

Crawford, Rowena; Cribb, Jonathan; Karjalainen, Heidi; O'Brien, Laurence

Research Report

Changing patterns of work at older ages

IFS Report, No. R192

Provided in Cooperation with:

Institute for Fiscal Studies (IFS), London

Suggested Citation: Crawford, Rowena; Cribb, Jonathan; Karjalainen, Heidi; O'Brien, Laurence (2021) : Changing patterns of work at older ages, IFS Report, No. R192, ISBN 978-1-80103-045-8, Institute for Fiscal Studies (IFS), London, <https://doi.org/10.1920/re.ifs.2021.0192>

This Version is available at:

<https://hdl.handle.net/10419/264453>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Institute for Fiscal Studies

IFS Report R192

Rowena Crawford
Jonathan Cribb
Heidi Karjalainen
Laurence O'Brien

Changing patterns of work at older ages



Economic
and Social
Research Council



Changing patterns of work at older ages

Rowena Crawford

Jonathan Cribb

Heidi Karjalainen

Laurence O'Brien

Copy-edited by Judith Payne

Published by **The Institute for Fiscal Studies**

7 Ridgmount Street

London WC1E 7AE

+44 (0)20 7291 4800

mailbox@ifs.org.uk

<http://www.ifs.org.uk/>

[@TheIFS](#)

© The Institute for Fiscal Studies, June 2021

ISBN 978-1-80103-045-8

Preface

The authors are grateful for funding from the Centre for Ageing Better that enabled them to write this report. The Centre for Ageing Better is a charitable foundation, funded by the National Lottery Community Fund. Its vision is a society where everyone enjoys later life. Co-funding from the Centre for the Microeconomic Analysis of Public Policy (ES/T014334/1) at the Institute for Fiscal Studies is gratefully acknowledged.

Data from the English Longitudinal Study of Ageing (ELSA) were supplied by the ESRC Data Archive. ELSA was developed by researchers based at University College London, the Institute for Fiscal Studies and the National Centre for Social Research, with funding provided by the US National Institute on Ageing and a consortium of UK government departments coordinated by the Office for National Statistics (ONS). The Labour Force Survey (LFS) data are Crown Copyright and are reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland. The LFS is produced by the Office for National Statistics and accessed through the ONS's Secure Research Service.

The authors would like to thank Emily Andrews, Carl Emmerson, Paul Johnson and members of the project advisory board for helpful feedback and comments. The authors would also like to thank Melanie Lührmann and Ija Trapeznikova for assistance with linking ELSA with the O*NET data, and Peter Spittal for assistance with ELSA life-history data.

Contents

Executive summary	4
1. Introduction	8
2. Movements into and out of paid work	16
2.1 Movements out of paid work	17
2.2 Movements out of unemployment	23
3. Movements between full-time and part-time work	29
3.1 Older workers and part-time work	31
3.2 Hours satisfaction.....	32
3.3 Movements into part-time work.....	37
3.4 Part-time work in retirement pathways	40
4. Changes in occupation	45
4.1 Occupations and task content at older ages.....	46
4.2 How common are changes in occupation year to year?	50
4.3 Who changes occupation?.....	51
4.4 Occupation changes as part of retirement pathways	55
5. Movements between employment and self-employment	58
5.1 Older workers and self-employment.....	60
5.2 Movements into self-employment.....	61
5.3 Self-employment in retirement pathways	64
6. Conclusion	67
Appendix A. Data and methodology descriptions	72
Appendix B. Additional results	79
References	81

Executive summary

Longer working lives offer many benefits, but achieving these can pose challenges for individuals, employers and policymakers. In order to support people in their 50s and 60s to remain in paid work for longer, it is imperative that we have a good picture of what paid work looks like at older ages, and how that might evolve in future. The desired working patterns of older workers – in terms of their hours of work, the form of their employment or the tasks they undertake at work – may be quite different from those of middle-aged or younger adults.

An ageing population and higher employment rates for people in their 50s and 60s mean that patterns of work of older workers are an increasingly important issue for the country as a whole. Indeed, in 2019, around 10 million or 61% of 50- to 69-year-olds were in paid work, meaning that this age group comprises almost a third (31%) of the workforce in the UK, up from just 21% in 1992.

In this report, we provide fresh evidence on the nature of paid work at older ages, how employment patterns differ for people in different circumstances and how the situation is changing over time. In particular, we examine in depth the transitions that older workers make, both into and out of work and between different types of employment in the run-up to retirement.

Having provided a comprehensive picture of working life for people in their 50s and 60s, we then examine the implications of our findings for some key issues facing older workers in the labour market in the coming years, including which groups might be of particular concern in the wake of the COVID-19 pandemic. These issues are important not only for the individuals themselves, but for policymakers who are seeking to encourage people into longer and more fulfilling working lives, for employers who would benefit from employing them, and for civil society organisations and government agencies interested in assisting older people in finding productive work that allows them to balance their work and personal lives.

