. Serious consideration must be given to how to ensure that people who are less likely to be able to work up to higher retirement ages due to lower healthy life expectancies or lack of suitable employment do not suffer deprivation as a result.

[34] WHO (2011) There is little data on the costs of ageing and health care in developing countries
[35] OBR (2012) Table 3.6, includes education
[36] GDP Projections by ONS, 2012/13 UK GDP- £1.57trillion, HM Treasury http://hm-treasury.gov.uk/data_gdp_index.htm
[37] EC (2012) These figures include education which is also affected by demographics
[38] EC (2012)
[39] EC (2012)
[40] EC (2012)

Chart 3:[41] Projected changes in age-related spending in UK and EU



The projected costs of ageing will be higher if people live for longer than current longevity projections indicate

The IMF warns that, based on past underestimations, it is possible that current global longevity projections could be underestimated.[42] The IMF calculate that if longevity projections are being underestimated by an average of three years, and assuming a 60% replacement rate of working income on average, this could add between 1.5% to 2% of GDP to the annual costs of pensions in countries with advanced economies by 2050, and could add between 1% to 1.3% of GDP to the annual costs of pensions in countries with emerging economies by 2050.[43] The IMF recommends that all governments take action now to:[44]

- acknowledge their own exposure to longevity risk (including liabilities for public pensions and benefits) and implement measures to ensure that higher than expected levels of longevity do not threaten fiscal sustainability.
- develop greater risk-sharing between governments, pension providers and individuals (through changes to state and private pensions) and institute sustainable safety nets for older people who may not be able to support themselves through work and may not have sufficient savings.

[41] EC (2012) OBR (2012)
[42] 3 years is the average underestimation in past projections
[43] IMF (2012) Assuming a 60% replacement rate
[44] IMF (2012)

- develop the practice of transferring longevity risk from those who need to reduce their exposure (e.g. individuals, governments, pension schemes) to those who may wish to increase exposure (e.g., providers of health and long-term care, insurers, investors).

We now explores in further detail the potential future costs of specific age-related spending including pensions, health care, long-term care, education and unemployment benefits across the world.

Pensions (including state pension, pensioner benefits and public service pensions)

Age-related government spending on pensions is projected to increase as follows:

- **In the UK:** spending on public pensions (state pension, pensioner benefits and public service pensions) is projected to rise from an annual cost of 8.9% to 10.8% of GDP between 2016/17 and 2061/62, a rise of 1.9% of GDP[45] (equivalent to a rise of around £33bn in today's money). These assumptions do not include consideration of the impact of a single-tier pension. Much of the increase in spending on public pensions arises from increases in the proportion of older people and maturing State Second Pension entitlements.[46]
- **In the EU:** spending on public pensions is projected to rise from an annual cost of 11.3% of GDP to 12.9% of GDP between 2010 and 2060, a rise of 1.5% of GDP.[47] The majority of the increase in costs is related to projected increases in the old-age dependency ratio; however, countries which have introduced policies raising the retirement age and reducing the generosity of public pensions have seen the greatest reductions in their individual country's projections of age-related spending.
- **Globally:** IMF calculations, which assume that people receive a 60% replacement rate of working life income on average, project that global spending on pensions could rise from an annual cost of 5.3% to 11.1% of GDP between 2010 and 2050 in advanced economies and from 2.3% to 5.9% of GDP in emerging economies.

[45] OBR (2012) includes Basic State Pension, State Second Pension, Pension Credit, Winter Fuel Allowance and other benefits.
[46] OBR (2012)
[47] Figures do not add up due to rounding. These projections include state benefits for older people and public service pensions in some countries however this is not consistent across all countries, for example, public service pensions in the UK are excluded.

Chart 4:[48] **Projected UK and EU spending on public pensions as a proportion of GDP**

