



Department
for Work &
Pensions



Fuller Working Lives

Evidence Base 2017

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1. Executive Summary

This document sets out the evidence base that underpins the UK Government Fuller Working Lives (FWL) strategy titled *Fuller Working Lives: A Partnership Approach*. New analysis and evidence is presented here in relation to how individuals, employers and the economy can benefit from FWL.

All evidence and analysis relates to people in the UK aged 50 years and over, unless otherwise specified.

The stated ambition for FWL is: **To support individuals aged 50 years and over to remain in and return to the labour market and tackle the barriers to doing so.**

The Challenge – Demographics and Labour Market Early Exit

The UK, along with other developed countries, is currently in a period of demographic change. The number of individuals aged 50 years and over as a proportion of the adult population is projected to increase from 42 per cent in 2010 to 50 per cent by the mid-2030s.

The average age of leaving the labour market has increased over the past two decades, but it is still lower than it was in 1950 and is not keeping pace with increases in life expectancy. Given the ageing workforce and scale of early exit from the labour market, the future UK economy is likely to face significant challenges in areas such as the financing of State Pension provision and maintaining the supply of labour.

As people approach State Pension age (SPa), the rate of employment declines and economic inactivity rates rise as people leave the labour market 'early'. Employment as a proportion of the working age population falls from around 80 per cent for men and 75 per cent for women in the mid-50s age groups, to around 35 per cent for men and 25 per cent for women in their mid-60s.

Over half of men and women are not in work in the year before reaching SPa. Moreover, one in four men and one in three women reaching SPa have not worked for five years or more.

The Labour Market for Older Workers

Individuals can be classified into three distinct economic activity groups: those in **employment**; those who are **economically inactive** and those who are **unemployed**, with individuals flowing between these groups.

The UK employment rate of individuals aged 50 years and over has been increasing over the past two decades, yet has only recently returned to the rate last seen in the 1970s. This increase in employment rates has largely been driven by a higher proportion of women moving into work over this period. There has also been a change in ways of working across the whole UK labour market, with increases in self-employment and flexible working, both of which are relevant to older workers.

Currently, there are almost one million individuals aged 50-64 years old that are not in employment but state that they are willing to, or would like to, work.

It is not possible to predict the future of the labour market, particularly in the current economic climate. However, it is likely that the UK workforce in 2030 will be more multi-generational, older and female. It is also predicted that technology will be universal, jobs more fluid and the global labour market highly competitive. It is increasingly important that workers of all ages have up to date, relevant and transferable skills.

The Key Factors and Potential Barriers to Working Later in Life

A significant proportion of people aged 50 years and over ‘voluntarily’ leave the labour market, because they want to, and/or they have planned a financially stable retirement. However, as life expectancy increases, some individuals may not, in reality, have enough income to maintain the standard of living they would like. Such individuals often have skills and experience that employers demand and could benefit the economy should they remain in the labour market.

It is estimated that 1.1 million people aged 50-64 who left their job in the past eight years may have done so for **‘involuntary reasons’**, typically due to ill-health, caring responsibilities or redundancy. Some individuals could be supported to overcome these barriers and remain in, or return to, some form of work.

Poor health is known as a significant factor given by individuals aged 50-64 who leave the labour market early. Evidence suggests that good, appropriate paid work can be beneficial for individuals’ health and wellbeing. Maintaining good health throughout the life course is key to people being able to and wanting to stay in work.

An ageing population and workforce mean that a greater proportion of the working age population are likely to provide informal care in future years. The likelihood of being a carer increases significantly with age. **Currently, three in five carers are over the age of 50, with 50-54 being the peak age of caring, particularly for women.** In addition, evidence suggests that caring for 10 plus hours a week can have a substantial negative effect on employment and therefore pension contributions.

A lack of skills can also be a barrier to working longer. Continued adult learning is set to be increasingly important as people have longer working lives. Lifelong learning can also have indirect benefits by improving social capital and integration, health behaviours, and skills, as well as employment outcomes.

Attitudes to retirement are beginning to change. Recent analysis of the British Social Attitudes Survey showed that nearly two thirds (65 per cent) of all employees interviewed said that they expect to retire in their 60s and 17 per cent expect to retire in their 70s. Those in younger age groups are more likely to say that they expect to retire in their 70s (37 per cent of 18-24s, 21 per cent of 25-34s). Of those who expect to retire at 65 or before, the most likely reason given is because they want to (36 per cent) followed by being able to afford to (20 per cent). Of those already retired, 39 per cent said they did so because they wanted to; 20 per cent said they retired due to ill-health.

Impact of Fuller Working Lives on Individuals

There are many potential benefits for people remaining in or returning to work in later life. Individuals who work longer can enjoy **additional income** from earnings, a boosted private pension income and State Pension contributions. Department for Work and Pensions analysis (2013) shows that 12 million people of working age are heading towards inadequate retirement incomes. Around a third of people who stopped work aged 50 to SPA between 2008 and 2010 saw their household income drop by more than half. For these people, and many others, doing some work can help to improve finances through earnings and private pension income; maximising opportunities and reaching a higher standard of living in retirement.

Analysis shows that by delaying retirement until 65 instead of 55, a male average earner could have £280,000 extra income and might increase his pension pot by 55 per cent. By retiring at 63 instead of 55, a female average earner who took a 10 year career break, could have £180,000 extra income and might increase her pension pot by 50 per cent.

Impact of Fuller Working Lives on Employers

The attitudes and policies of employers towards older workers are key to the lived experience at work and wellbeing of older workers. Polling research conducted with private sector businesses in 2015 highlighted that employers value older workers in their workforce:

- Over three quarters of employers believed that the **experience** of workers over 50 was the main benefit of having them in their organisation.
- 65 per cent highlighted the **reliability** of older workers.
- Nearly a third said workers over 50 were **easier to manage than younger workers** (54 per cent said they were equally easy to manage).
- 54 per cent value the role that older workers play as **mentors**.
- 87 per cent of employers reject the idea that the skills of older workers are unsuitable for their business.

However, recent DWP qualitative research with employers has highlighted the scale of the challenge. **While employers stated that they valued a mixed age workforce and were aware in general of an ageing population, few were taking active steps to change their policies and practices regarding the recruitment, retention and training of older workers.**

Impact of Fuller Working Lives on the Economy

Older workers do not take jobs from younger workers. As people work later in life, there are often concerns that older workers displace younger workers in the labour market. However, there is no empirical evidence that younger workers are 'crowded out' of the labour market by the employment of older workers. **Younger and older workers should be recognised as complements to each other in terms of their skills and experience, rather than substitutes.**

Research shows that adding one year to everyone’s working life could increase GDP by one per cent per year after a period of transition (equivalent to £18bn in 2015).

In 2016, £7.6 billion was spent on out of work benefits for 50-64 year olds, and 45 per cent of the ESA caseload (over 450,000 individuals) were aged 50 years and over.

Next Steps

An ageing population provides both challenges and opportunities for individuals, employers and the economy. This highlights the important role that older workers play in the labour market and the growing need to enable older workers to remain in and to return to the workforce.

In the strategy document ‘Fuller Working Lives: A Partnership Approach’ the Government has provided information and evidence to help employers and individuals adapt to changing demographics. Key messages for individuals are that working is good for your income and standard of living in later life, whilst appropriate paid work can be beneficial for health and wellbeing. Recommendations are also made around options for flexible working, retraining for a new career, self-employment, volunteering and phased retirement.

Through a combination of headline measures the government will monitor progress on FWL. The measures identified will be publically available so that individuals, employers and stakeholders as well as government, can monitor change. The measures will be published as part of the annual DWP Official Statistical release - Economic labour market status of individuals aged 50 and over since 1984.¹

Headline measures

- i. Employment rate of individuals aged 50 years and over**, by five year age band and gender.
- ii. Average age of exit from the labour market.** The age at which people are most likely, on average, to leave the labour force.
- iii. Employment rate gap** between 50-64 year olds and 35-49 year olds, broken down by gender.

We are continually developing our understanding and evidence base, through internal DWP analysis and research and by collaborating with expert academics and researchers.

Achieving a better understanding of changes in the attitudes, behaviours, expectations and experiences of individuals and employers is integral to the achievement of the FWL ambition. Developing the evidence base to understand what people want, experience and require in later life remains central to our future programme of FWL research and analysis.

¹ DWP (2016b) *Economic labour market status of individuals aged 50 and over since 1984 (experimental)*, Official Statistics. Available at: <https://www.gov.uk/government/statistics/economic-labour-market-status-of-individuals-aged-50-and-over-since-1984-experimental>

2. Introduction

The aim of this document is to set out the evidence base that underpins the UK Government's Fuller Working Lives (FWL) strategy, to encourage and enable working in later life.² New analysis and evidence is presented on how individuals, employers and the economy can benefit from FWL. Evidence is presented on the key factors associated with people working later in life such as health, caring responsibilities and relevant skills. The paper also presents what we know about the attitudes of both employers and individuals towards working later in life.

This document builds on the 'Fuller Working Lives: Background Evidence' published report by DWP in 2014.³ To avoid repetition, this report focusses on relevant new and updated research, evidence and analysis. The Department plans to further develop the evidence base through a dedicated programme of research and analysis, working in partnership with leading academic and policy stakeholders.

This document is split into eight main sections:

- This section (section 2) clarifies the data sources used, the age focus of FWL and the FWL ambition.
- Section 3 provides an overview of the policy rationale for FWL, outlining the demographic challenge and ageing workforce in the UK.
- Section 4 provides an overview of the UK labour market for the population aged 50 years and over, including trends over time, changes in the ways of working and draws on new analysis on labour market transitions of older workers.
- Section 5 provides analysis and evidence on the key factors and potential barriers to working longer for individuals. These include both 'voluntary' and 'involuntary' reasons for early labour market exit.
- Sections 6-8 outline the benefits and impacts of FWL for, respectively, individuals, employers and the economy.

2.1 Data Sources

Throughout this document new statistics and analysis are presented derived from a variety of data sources: the UK Labour Force Survey; the Annual Population Survey; the Family Resources Survey; the English Longitudinal Study of Ageing; DWP benefit data and DWP pension models. Robust published statistics quoted in other research reports are also referred to.

Details of the main data sources and methodologies adopted can be found in Appendices 5 and 6. Due to the variety of data sources used, analysis may cover different time periods and age bands, therefore, estimates could be subject to slight variation.

² DWP (2017d) *Fuller Working Lives: A Partnership Approach*. Available at: <https://www.gov.uk/government/publications/fuller-working-lives-a-partnership-approach>

³ DWP (2014) *Fuller Working Lives - Background Evidence*. Available at: <https://www.gov.uk/government/statistics/fuller-working-lives-background-evidence>

As part of the Pensions and Ageing Society statistical DWP strategy⁴, an annual experimental Official Statistic was published in July 2016 – ‘Economic labour market status of individuals aged 50 and over since 1984.’⁵

New evidence from a programme of DWP FWL research recently published, to further develop the evidence base, is also used. This includes: an evaluation of trials of enhanced Jobcentre Plus provision for claimants aged 45 and over; qualitative research with employers to better understand their experiences of recruiting, retaining and retraining older workers and new analysis of national employer data to understand recent trends regarding age related practices in the workplace and the impact of older workers on workplace performance. In 2015, we also examined the changing nature of expectations and attitudes towards working later in life.⁶

2.2 The Age Focus of Fuller Working Lives

The focus of this report is on people aged 50 and over, both in and out of work. Analysis is also provided for those who are aged 50 to SPa. To align with the age breakdowns used in National Statistics and other government departments, the age bands 50-64 years and 65 years and over as the main sub-groups.

It is important to note that individuals who are currently under 50 are also relevant to the FWL agenda. Decisions made throughout the lifecourse of an individual, as well as the key defining characteristics experienced at both younger and older ages, have an impact on later life.

Recent legislative changes have been introduced. The Default Retirement Age was removed in 2011. Up to November 2018, the SPa for women will continue to increase gradually to 65 years old. Between December 2018 and October 2020 the SPa for men and women is currently legislated to increase to 66 years and then to 67 between 2026 and 2028.

For definitions used throughout this document please see Appendix 1.

2.3 Fuller Working Lives Ambition and Monitoring

The stated FWL ambition is: **To support individuals aged 50 years and over to remain in and return to the labour market and tackle the barriers to doing so.**

A combination of headline measures will be used to monitor progress on FWL. The measures identified below will be publically available so that individuals, employers, stakeholders and government can monitor change transparently. The measures will

⁴ DWP (2016d) *Pensions and Ageing society statistics: release strategy*. Available at:

<https://www.gov.uk/government/publications/pensions-and-ageing-society-statistics-release-strategy>.

⁵ DWP (2016b) *Economic labour market status of individuals aged 50 and over since 1984 (experimental)*, Official Statistics.

Available at: <https://www.gov.uk/government/statistics/economic-labour-market-status-of-individuals-aged-50-and-over-since-1984-experimental>

⁶ DWP (2016a) *Attitudes to Working in Later Life: analysis of British Social Attitudes 2015*. Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/574655/attitudes-to-working-in-later-life-british-social-attitudes-2015.pdf

DWP (2017a) *Employer experiences of recruiting, retaining and retraining older workers*. Available at:

<https://www.gov.uk/government/publications/employer-experiences-of-recruiting-retaining-and-retraining-older-workers-qualitative-research>

DWP (2017b) *Older Workers and the Workplace: Evidence from the Workplace Employment Relations Survey*. Available at:

<https://www.gov.uk/government/publications/older-workers-and-the-workplace-evidence-from-the-workplace-employment-relations-survey>

DWP (2017c) *Sector-based work academies and work experience trials for older claimants: Qualitative and quantitative*

research. Available at: <https://www.gov.uk/government/publications/sector-based-work-academies-and-work-experience-trials-for-older-claimants-combined-quantitative-and-qualitative-findings>

be published as part of the annual DWP Official Statistical release - Economic labour market status of individuals aged 50 and over since 1984.⁷

Headline measures

- i. **Employment rate of individuals aged 50 years and over**, broken down by five year age band and gender.⁸ This will enable the identification of trends that may affect specific age groups within this population.
- ii. **Average age of exit from the labour market.** The age at which people are most likely, on average, to leave the labour force.⁹
- iii. **Employment rate gap** between 50-64 year olds and 35-49 year olds, broken down by gender.

It is important to note that cause and effect in relation to policies and outcomes can only be robustly estimated under a controlled evaluation scenario. Consequently, any changes in the measures outlined above could be due to a number of factors taking place within the labour market and wider economy.

Changes in the attitudes and behaviours of individuals and employers are integral to the achievement of the FWL ambition. Understanding any attitudinal changes will be central to the future programme of FWL research and analysis.

The latest (Q2 2016) headline measures are outlined below:¹⁰

- i. 50-64 Employment Rate, Males: 75.8 per cent (Level: 4.5m)
50-64 Employment Rate, Females: 65.7 per cent (Level: 4.0m)
50-64 Employment Rate, All: 70.6 per cent (Level: 8.6m)

65+ Employment Rate, Males: 14.2 per cent (Level: 0.7m)
65+ Employment Rate, Females: 7.5 per cent (Level: 0.5m)
65+ Employment Rate, All: 10.6 per cent (Level: 1.2m)
- ii. Average Age of Exit, Males: 65.2 years
Average Age of Exit, Females: 63.7 years
- iii. Employment Rate Gap (between 50-64 and 35-49 years), Males: 14.0pp¹¹
Employment Rate Gap (between 50-64 and 35-49 years), Females: 12.2pp
Employment Rate Gap (between 50-64 and 35-49 years), All: 13.1pp

35-49 Employment Rate, Males: 89.7 per cent
35-49 Employment Rate, Females: 77.9 per cent
35-49 Employment Rate, All: 83.7 per cent

⁷ DWP (2016b) *Economic labour market status of individuals aged 50 and over since 1984 (experimental)*, Official Statistics. Available at: <https://www.gov.uk/government/statistics/economic-labour-market-status-of-individuals-aged-50-and-over-since-1984-experimental>

⁸ Data for measures i) and iii) can be broken down by five year age bands to monitor gaps between different age groups within the 50 plus population. These are: 50-54, 55-59, 60-64, 65-69 and 70+.

⁹ For more information on this indicator please see the Appendix 1 - Definitions.

¹⁰ Source: Labour Force Survey Quarter 2 (Q2) April – June.

¹¹ pp = percentage points.

3. The Demographic Challenge

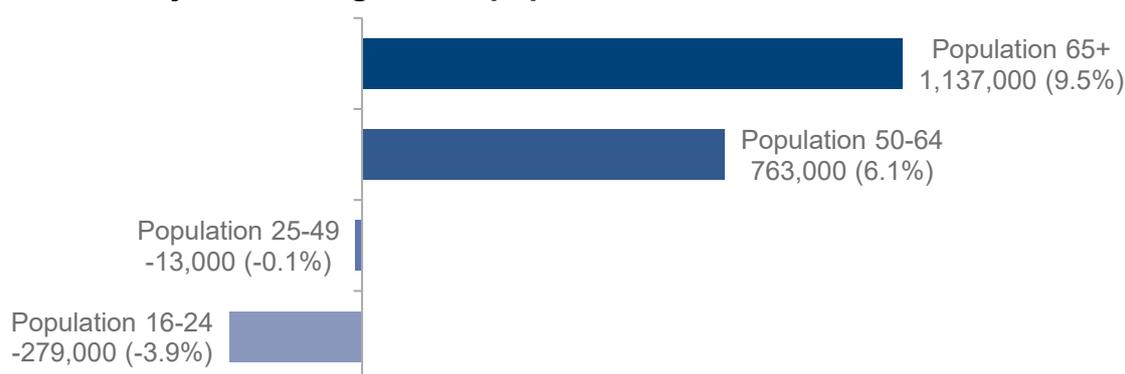
The UK, along with other developed countries, is currently in a period of demographic change. Population projections show that this is not a short term phenomenon; older individuals will represent an increasingly significant proportion of the population and the workforce in the future.

The number of individuals aged 50 years and over as a proportion of the UK adult population is projected to increase from 42 per cent in 2010 to 50 per cent by the mid-2030s and remain above 50 per cent thereafter.¹²

Chart 3.1 shows the expected change in the UK population over the next five years (from 2017 to 2022) by age band. The population aged 50 years and over will increase, whilst the younger population will decline. There will be a 6.1 per cent increase in those aged 50-64 (0.8m individuals) and 9.5 per cent rise in individuals aged 65 and over (1.1m individuals). Over the same period, the 16-24 and 25-49 populations are expected to decrease by 3.9 per cent and 0.1 per cent respectively.

The increase in the proportion of the population aged 50 years and over highlights the important role that older workers play in the labour market.

Chart 3.1: Projected change in UK population – 2017 to 2022



Source: ONS 2014-based population projections

The average age of leaving the labour market has increased over the past two decades, but it is still lower than it was in 1950 and is not keeping pace with the increases in life expectancy (Chart 3.2).¹³

Alongside changing demographics, changes to the SPa¹⁴ will also contribute to an increase in the working age population. In 2010, one in four of the working age population were aged 50 years and over; this is projected to increase to one in three by 2022.¹⁵

¹² ONS (2014) *Population Estimates and 2014-based Population Projections*. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration>. This is consistent with Office of Budget Responsibility projections on migration. See the “Additional Figures” sheet of the supporting Statistical Reference Tables for details of the calculation.

¹³ Life Expectancy - ONS 2014-based projections.

Average Exit Age - Blöndal, S. and S. Scarpetta (1999), *ONS Pension Trends and LFS Q2 analysis*.

¹⁴ See SPa definition in section “2.3 Definitions” for more information on legislated changes to Spa.

¹⁵ ONS (2014) *Population Estimates and 2014-based Population Projections*. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration>. See the “Additional Figures” sheet of the supporting Statistical Reference Tables for details of the calculation.

Given the ageing workforce and scale of early exit from the labour market, there are likely to be significant challenges for the future UK economy in areas such as financing of state pension provision and maintaining labour supply.

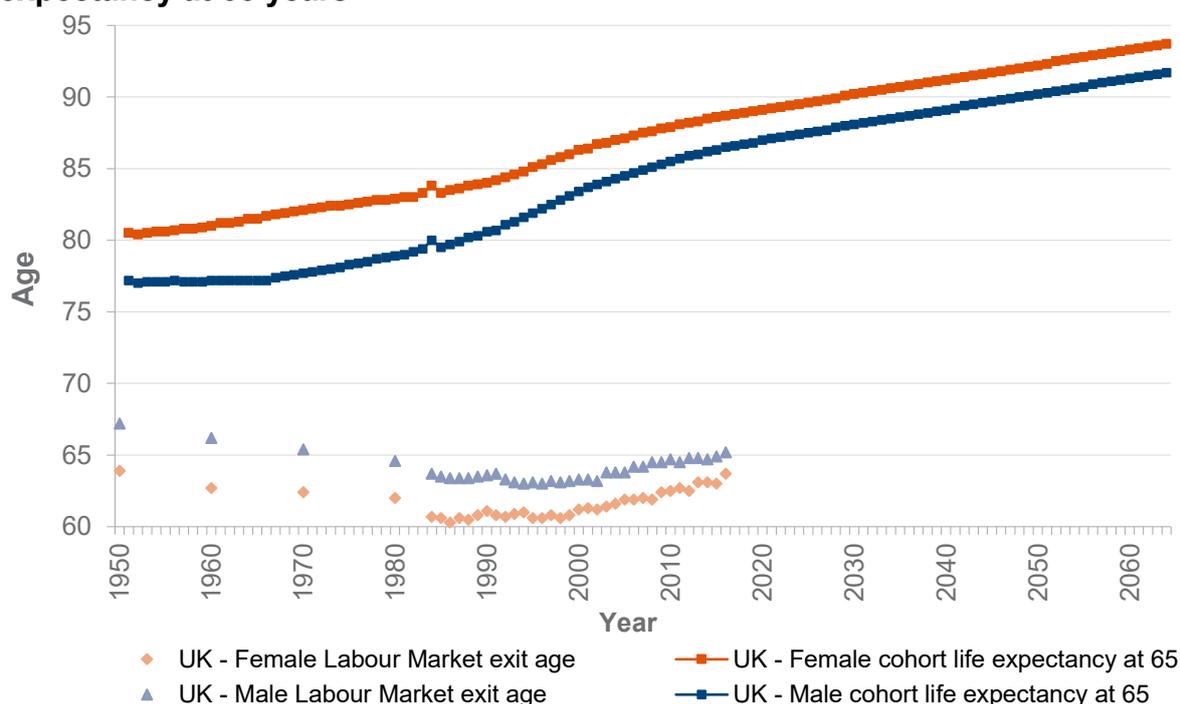
This could have a detrimental impact on economic growth and productivity. As the population and workforce continue to age, in order to avoid a loss of labour scenario, employers are likely to need to draw on the skills and experience of older workers.