Key findings

- 1 There are likely to be significant challenges for many people in their 50s and 60s finding new jobs after the end of the furlough scheme.** Older workers, particularly those aged over 65, have been more likely to be furloughed than middle-aged workers – at the end of April 2021, 14% of workers over 65 were furloughed, compared with 10% of those aged 40–49. There may well be significant numbers of older jobseekers in coming months.
- 2 There are a number of reasons that finding new work may be challenging for people in their 50s and 60s.** Most older workers do not have much recent experience of searching for work: Over two-thirds (69%) of 55-year-old workers have been with their employer for more than five years. Only 4% of older workers typically change employer in a single year. Older workers are also less likely than younger workers to change occupation, which may be necessary if vacancies are not available in their current line of work – and this is something that could become more prevalent as the economy adjusts to new patterns of working and spending after the pandemic.
- 3 Older jobseekers from lower socio-economic groups are more likely to struggle to find new work after a period of unemployment.** Those with lower levels of education, the long-term unemployed and women are particularly less likely to re-enter work at older ages after becoming unemployed.
- 4 Significant numbers of older workers would benefit from lower hours of work and more flexibility.** 16% of 50- to 69-year-olds in employment would like to work fewer hours, up from around 14% prior to the Great Recession. That is an increase of around 230,000 people. People in their 60s, those who own their home outright, those reporting a limiting health condition, and those who have been in their current job for longer are particularly likely to want to work less.

- 5 **For some older workers, part-time work acts as a way of making a gradual transition towards retirement.** Moving into part-time work at older ages is more common amongst people with higher levels of education and living in less deprived areas – which could point to differences in access to part-time work or to differences in financial constraints that affect people’s ability to reduce their hours.
- 6 **Only 9% of older employees become self-employed in the run-up to retirement.** Transitions into self-employment are more likely among men and those with a history of self-employment earlier in life. Given self-employment is a form of flexible work where people have greater autonomy over their hours, policymakers should consider whether older workers could be encouraged to view the option of being self-employed as a way of extending their working life.
- 7 **Half of full-time workers move straight into non-working retirement, without any intermediate steps.** One particularly important factor predicting moving straight from full-time work to retirement is membership of a defined benefit pension – those with such a pension are 13 percentage points (ppts) more likely to go straight from full-time work to retirement than those without. These pensions are particularly common in the public sector. As the reforms to public sector pension arrangements have led to a reduction in the financial disincentives associated with working shorter hours before retirement, public sector employers should consider how best to support employees who want to move gradually into retirement.
- 8 **There is a small but important section of the older workforce who would like to work more hours.** Around 7% of older workers in 2019 wanted to work more hours per week, higher than the 5% seen in 2007 before the financial crisis. That is an increase of around 190,000 individuals. They tend to have less secure work arrangements, such as being on a temporary employment contract. They are more likely to have low earnings and shorter job tenures, be in their 50s rather than their 60s, be men and be working part-time. The self-employed are also more likely to want to work more hours, highlighting that the flexibility of self-employment also entails risks.

- 9 **The position in the labour market of people in their 50s and 60s with long-standing health conditions requires special attention.** Around 49% of people (and 39% of workers) aged 50–69 report a long-standing health problem. Older workers with long-term and work-limiting health problems are 5 ppts less likely to be in paid work in a year's time than are similar workers without such a health problem. Those in work with a health problem are also significantly more likely to retire via a period out of the labour market.
- 10 **Some people in their 50s and 60s with long-standing health problems may have preferred, and been able, to stay in work if they had more flexibility or better support.** Indeed, those with a health problem are around 4 ppts more likely to want shorter hours than those without a health problem.
- 11 **The working lives of men and women who are approaching retirement over the next decade will be very different from those of people who did so over the last decade.** In future, those approaching retirement are increasingly likely to be in more stressful and more cognitively demanding jobs. Currently, older workers in these sorts of jobs are significantly more likely to want to work shorter hours but are actually less likely to move into part-time roles. This suggests that making sure appropriate flexible work options are available to this group should be a particular priority in the years to come.

1. Introduction

One of the greatest successes of the last century is the increase in life expectancy at older ages enjoyed by many around the world. A man reaching age 60 in the UK today can expect to live for another 25 years, over a third longer than was the case 40 years ago. In response to this increased longevity, the government has been seeking to encourage individuals to remain in paid work for longer – perhaps most obviously by increasing the age at which individuals can start to receive the state pension. In addition to helping the government’s financial position, longer working lives also make it easier for individuals to provide financially for their own retirement, and there can be other wider benefits – such as to health and social participation – for many from staying in work.

Longer working lives provide benefits but also challenges for individuals, employers and policymakers. The type of work desired by older workers may well be different from what middle-aged or younger people want – for example, in terms of their hours of work, the form of their employment or the tasks they undertake at work. This could arise due to changes in the health of older workers affecting the work that they are able or want to do, or simply due to changing preferences over time. Older workers may also have other demands on their time – for example, caring for a spouse or grandchildren. The extent to which older workers are able to continue in paid work, and to be satisfied in their situation, will therefore depend on the extent to which they are able to find employment that suits their needs and preferences.

Given these differences between older and younger individuals, in order for policymakers and employers to be able to support older workers to have longer working lives, it is imperative that we have a good picture of what paid work looks like at older ages. In particular, we need to be conscious of the fact that this could be quite a changing picture over time, with increasing numbers of people working into their mid 60s, late 60s and 70s, and many individuals – particularly women – reaching older ages with very different labour market histories from those in previous generations. Policy needs to be based on up-to-date evidence on the situation of older workers in the labour market.

That is the key aim of this report. We seek to understand more about the nature of work at older ages, how employment patterns differ for people in different circumstances and how the situation is changing over time. We do this in order to help identify which groups may find it easier and harder to adjust to higher state pension ages and longer working lives. In this context, it is particularly important to examine how people transition from work into their retirement. The traditional move from a full-time job into a non-working retirement is still the most common pathway. But there are many other patterns of work at older ages. These include movements: into and out of paid work; between jobs with different employers and in different occupations; between full- and part-time work; and between employment and self-employment. These patterns of work in the run-up to retirement give at least some people the opportunity to balance their work and personal lives in different ways. But they can also present challenges where changes are made involuntarily, or where particular groups are not easily able to change their work in the way that they would like. We shed light on these changes in work activities and different ‘pathways’ into retirement, how common they are amongst different groups and how their prevalence has changed over time.