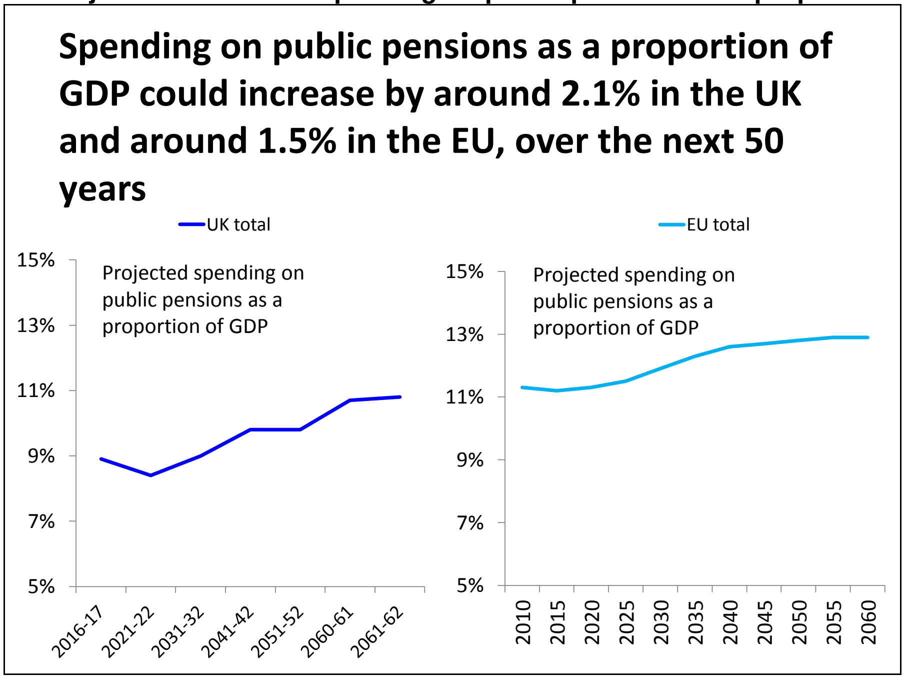
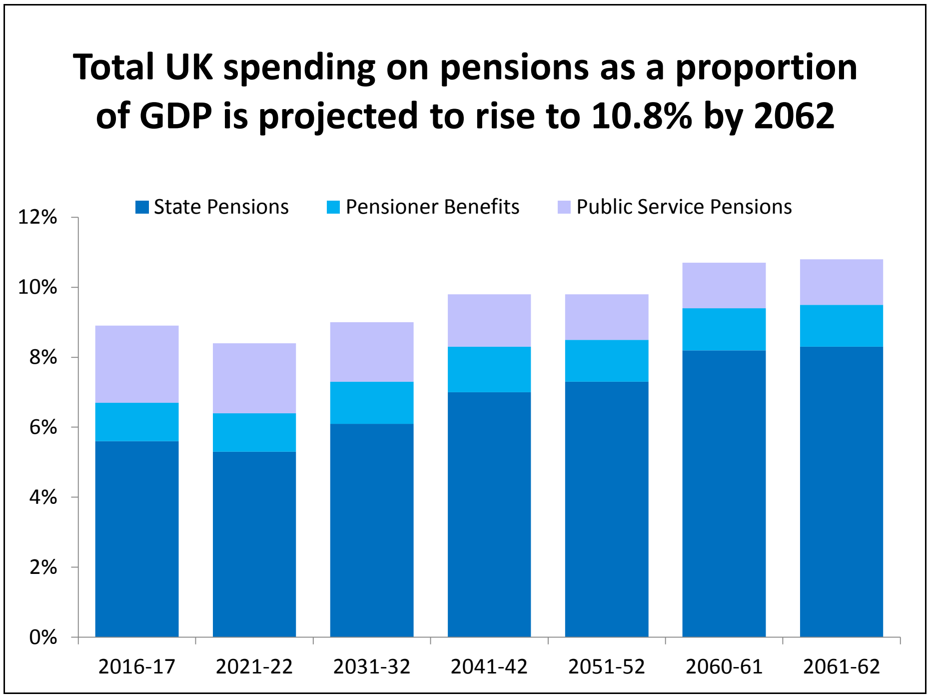


Chart 5:[49] **Projected UK spending on public pensions as a proportion of GDP**



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48 OBR (2012) EC (2012)
49 OBR (2012)

Health care

Age-related government spending on health care is projected to increase as follows:

- **In the UK:** spending on health care is projected to see the largest rise of all elements of age-related spending, rising from an annual cost of 6.8% to 9.1% of GDP between 2016/17 and 2061/62, a rise of 2.3% of GDP[50] (equivalent to a rise of around £36bn in today's money). The rise in projected spending on health care in the UK mirrors the increase in the ageing population. However scenarios in which there were higher than expected levels of mortality, morbidity and health care development could see much greater increases in expenditure on health care.[51]
- **In the EU:** spending on health care is projected to rise from an annual cost of 7.1% to 8.3% of GDP between 2010 and 2060, a rise of 1.1% of GDP.[52] This rise is prompted by increases in the proportion of older people in the population. However a second scenario which assumes greater resources devoted to development within health care projects suggests that EU spending on health care could rise to as much as 8.9% of GDP by 2060. [53]
- **Globally:** it is difficult to project the costs of health care because of the lack of data from developing countries.[54] However there is evidence of an increase in the proportions of people with medical problems which could lead to chronic diseases, such as hypertension, and an increase in age-related diseases, such as Alzheimer's, within some developing countries. [55] Health experts warn that the health and long term care costs associated with ageing could be very high in developing countries unless more investment is made in preventative treatment and health care development.[56] Investing in health care now could be as important as ensuring sustainable health care funding for the future though this would incur greater immediate costs.