Demographic change will also have a marked impact on the UK dependency ratio, there will be fewer people of working age generating income in order to support a larger population who are aged over SPa.¹⁶

Average life expectancy is increasing and people are living longer. Current average life expectancy at 65 is 23.8 years for females and 21.6 years for males.¹⁷ Since 1980, this has increased by 5.8 years and 7.6 years respectively; since 2001, by 2.2 and 2.8 years. Between 2017 and 2064 average life expectancy is projected to increase by an additional five years for both males and females.

From 1985 to 2009 (before the change to SPa for women), the average age of exit from the labour market increased by 1.8 years for females and 1.0 years for males. Over the same time period, life expectancy increased for females and males by 4.5 years and 5.8 years respectively.

Chart 3.2: Average age of exit from the labour market and cohort life expectancy at 65 years¹⁸



Sources: Life Expectancy - ONS 2014-based projections.
Average Exit Age - Blöndal, S. and S. Scarpetta (1999), ONS Pension Trends and LFS Q2 Analysis.

¹⁶ The Government has asked John Cridland to review the State Pension age: this will be published in spring 2017.

¹⁷ ONS (2014) *ONS 2014-based Expectation of Life Projections*. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/datasets/lifetablesprincipalprojectionunitedkingdom>

¹⁸ For further information on how the average age of exit from the labour market is calculated, see Appendix 1 – Definitions.

Average UK **life expectancy**¹⁹ has risen substantially for all social classes and geographic regions in recent years.²⁰ However, there remain inequalities that have/present potential challenges for some individuals to work in later life. In 2012-14, the highest life expectancy in England for men at age 65 occurred in Kensington and Chelsea (21.6 years) and the lowest in Manchester (15.9 years). For women at this age, the highest life expectancy at 65 was in Camden (24.6 years) and again lowest in Manchester (18.8 years). Moreover, men aged 65 who worked in higher managerial and professional occupations were expected to live almost four years longer than those in routine/manual roles (for women this was three years).²¹

When considering increases in average life expectancy, and the potential for people to work longer, it is also important to consider average **healthy life expectancy**. From 2000-02 to 2009-11, it is estimated that average healthy life expectancy increased for females and males by 1.3 and 1.2 years respectively. Research suggests that, particularly for older ages, increases in healthy life expectancy are not keeping pace with gains in life expectancy. Moreover, inequalities in healthy life expectancies between local areas in the UK are much larger than inequalities in life expectancy and are widening.²² However, analysis of health expectancies is challenging as the underlying health and disability questions in surveys have changed considerably over past decades. This means that caution should be taken when comparing life expectancy and healthy life expectancy.

The average effective age of exit from the labour market varies substantially across the OECD countries (Chart 3.3). The UK is below the OECD average for the effective age of exit from the labour market. Over the 2009-2014 period, countries such as New Zealand, Australia and Sweden had a higher average effective age of labour market exit than the UK. Other European countries such as France, Italy and Netherlands had lower effective age of exit compared with the UK. For some countries, the rise in employment rates among older people is part of a longer-term trend in response to rising life expectancy rates. As people derive benefits from better health, longer healthier life expectancy can enable the ability to work for longer.

¹⁹ The life expectancies discussed in this section are measured by "period life expectancy" as opposed to the "cohort life expectancy" measure used in Chart 3.2. For further information on the differences between period and cohort life expectancy, please visit:

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/methodologies/periodandcohortlifeexpectancyexplained>

²⁰ ONS (2015a) *Life Expectancy at Birth and at Age 65 by Local Areas in England and Wales: 2012 to 2014*, Statistical Bulletin. Available at:

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/bulletins/lifeexpectancyatbirthandage65bylocalareasinenglandandwales/2015-11-04>

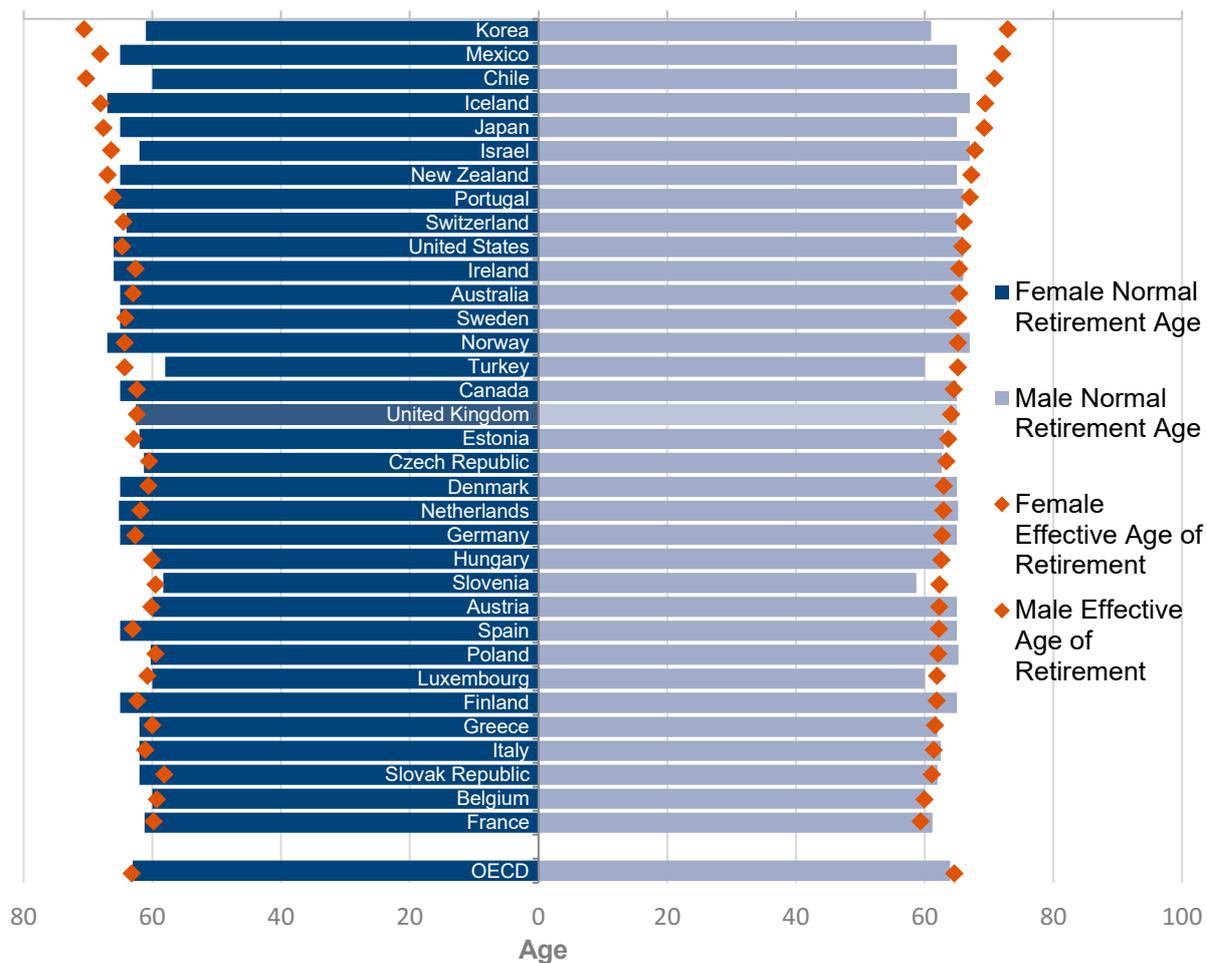
²¹ ONS (2015b) *ONS Longitudinal Study (LS) based estimates of Life Expectancy (LE) by the National Statistics Socioeconomic Classification (NS-SEC): England and Wales*. Data available at:

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/datasets/onslongitudinalstudybasedestimatesoflifeexpectancybythenationalstatistics socioeconomicclassificationnssecenglandandwales>

²² Jagger, C. (2015) *Trends in life expectancy and healthy life expectancy*, Foresight/Government Office for Science. Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/464275/gs-15-13-future-ageing-trends-life-expectancy-er12.pdf

Chart 3.3: OECD average effective retirement age and normal retirement age, 2009-2014^{23,24}



Source: OECD (2015), OECD Pensions at a Glance

²³ See definitions for more information.

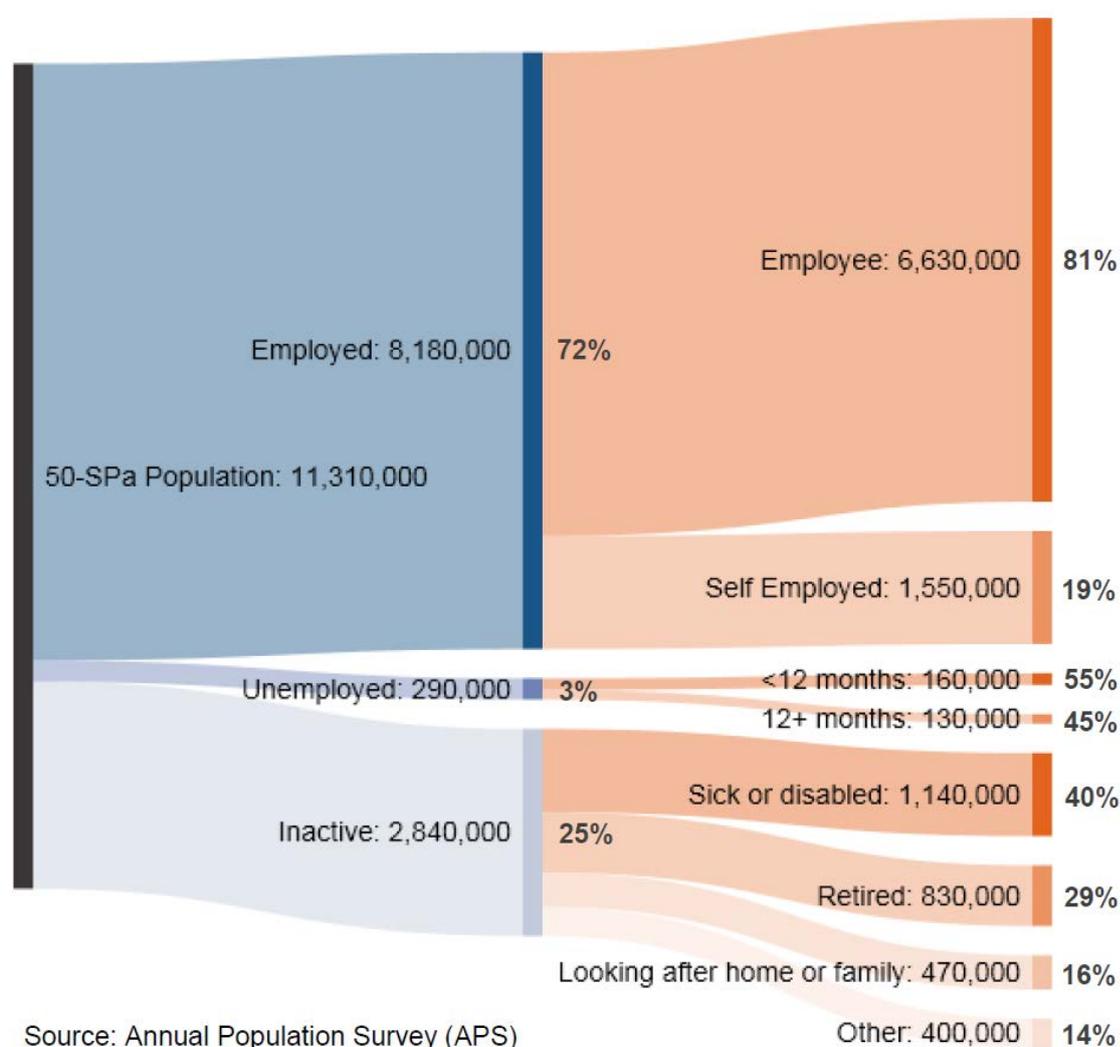
²⁴ 2008 instead of 2014 for women in Turkey.

4. The Labour Market for Older Workers - UK

The labour market for older workers is different to that for younger and mid-age workers in terms of employment rates, incentives to work and the characteristics of individuals. The decision to work longer is influenced by a range of social, environmental and economic factors across the lifecycle of an individual. There is a trade-off between work and leisure at all ages. The incentive to work tends to decline as individuals near SPa as a result of changes in financial incentives as well as the motivation to work.²⁵

Individuals can be classified into one of three distinct economic activity groups: those in employment; those who are economically inactive and those who are unemployed, with individuals flowing between these groups (chart 4.1).²⁶

Chart 4.1: Economic labour market status of individuals aged 50-SPa, July 2015 – June 2016



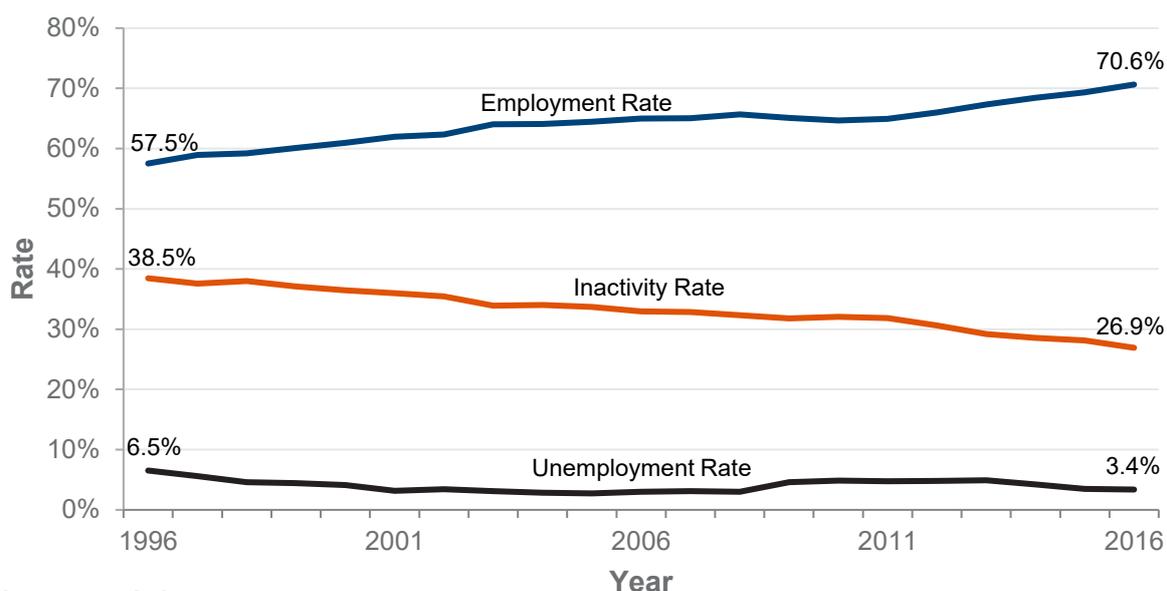
²⁵ Adam. S, Brewer. M, Shephard. A. (2006) *Financial Work Incentives in Britain: comparisons over time and between family types*, IFS Working Paper 06/20. Available at: <http://www.ifs.org.uk/wps/wp0620.pdf>

²⁶ For definitions of these terms please see Appendix 1.

The employment rate of individuals aged 50 years and over has been increasing over the past two decades, yet has only recently returned to the rate last seen in the 1970s (Chart 4.2.)^{27,28}

In Q2 2016, the employment rate for individuals aged 50-64 was 70.6 per cent, which was 13 percentage points (pp) higher than the rate twenty years ago. The employment rate for those aged 65 and over was 10.6 per cent, which was more than double the rate seen in 2000. These figures compare to an employment rate of 83.1 per cent for 25-49 year olds.²⁹

Chart 4.2: Economic labour market status of individuals aged 50 - 64, 1996 to 2016³⁰



Source: LFS Q2 analysis

The average employment rate masks differences between sub-groups of the population, including gender differences. There have been significant changes in the ways of working and attitudes to work by gender since the 1970s.³¹ Employment rates are lower today than in 1970 for men across all five-year age bands from 50-54 to 65-69. Conversely, for women there have been increases in employment rates in all of these age bands.

The employment rate gap between men and women aged 50-64 years has declined over time, as more women move into employment and work for longer. Yet, the gap is still significant, standing at 10pp in 2016 (Chart 4.3).

²⁷ In any given year, the employment rate, inactivity rate and unemployment rate do not add up to exactly 100 per cent. This is because the employment rate and inactivity rate are calculated as a proportion of the population in the age group, whereas the unemployment rate is calculated as a proportion of the number of economically active individuals in the age group.

²⁸ LFS Q2; Banks, J. (2015) *Extending Working Lives: A Solution to the Challenges of an Ageing Population?*, Institute for Fiscal Studies Annual Lecture 2015, University of Manchester. Available at:

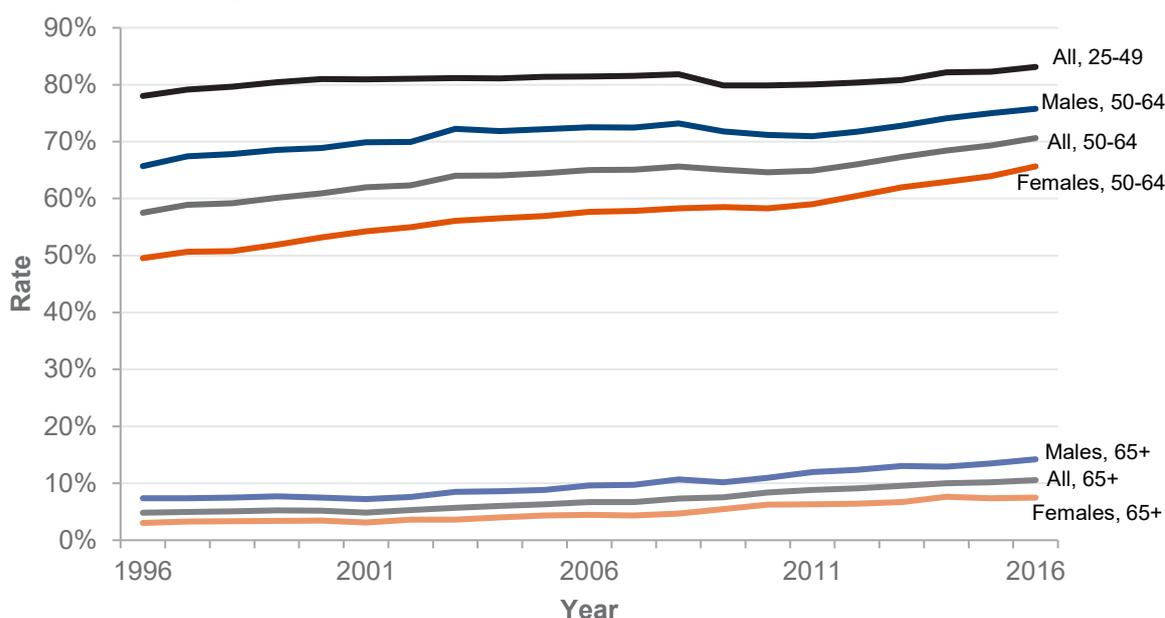
http://www.ifs.org.uk/uploads/Presentations/JB_IFSAnnualLecture.pdf

²⁹ LFS Q2.

³⁰ See Appendix 5 - Data Sources for information on how these rates are consistent with other publically available results (Section B "The Labour Force Survey and the Annual Population Survey").

³¹ Chandler, D. and Tetlow, G. (2014) *Retirement in the 21st Century*, IFS Report R98. Available at: <https://www.ifs.org.uk/publications/7384>

Chart 4.3: Employment rates for men and women, 1996 to 2016



Source: LFS Q2 analysis

The size of the female labour force is expected to increase at a faster rate than the male labour force in the future, reflecting a combination of increased participation of women in the labour market and the gradually increasing SPa for women.³²

Research suggests that rises in the SPa for women have had a significant impact on employment, both full time and part time. The analysis concluded that women’s employment rates at ages 60 to 61 increased by 6.3pp as a result of the SPa increase from age 60 to age 62 between April 2010 and March 2014. In addition to the impact on employment rates, the findings indicate that the policy change also led to a 4.0pp increase in the proportion of women reporting themselves as sick or disabled and a 1.2pp increase in the fraction of women who were unemployed and actively seeking work, at ages 60 and 61. These observed increases in employment, reported poor health and unemployment were offset by an 11.5pp reduction in the proportion reporting themselves to be retired.³³

As people approach SPa, employment rates decline and economic inactivity rates rise, as people leave the labour market ‘early’. Employment as a proportion of the individual year of age population falls from around 80 per cent for men and 75 per cent for women in their mid-50s, to around 35 per cent for men and 25 per cent for women in their mid-60s (Chart 4.4).³⁴

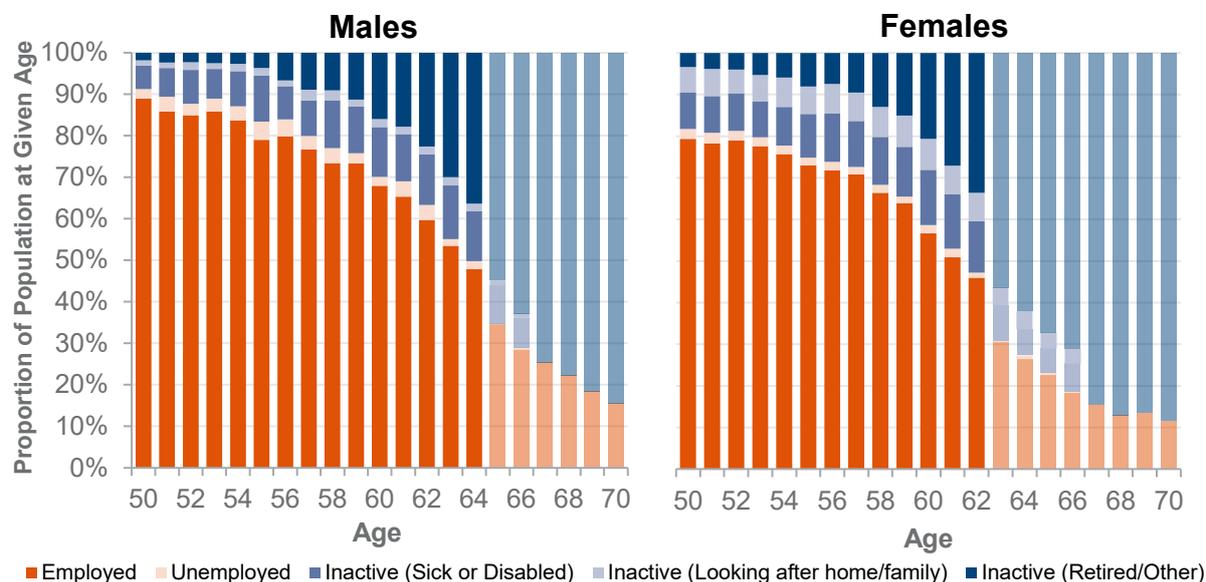
³² ONS (2014) *Population Estimates and 2014-based Population Projections*. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration>. This is consistent with Office of Budget Responsibility projections on migration.