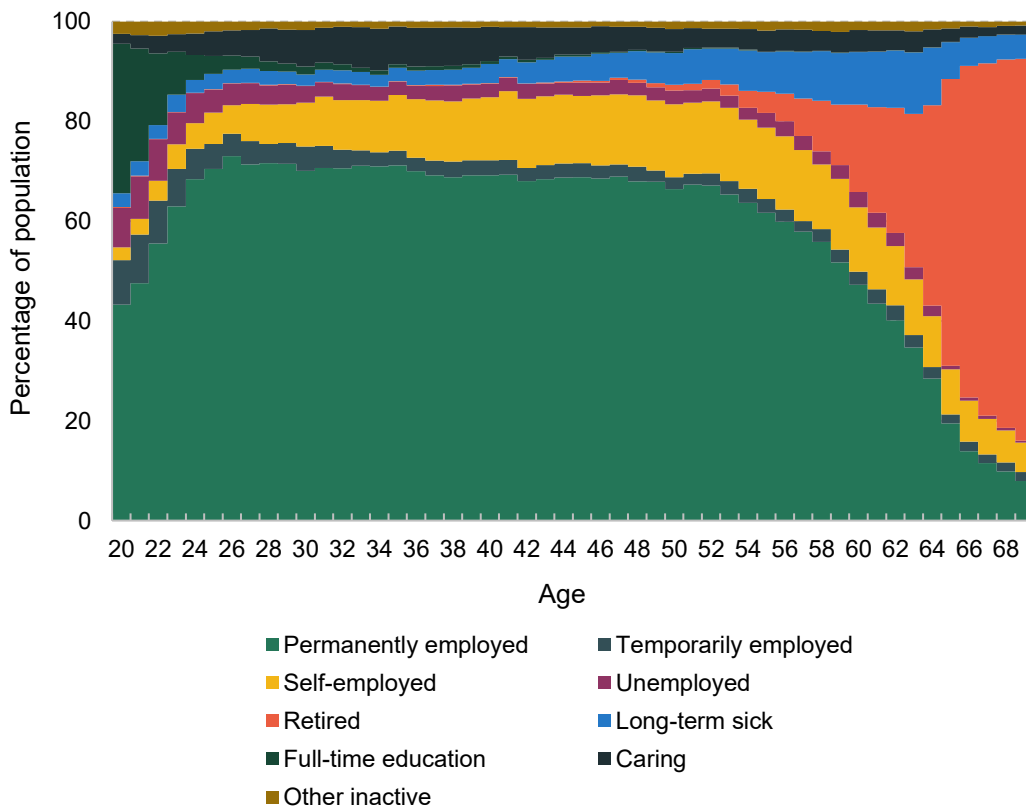
All of the analysis in this report examines patterns in labour market activity among older adults up to the eve of the COVID-19 pandemic. This is because the immense shock to the labour market over the past year, with almost 9 million people furloughed at the start of May 2020 and almost 3.5 million still furloughed at the end of April 2021 (HMRC, 2021), means that the effects of the pandemic could obscure the important long-running pre-pandemic trends which are important for understanding the patterns of work for people in their 50s and 60s. Evidence on the trends and other patterns observed prior to the pandemic will also shed light on the groups for whom economic adjustments post pandemic might be particularly difficult, and throughout the report we highlight cases where this may be particularly concerning.

The analysis in this report uses data from two long-running micro-datasets: the UK-wide Labour Force Survey (LFS) and the English Longitudinal Study of Ageing (ELSA). As a large and nationally representative dataset with detailed information on labour market issues, the LFS is used to understand in detail the economic activity of people aged 50–69. In addition, because it follows people for up to five consecutive quarters, we use it to understand transitions into and out of paid work and between different employers and forms of work over the course of a year. The analysis using the LFS is then supplemented using ELSA, which is a longitudinal

study that has surveyed a representative sample of those aged 50 and over in England every two years since 2002 – allowing us to observe the labour market activity of some individuals over a full 16 years. This is particularly important as it allows us to observe a longer view of pathways between work and retirement at older ages. More details on the data used in this report, and the methodological approaches taken, are available in Appendix A.

It is important to provide some context for the analysis in the main chapters of this report. Using the LFS, in Figure 1.1 we document the share of people of different ages who are in paid work (either as permanent employees, temporary employees or self-employed workers), the share who are unemployed and the share who are not in the labour force, splitting this up by their main activity (such as retired, caring for family, or long-term sick).