Governments across the world should consider how to create better conditions for health care innovation and development: Health care spending will see the largest rise of all elements of age-related spending in the future. However, investing in preventative medicine, especially in developing countries, could save money in the long-term by preventing the onset of chronic diseases. Investing in health care now and creating better conditions for innovation and development in health care and global sharing of good practice, could be as important as ensuring sustainable health care funding for the future though this would incur greater immediate costs. The UCL School of Pharmacy recommends better use of community pharmacies to educate communities about preventative health care and healthy lifestyles. They recommend that community pharmacies could be more integrated into their local communities and help enable people to use pharmaceutical drugs to deal with ongoing conditions or prevent health problems in later life through the use of preventative medicines.[57]

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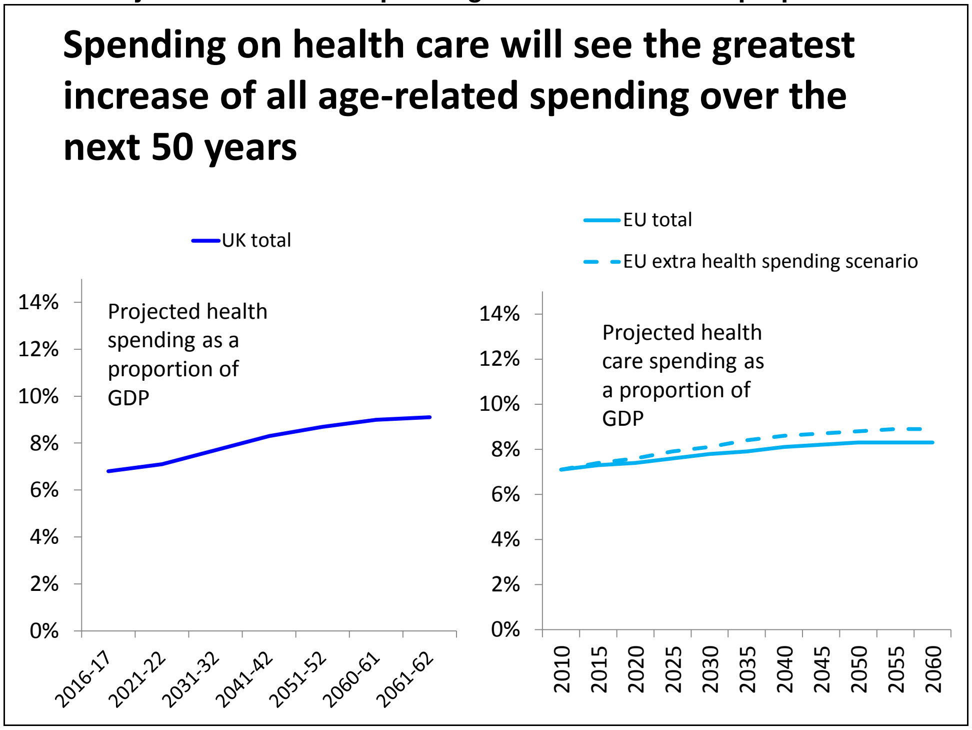
[50] OBR (2012)
[51] OBR (2012)
[52] EC (2012). Figures do not sum due to rounding
[53] EC (2012)
[54] WHO (2011)
[55] WHO (2011)
[56] WHO (2011)
[57] UCL School of Pharmacy (2012)

Chart 6: Projected UK and EU spending on health care as a proportion of GDP[58]



Long term care

Age-related government spending on long term care is projected to increase as follows:

- **In the UK:** spending on long term care is projected to rise between 2016/17 and 2061/62 from an annual cost of 1.1% to 2% of GDP, a rise of 0.9% of GDP[59] (equivalent to a rise of around £14bn in today's money). As with health care, the rise in projected spending on long term care in the UK also mirrors the rise in ageing population. However, it does not account for changes in household status and potential changes in care requirements for the care of adults with disabilities and mental health issues. Therefore, the age profile of those who need long-term care may shift in future and affect the proportion of GDP required to fund long-term care.[60]
- **In the EU:** spending on long term care is projected to rise from an annual cost of 1.8% to 3.4% of GDP between 2010 and 2060, a rise of 1.5% of GDP.[61]