³³ Cribb, J., C. Emmerson and G. Tetlow (2014), ‘Signals matter? Large retirement responses to limited financial incentives’, *Labour Economics*, 42: October, 203-212. Available at: <http://www.sciencedirect.com/science/article/pii/S0927537116301245>

³⁴ APS Jul 15 – Jun 16

Over half of men and women are not in work in the year before reaching SPa.³⁵ Moreover, one in four men and one in three women reaching SPa have not worked for five years or more.³⁶

Chart 4.4: Economic activity by single year of age (July 2015-June 2016)³⁷



Source: APS July 2015 - June 2016.

Note: The lighter bars indicate ages at and above the 2016 State Pension age (Men: 65 years old, women: 63 years old).

The analysis in Chart 4.4 has been extended to cover ages 20 to 70 years old (see Appendix 2). This shows that employment rates for men aged 30 to 50 years old are similar to the employment of people in their early 50s, at approximately 90 per cent. The employment rates for women increase from about 75 per cent in their 30s to almost 80 per cent for those in their late 40s, before declining after age 52.

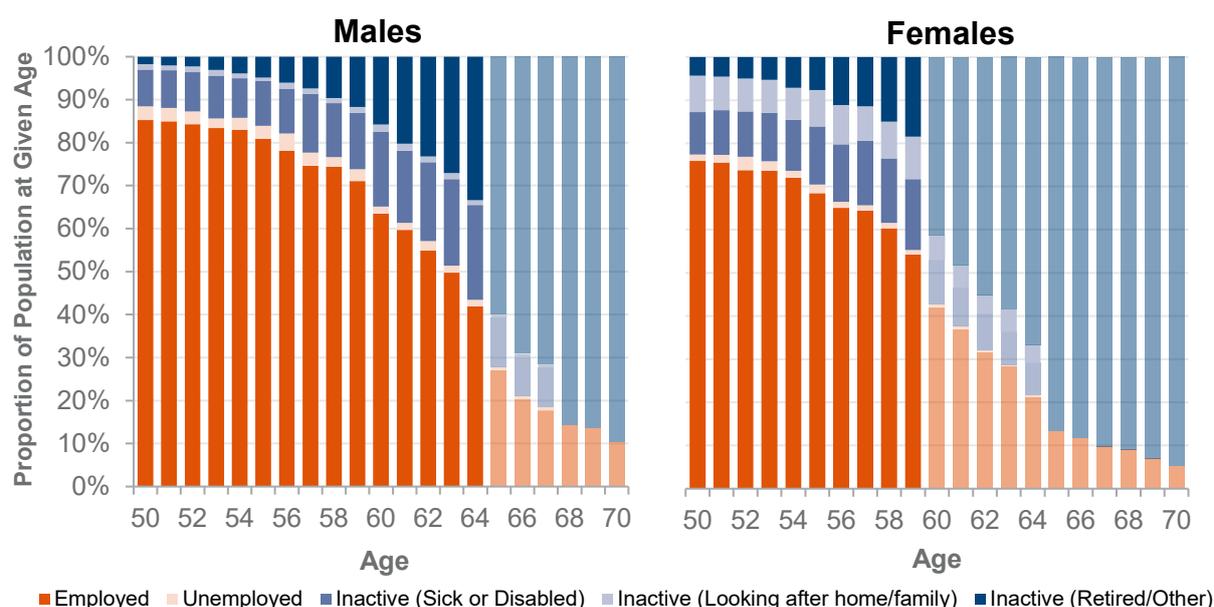
Chart 4.5 shows the situation ten years ago. As previously seen (Chart 4.2), the overall employment rate for individuals aged 50-64 years old has increased over the last ten years. Analysis by single year of age highlights where these increases have occurred, in particular, for males aged 60-70 and for females aged 56-62. For males, the increases in employment rates have coincided with a decrease in the proportion reporting they are economically inactive due to being sick or disabled. For females, the increases in employment rates are largely offset by decreases in the economically inactive proportion due to being retired (or other).

³⁵ For the time period referred to, this is taken to be 64 for men and 62 for women. Although women's SPa increased incrementally over the year covered by this data.

³⁶ APS Jul 15 – Jun 16. See the "Additional Figures" sheet of the supporting Statistical Reference Tables for details of the calculation.

³⁷ Due to small sample sizes at ages 67 and over, responses for Unemployed, Inactive (Sick or Disabled), Inactive (Looking after home/family) and Inactive (Retired/Other) have all been grouped into the Inactive (Retired/Other) category.

Chart 4.5: Economic activity by single year of age (July 2005-June 2006)³⁸



Source: APS July 2005 - June 2006.

Note: The lighter bars indicate ages at and above the 2006 State Pension age (men: 65 years old, women: 60 years old).

4.1 Economic Inactivity and Unemployment

There are 3.3 million individuals aged 50-64 years old (27.8 per cent of the total population aged 50-64) who report themselves as economically inactive and 300,000 individuals (2.5 per cent of the population) who report that they are unemployed.³⁹

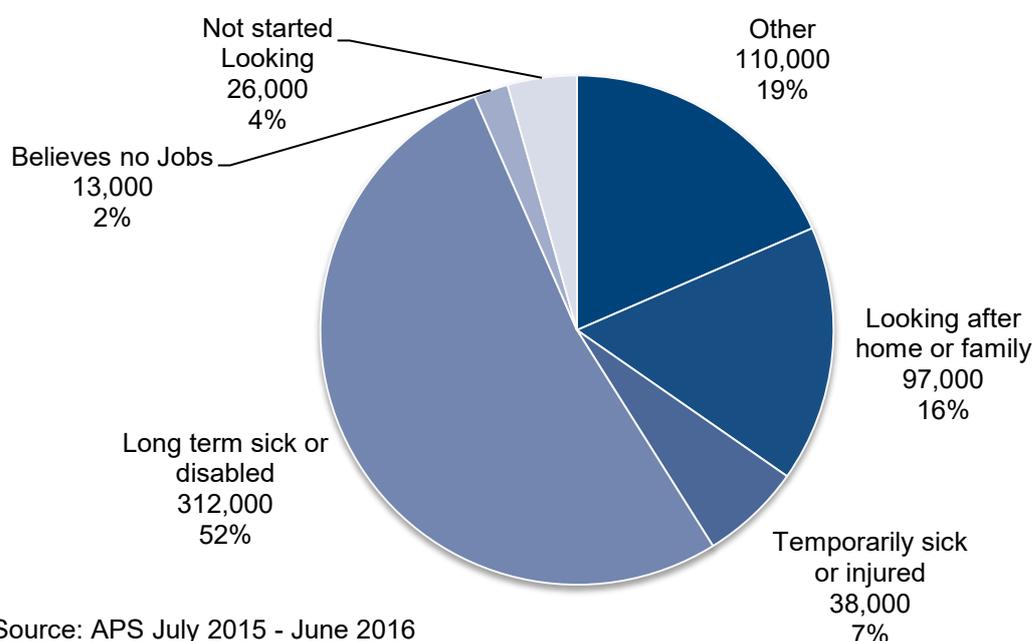
There are almost one million individuals aged 50-64 years old that are not in employment but state that they are willing or would like to work.⁴⁰ This group is made up of the 300,000 individuals that are unemployed, 40,000 individuals who are seeking a job but were not available to start work in the next two weeks and 600,000 individuals (18 per cent of the economically inactive population) who are not currently seeking a job but report they would like to work (Chart 4.6).

³⁸ Due to small sample sizes at ages 68 and over for males and 65 and over for females, responses for Unemployed, Inactive (Sick or Disabled), Inactive (Looking after home/family) and Inactive (Retired/Other) have all been grouped into the Inactive (Retired/Other) category.

³⁹ APS Jul 15 – Jun 16.

⁴⁰ APS Jul 15 – Jun 16.

Chart 4.6: Reasons for not looking for work, individuals aged 50-64, who are inactive but are willing to or would like to work



The unemployment level of individuals aged 50 years and over is relatively low compared to the levels of economic inactivity and employment. This level has decreased over the past five years by over 70,000 individuals (18.5 per cent).⁴¹

Yet, the long term unemployment rate for those aged 50 years and over is higher than for both younger and mid-age groups. A total of 138,000 (43.8 per cent) of unemployed individuals aged 50 years and over have been unemployed for over 12 months. This compares to 29.5 per cent for 25-49 year olds and 19.5 per cent for 18-24 year olds.⁴²

It is estimated that, of the 225,000 individuals aged 50-64 who are currently unemployed and have left their job in the last eight years, 36 per cent were dismissed/made redundant, 18 per cent said their job came to an end, 13 per cent left due to ill health and four per cent retired.⁴³

Further information on individuals' reasons for leaving the labour market can be found in Section 5.

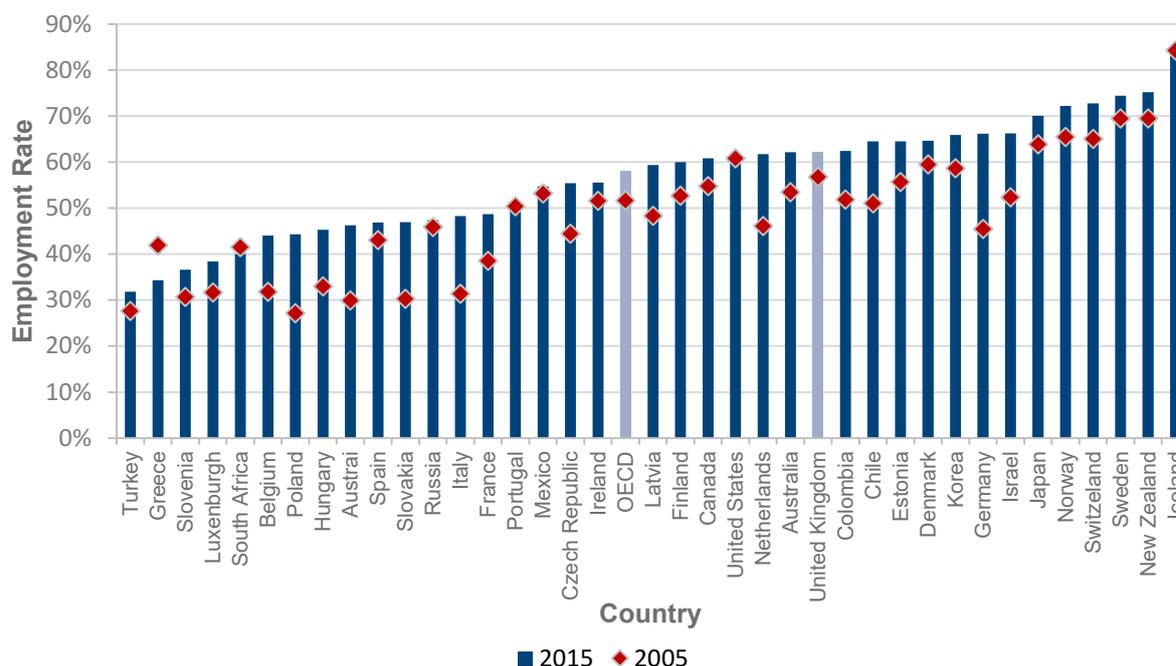
Internationally, the UK performs above average for older worker employment rates, but there remains room for improvement. OECD countries such as New Zealand, Sweden and Iceland have employment rates for 55-64 years olds of above 70 per cent. This is compared with the UK's rate of 62.2 per cent (Chart 4.7).

⁴¹ LFS (Q2 2016 compared to Q2 2011). See table A05 (not seasonally adjusted) from the UK Labour Market Statistical bulletin published by ONS. Available at: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/previousReleases>

⁴² LFS Q2 2016. See table UNEM01 (not seasonally adjusted) from the UK Labour Market Statistical bulletin published by ONS. Available at: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/previousReleases>

⁴³ APS Jul 15 – Jun 16.

Chart 4.7: International comparison of employment rates for 55-64 year olds, OECD, 2005 and 2015^{44,45}



Source: OECD Labour Market Statistics (2016)

4.2 Ways of Working

There are more people in work than ever before, yet there has not been a corresponding increase in the labour supply measured by total hours worked. Over the past ten years, there have been changes in ways of working in the UK labour market, including an increase in self-employment and flexible working.⁴⁶

Recent analysis (2016) of the English Longitudinal Study of Ageing (ELSA)⁴⁷ shows that between 2002-03 and 2014-15, the proportion of men aged 50-69 years in the survey, in any paid work, increased from 59 per cent to 65 per cent, whilst hours worked increased by two per cent. For women aged 50-69 in the survey, the proportion in paid work over the same period increased from 48 per cent to 54 per cent and hours worked increased by 13 per cent.⁴⁸

The proportion of individuals reporting that they are self-employed increases with age; the majority of work taking place post-SPa is part time and/or self-employed (Chart 4.8).

⁴⁴ Note: OECD weighted average. OECD (2016) *Employment rate by age group (indicator)*. Available at: <https://data.oecd.org/emp/employment-rate-by-age-group.htm> [accessed 07 November 2016]

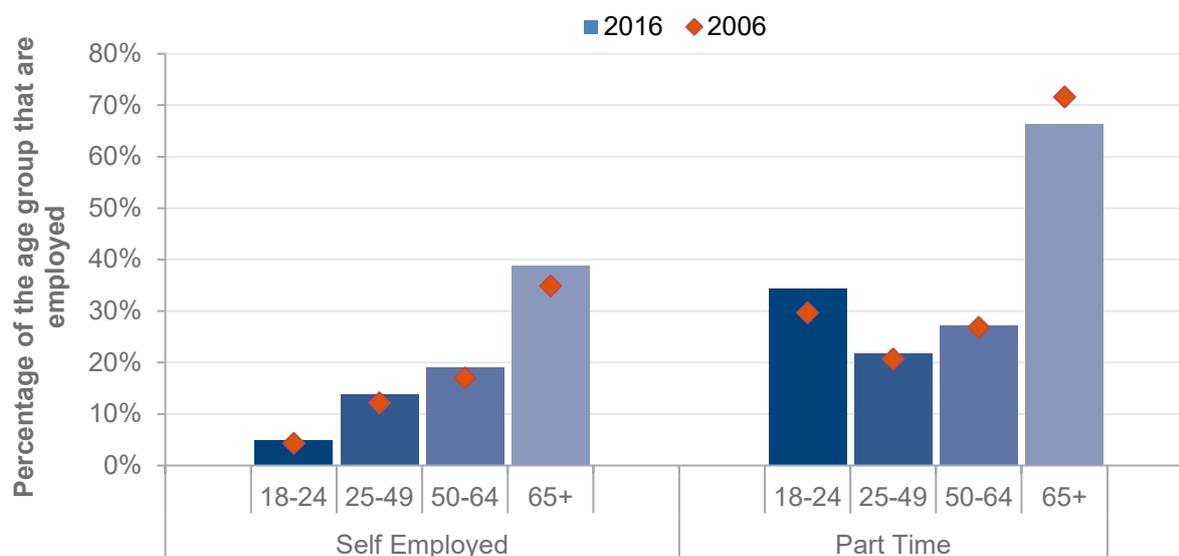
⁴⁵ 2006 data for Turkey as 2005 was not available.

⁴⁶ To note that, in November 2016 the Government commissioned Matthew Taylor to conduct a review of modern employment practices. For more information see: <https://www.gov.uk/government/news/taylor-review-on-modern-employment-practices-launches>

⁴⁷ For more information on the English Longitudinal Study of Ageing (ELSA) please see Appendix 5.

⁴⁸ Banks J., Batty, G. D., Nazroo, J. and Steptoe A. (2016) *The Dynamics of Ageing: Evidence from the English Longitudinal Study of Ageing 2002-15 (Wave 7)*, Institute for Fiscal Studies. Available at: <https://www.ifs.org.uk/publications/8696>

Chart 4.8: Proportion of people employed that are self-employed and/or work part time⁴⁹



Source: LFS Q2 2016 and Q2 2006

Evidence suggests that there is high demand for more flexible work among older employees; this approach may help workers and employers to better manage the demands of work and age. However, recent research has shown that employers tend to think of younger workers as the primary beneficiaries of flexible working arrangements in relation to parenting and childcare responsibilities – more flexible ways of working for older workers could be equally beneficial.^{50,51}

4.3 Transitions in Work

Recent analysis of ELSA also shows that the labour market for older age groups is more dynamic than might previously have been thought, with people changing jobs frequently during the later stages of their working lives - although this labour market mobility still falls with age and is lower for women. The analysis also shows that these job transitions are strongly associated with reductions in hours worked. This is particularly true for low socioeconomic status workers and those in poor health, who seem less likely to be able to vary their hours without such employment changes.⁵²

Over 12 per cent of people aged 50-54 and eight per cent of people aged 55-59 in the survey changed jobs in the period 2008-10 to 2012-14, and approximately two per cent of people aged 50-69 years entered paid work between this period.⁵³ The analysis shows that those with fewer qualifications and those with lower wealth were less likely to change jobs or re-enter the labour market if they were out of work.

⁴⁹ An individual in employment is classified as either full time or part time. Any individual in employment (whether full time or part time) can be classified as self-employed.

⁵⁰ DWP (2016a) *Attitudes to Working in Later Life: analysis of British Social Attitudes 2015*. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/574655/attitudes-to-working-in-later-life-british-social-attitudes-2015.pdf;

⁵¹ DWP (2017a) *Employer experiences of recruiting, retaining and retraining older workers*. Available at: <https://www.gov.uk/government/publications/employer-experiences-of-recruiting-retaining-and-retraining-older-workers-qualitative-research>

⁵² Banks J., Batty, G. D., Nazroo, J. and Steptoe A. (2016) *The Dynamics of Ageing: Evidence from the English Longitudinal Study of Ageing 2002-15 (Wave 7)*, Institute for Fiscal Studies. Available at: <https://www.ifs.org.uk/publications/8696>; Chandler, D. and Tetlow, G. (2014) *Retirement in the 21st Century*, IFS Report R98. Available at: <https://www.ifs.org.uk/publications/7384>;

⁵³ Sample is all individuals aged 50-69 in ELSA waves 1-6 who were observed in the subsequent wave two years later.

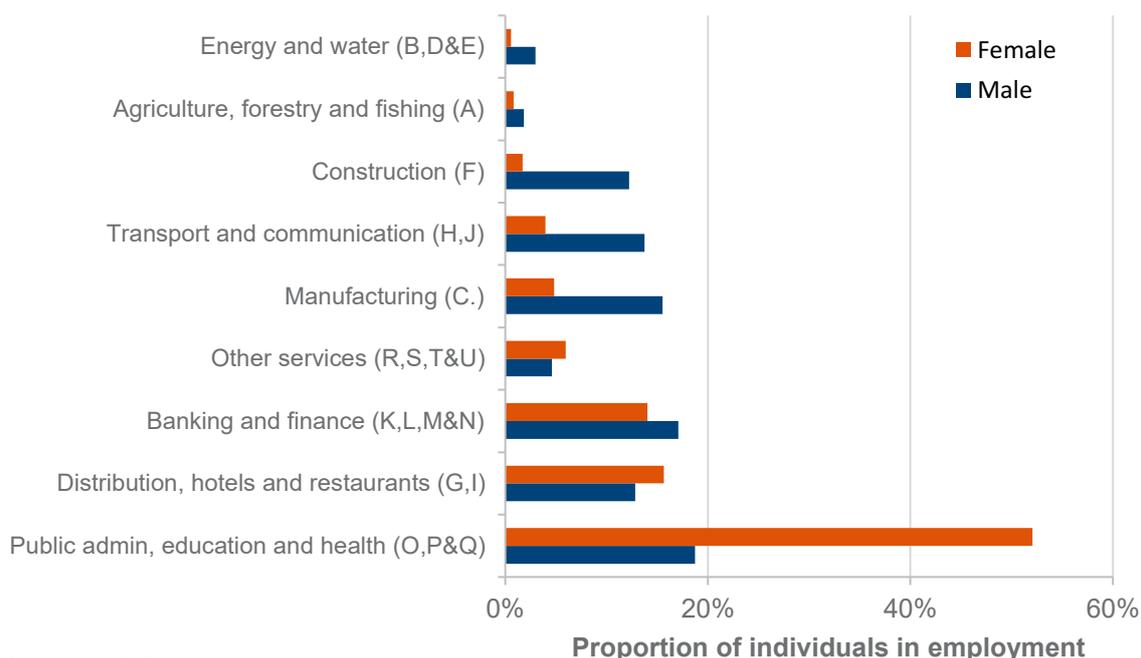
Moreover, they were more likely to exit the labour market if they were in work. These differences were more marked for men than for women.⁵⁴

4.4 Key Sectors for Employment of Older Workers

The proportion of older workers within workplaces varies depending on a number of key characteristics: industry, region, occupational group, workplace age, size, union recognition and the presence of equal opportunities policies.⁵⁵ Recent workplace survey analysis, of 2004 and 2011 data, shows that older workers are more likely to be found in administrative roles as well as in skilled trades. Additionally, older workers tend to be found in more established workplaces and those with a recognised trade union. In contrast, they were less likely to be employed in service sectors such as hotels and restaurants or financial services. In terms of geography, they are less likely to be found in workplaces in London and the North West.⁵⁶

In 2015/16, over 50 per cent of women aged 50-64 years old were employed in public administration, education and health (chart 4.9). For men, there is a more equal spread of employment across sectors, including: public administration, education and health (19 per cent), banking and finance (17 per cent) and manufacturing (16 per cent).⁵⁷ Patterns of employment by sector and gender have shown consistency since 2010/11.