Figure 1.1. Share of individuals in different types of economic activity, by age (2017–19)

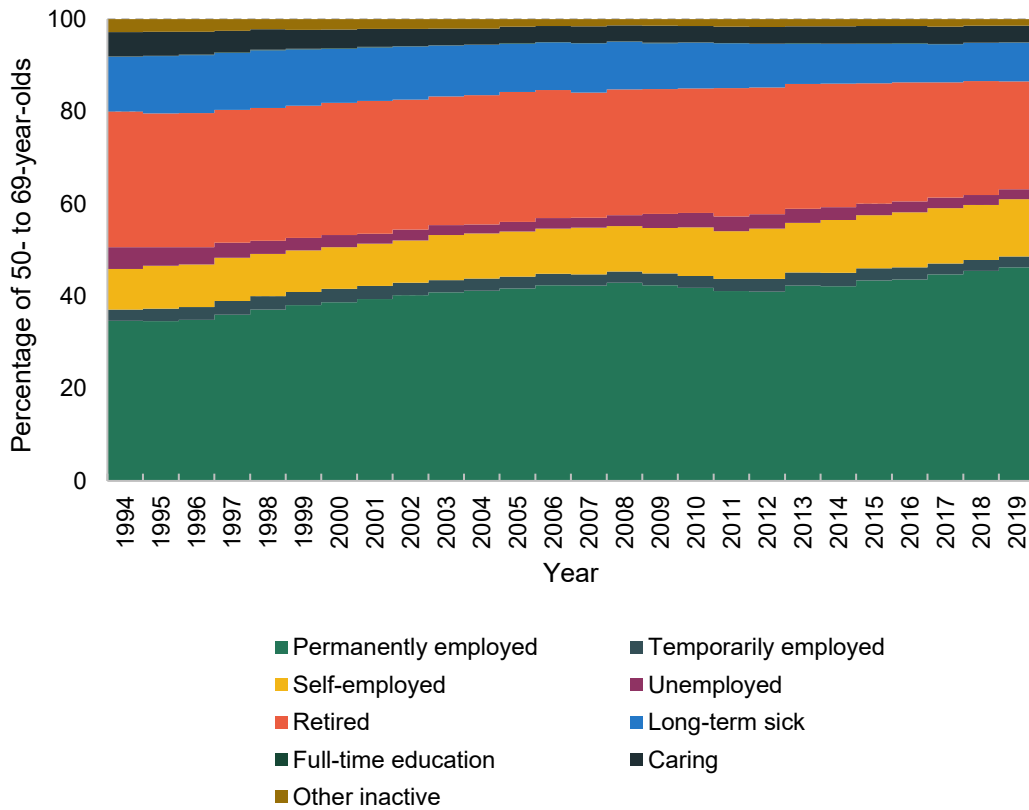


Source: Labour Force Survey.

11 Changing patterns of work at older ages

The figure shows the share of individuals in these different forms of economic activity in 2017–19. Unsurprisingly, the share of individuals in paid work falls after approximately age 50: around five-in-six (83% of) 50-year-olds are in paid work, compared with under one-in-six (16% of) 69-year-olds. The fall in the proportion of people in work is relatively gradual, although this does get steeper after age 60 and in particular around state pension age: for example, about 41% of people are in paid work at age 64, but only 30% are still in work at 65. The main reason for the fall in the proportion of people in work is an increase in people who are retired or are out of work and reporting long-term health problems.

Figure 1.2. Share of 50- to 69-year-olds in different types of economic activity, by year



Source: Labour Force Survey.

However, Figure 1.2 shows that the share of 50- to 69-year-olds in paid work has increased noticeably over the last 25 years, from around 46% in 1994 to just over 61% by 2019. This increase has mainly come about due to a reduction in the share who are retired or out of work and reporting long-term health problems. The

increase has occurred at the same time as several government policies trying to encourage people to have longer working lives – for example, increases in the state pension age (Amin-Smith and Crawford, 2018), reforms to incapacity benefits (Banks, Blundell and Emmerson, 2015) and the removal of default or mandatory retirement ages in 2011.¹

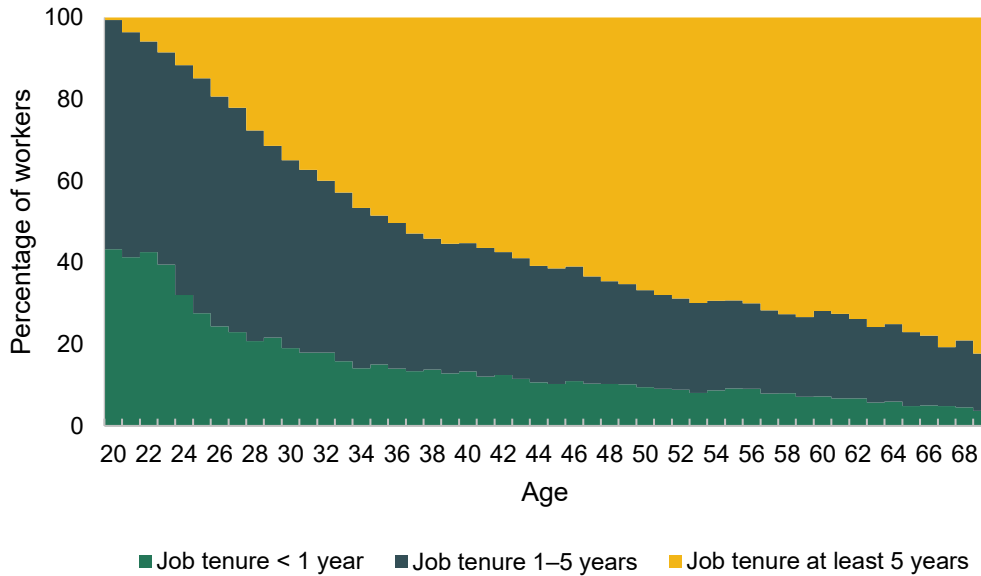
It is worth noting, though, that the employment rate of older workers experienced a large decrease during the 1980s, particularly for men. This means that, while recent years have seen an increase, the employment rate of men in their early 60s was still over 15 percentage points (ppts) lower in 2019 than in 1975 (Banks, Emmerson and Tetlow, 2017; Cominetti, 2021). This suggests that, despite recent successes, there is still scope for more people to stay in the labour market until older ages. We also know that the productive potential of people in their 50s and 60s (both in and out of work) is higher today as people in these age groups are much healthier now than they were in the mid 1970s (Banks, Emmerson and Tetlow, 2017).