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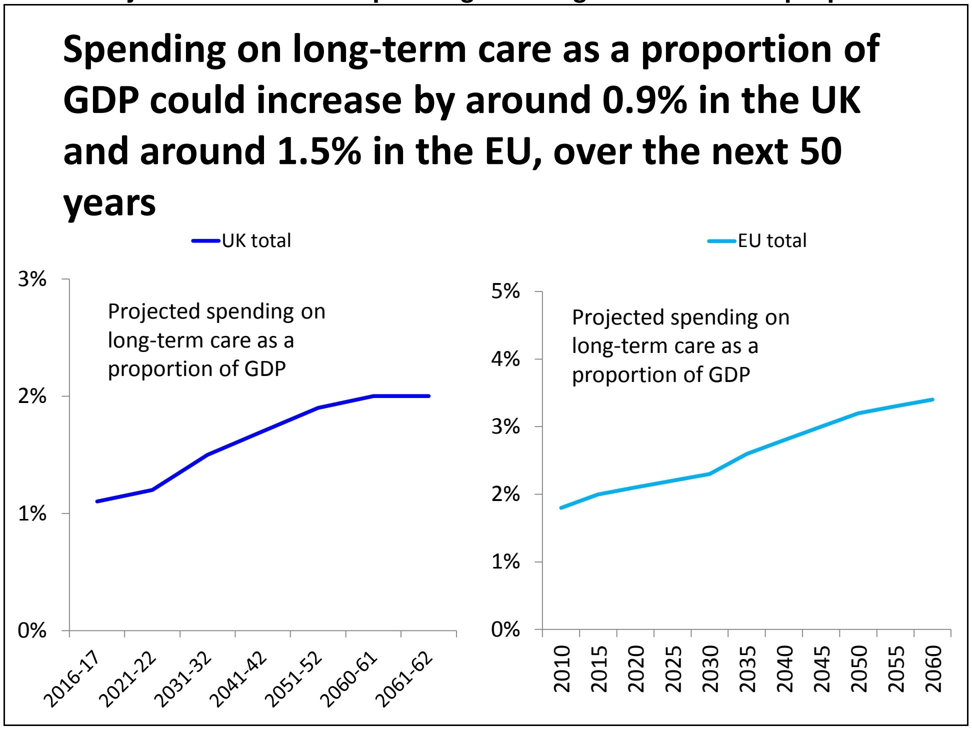
[58] OBR (2012) EC (2012)
[59] OBR (2012)
[60] OBR (2012)
[61] EC (2012) Figures do not sum due to rounding

Chart 7:[62] Projected UK and EU spending on Long-term care as a proportion of GDP



Education expenditure

Age-related government spending on education is projected to remain level or reduce as follows:

- **In the UK:** spending on education is projected to remain generally level between 2016/17 and 2061/62 at an annual cost of 4.5% of GDP.[63] Part of the explanation for the lack of increase in spending on education is due to spending cuts in education announced in November 2011.[64]
- **In the EU:** spending on education is projected to reduce from an annual cost of 4.6% to 4.5% of GDP between 2010 and 2060, a reduction of less than half a percent.[65] This is as a result of the school-age population reducing in size relative to the working population over the next few decades. However, if it is assumed that across the EU there is an increase in investment in education[66] than spending on education across the EU could increase by 0.2% of GDP by 2060.

[62] OBR (2012) EC (2012)
[63] OBR (2012)
[64] OBR (2012)
[65] EC (2012)
[66] EC (2012) aimed at reducing the proportion of early-leavers to below 10% and ensuring that at least 40% of 30 to 34-year-olds with tertiary or equivalent educational attainment is at least 40%.

Unemployment benefits

Age-related government spending on unemployment benefits is projected to change as follows:

- **In the UK:** spending on unemployment benefits is projected to rise from an annual cost of 0.3% to 0.6% of GDP between 2010 and 2060, a rise of 0.3% of GDP[67] (equivalent to a rise of around £5bn in today's money). The proportion of older people receiving unemployment benefits is likely to increase alongside a rising State Pension Age, as the age under which people out of work would be considered unemployed (and eligible for benefits) will also rise as a consequence.
- **In the EU:** spending on unemployment benefits is projected to reduce from an annual cost of 1.1% to 0.7% of GDP between 2010 and 2060, a reduction of less than half a percent.[68] The reduction in projected spending on unemployment benefits results from the European Commission's expectation that there will be a decrease in the structural unemployment rate, (meaning that the mismatch between available jobs and the skills of available workers is likely to reduce) which would result in a higher employment rate across the EU.

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[67] OBR (2012) Box 3.2, Table B, OBR projections of unemployment cannot be directly compared with the European Commission's because of different underlying assumptions
[68] EC (2012)

Conclusions and policy recommendations

The projections in this briefing evidence the challenges that the world is facing as demographics shift over the next century and old-age dependency ratios increase. The UK is, on average, in a slightly more favourable situation, demographically, than other countries in the EU, with a lower projected dependency ratio in the future. However, the UK is still facing a potential dependency ratio of two working-age people for every person aged 65 and over without further policy intervention. It will be important for the UK government to carefully consider how policy action today can impact future costs of ageing. The following policy recommendations aim to contribute to the policy debate around addressing the challenges posed by ageing populations.

Governments need to prepare for uncertainty: The projections of age-related spending in this briefing are based on assumptions about future demographics, economic performance, employment trends, and health care development. However it is very difficult to predict what the world will look like over the next fifty years. Policy makers today are being asked to prepare for a future about which there is a serious degree of uncertainty and therefore sustainable policies will be the ones which can adapt to unexpected changes.