Chart 4.9: Employment by sector for individuals aged 50-64 years, by gender (SIC codes)⁵⁸



Source: APS July 2015 to June 2016

⁵⁴ The Dynamics of Ageing, Evidence from ELSA 2002-15, Wave 7 (October 2016)

⁵⁵ DWP (2017b) *Older Workers and the Workplace: Evidence from the Workplace Employment Relations Survey*. Available at: <https://www.gov.uk/government/publications/older-workers-and-the-workplace-evidence-from-the-workplace-employment-relations-survey>

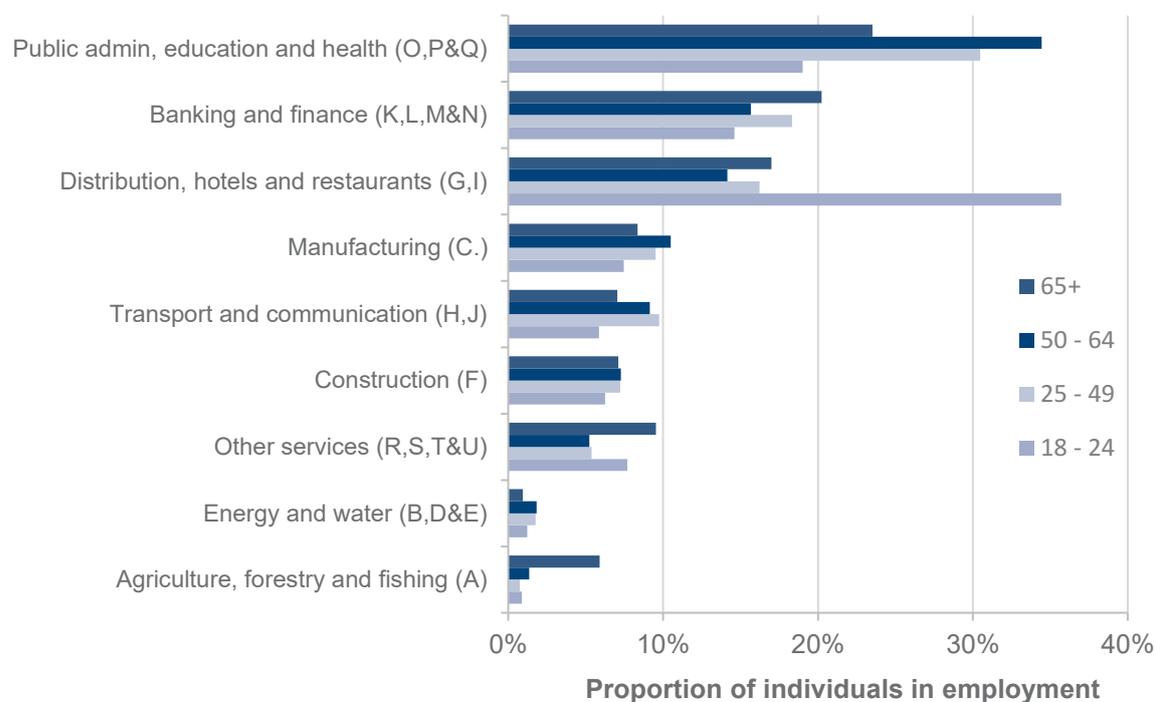
⁵⁶ DWP (2017b) *Older Workers and the Workplace: Evidence from the Workplace Employment Relations Survey*. Available at: <https://www.gov.uk/government/publications/older-workers-and-the-workplace-evidence-from-the-workplace-employment-relations-survey>

⁵⁷ APS July 2015 to June 2016.

⁵⁸ *Standard Industrial Classification Codes used (SIC) For more details see definitions in Appendix. 1.*

Public administration, education and health is also a key sector for employment of younger workers and there are a higher proportion of younger workers in distribution, hotels and restaurant and banking and finance sectors (Chart 4.10).

Chart 4.10: Employment by sector, all age groups (SIC codes)



Source: APS July 2015 to June 2016

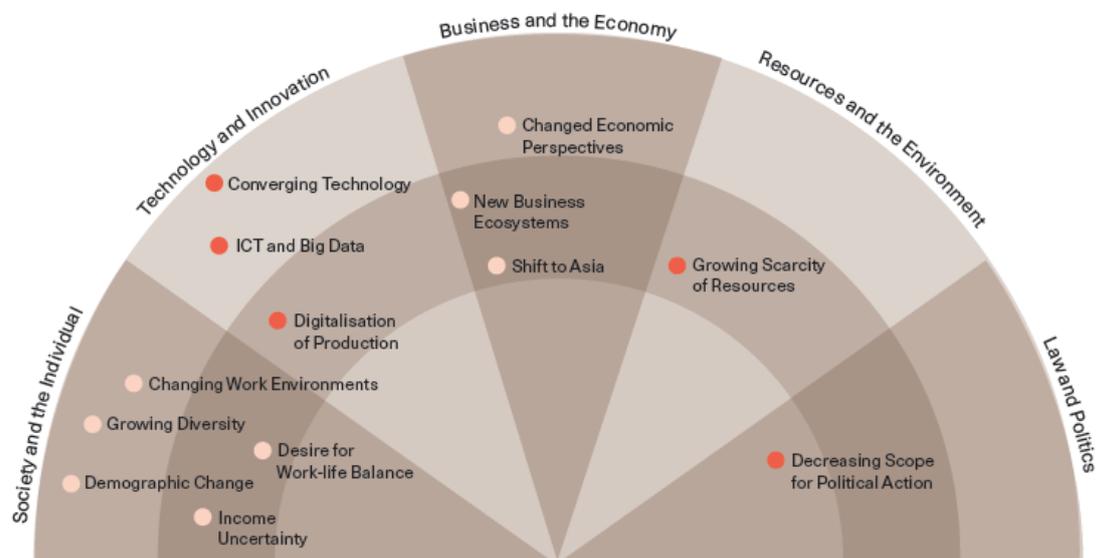
Tables showing the reasons for leaving the labour market by sector last worked can be found in Appendix 4.

4.5 The Future of Work and Skills

The descriptive analysis presented in the previous section reflects the employment of the current population by sector and age group. **It is not possible to predict the future of the labour market, particularly in the current economic climate. However, it is likely that the UK workforce in 2030 will be more multi-generational, as well as older and female. It is also predicted that technology will be universal, jobs more fluid and the global labour market highly competitive.**⁵⁹ Therefore, it is likely that as industries grow and shrink, there will be a need for more transferable skills for all workers in the labour market. Analysis into the future of work by The UK Commission for Employment and Skills highlighted that experience tells us that predictions about the future are destined to be inaccurate. However, 13 potential trends were presented which influence UK jobs and skills to 2030 (Figure 4.1).

⁵⁹UK Commission for Employment and Skills (2014) *The Future of Work: jobs and skills in 2030*. Available at: <https://www.gov.uk/government/publications/jobs-and-skills-in-2030>

Figure 4.1 - Trends shaping future UK jobs and skills



Source: UKCES (2014) The future of work

Estimated projections of the skills need for the labour market over the next two decades indicate a continuing polarisation with growth at both high and low skill levels and some hollowing out in the middle. The manufacturing sector, where older male workers are more prevalent, is expected to experience further decline in its share of total employment, as well as its overall level of employment. Job losses are projected in coming decades for those in administrative and secretarial occupations as well as skilled trade occupations and process, plant and machine operatives – all sectors that traditionally employ greater numbers of older workers. Projections indicate a continued trend in favour of more highly skilled, white collar occupations, with some growth in employment for a number of less skilled occupations, such as care workers, leisure and other service occupations.⁶⁰

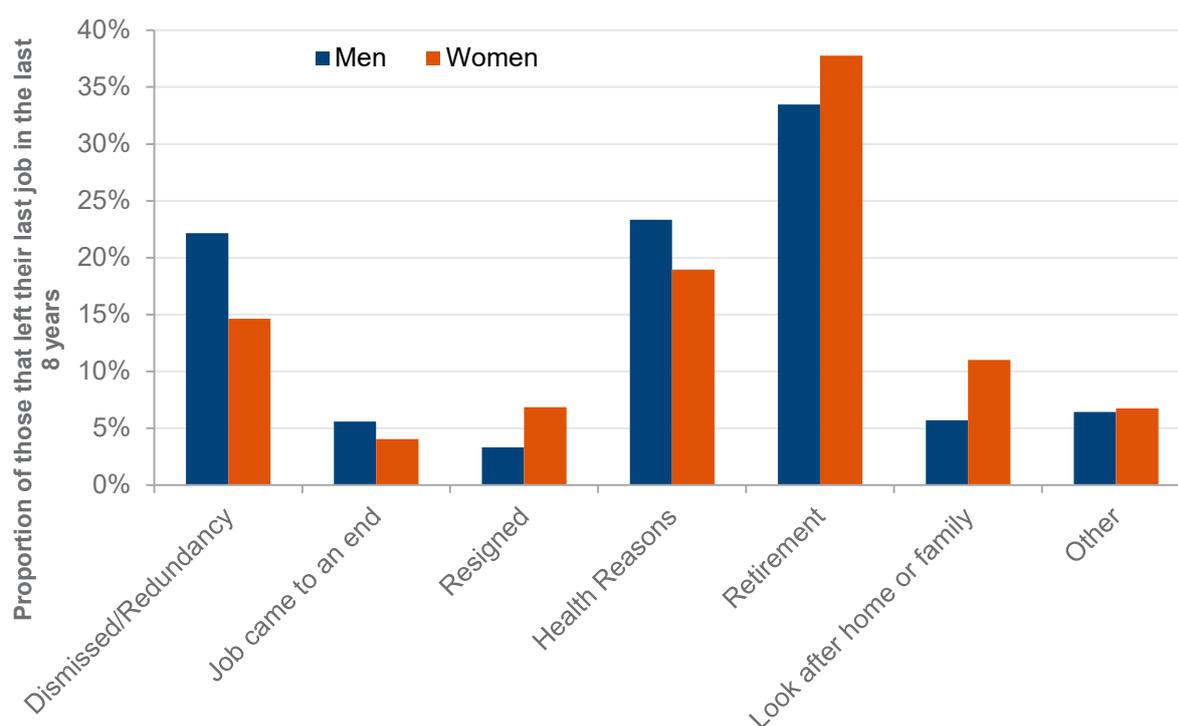
⁶⁰ UK Commission for Employment and Skills (2016b) *Working Futures 2014-2024*. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/513801/Working_Futures_final_evidence_report.pdf; Projections are based on econometric modelling conducted periodically by Cambridge Econometrics and the Warwick Institute of Employment Research.

5. The Key Factors and Potential Barriers to Fuller Working Lives

The underlying reasons why people experience periods of labour market inactivity are numerous and complex. It is therefore important to understand the potential barriers for individuals to working in later life.

The main reason that individuals aged 50 years and over report in the Annual Population Survey (APS) for leaving the labour market before SPa is ‘retirement’ (chart 5.1). This can be described as ‘voluntary’ labour market exit because the individual wants to leave and/or has planned a financially stable retirement. It is estimated that 1.1 million people aged 50-64 who left their job in the past eight years could have done so for ‘involuntary’ reasons, typically due to ill-health, caring or redundancy reasons.⁶¹ Some of these individuals could be supported to overcome these barriers and remain in some form of work.

Chart 5.1: Reason for leaving last job, individuals aged 50-64 who are not in work⁶²



Source: APS July 2015 - June 2016.

There are some individuals that have left the labour market for reasons that do not correspond to their current reason for being out of work. Appendix 3 shows that reasons for leaving the labour market are complex, and that conclusions drawn from survey findings only provide some indication of an individual’s decision to work. For example, 14 per cent (61,000) of people aged 50-64 who report that they are economically inactive due to ill-health, left the labour market because they were

⁶¹ APS Jul 15 – Jun 16. Involuntary labour market exit includes dismissed/redundancy; job came to an end; health reasons and looking after family or home.

⁶² Individuals that left their last job within the last eight years at the time of the survey.

dismissed or made redundant. While, 20 per cent (41,000) of those who report they are economically inactive due to looking after family or home left the labour market due to being dismissed or made redundant.

5.1 Drivers of 'Voluntary' Labour Market Exit

5.1.1 Retirement and Individual Attitudes

The main reason that individuals aged 50-64 report leaving their last job is 'retirement'.⁶³ It is estimated that 0.7 million (36 per cent) of the two million individuals who left their job in the last eight years and are currently not working did so for this reason.⁶⁴

An examination of financial incentives or disincentives to carry on in work help to explain patterns of retirement decisions; older workers tend to be more responsive to financial incentives e.g. wage levels compared to younger and mid-age workers when considering the trade-off between work and leisure.⁶⁵ **Those that leave the labour market 'voluntarily' to retire before SPa may not, in reality, have enough income to maintain the standard of living they would like, as life expectancy increases. These individuals can have the skills and experience that employers demand and could benefit the economy should they remain in the labour market.**

Reaching SPa holds significance for individuals' retirement planning, with 57 per cent of people aged 65 and over who have retired citing 'reached state pension age' as the key reasons for leaving work when they did.⁶⁶ Research by IFS (2016) suggests that SPa provides a signal to individuals about the appropriate age to retire.⁶⁷

The Government is committed to helping people achieve financial security in later life. In October 2012, the Government introduced automatic enrolment, a reform which requires employers to enrol all eligible workers into a pension scheme and make contributions into it. This will be fully rolled out across all employers by 2018. It is estimated this will lead to ten million individuals that begin saving or save more into a workplace pension scheme by 2018, generating around £17bn in additional savings by 2019/20.⁶⁸ In April 2018, the contribution rate will be increased from its current total of two per cent of qualifying earnings to five per cent of qualifying earnings. This will rise again to eight per cent of qualifying earnings by April 2019. This will be made up of contributions from the employer, the individual and the government in the form of tax relief.

In April 2015, the Government introduced pension flexibilities which enable those reaching age 55 with a defined contribution (DC) pension scheme to access their pension flexibly, rather than waiting until their retirement age. These changes mean

⁶³ Individuals that left their last job within the last eight years.

⁶⁴ APS Jul 15 – Jun 16.

⁶⁵ Adam, S, Brewer, M, Shephard, A. (2006) *Financial Work Incentives in Britain: comparisons over time and between family types*, IFS Working Paper 06/20. Available at: <http://www.ifs.org.uk/wps/wp0620.pdf>

⁶⁶ ILC-UK (2014) *The Missing Million: Illuminating the employment challenges of the over 50s*. Available at: http://www.ilcuk.org.uk/images/uploads/publication-pdfs/The_missing_millions_web.pdf

⁶⁷ Cribb, J., Emmerson, C. and Tetlow, G. (2014b) 'Signals matter? Large retirement responses to limited financial incentives', *Labour Economics*, 42: October, 203-212. Available at: <http://www.sciencedirect.com/science/article/pii/S0927537116301245>

⁶⁸ DWP (2016) *Workplace pensions: Update of analysis on Automatic Enrolment 2016*. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/560356/workplace-pensions-update-analysis-auto-enrolment-2016.pdf

that people in their 50s are now being presented with retirement decisions that were previously not available and could therefore change the decisions that a person makes about work and finances in later life.

In addition, there is currently a shift from defined benefit (DB) pension schemes, where a person is guaranteed a known income in retirement, to defined contribution pension schemes. This is likely to have an impact on retirement choices through a change in the retirement ages and potential changes to income levels throughout retirement depending on an individual's choices.

There are certain characteristics of those that retire early. People who could be seen as financially secure are more likely to retire early, compared with their less well-off peers. However paradoxically, those more likely to continue working past age 65 are also those who are more financially secure. Both men and women aged 50 to 64 years are more likely to be retired, compared with other groups. Education levels are also indicative; men aged 55 to 64, with a degree, or who are in higher education are more likely to be retired than those with lower qualifications. However, at ages 65 to 69, they are less likely to be retired and more likely to still be in employment. In addition, men and women living in London are less likely to be retired both before and after SPa.⁶⁹

Attitudes to retirement are beginning to change. Recent analysis of the British Social Attitudes Survey showed that nearly two thirds (65 per cent) of all employees interviewed said that they expect to retire in their 60s and 17 per cent expect to retire in their 70s. Those in younger age groups were more likely to say they expect to retire in their 70s (37 per cent of 18-24s, 21 per cent of 25-34s). Of those who expected to retire at 65 or before, the most likely reason given was because they wanted to (36 per cent) followed by being able to afford to (20 per cent). Of those already retired, 39 percent said they did so because they wanted to; 20 per cent said they retired due to ill-health.⁷⁰

Recent polling commissioned by DWP showed that three quarters of respondents who were aged 50 - 59 and were not currently retired, would like to still be in work between the ages of 60 and 65. A minority, 15 per cent, reported that they would like to stop work altogether and retire. In addition, just under half of those polled who were not currently retired (and were under age 65) said that they would like to still be in work between ages 65 and 70.⁷¹

5.2 Drivers of 'Involuntary' Labour Market Exit

The main reasons for 'involuntary' labour market exit are known to be health, caring responsibilities, lack of skills and redundancy.

5.2.1 Health

Health is known to be a significant factor cited by individuals aged 50-64 for leaving the labour market early. In the APS, health was cited by 21 per cent of respondents

⁶⁹ Analysis provided by the Office of National Statistics. *Annual Population Survey (Jan-Dec) 2015*

⁷⁰ DWP (2016a) *Attitudes to Working in Later Life: analysis of British Social Attitudes 2015*. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/574655/attitudes-to-working-in-later-life-british-social-attitudes-2015.pdf

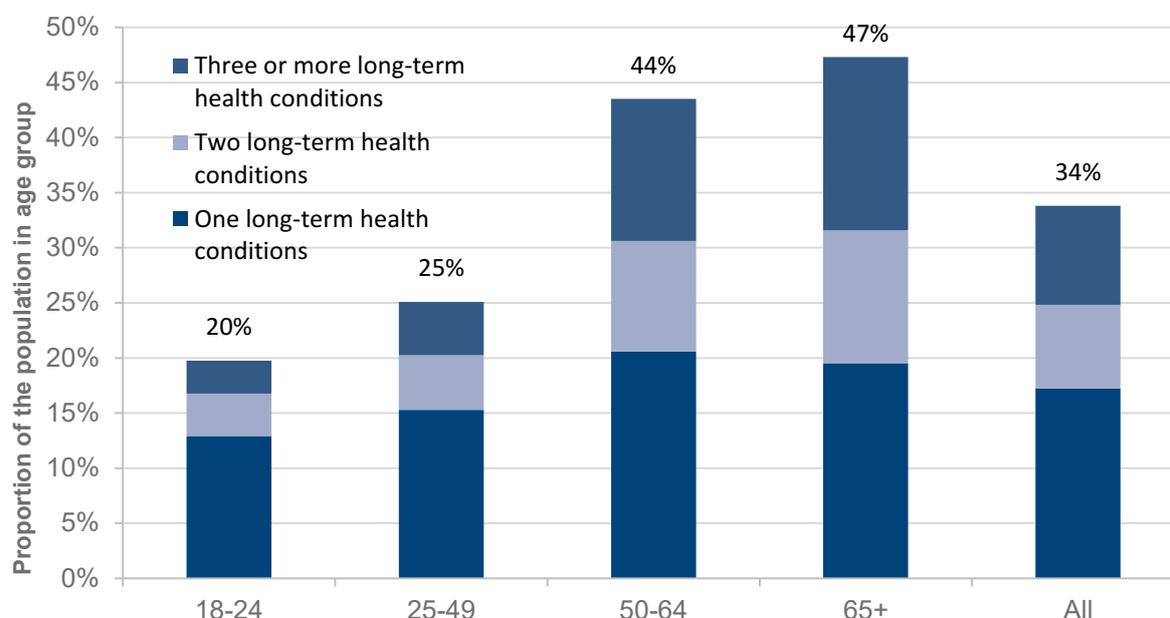
⁷¹ DWP (2015a) *Attitudes of the over 50s to Fuller Working Lives, Ad hoc research report no. 15*. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/394642/attitudes-over-50s-fuller-working-lives.pdf; Overall sample size: 2,235 respondents aged 50 and over; 1,087 not currently retired is the sample for this specific question, 1,148 were retired.

(representing an estimated 400,000 individuals).⁷² ‘Involuntary’ labour market exit become increasingly likely as self-reported health declines. Evidence suggests that someone who considers their health to be either ‘good’ or ‘fair’ is at least three times more likely to retire involuntarily than someone who reports excellent self-reported health.⁷³

As the prevalence of long term health conditions (LTCs) and disability increases with age (chart 5.2), the numbers of working age people with LTCs and co-morbidities is expected to rise. **Therefore, it is increasingly important that employers are able to support an ageing workforce, by providing workplaces and job roles that enable people to manage their health conditions and disabilities and work.**⁷⁴

Just under half (44 per cent) of 50-64 year olds report having a LTC, with nearly one quarter (23 per cent) reporting two or more LTCs. Within this group, over one quarter (27 per cent) of 50-64 year olds report having a disability compared with 15 per cent of 25 to 49 year olds.⁷⁵

Chart 5.2: Proportion of population with long term health conditions, by age and number of conditions



Source: APS July 2015 to June 2016

Many LTCs are more common amongst individuals from lower socio-economic groups. General Household Survey data (2006), analysed by the Department of

⁷² APS Jul 15 – Jun 16.

⁷³ Banks J., Batty, G. D., Nazroo, J. and Steptoe A. (2016) *The Dynamics of Ageing: Evidence from the English Longitudinal Study of Ageing 2002-15 (Wave 7)*, Institute for Fiscal Studies. Available at: <https://www.ifs.org.uk/publications/8696>

⁷⁴ For more information on the Government’s approach to Work, Health and Disability see: DWP (2016e) *Work, health and disability: improving lives*. Available at: <https://www.gov.uk/government/consultations/work-health-and-disability-improving-lives>

⁷⁵ APS Jul 15 – Jun 16. See the “Additional Figures” sheet of the supporting Statistical Reference Tables for details of the calculation.