Policymakers wanting to boost older-age employment rates require a proper understanding of the movements behind these headline trends. In this report, we therefore examine labour market activity at older ages in more detail, in particular focusing on changes in work activities.

At first sight, the labour market at older ages appears to exhibit much less turnover than at younger ages. Figure 1.3 describes the distribution of job tenure among those in paid work at different ages. The proportion of workers who have joined their job in the past year, or the past five years, is much lower at older ages. At age 55, over two-thirds (69%) of workers have been with their employer for at least five years. Since workers can join a job either directly from another job or after a spell out of work, this pattern has two possible explanations (or most likely a combination of the two). The first possibility is that older workers are less likely to switch jobs than younger workers, while the second is that older workers are less likely to start working again after a period out of the labour market than younger workers. We examine both of these questions in this report.

¹ See <https://www.gov.uk/government/news/default-retirement-age-to-end-this-year>.

Figure 1.3. Share of workers with different lengths of job tenure, by age



Note: Job tenure refers to the length of time a worker has been working for their current employer or has been (continuously) self-employed for.

Source: Labour Force Survey 2017–19.

Figure 1.4 shows that among those aged 50–69 who were in paid work over the period 2012–19, 5% of them were retired a year later, while 1% were unemployed and 2% were out of work but neither retired nor actively seeking work. Among those aged 50–69 who were observed to be unemployed, 35% were still unemployed a year later, while 31% were in paid work, 11% were retired and 24% were otherwise not in paid work. In Chapter 2, we examine these patterns in detail, including which types of older workers are more likely to leave employment, and which types of older jobseekers are less likely to find a job again after becoming unemployed.

Figure 1.5 illustrates the prevalence of various employment changes among older workers who remain in paid work over the course of a year. Around 4% change employer. Of course, people can change their work arrangements (such as their hours, or even their occupation) without changing employer, and they can change employer without changing their broad work arrangements.

Figure 1.4. Movements into and out of work among those aged 50–69 (2012–19)



Note: Sample includes those employed (left four bars) or unemployed (right four bars) in wave 1. Bars show the share who are employed, retired, unemployed, or otherwise out of work in wave 5.

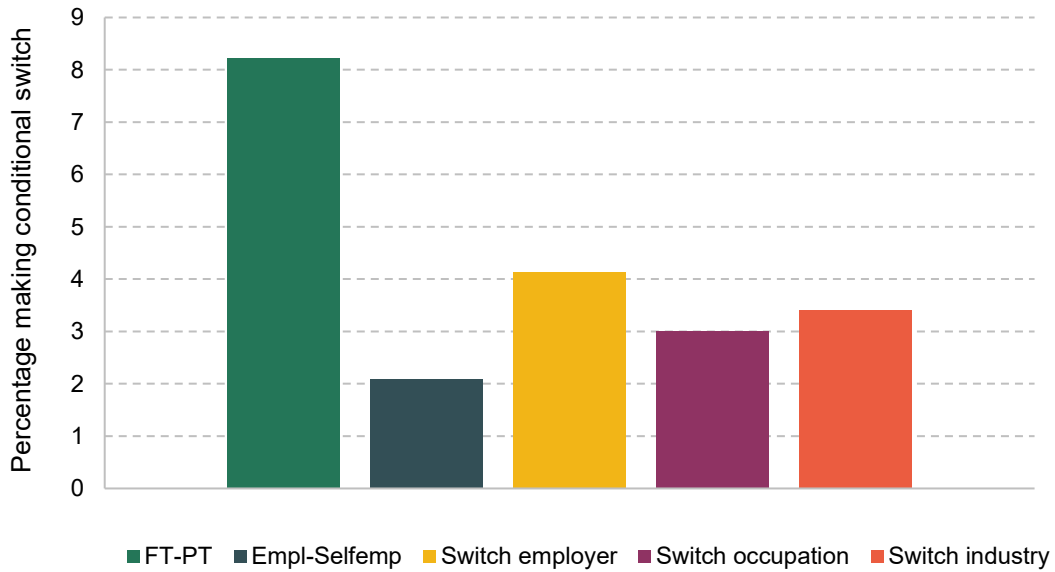
Source: Labour Force Survey.

Among older full-time workers, around 8% had moved into part-time work by a year later. In Chapter 3, we look particularly at the hours of work that people undertake at older ages, the extent to which people want to work more or fewer hours, and whether people move into part-time work as a pathway between full-time work and retirement.

Around 3% of older workers report having changed their occupation over the course of a year. In Chapter 4, we examine these transitions in more detail, in particular which types of older workers change occupation, and whether people choose to move into occupations that are in some sense ‘less demanding’ as they approach retirement.

Among older employees, around 2% moved into self-employment by a year later. Chapter 5 examines the issue of self-employment, which is an important form of economic activity for older workers, and the types of people who switch between employment and self-employment in the run-up to retirement.

Figure 1.5. Movements within employment among those aged 50–69 (2012–19)



Note: The FT-PT bar shows the share of full-time workers in wave 1 who work part-time in wave 5 (conditional on still being in work); the Empl-Selfemp bar shows the share of employees who are self-employed in wave 5 (conditional on still being in work); the other three bars show the share of workers who report having switched employer, occupation or industry over the past 12 months (conditional on working 12 months prior). Full-time work is defined as working 30 or more hours per week, and part-time work as working fewer hours than that.