Governments need to ensure pension systems are sustainable, allow for greater risk-sharing, and are less vulnerable to longevity risk: The IMF warn[69] that all governments must take action now to acknowledge their own exposure to longevity risk (through liabilities for public pensions and benefits) and implement measures to ensure that higher than expected levels of longevity do not threaten fiscal sustainability. They recommend that governments across the world develop greater risk-sharing between government, pension providers and individuals through changes to state and private pensions (for example through government issue of longevity bonds) and institute sustainable safety nets for older people. They also recommend developing the practice of transferring longevity risk from those who may wish to reduce exposure (individuals, governments, pension scheme providers) to those who increase their exposure (e.g., insurers, investors, providers of health and long-term care).

Linking retirement ages to life expectancy can help protect pension system sustainability: One way in which governments can prepare for uncertainty is by linking retirement ages (State Pension Age in the UK) to life expectancy. The European Commission has recommended linking retirement ages to life expectancy as an effective way to ensure the sustainability of public pension systems while also protecting pensioners from suffering reductions in public pension (state pension) payments.

Across the world, people will need to continue to work longer: Longevity is increasing on a global level and many countries are responding by reducing the generosity of their public pensions and raising their retirement ages. People across the world will need to continue to work longer in order to sustain tax and benefit systems based on redistribution and to support themselves up until

[69] IMF (2012)

the age that they can access income through public pensions or savings. Governments will need to work hard to ensure that the labour market is accessible to older people.

People in particular groups such as women and people at risk of social exclusion are more likely to be unemployed. It will be important that governments explore ways of helping people in vulnerable groups to access the labour market if they wish to reduce the degree of dependence. Governments might wish to look at ways of helping women with children to be able to remain in the workforce, through development of child-care programmes and work with employers to ensure fathers can contribute more to raising children and women are not penalised for taking career breaks.

Countries need to ensure there are safety nets for those who cannot work longer: The most progress in EU member states in reducing projections of age-related spending are in those states which have reduced the generosity of their public pension, raised the age at which people can claim a public pension and reduced access to early-retirement schemes. However, reducing public expenditure cannot be the solutions to the challenge of ageing populations. Serious consideration must be given to how to ensure that people who may have little chance of working up until higher retirement ages due to a lower healthy life expectancy or who are excluded from the labour market by a lack of suitable employment do not suffer deprivation as a result.

Governments across the world should consider how to create better conditions for health care innovation and development: Health care spending will see the largest rise of all elements of age-related spending in the future. However, investing in preventative medicine, especially in developing countries, could save money in the long-term by preventing the onset of chronic diseases. Investing in health care now and creating better conditions for innovation and development in health care and global sharing of good practice, could be as important as ensuring sustainable health care funding for the future though this investment would incur greater immediate costs.

If governments were to introduce legislation restricting the inward flow of migration the dependency ratio could be increased beyond current projection levels: Inward migration is good for dependency ratios because it can boost fertility rates and increase the proportion of working-age people. If governments in the EU and UK were to pass legislation restricting the inward flow of net migration there could be a reduction in the proportion of women of child-bearing age and people of working-age which could in turn increase the dependency ratio in future beyond current projection levels. Governments with high dependency ratios should think carefully about the potential impact on dependency ratios before restricting the flow of inward migration.

Addressing the needs of ageing populations will require ongoing investment in research and data collection: If governments are going to be able to successfully devise policies which both meet the needs of older people and help enable older people to engage actively in society then maintaining comprehensive financial, social, and health data about older people and how these trends change over time will be essential. Studies on the needs and resources of older people such as the English Longitudinal Study of Ageing will continue to be especially valuable to UK policy making.

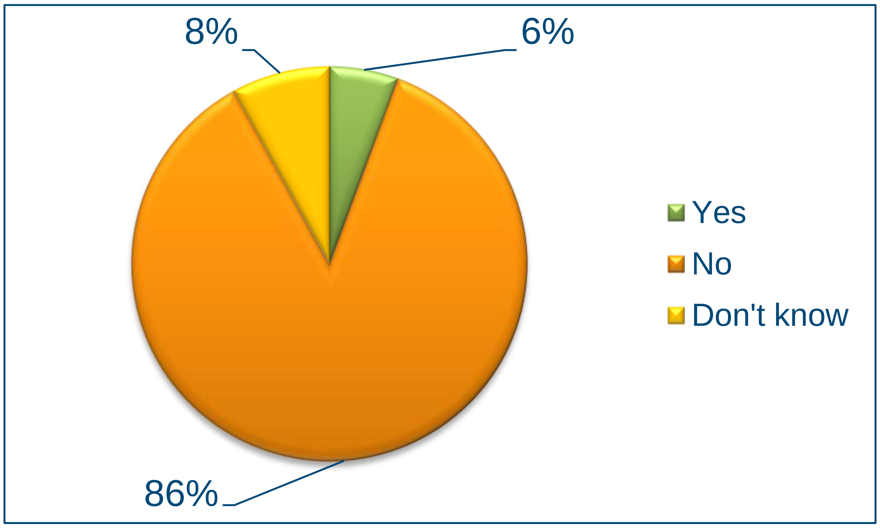
It is important that governments recognise the contribution that older people make to society and the economy when considering policy interventions: Older people have a wealth of skills and experience to offer society and the labour market. Labour market participation at older ages is on the rise, many older people not in work contribute to society through unpaid caring and volunteering (carers of all ages contribute the equivalent of £119 billion every year in the UK), and older consumers (65 and over) spend on average, around £100bn per year.