Health, shows that those from unskilled occupations (52 per cent) suffer from LTCs more than individuals from professional occupations (33 per cent).⁷⁶

There are certain health conditions that are more prevalent in older ages: musculoskeletal conditions, heart, blood pressure or blood circulation problems and diabetes (Table 5.1).⁷⁷

Table 5.1 Main long term health conditions by age group, total adult population (%)⁷⁸

	18-24	25-49	50-64	65+
Musculoskeletal	2	6	14	16
Chest or Breathing	4	3	4	4
Heart, blood pressure or blood circulation problems	1	2	7	10
Stomach, liver kidney or digestive problems	1	2	2	2
Diabetes	0	1	4	4
Depression, bad nerves or anxiety	4	4	3	1
Mental Health	2	1	1	1
Other	6	6	9	10

Source: APS July 2015 to June 2016

Nearly two thirds of 50 to 64 year olds in employment have no LTC compared to only one third of those who are economically inactive.⁷⁹

Overall, people aged 18-64 with LTCs that are not disabling have similar employment rates to those without LTCs (Table 5.2). This is also the case when looking at the sub-group of 50-64 year olds. However, the employment rate gap between individuals with no health conditions and those with disabling LTC is higher for those aged 50-64 (38pp) compared to the overall adult population (34pp). There have been no considerable changes to this gap in recent years.⁸⁰

Table 5.2 Employment rate of working age adults, by health status and age group (%)

	Individuals with no LTC	Individuals with non-disabling LTCs	Individuals with disabilities	<i>Employment rate gap – those without LTC vs. those with disability</i>
18-64	82.0	81.8	48.3	34pp
50-64	80.7	79.8	42.5	38pp

Source: APS July 2015 to June 2016

⁷⁶ Department of Health (2012) *Long-term conditions compendium of Information: 3rd edition*. Available at: <https://www.gov.uk/government/news/third-edition-of-long-term-conditions-compendium-published>

⁷⁷ This includes all types of diabetes.

⁷⁸ This is their primary long term health condition, they may have secondary ones that the data does not capture.

⁷⁹ APS July 2015 to June 2016. See the “Additional Figures” sheet of the supporting Statistical Reference Tables for details of the calculation.

⁸⁰ LFS Q2 analysis.

The prevalence of disabilities and LTCs does not necessarily affect the amount or type of work that an individual can do. The way that health conditions can impact on work capability varies substantially depending on several factors; involving individual's characteristics, life course history, as well as environmental and social interactions. There is a broad consensus that when health condition permits, people could and should be encouraged and supported to remain in or (re)-enter work to reduce poverty and improve the quality of life and wellbeing.⁸¹

Although ill health may affect capacity to work longer in life, ill health alone is known to be a barrier to work for only a minority of workers.^{82,83} Therefore, ensuring that there is appropriate work available for individuals with health conditions and disabilities is crucial to enable them to remain in or return to work. Employers can play a significant role in supporting individuals with LTCs, regardless of age. Analysis estimates benefits to both the employees and employers, where workers can be up to three times more productive if they are in good health.⁸⁴

5.2.2 Informal Care

An ageing population and workforce means that a greater proportion of the working age population are likely to provide informal care in future years. Carers UK estimate that there will be a 40 per cent increase in the number of carers needed by 2037, to a total of nine million.⁸⁵

The likelihood of being a carer increases significantly with age. The 2011 Census found that 24 per cent of women and 17 per cent of men aged 50–64 provide unpaid care for a family member or friend.⁸⁶ **Currently, three in five adult carers are aged 50 years and over, with the peak age of caring between 50-54 years. This is particularly the case for women (chart 5.3).**⁸⁷

⁸¹ DWP (2006) *Is work good for your health and well-being? An independent review*. Available at:

<https://www.gov.uk/government/publications/is-work-good-for-your-health-and-well-being>

⁸² Benson, R., Sacker, A. and Glaser, K. (2016) *How does health affect working beyond state pension age?*, Wellbeing, Health, Retirement and the Lifecourse (WHERL). Available at: <http://wherl.ac.uk/findings/393/>

⁸³ Banks J., Emmerson C. and Tetlow G. (2016) *How poor health limits older people's capacity to work*. Available at: <http://voxeu.org/article/older-people-s-capacity-work-new-uk-evidence>

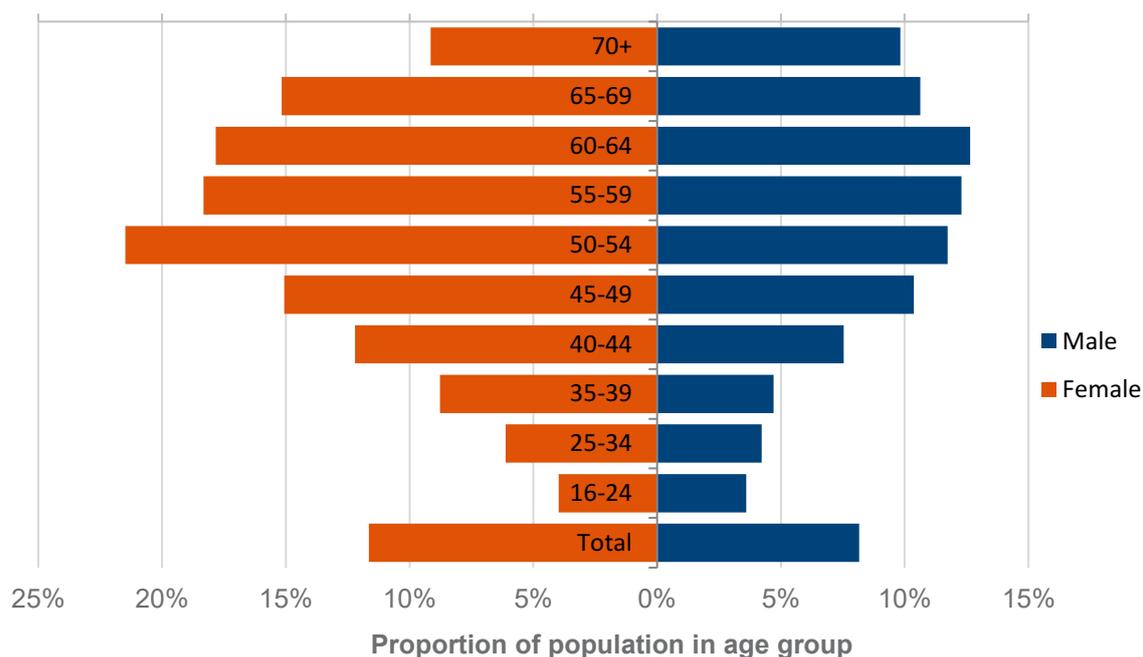
⁸⁴ Vaughan-Jones, H. and Barham, L. (2010) *Healthy Work: Evidence into action*, The Work Foundation. Available at: http://moodle.adaptland.it/pluginfile.php/20611/mod_data/content/39955/healthy-work-evidence-into-action-report.pdf

⁸⁵ Carers UK (2015) *Facts about Caring*. Available at: <http://www.nhs.uk/news/2013/05May/Pages/numbers-unpaid-carers-young-carers-increase.aspx>

⁸⁶ Carers UK (2015) *Facts about Caring*. Available at: <http://www.nhs.uk/news/2013/05May/Pages/numbers-unpaid-carers-young-carers-increase.aspx>

⁸⁷ Family Resources Survey 2014/15.

Chart 5.3: Proportion of the adult population with informal caring responsibilities, by age and gender



Source: Family Resource Survey 2014/15

Research suggests that a quarter of the UK’s adult population have experienced ‘sandwich caring’ at some point in their lives, where someone provides care for a dependent child or grandchild, as well as a parent. Typically, it is those in the middle generation who are sandwich carers,⁸⁸ with women being significantly more likely to be sandwich carers.⁸⁹ Research has found that the care provided by grandparents plays a crucial role in allowing parents, especially mothers, to (re-)enter the workplace, with low and middle income families more likely to rely on informal childcare from grandparents.⁹⁰ This appears to have a knock on effect, with lower employment rates for women who are grandmothers than for women who are not grandmothers.⁹¹ In the UK, it is estimated that grandparents provide childcare to 42 per cent of families with children over nine months old and 35 per cent of families rely on grandparents as the main providers of childcare. **For families in which the mother is in work or education, 71 per cent receive some level of childcare from grandparents.**⁹²

Evidence suggests that caring for 10 plus hours a week can have a substantial negative effect on employment, and therefore pension contributions: 56 per cent of males and females aged 50-64 years who spend over 10 hours per week

⁸⁸ Social Market Foundation (2016) *Longer Lives, Stronger Families? The changing nature of intergenerational support*. Available at: <http://www.smf.co.uk/publications/longer-lives-stronger-families-the-changing-nature-of-intergenerational-support/>

⁸⁹ The Money Advice Service (2013) *The Sandwich Generation. An exploration of the affective and financial impacts of dual caring*. Available at: <https://mascdn.azureedge.net/cms/sandwich-generation-report-final-100613.pdf>

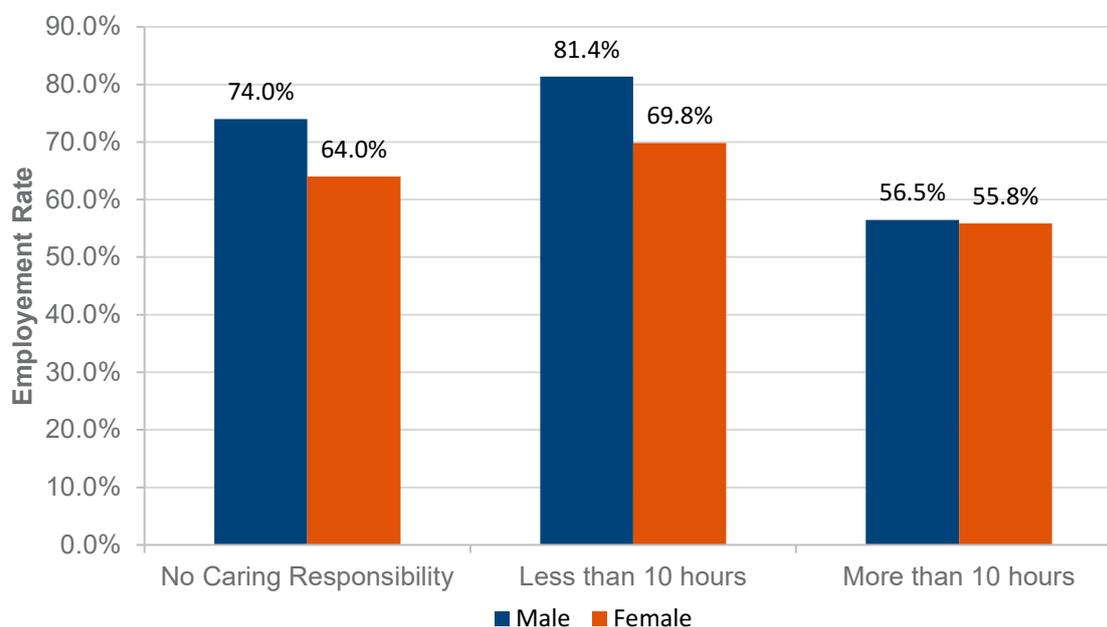
⁹⁰ Ibid.

⁹¹ Grandparents Plus (2013) *Grandparents and childcare*, Policy Briefing 04. Available at: <https://www.grandparentsplus.org.uk/wp-content/uploads/2013/05/Briefing-paper-on-grandparental-childcare.pdf>

⁹² Institute for Public Policy Research (2013) *The sandwich generation: Older women balancing work and care*. Available at: <http://www.ippr.org/publications/the-sandwich-generation-older-women-balancing-work-and-care>

providing informal care are in employment compared with 74 per cent of males and 64 per cent with no caring responsibility (chart 5.4).⁹³

Chart 5.4: Employment rate of people aged 50-64, by gender and time spent caring (per week)



Source: Family Resource Survey 2014/15

Recent research suggests that only a third of employers (34 per cent) have a formal, written policy or an informal, verbal policy in place to support carers in their workplace. This is particularly prevalent in the private sector, where just 11 per cent of organisations offer line manager training; 18 per cent have a formal, written policy aimed at supporting working carers, and only 20 per cent know how many working carers they employ.⁹⁴ The need to enable a growing population of informal carers to remain in and return to work is inevitable for employers.

5.2.3 Skills and Older Workers

A lack of skills can also be a barrier to working longer. Continued adult learning is set to be increasingly important as people have longer working lives. Lifelong learning can also have indirect benefits by improving social capital and integration, health behaviours, and skills, as well as employment outcomes.⁹⁵

The current population of individuals aged 50 years and over are less likely to possess formal qualifications, which are often used as a proxy for skills, compared with younger age groups (Chart 5.5).⁹⁶ However, as younger cohorts flow into the labour market, an increase in qualification levels at all ages is expected.

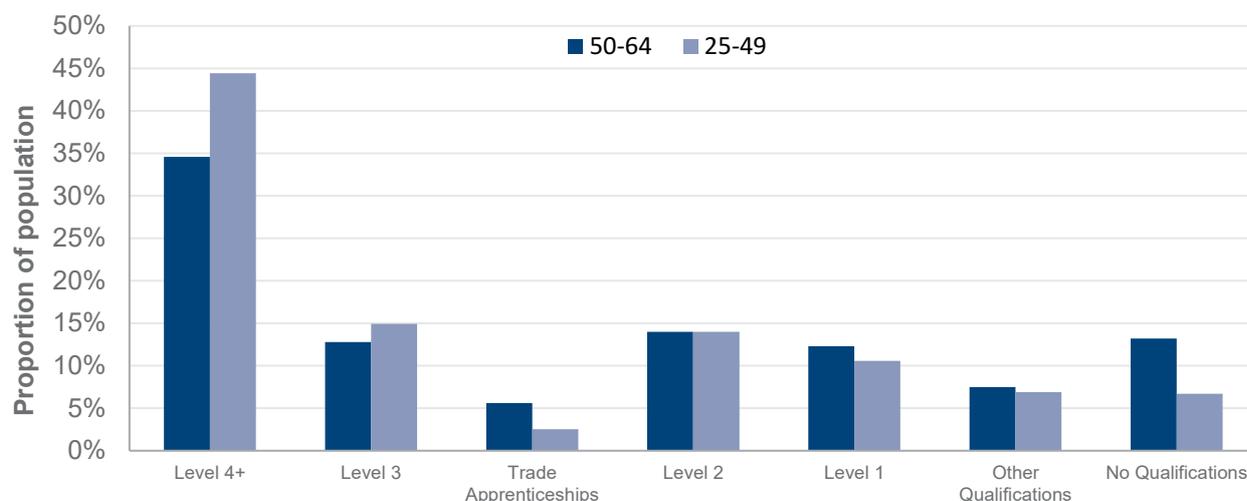
⁹³ Family Resources Survey 2014/15.

⁹⁴ CIPD/Westfield Health (2016) *Creating an Enabling Future for Carers in the Workplace*. Available at: <https://www.cipd.co.uk/knowledge/culture/well-being/enabling-carers>

⁹⁵ UCL Institute of Health Equity (2014) *Local action on health inequalities*. Available at: <http://www.publichealth.ie/news/other-news/local-action-health-inequalities-series-reports-published-institute-health-equity>

⁹⁶ UK Commission for Employment and Skills (2011) *Older people and skills in a changing economy*. Available at: <http://dera.ioe.ac.uk/10461/1/equality-older-people.pdf>

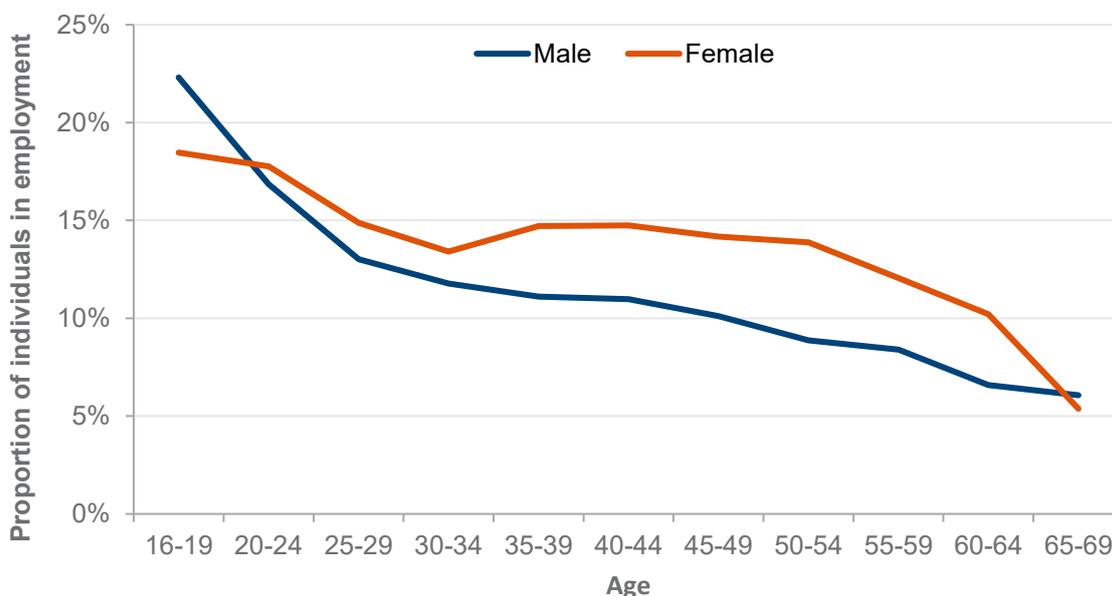
Chart 5.5: Percentage of the population with a given qualification level, by age⁹⁷



Source: NOMIS, Annual Population Survey Jan - Dec 2015

Prevalence of job-related training declines with age. A slight increase in training for women in their 30s reflects the age that many women return to work after taking a career break to have children. However in general training trends begins to decline with age for men and women. Note that this does not indicate the type, quality or level of training provided (chart 5.6).

Chart 5.6: Percentage of individuals employed that had completed job-related training in the last four weeks.

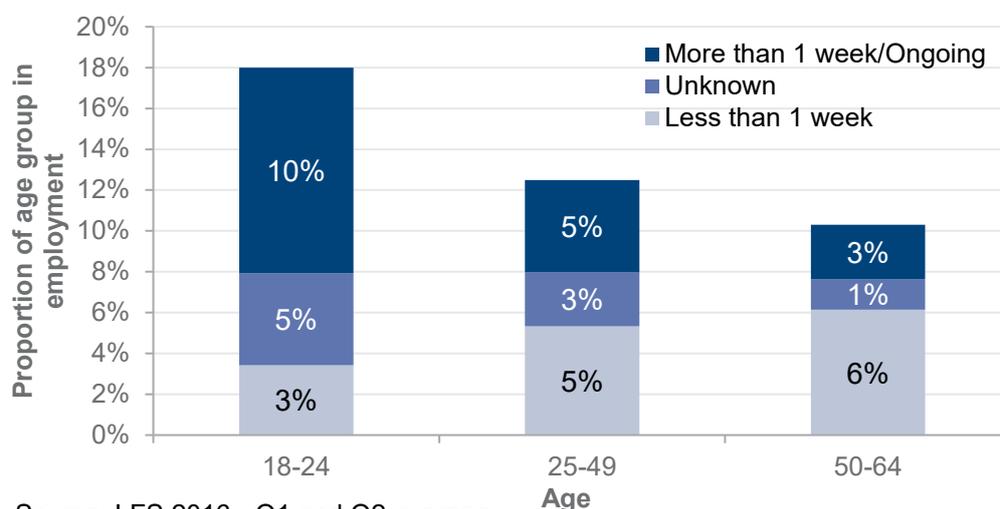


Source: APS July 2015 - June 2016

⁹⁷ For more information on qualification levels, please see: <https://www.gov.uk/what-different-qualification-levels-mean/list-of-qualification-levels>.

Employees aged 50-64 years old are also less likely to participate in training courses than employees aged 18-49 years old; 18 per cent of 18-24 year olds said that they had recently taken part in a training course compared with 10 per cent of 50-64 year olds (Chart 5.7). Of those that received training, older workers tend to receive fewer hours compared with younger workers.⁹⁸

Chart 5.7: Proportion of individuals in employment that had participated in a training course in the last four weeks, by age and duration of training



Source: LFS 2016 - Q1 and Q2 average.