Source: Labour Force Survey.

Throughout all the chapters, we highlight the implications of our key findings for policymakers, employers and those interested in facilitating longer, fulfilling and productive working lives for older workers. In Chapter 6, we draw together our key findings from all the chapters, and discuss in particular where we think that there are likely to be difficulties facing the older population, or particular parts of the older population.

2. Movements into and out of paid work

While employment rates fall after the age of 50, and retirement rates rise, it is not the case that the only transitions people in their 50s and 60s make are from employment into retirement. Many older workers make other transitions, such as from paid work into unemployment or into economic inactivity due to poor health. And unemployed people often move back into paid work after a period searching for work.

To understand this behaviour more fully, in this chapter, we examine transitions into and out of work over the course of a year, using the Labour Force Survey. We find that workers are more likely to leave work as they get older, principally into retirement, and that older unemployed individuals are less likely to find work again than similar younger individuals. We also examine which characteristics are associated with a higher prevalence of making these transitions, and discuss potential implications for policymakers, in particular in the wake of the COVID-19 pandemic.

Key findings

- 1 Older workers are more likely to leave paid work over the course of a year than younger workers, principally into retirement. Older jobseekers are also less likely to find a job than younger ones.
- 2 Women are almost 1 percentage point more likely to leave paid work at ages 50–69 than men with otherwise similar characteristics, and are around 4 pts less likely to move from unemployment back into work.
- 3 Non-white older workers are 2 pts less likely to stay in paid work at older ages than white older workers with otherwise similar

characteristics, while immigrants are 2.5 pts more likely to stay in paid work than workers born in the UK as they are less likely to retire.

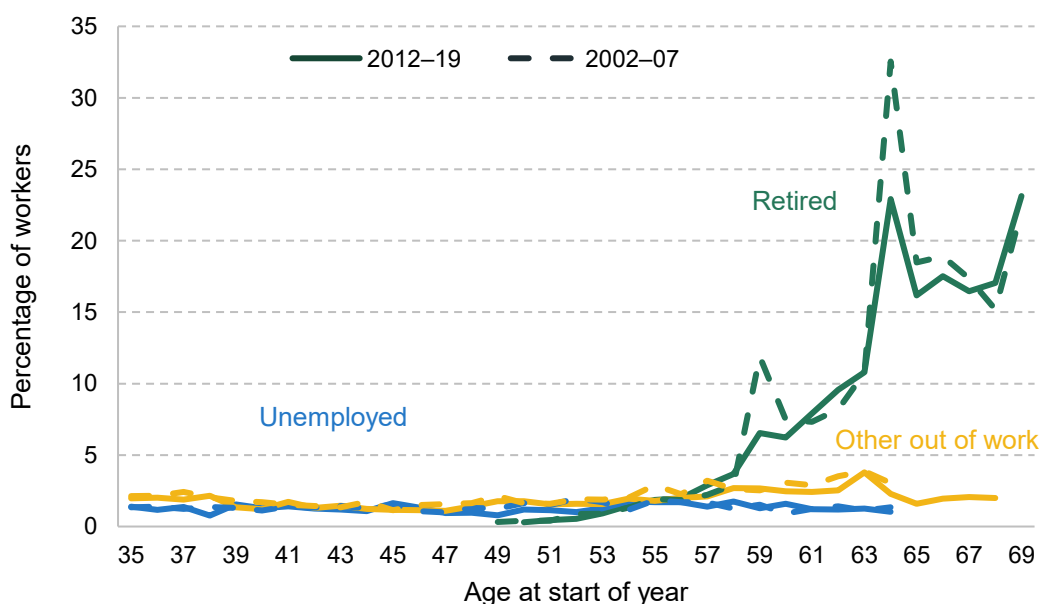
- 4 Workers reporting a long-standing and work-limiting health problem are almost 5 pts less likely to still be in work in a year's time compared with workers with otherwise similar characteristics but who do not report such a health problem. Jobseekers with a long-standing health problem also re-enter work at lower rates than those without such a health problem.
- 5 Compared with permanent employees, self-employed workers with otherwise similar characteristics are almost 2 pts more likely to stay in paid work at older ages. Temporary employees are over 8 pts less likely to stay in paid work than permanent employees. Relatedly, older workers who recently started their job are also more likely to be out of work in 12 months' time than older workers with longer job tenure.
- 6 Part-time work does seem to be a 'bridge' into retirement for some workers, as those working fewer than 30 hours per week are 3 pts more likely to leave work and go into retirement than full-time workers with otherwise similar characteristics.
- 7 More-educated older jobseekers are 5 pts more likely to have found work one year later than otherwise-similar jobseekers with lower levels of formal education.
- 8 Older jobseekers who have been out of work for 6–12 months are around 17 pts less likely to be in work one year later than otherwise-similar jobseekers who have moved out of paid work within the last 6 months, while those who have been out of work for over two years are over 30 pts less likely to be in work one year later.

2.1 Movements out of paid work

We start by documenting how common it is for workers to retire from work, become unemployed or otherwise move out of work, and how this differs by age. This is shown in Figure 2.1 for two different time periods: 2012–19 (the years

running up to the pandemic) and 2002–07 (the years running up to the Great Recession). The likelihood that a worker retires over the course of a year unsurprisingly increases with age. Historically, there were spikes in retirement over the next year for those aged 59 and those aged 64 – for example, in the mid 2000s over 30% of 64-year-olds in work were retired a year later. However, alongside the female state pension age increasing from 60 to 65 between 2010 and 2018 and the state pension age for both men and women increasing from 65 to 66 between 2018 and 2020, these spikes in retirement at particular ages have become much less pronounced.