- **Governments must ensure that the wealth of skills and experience older people have are viewed as a positive resource when designing the policy environments of the future.**
- **Policies must focus on enabling active, healthy ageing rather than just tackling the costs of ageing.**

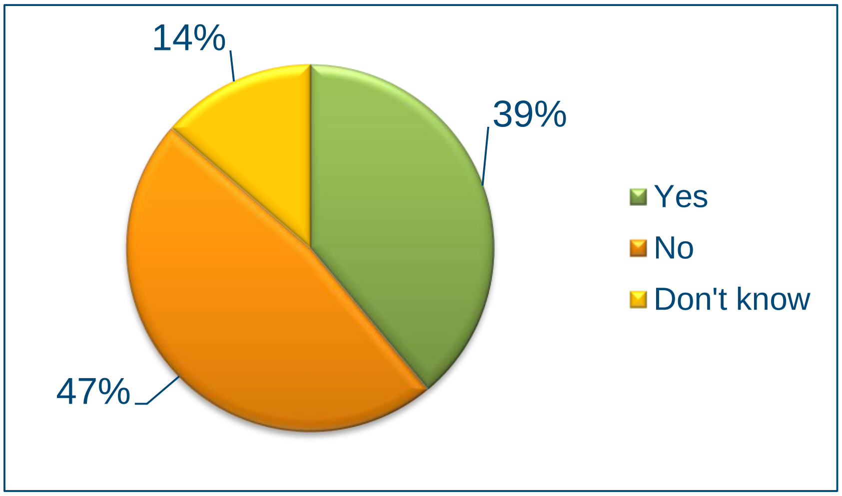
The Expert Viewpoint

Ahead of our debate and discussion on 16th October at the Actuarial Profession, ILC-UK, in conjunction with Milliman LLP, surveyed attendees and subscribers to our database to gather views on the "cost of ageing". Over 200 people responded to this survey. We cannot claim the sample to be representative of society, but the results give us a strong indication of the views of experts in the field of ageing policy and research.

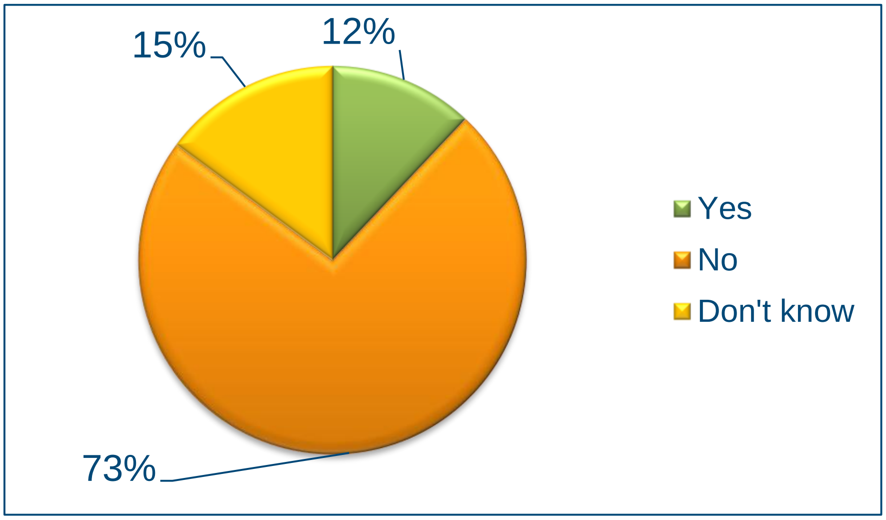
Are government policies, on the whole, adequately preparing us for the cost of an ageing society?