The amount of training provided by employers is generally higher in large organisations, but older workers are disproportionately found in small and medium enterprises (SMEs), where training levels are notably lower.⁹⁹ Research has also shown that training for older workers tends to have a narrower focus towards the employees' current role rather than wider development needs.¹⁰⁰

Both private and public sector spending on learning declines rapidly per head of population for those aged 50 years and over, estimated at £280 per head for 25-49 year olds compared with £85 per head for 50-74 year olds (Chart 5.8). However, some SMEs have reported good returns on investment for training older employees.¹⁰¹

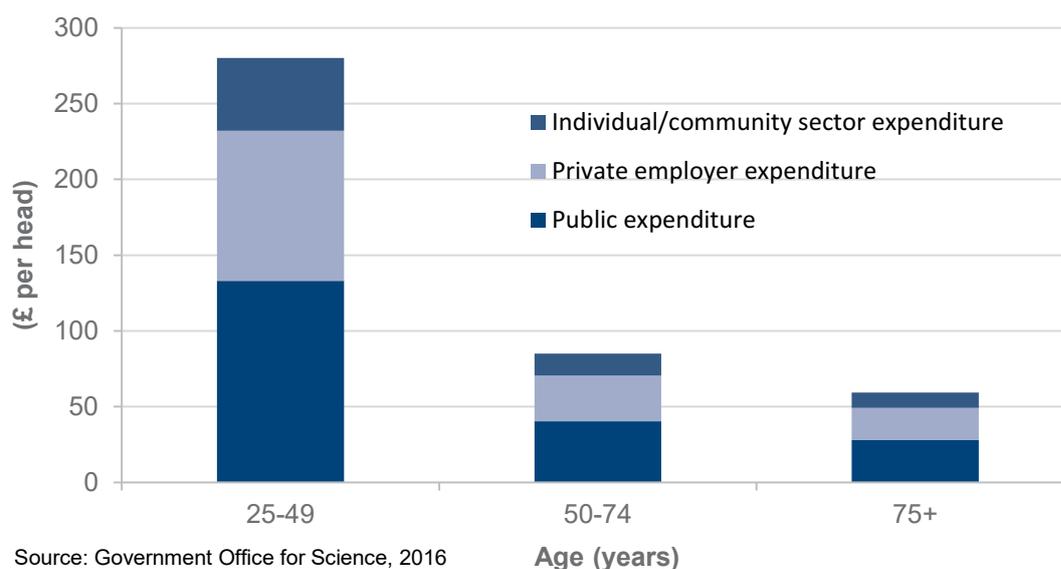
⁹⁸ Green, F., Felstead, A., Gallie, D., Inanc, H. and Jewson, N. (2013) *What Has Been Happening to the Training of British Workers?*, Centre for Learning and Life Chances in Knowledge Economies and Societies. Available at: <http://www.llakes.org/wp-content/uploads/2013/12/43.-Green-et-al.pdf>

⁹⁹ McNair, S., Flynn, M., Myerson, J., Gherawoo, R. and Ramster, G. (2012) *What are the supply (workforce) and demand (product) implications of an ageing society?*, Foresight/Government Office for Science. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/283896/ep22-ageing-society-implications-manufacturing.pdf

¹⁰⁰ UK Commission for Employment and Skills (2011) *Older people and skills in a changing economy*. Available at: <http://dera.ioe.ac.uk/10461/1/equality-older-people.pdf>

¹⁰¹ Buckle, P. (2015) *Workplace infrastructure – Future of Ageing: evidence review*, Foresight/Government Office for Science. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/435072/gf-15-4-future-ageing-workplace-infrastructure-er24.pdf

Chart 5.8: Annual UK learning expenditure per head, by age group, 2009¹⁰²



5.2.4 Redundancy

There are an estimated two million individuals aged 50-64 who left their job in the last eight years and are now currently out of work. Eighteen per cent of individuals asked (representing an estimated 400,000 individuals) cited redundancy or being dismissed as the main reason for leaving (chart 5.1).¹⁰³

Redundancy can be associated with an onset of poorer mental wellbeing and temporary loss of income.¹⁰⁴ Moreover, redundancy in later life is often associated with fewer opportunities to return to the workforce.¹⁰⁵

Recent research with older claimants participating in Jobcentre Plus sector-based work academies (sbwa) provision for older claimants showed that the majority of participants reported that the experience had enabled them to develop new skills and gain a qualification. Other benefits reported included establishing a working routine and increased confidence, enabling claimants to try out sectors where they had not previously worked.¹⁰⁶

¹⁰² Survey of 5,000 people aged 17+.

¹⁰³ APS Jul 15 – Jun 16.

¹⁰⁴ Gallo, W. T., Bradley, E. H., Dubin, J. A., Jones, R. N., Falba, T. A., Teng, H. M. and Kasl, S. V. (2006) 'The persistence of depressive symptoms in older workers who experience involuntary job loss: results from the health and retirement survey', *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 61: 221–28.

¹⁰⁵ Banks J., Batty, G. D., Nazroo, J. and Steptoe A. (2016) *The Dynamics of Ageing: Evidence from the English Longitudinal Study of Ageing 2002-15 (Wave 7)*, Institute for Fiscal Studies. Available at: <https://www.ifs.org.uk/publications/8696>

¹⁰⁶ DWP (2017c) *Sector-based work academies and work experience trials for older claimants: Qualitative and quantitative research*.

6. Impact of Fuller Working Lives on Individuals

6.1 Impact on Later Life Income

Individuals who work longer can enjoy additional income from earnings, a boosted private pension income and additional State Pension contributions. Analysis by DWP (2013) shows that 12 million people of working age are heading towards inadequate retirement incomes. Around a third of people who stopped work aged 50 to SPa between 2008 and 2010 saw their household income drop by more than half.¹⁰⁷

Over a third (37 per cent) of 55-64 year old women and around a fifth (19 per cent) of 55-64 year old men have no private pension savings at all; as many as 45 per cent of pensioner couples and 71 per cent of single pensioners currently receive at least half their income from State Pension and benefits.¹⁰⁸

Analysis of later life income: scenario modelling

The analysis below presents two case studies – a male and a female – to illustrate the potential financial impacts of working in later life. Further detail on the analysis can be found in Appendix 6.

It is important to note that this analysis provides illustrative scenarios of the potential financial impacts of working longer and therefore should not be used to determine exact changes for specific individuals.

All scenarios are compared to a baseline situation of someone considering early retirement and leaving the labour market at age 55 years old.

It is assumed in each case study that the individual is a median earner across their life course.

Case Study 1

Single man who has reached SPa in 2016 (aged 65) who considered retiring at 55.

- a) **By working full time up to SPa**, he might have boosted his private pension pot by around 55 per cent, equivalent to an extra £2,800 per year (£54 per week) for the rest of his life. He has also received £280,000 gross earnings income over this period.

If he worked one further year full time beyond SPa he could earn an additional £29,000 in gross earnings and increase his private pension pot by an additional three per cent, equivalent to an extra £400 per year for the rest of his life. He would also benefit from not paying National Insurance on his earnings and the SP deferral rate would increase his State Pension by around £700 per year for the rest of his life.

- b) **By working full time for five years (aged 55 to 60) and then part time from the age of 60 to 65 years (SPa)**. His private pension pot might have increased by 50 per cent; equivalent to an extra £2,600 per year for the

¹⁰⁷ DWP (2014) *Fuller Working Lives - Background Evidence*. Available at: <https://www.gov.uk/government/statistics/fuller-working-lives-background-evidence>

¹⁰⁸ DWP (2016c) *Pensioners' incomes series: financial year 2013/14*, National Statistic. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/522351/pensioners-incomes-series-2013-14-report.pdf

rest of his life. He would have also earned around £210,000 in income over this period.

Case Study 2

Single woman who has reached SPa in 2016 (aged 63) and took a 10 year career break aged 25-35 years. She considered retiring at 55.

a) **By working full time up to SPa**, she might have increased her private pension pot by around 50 per cent, equivalent to an extra £1,300 per year (£25 per week) additional income for the rest of her life. She would also have received £180,000 gross earnings income over this period.

If she worked one further year full time beyond SPa, she could earn an additional £22,000 in gross earnings and might increase her private pension pot by an additional three per cent, equivalent to an extra £200 per year for the rest of her life. She would also benefit from not paying National Insurance on earnings and the SP deferral rate would increase her State Pension income by around £500 per year for the rest of her life

b) **By working full time for three years (aged 55 to 58) and then part time to SPa (age 63)**. Her private pension pot could have increased by 40 per cent; equivalent to an extra £1,100 per year (£20 per week) for the rest of her life. She would also have earned around £120,000 in earnings income over this period.

6.2 Impact on Health and Wellbeing

The evidence on interactions between health and work for those in employment is mixed, but research indicates that appropriate paid work is linked to good health outcomes.¹⁰⁹ Maintaining good health throughout the life course is key to people being able to and wanting to stay in work in later life.¹¹⁰

In general work is beneficial for health and wellbeing:

- Unemployment is related to increased rates of mortality from cardiovascular disease, lung cancer, poorer mental health and psychological wellbeing.
- There is broad consensus that for sick and disabled people, remaining or returning to work helps promote recovery and rehabilitation, minimises the negative physical, mental and social effects of long-term sickness absence. In addition to providing income, work can potentially help to maintain cognitive and physical activity, a sense of identity and social support.¹¹¹

The impact of retirement on health varies depending on the circumstances around the decision to leave the labour market. Early retirement can be beneficial to wellbeing when individuals choose to leave the workforce voluntarily, when it is affordable and when the individual can continue to participate in socially meaningful activities.¹¹² Retirement that is not taken in optimal circumstances is associated with

¹⁰⁹ Rueda, S., Chambers, L., Wilson, M., Mustand, C., Rourke, S., Bayoumi, A., Raboud, J. and Lavis, J. (2012) 'Association of returning to work with better health in working-aged adults: a systematic review', *American Journal of Public Health*, 102(3): 541-556; Roelfs, D. J., Shor, E., Davidson, K. W., and Schwartz, J. E. (2011) 'Losing life and livelihood: A systematic review and meta-analysis of unemployment and all-cause mortality', *Social Science & Medicine*, 72(6): 840-854.

¹¹⁰ World Health Organisation (2013) *International Classification of Functioning, Disability and Health (ICF)*. Available at: <http://www.who.int/classifications/icf/en/>

¹¹¹ DWP (2006) *Is work good for your health and well-being? An independent review*. Available at: <https://www.gov.uk/government/publications/is-work-good-for-your-health-and-well-being>

¹¹² Herzog, A. and House, J. S. (1991) 'Productive activities and aging well', *Generations: Journal of the American Society on Aging*, 15: 49-54; Drentea, P. (2002) 'Retirement and mental health', *Journal of Aging and Health*, 14: 167-94; Scherger, S.,

poorer wellbeing. Early workforce exit due to the individual's own ill health can have detrimental effects on various health and wellbeing outcomes.¹¹³ Retirement taken due to the illness of a spouse or close family member has also been associated with negative effects on health and wellbeing.¹¹⁴

Employers can support individuals with LTCs or disabilities by providing adaptations or adjusting their workload. In a 2014 survey, nine out of 10 employees (all ages) who received adjustments at work regarded them as helpful to manage their health condition.¹¹⁵ Recent attitudinal analysis highlights the importance that those in employment give to the consideration of flexible working arrangements and how being offered flexible working arrangements could help people to stay in the labour market later in life.^{116,117} NICE guidance states that employers have a key role to play in ensuring that those with health conditions maintain good links to the labour market: 'there is strong evidence that proactive company approaches to sickness, together with the temporary provision of modified work and accommodations are effective and cost-effective'.¹¹⁸

Nazroo, J. and Higgs, P. (2011), 'Leisure activities and retirement: do structures of inequality change in old age?', *Ageing and Society*, 31: 146–72.

¹¹³ Mein, G., Martikainen, P., Stansfeld, S. A., Brunner, E. J., Fuhrer, R. and Marmot, M. G. (2000) 'Predictors of early retirement in British civil servants', *Age and Ageing*, 29: 529–36; Butterworth, P., Gill, S. C., Rodgers, B., Anstey, K. J., Villamil, E. and Melzer, D. (2006), 'Retirement and mental health: analysis of the Australian national survey of mental health and wellbeing', *Social Science and Medicine*, 62: 1179–91.

¹¹⁴ Dentinger, E. and Clarkberg, M. (2002) 'Informal caregiving and retirement timing among men and women gender and caregiving relationships in late midlife', *Journal of Family Issues*, 23: 857–87; Evandrou, M. and Glaser, K. (2004) 'Family, work and quality of life: changing economic and social roles through the life course', *Ageing and Society*, 24: 771–91.

¹¹⁵ DWP (2015c) *Health and Wellbeing at work: a survey of employees, 2014*. DWP Research Report 901. Available at: <https://www.gov.uk/government/publications/health-and-wellbeing-at-work-survey-of-employees>

¹¹⁶ DWP (2016a) *Attitudes to Working in Later Life: analysis of British Social Attitudes 2015*. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/574655/attitudes-to-working-in-later-life-british-social-attitudes-2015.pdf

¹¹⁷ DWP (2015a) *Attitudes of the over 50s to Fuller Working Lives*, Ad hoc research report no. 15. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/394642/attitudes-over-50s-fuller-working-lives.pdf

¹¹⁸ DWP (2013) *Vocational Rehabilitation: what works, for whom and when?*. Available at: <https://www.gov.uk/government/publications/vocational-rehabilitation-scientific-evidence-review>

7. Impact of Fuller Working Lives on Employers

Employer attitudes and policies are key to the work experience and wellbeing of older workers. Evidence suggests that job quality and good line management can lead to higher job satisfaction throughout the working life of employees.

The Learning and Work Institute suggest that for employees to be persuaded to defer retirement, employers need to take more active steps to encourage older workers to look forward to continuing career development and new ways of contributing.¹¹⁹

The attitudes and policies of employers towards older workers are key to the lived experience at work and the wellbeing of older workers. Polling research conducted with private sector businesses in 2015 highlighted that employers value older workers in their workforce:

- over three quarters of employers believed the **experience** of workers over 50 was the main benefit of having them in their organisation;
- 65 per cent highlighted the **reliability** of older workers;
- nearly a third said workers over 50 were **easier to manage than younger workers** (54 per cent said they were equally easy to manage);
- 54 per cent value the role older workers play as **mentors**;
- 21 per cent said older workers were **more productive**, whilst 68 per cent thought they were equally productive to other age groups;
- 87 per cent of employers reject the idea that the skills of older workers are unsuitable for their business.¹²⁰

However, recent DWP qualitative research with employers has highlighted the scale of the challenge. **While employers stated that they valued a mixed age workforce and were aware in general of an ageing population, few were taking active steps to change their policies and practices regarding the recruitment, retention and retraining of older workers.**

The key findings were that:

- An ageing workforce is not yet a prominent concern for most employers;
- Fear of contravening equal opportunities legislation acts as a barrier to collecting information on age;
- Line managers may not always have the skills required to ensure older workers feel comfortable discussing issues relating to ageing;
- Flexible approaches to work arrangements are much more likely to be made for long-standing employees than for new entrants;
- Employers are less likely to offer flexibility to workers in physically demanding roles (which tend to be lower paid) and this may be contributing to a tendency for lower paid workers to leave the workforce earlier;
- Employers value older workers, but the qualities/benefits older workers are praised for can be hard to demonstrate in a job interview.¹²¹

¹¹⁹ McNair, S. (2010) *A Sense of a Future: A Study of Training and Work in Later Life*, National Institute of Adult Continuing Education. Available at: http://shop.niace.org.uk/media/catalog/product/a/_/a_sense_of_a_future_full_report_final_2.pdf

¹²⁰ DWP (2015b) *Employer Attitudes to Fuller Working Lives*, Ad hoc research report no. 21. Available at: <https://www.gov.uk/government/publications/employer-attitudes-to-fuller-working-lives>

¹²¹ DWP (2017a) *Employer experiences of recruiting, retaining and retraining older workers*.

This last finding echoes research by CIPD/Anglia Ruskin (2015) highlighting the persistence of ageism in recruitment processes.¹²²

On average older workers tend to stay in a job role longer than younger workers, (13 years and seven years respectively).¹²³ Research by CIPD shows that the average cost of filling a vacancy per employee is over £4,000, increasing to £7,750 when organisations include the associated labour turnover costs. This is driven by time spent training a new staff member and the associated loss of output.¹²⁴ **Therefore, retaining older workers could be more cost effective for an employer than hiring a new employee.**

Evidence from existing research on the relationship between the age composition of the workforce and workplace performance is mixed. International literature covers a range of settings and countries, and uses various measures of performance. A recent study using UK data found some evidence that workplace labour productivity falls where the proportion of workers aged 22-49 falls, either due to a rise in the proportion of younger or older workers. However, an increase in the proportion of older workers does not impact on workplace financial performance or quality of outputs.¹²⁵

The impact of retaining older workers on workplace performance varies from employer to employer, depending on factors such as their customer base or the level of expertise required. Employers could benefit from increasing the share of older workers in certain circumstances. For example, firms may find that matching their staff profile to their customer base could increase customer satisfaction or sales. Additionally, there may be need for firm-specific knowledge that requires workers with more experience.¹²⁶

Older workers' experience and skill sets are also beneficial for 50 plus business start-ups; they could capitalise on the business opportunities arising from demographic change and an ageing population, if given the right support.¹²⁷ 'Senior entrepreneurships' are at their highest levels, with approximately 600,000 individuals aged over 50 years old engaged in early-stage entrepreneurial activity. Older entrepreneurs also tend to be more successful in terms of start-up survival rates: 70 per cent of start-ups founded by older workers were found to last longer than three years, in contrast to only 28 per cent of those created by younger entrepreneurs.¹²⁸

Research by the European Commission shows that being a 'senior entrepreneur' can benefit individuals, employers and the economy. This could be achieved for example, through cross-generational support between senior and younger

¹²² CIPD/Anglia Ruskin University (2015) *Measuring Age Discrimination in the UK*. Available at: <http://www2.cipd.co.uk/pm/peoplemanagement/p/paymentgateway.aspx?returnURL=/pm/peoplemanagement/b/weblog/archive/2015/07/23/under-30-you-re-4-25-times-more-likely-to-get-an-interview.aspx&blogid=2&postid=99748>

¹²³ APS Jul 15 – Jun 16.

¹²⁴ CIPD (2007) *Recruitment, retention and turnover*, Annual Survey Report. Available at: <http://www2.cipd.co.uk/NR/rdonlyres/746F1183-3941-4E6A-9EF6-135C29AE22C9/0/recruitmentsurv07.pdf>

¹²⁵ DWP (2017b) *Older Workers and the Workplace: Evidence from the Workplace Employment Relations Survey*.

¹²⁶ DWP (2017b) *Older Workers and the Workplace: Evidence from the Workplace Employment Relations Survey*.

¹²⁷ Institute for Public Policy Research (2014) *Silver Cities, realising the potential of our growing older population*. Available at: <http://www.ippr.org/publications/silver-cities-realising-the-potential-of-our-growing-older-population>

¹²⁸ Institute for Public Policy Research (2014) *Silver Cities, realising the potential of our growing older population*. Available at: <http://www.ippr.org/publications/silver-cities-realising-the-potential-of-our-growing-older-population>

entrepreneurs; accumulated experience; investment and support at early and unstable project periods.¹²⁹

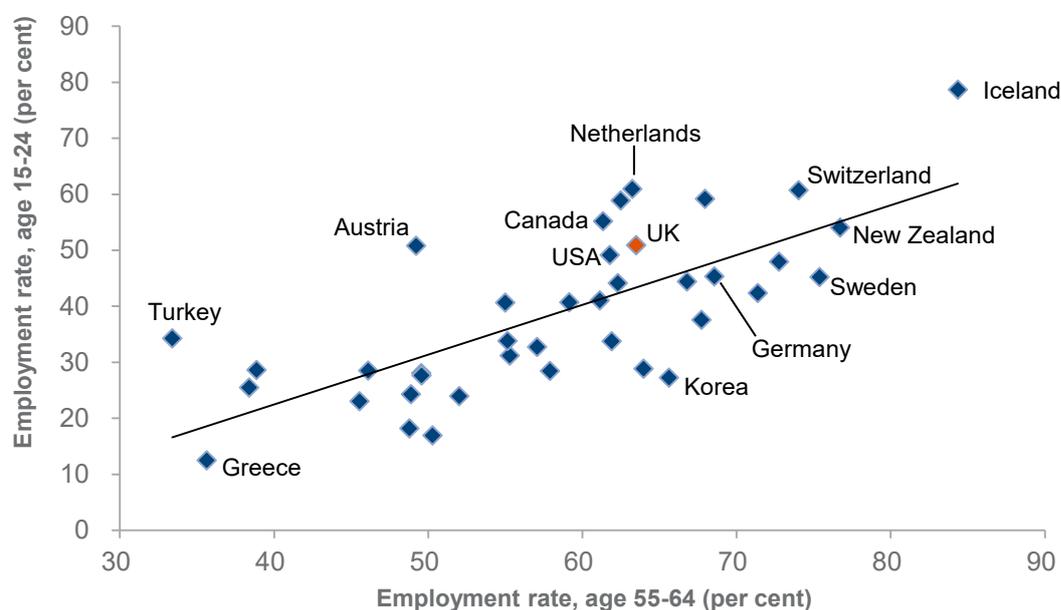
8. Impact of Fuller Working Lives on the Economy

Older workers do not take jobs from younger workers. As people work later in life, there are often concerns that older workers displace younger workers in the labour market under the notion that there are a fixed number of jobs in the economy, or a ‘lump of labour’. However, research shows that there is no empirical evidence that younger workers are ‘crowded out’ by the employment of older workers.^{130,131} Instead, evidence suggests that increasing overall employment can further economic growth through increased consumption of goods and services, raising aggregate demand in the economy.

Younger and older workers should be recognised as complements to each other, in terms of their skills and experience, rather than substitutes.¹³²

The relationship between employment rates of older and younger people across the member states of the OECD is shown in Chart 8.1. **On average, those countries that have higher employment rates of older people also maintain higher employment rates for younger people.**

Chart 8.1. OECD employment rates of younger and older workers.



Source: OECD Employment Data, Q2 2016

¹²⁹ European Commission (2016) *Senior Entrepreneurship: Good Practices Manual*. Available at: <https://bookshop.europa.eu/en/senior-entrepreneurship-good-practices-manual-pbEA0216951/>

¹³⁰ Banks, J., Blundell, R., Bozio, A. and Emmerson, C. (2008) *Releasing Jobs for the Young? Early Retirement and Youth Unemployment in the United Kingdom*, IFS Working Paper W10/02. Available at: <http://www.ifs.org.uk/publications/4785>.