Figure 2.1. Percentage of workers moving into retirement, unemployment or ‘other out of work’ within a year, by age



Note: For those who are working in wave 1, the graph shows the percentage who are retired, unemployed or otherwise out of work in wave 5. Samples are restricted to those who respond to wave 1 between 2012q3 and 2019q1 (2012–19) and between 2002q2 and 2006q4 (2002–07).

Source: Labour Force Survey.

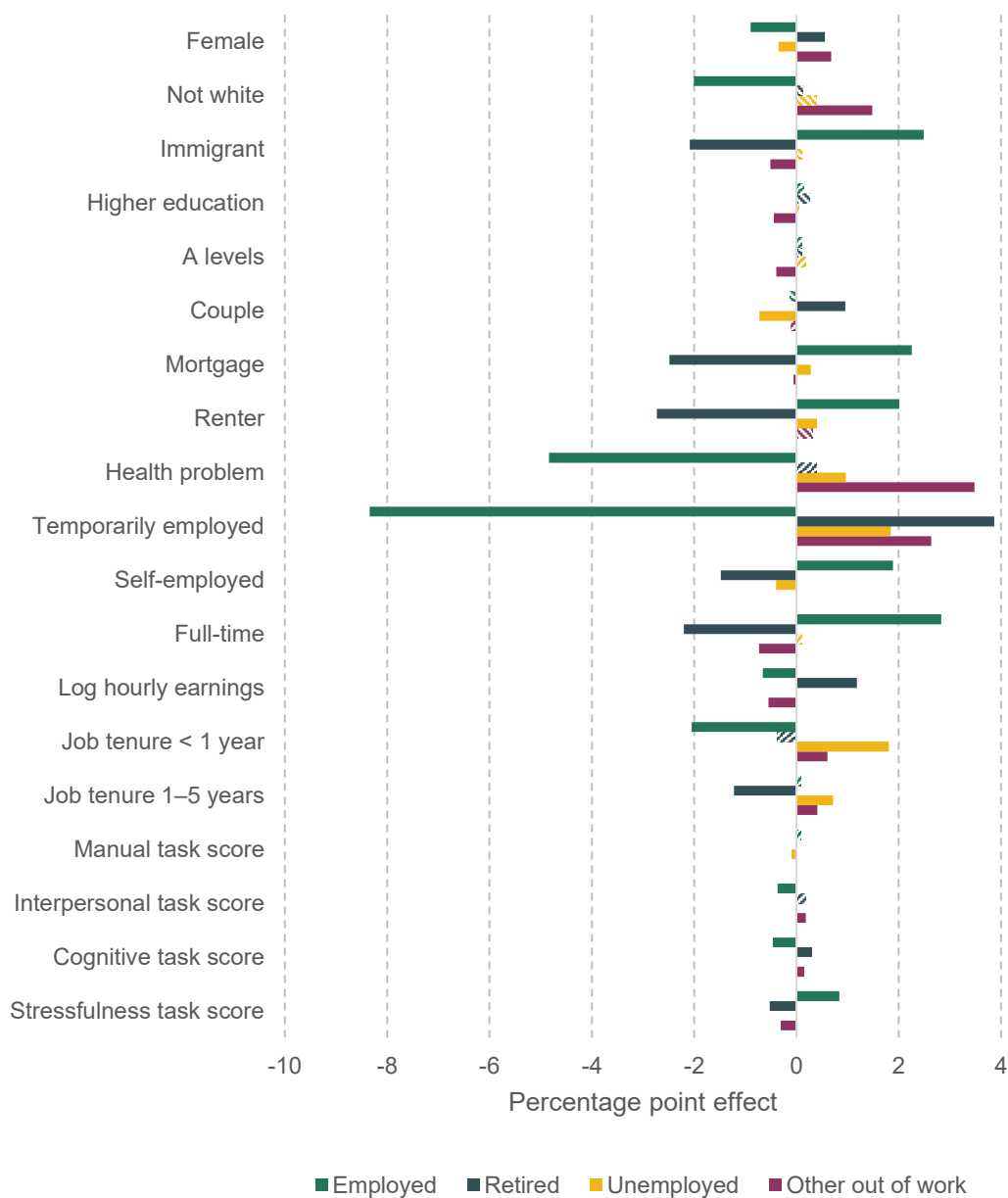
The share of workers becoming unemployed is fairly low, and similar across all ages and time periods at around 1–2%. The proportion of workers leaving work within the next year but classing themselves then neither as retired nor unemployed (typically such individuals report themselves to be either looking after family or long-term sick or disabled) increases slightly with age, but this has been less common over the latter part of the 2010s than in the earlier period.

What other characteristics, apart from age, affect the probability of workers leaving employment? To answer this question, we present the results from a multinomial logit regression in Figure 2.2. These results show, for a sample of people aged 50–69 between 2012 and 2019, the association between their initial individual and job characteristics, and the probability of their being employed, unemployed, retired or otherwise out of work one year later. In this, and in similar analyses in later chapters, we examine associations between a large range of characteristics and the transition probabilities, including: sex, age, education, marital status, ethnicity, housing tenure, job tenure, health, hours of work, earnings and the task content of the job.

We measure the ‘task content’ of each occupation using the O*NET database, which provides a rich set of variables for each occupation, describing the type of work performed, the general attributes of workers in these occupations, and typical work settings.