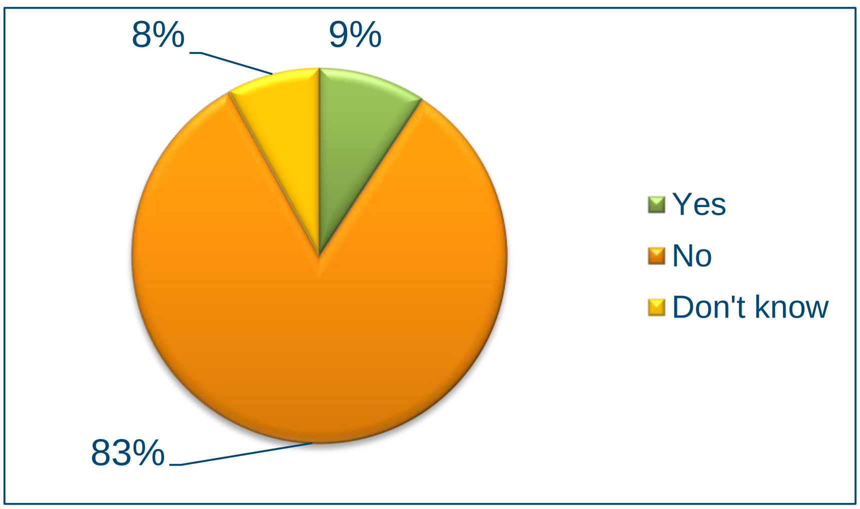
The government is planning to raise the State Pension Age in the UK to 66 by 2020, to 67 between 2024 and 2026, and to 68 by 2046. Should the government increase the state pension age further and faster than this?



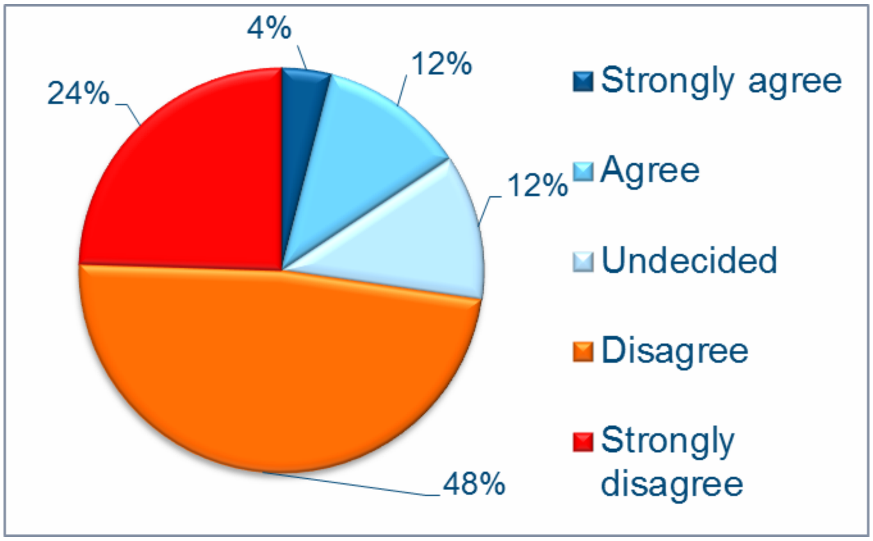
Are governments and employers doing enough to enable and support older people to remain in work for longer?



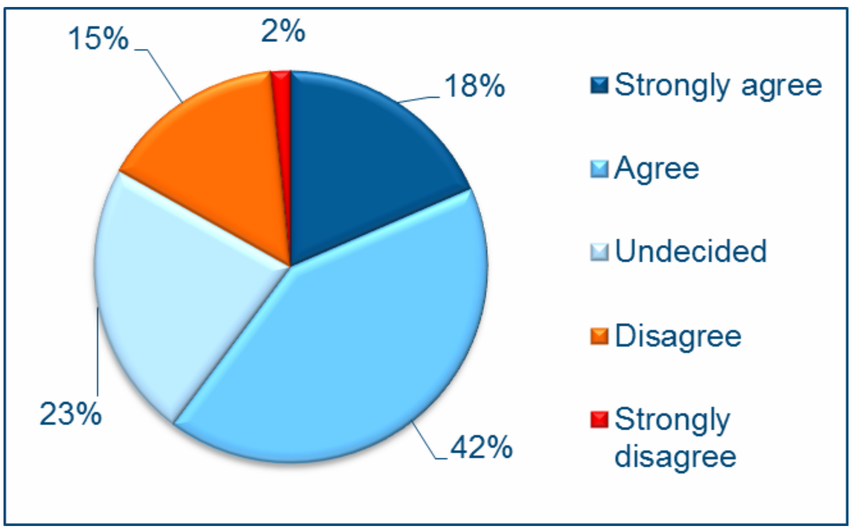
Is the government ensuring that people prepare early enough for their retirement?