¹³¹ European Central Bank (2015) *Comparisons and Contrasts of the impact of the crisis on euro area labour markets*, Occasional Paper Series No 159. Available at: <http://www.ecb.europa.eu/pub/pdf/scpops/ecbop159.en.pdf>

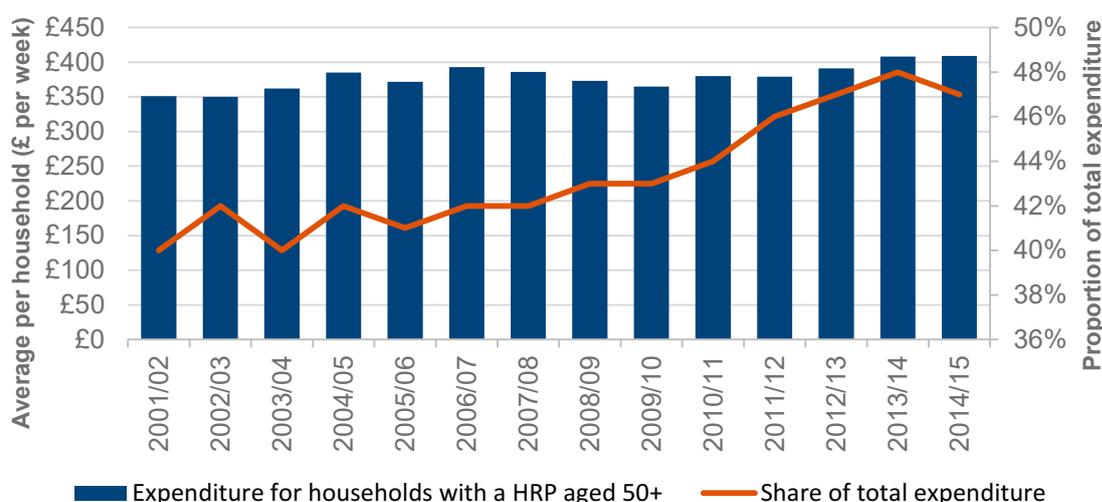
¹³² Boheim, R. (2014) 'The Effect of Early Retirement Schemes on Youth Employment', *IZA: World of Labor*, June 2014. Available at: <http://wol.iza.org/articles/effect-of-early-retirement-schemes-on-youth-employment.pdf>

Past policy attempts to reduce youth unemployment in Germany, Denmark and France, by encouraging the take up of early retirement have proved unsuccessful. It remains the case that the employment of younger workers tends to rise and fall together with the employment of older workers.^{133,134}

8.1 Impact on GDP

As the population ages, individuals aged 50 and over are becoming relatively more important in economic terms. The gross income of households with an individual aged 50 years and over amounted to 47 per cent of total UK household income in 2014/15. Analysis by the ONS shows that the 50 plus share of UK household income has grown since the financial crisis, rising from 42 per cent in 2007/08 (chart 8.2).¹³⁵

Chart 8.2: Median gross household expenditure (per week), 2001/02 to 2014/15



Source: ONS analysis, 2014/15 price year

DWP commissioned research by the National Institute for Economic and Social Research (NIESR) shows that longer working lives could result in increased GDP, tax revenue (direct, indirect and corporation tax), and household consumption, as well as a decrease in Government expenditure and debt interest payments over time.¹³⁶

This research showed that adding one year to everyone’s working life could increase GDP by one per cent per year (equivalent to £18bn in 2015) after a period of transition.¹³⁷

¹³³ Boheim, R. (2014) ‘The Effect of Early Retirement Schemes on Youth Employment’, *IZA: World of Labor*, June 2014. Available at: <http://wol.iza.org/articles/effect-of-early-retirement-schemes-on-youth-employment.pdf>

¹³⁴ Chybalski, F. and Marcinkiewicz, E. (2014) *Does the professional activity of older workers contribute to youth unemployment? A cross-section study of European countries*, Discussion Paper PI -1503, Business and Economic Horizons. Available at:

http://academicpublishingplatforms.com/downloads/pdfs/beh/volume16/201505211455_20_BEH_Vol10_Issue4_2014_Chybalski_and_Marcinkiewicz_Professional_activity_older_workers_youth_unemployment_238-252.pdf

¹³⁵ ONS (2016) *Effects of Taxes & Benefits / Living Costs & Food Survey*. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/theeffectsof taxesandbenefitsonhouseholdincome/financialyearending2015>

¹³⁶ Barrell, R., Kirby, S. and Orazgani, A. (2013) *The macroeconomic impact from extending working lives*, DWP Working Paper No 95. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/214392/WP95.pdf

¹³⁷ ONS 2015 GDP data. Period of transition is six years.

Adding one year to working lives could also achieve immediate increases in annual tax revenue which would grow as changes flow through the economy. Within 10 years, the analysis suggests that the tax boost could achieve an extra 1.4 per cent in indirect taxes, 0.6 per cent in direct taxes and 1.0 per cent in corporation tax per year, which could generate an additional £5bn to £10bn per annum.

Analysis by PwC (2016) comparing employment rates across 34 OECD countries illustrates that the UK could add around 5.8 per cent to its GDP (around £105bn) if the employment rate of workers age 55 and over could match the highest performing EU country i.e. Sweden. This would translate to a 15pp increase in the UK's full time equivalent employment rate for workers aged 55-64 and a four pp increase for people aged 65 years and over.¹³⁸

8.2 Welfare Costs

In 2016, DWP expenditure on out-of-work benefits for individuals aged 50 – 64 years old was £7.6 billion (Table 8.1).

Research has shown that over the last twenty years there has been a decline in the number of older men who are in receipt of an out of work disability benefit or report they are economically inactive due to sickness or disability.¹³⁹ This research showed that the rate of disability benefit claims among men aged 55-59 has fallen from 20 per cent in 1996 to 10 per cent in 2014. This could be attributed to a combination of factors: a real underlying improvement in health; changes in the nature of work; improvements in employment retention following the onset of health conditions; fewer job losses associated with industrial decline than in the 1970s and 1980s, and reforms implemented by successive governments to limit the numbers claiming incapacity benefits.

Engagement in the labour force amongst older women has also been driven by reductions in health-related economic inactivity, with the proportion that are out of work due to ill health down from 14 per cent in 2000, to just over 10 per cent in 2013. Yet, there are also fewer women who say they are looking after the home or family, down from 10 per cent to just over seven per cent over the same period.

Despite the decline in health related benefits, **45 per cent of the ESA caseload are aged 50 to 64 years** (over 450,000 people). The majority of ESA claimants in this age group have been on ESA for between two to five years (62 per cent).¹⁴⁰

¹³⁸ PwC (2016) *Golden Age Index 2016*. Available at: <http://www.pwc.co.uk/economic-services/assets/pwc-golden-age-index-final.pdf>

¹³⁹ Banks, J., Blundell, R. and Emmerson, C. (2015) *Disability Benefit Receipt and Reform: Reconciling Trends in the United Kingdom*. IFS Working Paper W15/09. Available at: <http://www.ifs.org.uk/uploads/publications/wps/WP201509.pdf>

¹⁴⁰ Employment and Support Allowance data from NOMIS, May 2016. See the "Additional Figures" sheet of the supporting Statistical Reference Tables for details of the calculation.

Table 8.1: Benefit expenditure and caseload table, 50 – 64 year olds, May 2016 (GB)

	Claimants	Proportion of Working Age Claimants	Expenditure (£ million)	Proportion of Working Age Expenditure
Employment Support Allowance (ESA)	1,036,403	44%	6,267	44%
Jobseekers Allowance (JSA)	190,246	26%	597	26%
Income Support (IS)	119,248	17%	421	17%
<i>Of which:</i>				
– Carers	67,499	40%	240	39%
– Incapacity	37,171	51%	123	53%
– Lone Parent	10,463	2%	37	2%
– Other	4,116	12%	20	15%
Disability Living Allowance (DLA)	763,337	49%	3,354	51%
Carer's Allowance (CA)	274,994	37%	932	37%
Incapacity Benefit (IB) and Severe Disablement Allowance (SDA)	102,438	58%	289	54%

Source: DWP tabulation tool (May16) and benefit expenditure and caseload tables 2016^{141,142}

¹⁴¹ Notes: claimant volumes include only those claiming benefits; expenditure is in cash terms; Totals may not sum due to rounding; Claimants can be in receipt of more than one of the above benefits.

¹⁴² After reaching the age of 63 (as at April 2016), people can claim income related Pension Credit and can continue to claim Housing Benefit for assistance with housing costs. For pensioners who have a physical or mental illness or disability, additional help may be available through Attendance Allowance.

9. Concluding Remarks and Areas for Future Research

Recent research indicates that attitudes to working later in life are beginning to change.¹⁴³ Younger people expect to continue working later in life. There has been a significant increase in the number of individuals aged 50 years and over in employment over the past two decades. An ageing workforce provides challenges and opportunities for the economy, including maintaining and growing the labour supply and ensuring the continuation of a sustainable State Pension.

Employers play a key role in supporting individuals to stay in and return to work. Evidence suggests that job quality and good line management can lead to higher job satisfaction. Employers see the benefits that older workers can bring, such as reliability and experience, yet, there remains more to do. Employers say that they value a mixed age workforce and value the skills that older workers can bring. While most recognise that the population in general is ageing, an ageing workforce is not yet a prominent concern. More employers could take active steps to promote policies and practices to recruit, retain and retrain older workers.

We are continually developing our understanding and evidence base on FWL, through internal DWP analysis and research and by collaborating with expert academics and researchers.

Achieving a better understanding of changes in the attitudes, behaviours, expectations and experiences of individuals and employers is integral to the achievement of the FWL ambition. Developing the evidence base to understand what people want, experience and require in later life remains central to our future programme of FWL research and analysis.

We will provide regular updates of new FWL research and policies. This will include the publication of our annual Official Statistics: *Economic labour market status of individuals aged 50 and over since 1984*, which will be used to monitor changes in line with the FWL ambition.¹⁴⁴

¹⁴³ DWP (2016a) *Attitudes to Working in Later Life: analysis of British Social Attitudes 2015*. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/574655/attitudes-to-working-in-later-life-british-social-attitudes-2015.pdf

¹⁴⁴ DWP (2016b) *Economic labour market status of individuals aged 50 and over since 1984 (experimental)*, Official Statistics. Available at: <https://www.gov.uk/government/statistics/economic-labour-market-status-of-individuals-aged-50-and-over-since-1984-experimental>

Appendix 1 – Definitions

Adult population: refers to the population aged 16 and over, unless otherwise specified.

Aggregate Demand is an economic measurement of the sum of all final goods and services produced in an economy at a given time. This is calculated by adding the expenditure consumers on goods and services, investment, government expenditure and net exports.

Average age of exit from the labour market: the age at which people are most likely, on average, to leave the labour force.¹⁴⁵

Average effective age of retirement (OECD): is defined as the average age of exit from the labour force during a 5-year period. Labour force (net) exits are estimated by taking the difference in the participation rate for each 5-year age group (40 and over) at the beginning of the period and the rate for the corresponding age group aged 5-years older at the end of the period.

Cohort life expectancy: are calculated using age-specific mortality rates which allow for known or projected changes in mortality in later years and are therefore regarded as a more appropriate measure of how long a person of a given age would be expected to live, on average, than period life expectancy.

Defined benefit pension schemes: (sometimes known as ‘final salary’ or ‘career average’) pensions are nearly always workplace pensions arranged by an individual’s employer. How much an individual gets depends on their salary, how long they’ve worked for their employer and a calculation made under the rules of their pension scheme. Their provider guarantees a certain amount each year when they retire.¹⁴⁶

Defined contribution pension schemes: (sometimes known as ‘money purchase’) pensions can be personal pensions arranged by an individual or workplace pensions arranged by an individual’s employer. The money paid in is put into investments by an individual’s pension provider. The amount they get when they come to take their pot depends on how much was paid in and how well the investments have done. The value of their pot can go up or down depending on their investments. With defined contribution pensions an individual decides how to take their money out. Types of defined contribution pension include: Executive pension plan; Group personal pension; Master trust pension (e.g. NEST, NOW pension, the People’s Pension); SIPP (Self Invested Personal Pension); SSAS (Small Self-Administered Schemes); Stakeholder pension.¹⁴⁷

Disability (Equality Act definition): data covering people with a disability refers to people self-reporting a current disability consistent with the Equality Act definition.

¹⁴⁵ The measure used in this publication is the Static Exit Age Indicator. For further methodological details see “Average age of withdrawal from the labour market - a methodology update”. Available at: <http://www.ons.gov.uk/ons/rel/pensions/average-age-of-withdrawal-from-the-labour-market/2010/average-age-of-withdrawal-from-the-labour-market.pdf>

¹⁴⁶ Pensionwise (2016) *Pension Types*. Available at: <https://www.pensionwise.gov.uk/pension-types>

¹⁴⁷ Pensionwise (2016) *Pension Types*. Available at: <https://www.pensionwise.gov.uk/pension-types>

More information about disability under the Equality Act is available at: <https://www.gov.uk/government/publications/disability-equality-act-2010-guidance-on-matters-to-be-taken-into-account-in-determining-questions-relating-to-the-definition-of-disability>

Economic inactivity level: the number of individuals who are not working, have not been looking for work within the last 4 weeks or who are unable to start work within the next 2 weeks. Examples of economically inactive individuals include: individuals not looking for work because they are students; looking after the family or home; because of illness or disability or because they have retired.

Economic inactivity rate: the economic inactivity level for those in the age group divided by the population for that age group.

Employment level: the number of individuals in work. This includes those working part time and those who are self-employed.

Employment rate: the employment level for those in the age group divided by the population for that age group.

Gross Domestic Product (GDP): the monetary value of all final goods and services produced within a country's border in a specific period of time. It is usually calculated on an annual basis, but it can be calculated on a quarterly basis too. GDP is broadly a measurement of a country's overall economic activity.

Healthy Life Expectancy (HLE): a population health indicator which combines information on mortality and morbidity. It aims to measure longevity in the context of health related well-being. Further information regarding how healthy life expectancies are calculated can be found at: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/qmis/healthexpectanciesqmi>

Household reference person (HRP): from 2001/02 the concept of household reference person was adopted on all governments sponsored surveys in place of head of household. The household reference person is the householder who: Owns the household accommodation, or; is legally responsible for the rent of the accommodation, or has the household accommodation as an emolument or perquisite, or; has the household accommodation by virtue of some relationship to the owner who is not a member of the household. If there are joint householders the household reference person will be the one with the higher income. If the income is the same, then the eldest householder is taken. The expenditure measure in this analysis includes current expenditure on goods and services and excludes recorded payments that relate to savings and investments, income tax payments, National Insurance Contributions, mortgage capital repayments and other payments for major additions to dwellings. In addition, council tax payments are also excluded to allow for consistency with the definition of disposable income used in income-based analyses.

Industrial Sectors (SIC code): the industrial sector of those in employment is classified according to the UK Standard Industrial Classification 2007 (UK SIC 2007). More information about the SIC 2007 is available in the ONS guidelines on current standard industrial classifications at: <http://www.ons.gov.uk/ons/guide->

method/classifications/current-standardclassifications/standard-industrial-classification/index.html

Long Term Health Condition (LTC): in the Labour Force Survey, a long term health condition is defined as a health condition which is expected to last for more than one year.

Lump of labour fallacy: the assumption that the quantity of labour required in an overall economy is fixed. This assumption is often regarded as fallacious, as the consensus view amongst economists is that the quantity of labour demanded varies with respect to many factors. It is argued that the employment of labour expands the overall size of the economy, leading to further job creation. Reducing the amount of labour employed would decrease overall economic activity and thus further decrease the demand for labour.

Normal age (OECD): corresponds to the age at which a pension can be received irrespective of whether a worker has a long insurance record of years of contributions.

Organisation for Economic Co-operation and Development (OECD): has 35 member countries and a mission to promote policies that will improve the economic and social wellbeing of people around the world. It provides a forum in which governments can work together to share experiences and seek solutions to common problems. For more information see <http://www.oecd.org/about/>

Period life expectancy: at a given age for an area is the average number of years a person would live, if he or she experienced the particular area's age-specific mortality rates for that time period throughout his or her life. It makes no allowance for any later actual or projected changes in mortality. In practice, death rates of the area are likely to change in the future, so period life expectancy does not therefore give the number of years someone could actually expect to live. Also, people may live in other areas for at least some part of their lives.

Sandwich generation/carer: is generally understood to refer to those people who are concurrently looking after both their parents or grandparents and their children or grandchildren.¹⁴⁸

Senior Entrepreneurship: is defined in literature as people aged 50 years and over starting up a new business.¹⁴⁹

State Pension age (SPa): the age at which an individual becomes entitled to claim their State Pension. Recent legislative changes have been introduced. The Default Retirement Age was removed in 2011. Up to November 2018, the SPa for women will continue to increase gradually to 65 years old. Between December 2018 and October 2020 the SPa for men and women is currently legislated to increase to 66 years and then to 67 between 2026 and 2028. More information on the State Pension age timetable is available at:

<https://www.gov.uk/government/publications/state-pension-age-timetable>

¹⁴⁸ The Money Advice Service (2013) *The Sandwich Generation. An exploration of the affective and financial impacts of dual caring*. Available at: <https://mascdn.azureedge.net/cms/sandwich-generation-report-final-100613.pdf>

¹⁴⁹ OECD (2013) Senior Entrepreneurship. Available at: http://www.oecd.org/cfe/leed/senior_bp_final.pdf

The old age dependency ratio: measures the number of people of SPa and over for every 1,000 people of working age (16 to SPa). The dependency ratio provides an idea of the relationship between working and pensioner populations.¹⁵⁰

Unemployment level: the number of individuals who are not working, have been looking for work within the last four weeks and are able to start work within the next two weeks. A common misconception is that the unemployment statistics are a count of individuals on benefits; this is not the case as they include unemployed individuals not claiming benefits.

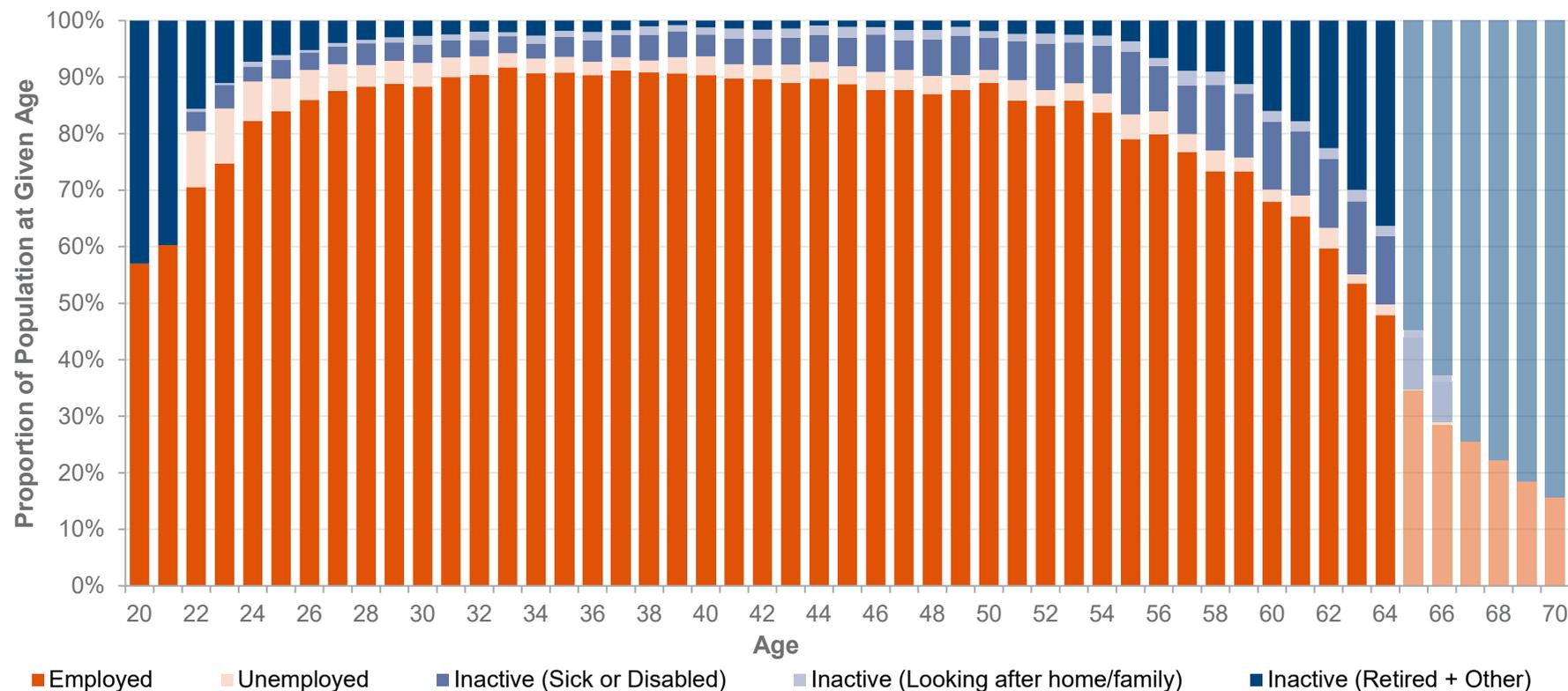
Unemployment rate: the unemployment level for those in the age group divided by the total number of economically active individuals for that age group. Economically active is defined as those in employment plus those who are unemployed.

Working age population: refers to people aged 16 to State Pension age.