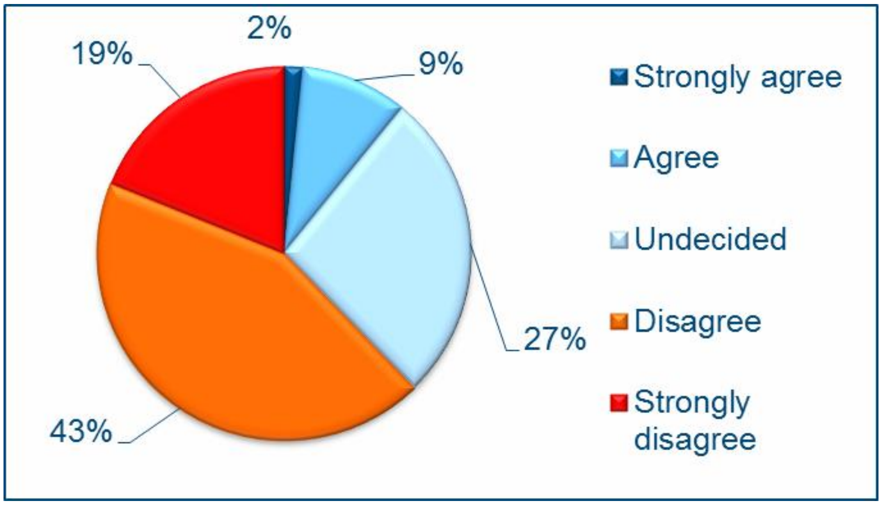
As a society, we are overestimating the impact of an ageing population.



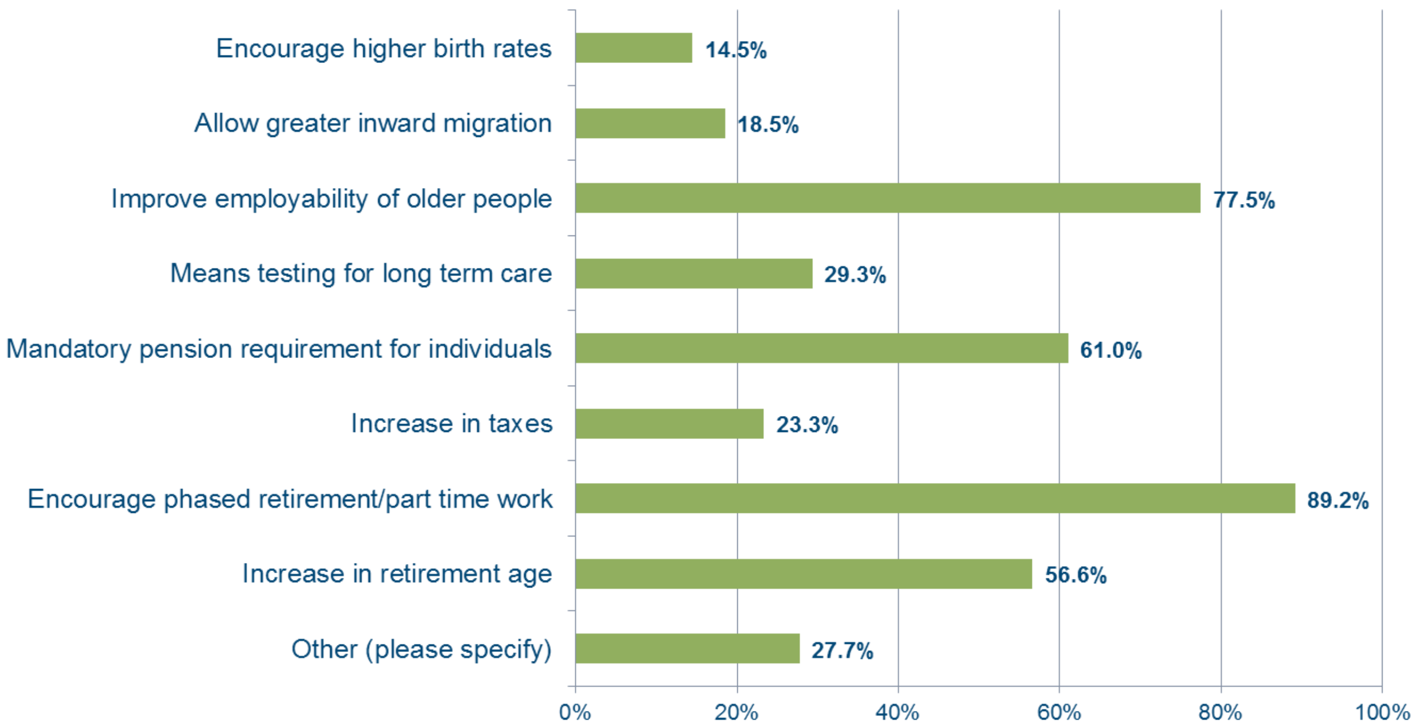
The ageing population across the world will inevitably lead to older people facing greater levels of poverty.



The insurance industry is doing enough to offer products and solutions to meet the impact of an ageing society



Which of the following policies should be used to address the costs of an ageing society?



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