¹⁵⁰ ONS (2015c) *The changing UK Population*. Available at: <http://visual.ons.gov.uk/uk-perspectives-the-changing-population/>

Appendix 2 – Economic activity by single year of age 20 – 70 years old

Chart A2.1: Economic activity by single year of age 20 – 70 years old, Males, July 2015 - June 2016

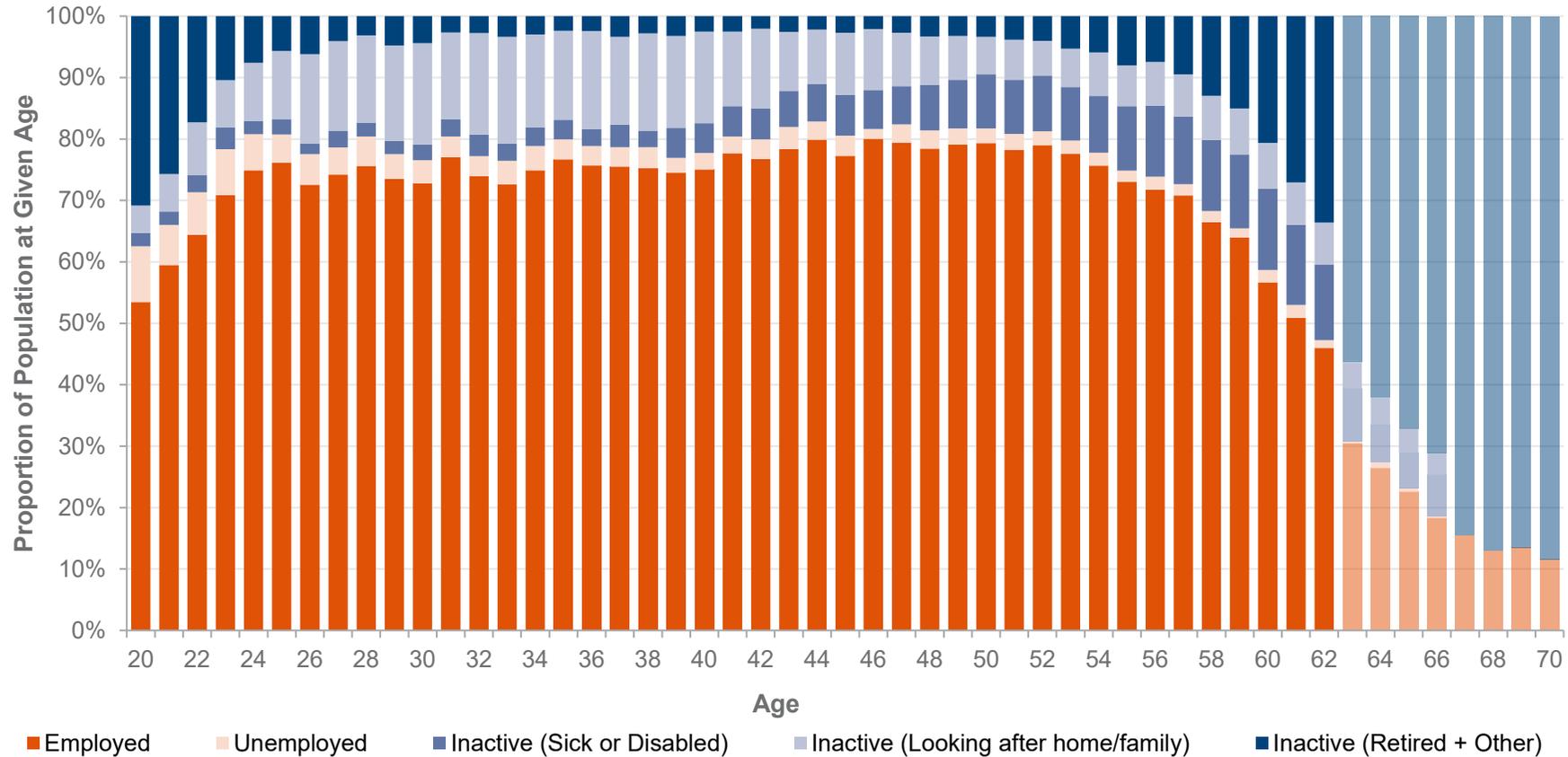


Source: APS July 2015 - June 2016.

Notes:

1. The lighter bars indicate ages at and above the 2016 State Pension age.
2. Due to small sample sizes at ages 20-21 and 67 and over, responses for Unemployed, Inactive (Sick or Disabled), Inactive (Looking after home/family) and Inactive (Retired/Other) have all been grouped into the Inactive (Retired/Other) category.

Chart A2.2: Economic activity by single year of age 20 – 70 years old, Females, July 2015 - June 2016



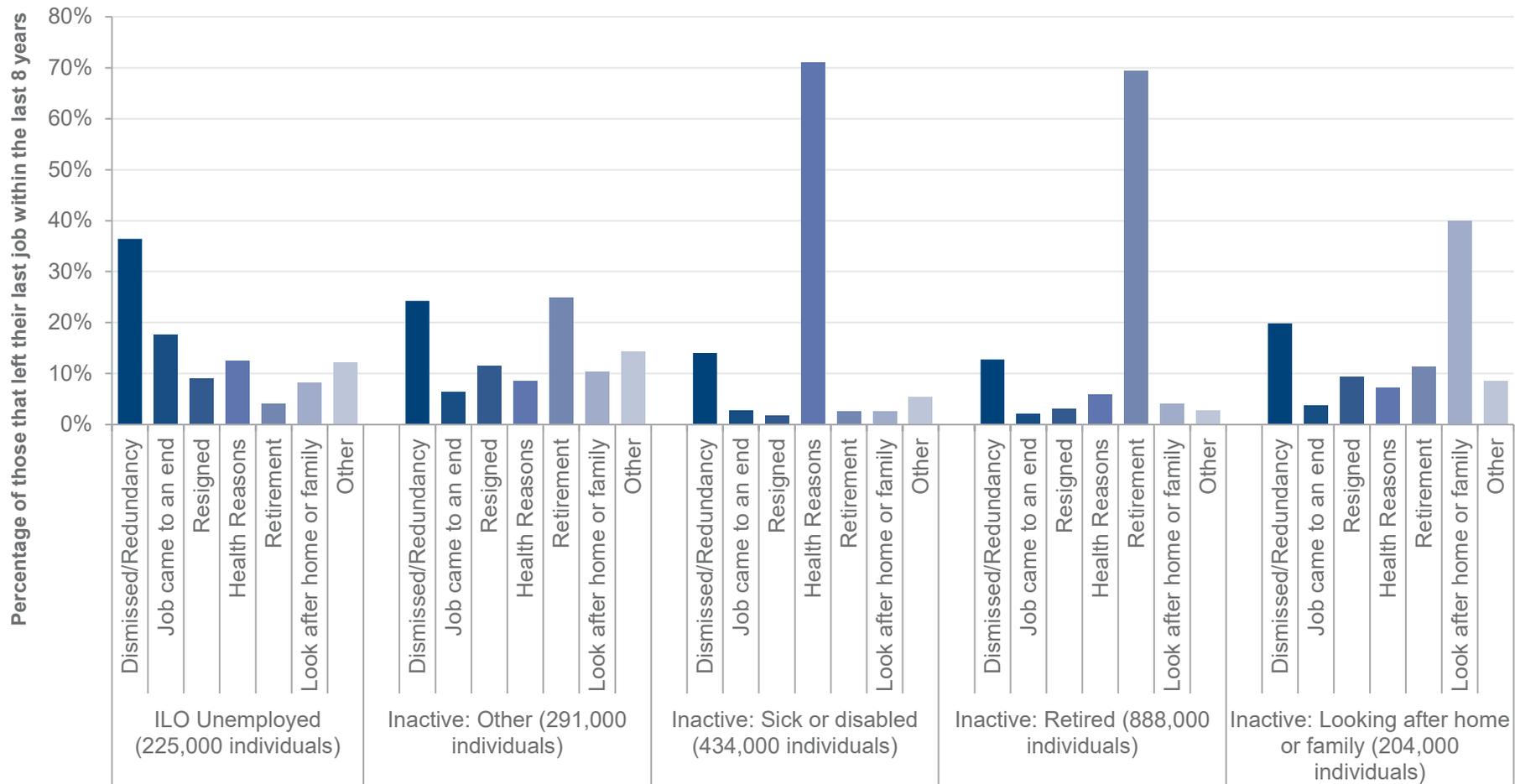
Source: APS July 2015 - June 2016.

Notes:

1. The lighter bars indicate ages at and above the 2016 State Pension age.
2. Due to small sample sizes at ages 67 and over, responses for Unemployed, Inactive (Sick or Disabled), Inactive (Looking after home/family) and Inactive (Retired/Other) have all been grouped into the Inactive (Retired/Other) category.

Appendix 3 – Reason for leaving last job, by current economic labour market status

Chart A3.1: Reason for leaving last job, by current economic labour market status, individuals age 50-64 years



Source: APS July 2015 - June 2016.

Appendix 4 – Reasons for leaving the labour market by last industry worked

Table A4.1: Proportion of inactive men aged 50-64 who had left work in last 8 years by the last industry worked (SIC code)

Industry	All	Dismissed/ Redundancy	Job Came to an End	Resigned	Health Reasons	Retirement	Family Reasons	Other
Public administration and defence (O)	82,370	15%	3%	-	11%	63%	-	4%
Education (P)	60,480	10%	7%	-	14%	60%	-	4%
Finance and insurance (K)	28,780	26%	-	-	10%	53%	-	-
Professional, scientific and technical activities (M)	38,370	15%	-	-	15%	49%	5%	8%
Energy and Water (D & E)	18,080	22%	-	-	20%	47%	-	-
Human health and social work activities (Q)	53,940	12%	4%	5%	21%	46%	7%	5%
Mining and quarrying and agriculture, forestry and fishing (A & B)	10,250	31%	5%	-	11%	42%	7%	-
Information and communication (J)	30,680	29%	-	-	14%	40%	7%	-
Manufacturing (C)	120,180	29%	2%	3%	24%	35%	6%	1%
Other (L, S, T & U)	24,360	19%	-	-	27%	34%	-	-
Arts, entertainment and recreation (R)	13,910	16%	-	-	22%	32%	-	-
Transportation and storage (H)	70,020	17%	-	-	39%	29%	8%	4%
Construction (F)	81,620	13%	4%	-	46%	26%	5%	5%
Wholesale and retail trade of vehicles (G)	68,040	21%	3%	4%	32%	23%	7%	10%
Administrative and support service activities (N)	34,030	16%	-	-	37%	22%	9%	7%
Accommodation and food service activities (I)	28,920	10%	-	-	38%	22%	12%	11%
All	764,000	19%	4%	3%	25%	39%	6%	5%

Source: APS July 2015 - June 2016.

Table A4.2: Proportion of inactive women aged 50-64 who had left work in last 8 years by the last industry worked

Industry	All	Dismissed/ Redundancy	Job Came to an End	Resigned	Health Reasons	Retirement	Family Reasons	Other
Energy and Water (D & E)	2,600	-	-	-	-	-	-	-
Education (P)	215,750	7%	3%	6%	14%	55%	10%	4%
Public administration and defence (O)	96,840	21%	3%	5%	13%	50%	6%	3%
Human health and social work activities (Q)	257,100	8%	2%	6%	24%	42%	13%	5%
Professional, scientific and technical activities (M)	33,090	21%	-	7%	12%	40%	5%	11%
Construction (F)	18,550	18%	-	-	-	39%	10%	12%
Finance and insurance (K)	37,960	29%	-	7%	16%	39%	-	-
Manufacturing (C)	53,880	35%	-	4%	17%	32%	7%	-
Other (L, S, T & U)	40,110	13%	5%	7%	22%	32%	13%	8%
Wholesale and retail trade of vehicles (G)	128,270	15%	2%	7%	22%	31%	15%	7%
Information and communication (J)	13,650	19%	-	-	-	30%	-	-
Transportation and storage (H)	19,830	17%	-	-	26%	29%	12%	-
Arts, entertainment and recreation (R)	19,460	24%	-	10%	20%	28%	-	-
Mining and quarrying and agriculture, forestry and fishing (A & B)	5,450	-	-	-	-	26%	24%	-
Administrative and support service activities (N)	44,500	14%	-	7%	27%	25%	17%	7%
Accommodation and food service activities (I)	54,140	11%	4%	10%	31%	23%	9%	12%
All	1,041,170	14%	3%	6%	19%	41%	11%	6%

Source: APS July 2015 - June 2016.

Appendix 5 – Data Sources

This appendix presents further information on sampling and the data sources used in this document. The main analysis is derived from survey data: the Labour Force Survey (LFS), Annual Population Survey (APS), Family Resources Survey (FRS), and the English Longitudinal Study of Ageing (ELSA).

A. Sampling variability and reliability of survey estimates

Sampling variability is a measure of how much survey estimates vary due to the sampling scheme. In this publication, we produce statistics which describe the characteristics of the whole population, from a small sample of the population. The smaller the sample used for a particular breakdown, the less precise that estimate. Therefore, some of the estimated results in the reference data have been suppressed where the sample is small (where un-weighted population is less than 10), and we do not quote absolute numbers or percentages where the population on which they are based is less than 200. Sample bases for survey-based estimates are included in the data tables that we have published alongside this document.

We do not comment on differences between estimates unless we can be confident that they are statistically significant (i.e. not just due to random variation in the sample). None of the estimates presented here are seasonally adjusted unless specifically stated.

In addition to sampling variability, survey data is usually self-reported – meaning answers may be subject to respondents' bias and ability to recall information correctly.

B. The Labour Force Survey and the Annual Population Survey

The Labour Force Survey (LFS) is a representative sample survey of around 40,000 private households in Great Britain & Northern Ireland conducted on a quarterly basis. As it is a household survey, people in communal establishments (e.g. hostels or medical and care institutions) are not included in results. More detailed information is available in the ONS Labour Force Survey guidance at:

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/qmis/labourforcesurvey/lfsqmi>

Charts 4.2 and 4.3 are consistent with the DWP Official Statistics 'Economic labour market status of individuals aged 50 and over since 1984 (experimental)' found at:

<https://www.gov.uk/government/statistics/economic-labour-market-status-of-individuals-aged-50-and-over-since-1984-experimental>

Further information regarding the reasons for using Q2 data for the Official Statistics can be found in the supporting 'Background information and methodology' document released alongside the Official Statistics.

The Official Statistics provide a more detailed breakdown to the published Office for National Statistics (ONS) monthly labour market statistics for data regarding individuals aged 50 years old and over. Therefore, the statistics will not be the same as the monthly labour market publications. They are however, consistent with the not

seasonally adjusted estimates for wider age groups given in Table A05 NSA of the same bulletins. Q2 refers to the period April – June for the given year.

The latest UK Labour Market Statistical bulletin can be found here:

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/previousReleases>

The Annual Population Survey (APS) is derived from LFS data to provide robust estimates which cover a full calendar year. The sample size is larger than the LFS, meaning that estimates can be more precise. More information on the APS is available in the ONS guidance at:

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/qmis/annualpopulationsurveyapsqmi>

When producing estimates across the whole UK population we use weighting factors provided by the LFS (see LFS guidance for more details).

C. The Family Resources Survey

The Family Resources Survey is a major survey, sponsored by the Department for Work and Pensions (DWP). It provides information about the living conditions of people in the UK and the resources available to them. The FRS has been running since 1992. Until 2002/03 the survey covered Great Britain, and was then extended to cover all of the UK.

The FRS does not collect information on people living in institutions for example, nursing homes, jails, and homeless people living rough, and therefore these individuals are not represented in estimates.

Information on design and response rates of the FRS can be found in the methodology chapter of the 'Background Note and Methodology' document at

<https://www.gov.uk/government/statistics/family-resources-survey-financial-year-201415>

More information on the Family Resources survey is available at:

<https://www.gov.uk/government/collections/family-resources-survey--2>

D. The English Longitudinal Study of Ageing

The English Longitudinal Study of Ageing (ELSA) is a biennial longitudinal study¹⁵¹ of the health, social and economic circumstances of individuals aged 50 years and over in England. ELSA holds information on interactions and transitions over the life courses of respondents as they age and move from work into retirement. ELSA collects both objective and subjective data relating to health and disability, biological markers of disease, economic circumstance, social participation, networks and wellbeing.

ELSA began in 2000 with an initial sample of approximately 12,000 people aged 50 years. The current sample (Wave 7) contains data from up to six waves of data

¹⁵¹ Longitudinal studies observe the same participants at different points in time.

collection covering a period of eleven years. Members are drawn from respondents to the Health Survey for England (HSE). At waves 3, 4, 6 and 7 the study was replenished with new study participants (refreshments) from HSE to maintain the size and representativeness of the panel. Wave 8 fieldwork, which will include a nurse visit, commenced in May 2016.

More information on ELSA including sample design, uses of the data, and other research outputs is available at: <http://www.elsa-project.ac.uk>

E. Methodology for benefit statistics

For each individual benefit, a time series of working-age benefit claimants and average expenditure per benefit by age is taken from DWP's tabulation tool.¹⁵² These are multiplied to give the estimated expenditure for each age group for each quarter. The quarters are averaged to get total caseloads and expenditure per year per benefit and estimates for those aged 50 to 64 years are taken as a proportion of the total.

To ensure consistency with published figures for claimants and expenditure in each year, these proportions are then combined with working-age totals as published in the benefit expenditure and caseload tables for Autumn Statement 2016, available at:

<https://www.gov.uk/government/publications/benefit-expenditure-and-caseload-tables-2016>

Total expenditure is the sum of spending on each benefit.

¹⁵² <http://tabulation-tool.dwp.gov.uk/100pc/tabtool.html>

Appendix 6 – I-Pen model detail

The case study analysis used in Section 6.1 is derived from the Department of Work and Pensions' I-Pen model. This is an Excel-based model that estimates state and private pension income in retirement for hypothetical individuals, based on illustrative life course work histories.

For a given hypothetical individual at a point in time, whose characteristics the user can define in the model, I-Pen replicates the mechanics of the pension system to illustrate their potential pension outcomes. This enables analysis to estimate the effects of different work patterns throughout an individual's life course on their retirement income. For example, it enables us to consider the financial outcomes for individuals who take 'early retirement' compared with if they work to and/or beyond State Pension age, or compare the financial outcomes of a full time worker with someone who works part time in later life.

Case studies

The analysis below presents two case studies – a male and a female – to illustrate the potential financial impacts of working in later life. Further detail on the analysis can be found in Appendix 6.

It is important to note that this analysis provides illustrative scenarios of the potential financial impacts of working longer and therefore should not be used to determine exact changes for specific individuals.

All scenarios are compared to a baseline situation of someone considering early retirement and leaving the labour market at age 55 years old.

It is assumed in each case study that the individual is a median earner across their life course.

1) A single man, born in 1951, reaching State Pension age in 2016. He works full time from the age of 16 years old until:

Scenario A (compared to baseline): he reaches State Pension age (65 years old).

Scenario A.1 he reaches age 66 years old (works one year full time beyond State Pension age).

Scenario B (compared to baseline): he reaches age 60 years old (five years before SPa) and then works part time up to State Pension age.

2) A single woman, born in 1953, reaching State Pension age in 2016. She works full time from the age of 16 years old. She takes a 10 year career break between the age of 25 and 35 years before returning to full time employment until:

Scenario A (compared to baseline): she reaches State Pension age (63 years old).

Scenario A.1): she reaches age 64 years old (works one year full time beyond SPa).

Scenario B (compared to baseline): she reaches age 58 years old (five years before SPa) and then works part time up to State Pension age.

Work history assumptions

To develop realistic case studies, baselines and scenarios, evidence from the English Longitudinal Study of Ageing (ELSA) has been used.¹⁵³

Table A6.1 Labour Market Histories for ELSA sample

Labour Market Histories	Description	%
Men (N=1,600)		
Full time throughout	Mostly full time ages 16 to 64	49
Non-employed throughout	Mostly non-employed ages 16 to 64	4
Full time, very early exit	Mostly full time from about 16 to 49, then mostly out of the labour market from around 50 to 64	9
Full time, early exit	Mostly full time from about 16 to 60, then mostly out of the labour market from around 61 to 64	30
Later start, early exit	Mostly out of the labour market to about 23, mostly full time from about 24 to 60, then mostly out of the labour market from around 61 to 64	8
Women (N=2,718)		
Mostly full time throughout	Mostly full time ages 16 to 59	26
Mostly not in paid work -employed throughout	Mostly non-employed ages 16 to 59	22
Weak attachment, early exit	Mostly full time until about 22, mainly out of the labour market 23 to 33, mostly part time from around 34 to 47, then mainly out of the labour market 48 to 59	6
Family carer to part time (longer break)	Mostly full time to about 25, mainly out of the labour market 26 to 41, then mainly part time from around 42 to 59	13
Family carer to part time (shorter break)	Mostly full time to about 25, mainly out of the labour market 26 to 29, then mainly part time from around 30 to 59	12
Family carer to full time (medium break)	Mostly full time to about 25, mainly out of the labour market 26 to 34, then	17

¹⁵³ Corna, L., Di Gessa, G., Platts, L., Sacker, A., Worts, D., Price, D., McDonough, P. and Glaser, K. (2017) *A sequence analysis approach to modelling work histories from 16 to State Pension age using the English Longitudinal Study on Ageing*, WHERL Working Paper, No. 2.

	mainly full time from around 35 to 59	
Part time throughout	Mostly full time to about 22 then mainly part time from around 23 to 59	6

Wage level assumptions

For all scenarios, the individuals were assumed to be median earners. Age and gender specific median earnings from the Annual Survey of Hours and Earnings (ASHE) were used to determine the annual earnings of each individual, with a base year 2016.¹⁵⁴ When working part time, the individual was assumed to earn 50 per cent of the full time median salary.

Table A6.2: Age and gender specific median gross earnings based on ASHE 216 data

Age	Men	Women
16 to 17	£9,542	£7,940
18 to 21	£16,900	£15,829
22 to 29	£23,930	£22,464
30 to 39	£31,112	£28,449
40 to 49	£34,752	£27,487
50 to 59	£33,732	£25,797
60 and over	£29,011	£22,381

Source: ASHE 2016

Pension contribution assumptions

When in work, individuals are assumed to have paid into a defined contribution pension scheme with a combined contribution (individual plus employer plus tax relief) rate of 8 per cent for total earnings. The fund was assumed to be invested in equities and bonds at a ratio of 60:40 for the majority of working life and was subject to a 1 per cent annual management charge. The growth rate from equities was assumed to be 4.75 per cent above RPI and bonds 1.55 per cent above RPI. Lifestyling was applied in the later years (starting 10 years before stopping work), decreasing the proportion in equities (and therefore reducing risk) as retirement approaches. When they retire they are assumed to take a 25 per cent tax-free lump sum (and spend it immediately) and buy a level annuity with the remainder at the age they stop working.¹⁵⁵

It is also assumed that members do not choose to access any pension though pension flexibilities earlier than state pension age.

All individuals modelled were contracted in to the Additional Pension throughout their careers (SERPS from 1978 until 2001/02, followed by State Second Pension). In

¹⁵⁴ONS (2016b) *Annual Survey of Hours and Earnings: 2016 provisional results*. Available at: <http://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/bulletins/annualsurveyofhoursandearnings/2016provisionalresults>

¹⁵⁵ Recent changes (such as automatic enrolment) mean that a 'typical' DC retiree in the future is likely to be different to that shown here. However, they would still be expected to take a tax-free lump sum and using an annuity example such as this is useful for illustrating the impact decisions around working in later life influence retirement income.

retirement they then receive a full new State Pension plus any protected payment due.

The key outputs of the I-Pen model for each scenario are:

- a) the size of pension pot accrued
- b) the percentage increase in the size of the pension pot accrued by continuing working beyond age 55 years on either a full, or part time basis up to or beyond State Pension age
- c) the increased private pension income each individual could expect to receive each year for the remainder of their lives (through the purchase of an annuity with their pension fund) as a result of continuing working beyond age 55 years on either a full, or part time basis up to or beyond State Pension age
- d) the additional gross income the individuals will gain through working either full or part time beyond the age of 55 years to State Pension age and beyond.

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