Following Ameriks et al. (2020) and Jolivet and Postel-Vinay (2020), we use principal component analysis to synthesise information in this database into the ‘manual’, ‘interpersonal’, ‘cognitive’ and ‘stressfulness’ task content of each occupation, where each measure is normalised to lie between 0 and 1. More details on the method can be found in Appendix A. As examples of the kind of task content scores different occupations are assigned, chief executives and senior officials have a manual task score of 0.41, interpersonal score of 0.65, cognitive score of 0.96 and stressfulness score of 0.89. In comparison, carpenters and joiners have a manual task score of 0.75, interpersonal score of 0.47, cognitive score of 0.52 and stressfulness score of 0.59.

A list of all variables can be found in Table DA.1 of the data appendix. Note that the effect of each characteristic is calculated assuming that all the other characteristics are held constant. For example, this means that when looking at differences between immigrants and UK-born individuals, it controls for other differences that may be important, such as education, sex or ethnicity. In this section, as well as in the rest of the report, we also repeat the estimation separately for 50- to 59-year-olds and for 60- to 69-year-olds, and highlight any significant differences between the two age groups.

Figure 2.2. Characteristics associated with leaving work among 50- to 69-year-olds

Note: Average marginal effects from a multinomial logit regression. The sample is 50- to 69-year-olds who join wave 1 between 2012q3 and 2019q1 and who are working at that time. The outcome is whether they are employed, retired, unemployed, or otherwise out of work in wave 5. The independent variables are individual characteristics in wave 1. Solid bars indicate the effects are statistically significantly different from zero at the 10% significance level. See Table DA.1 in the data appendix for a full list of controls and base covariates.

Source: Labour Force Survey.

Figure 2.2 indicates that many characteristics are associated with changes in transition probabilities for those who are in work:

- **Sex:** Women in paid work are estimated to be 0.9 ppts less likely to still be in paid work in a year's time compared with men – being more likely to retire or otherwise move out of paid work but not report themselves as unemployed. In particular, women are much more likely to go into caring (looking after the family and home) than men are. This relationship of women in paid work being less likely to still be in work a year later has, however, diminished over time, and particularly given that the state pension ages of men and women have been equalised since December 2018, this difference may have faded further.
- **Ethnicity** also seems to play a role. Non-whites are around 2 ppts less likely to still be working one year later than whites, and are more likely to move into 'other out of work'.² Immigrants, on the other hand, are 2.5 ppts more likely to still be working one year later than those born in the UK, and are less likely to move into retirement. The magnitude of this effect is larger for those in their 60s than those in their 50s. An important direction for future research is to understand more about the drivers of these patterns, the extent to which they are a cause for concern, and how policy could address these differences. For example, these differences could arise due to differences in financial constraints on retirement (either because of different spending needs or because some groups, such as immigrants who have spent less time in the UK, may have lower pension wealth), or due to different retirement preferences, or due to different opportunities in the labour market for different groups.
- **Education:** Education does not seem to have a significant association among 50- to 69-year-olds as a whole. However, when we restrict our focus to workers in their 50s, we find that those with higher education are 0.7 ppts more likely to retire than those with GCSE education or lower. Early retirement therefore seems to be more of an option for more educated workers, potentially because they have built up more pension wealth.
- **Housing tenure:** People who own their home outright are around 2 ppts less likely to still be in work and around 2.5 ppts more likely to be retired one year

² Ideally, we would like to analyse differences for more granular ethnic minorities. Regrettably, we are unable to do this in this report due to limited sample sizes.

later than renters and owner-occupiers with a mortgage. They are also 0.3–0.4 ppts less likely to have become unemployed. This could point to a potential issue in the future – if fewer people are reaching retirement owning their home outright, then they may have to remain in paid work for longer.

- **Health:** Those reporting a long-standing and work-limiting health problem are almost 5 ppts less likely to still be in work a year later compared with those not reporting such a health problem. They are not significantly more likely to retire though; rather, they are more likely to become unemployed or to go into ‘other out of work’. This suggests that health problems are a barrier to longer working lives, and is consistent with the rising share of people who are out of work due to long-term health problems with age found in Figure 1.1. If people are to be encouraged to remain in paid work for longer, it is crucial that policymakers and employers consider how best to make work possible for those who might want to work but are struggling with health problems.
- **Employment type:** The type of job or employment contract that someone has is also associated with different probabilities of leaving work in the next year. For example, compared with permanent employees, self-employed workers are almost 2 ppts more likely to still be working a year later, mainly because they are less likely to retire or to become unemployed. This suggests that self-employment can be a path to a longer working life for some individuals. To build on this, in Chapter 5, we explore which types of workers move into self-employment at older ages. On the other hand, temporary employees are over 8 ppts less likely to still be in work a year later – this effect is particularly driven by those in their 60s. Just under half of this difference can be explained by a higher probability of retiring, suggesting that some workers might be using temporary employment at the end of their careers as a bridge to retirement (or less benignly could suggest that those moving out of temporary employment retire as they see little prospect of a move into paid work that they would like). Being more likely to move out of work when a temporary employee is not only a feature of older workers, though it is more likely for older workers. Being a temporary employee aged 35–49 increases the probability of subsequently leaving work by 4 ppts compared with being permanently employed, while the increase is 8 ppts for 50- to 69-year-olds. Older temporary employees are also around 2 ppts more likely to become unemployed and 2.5 ppts more likely to go into ‘other out of work’ than permanent employees, indicating that temporary

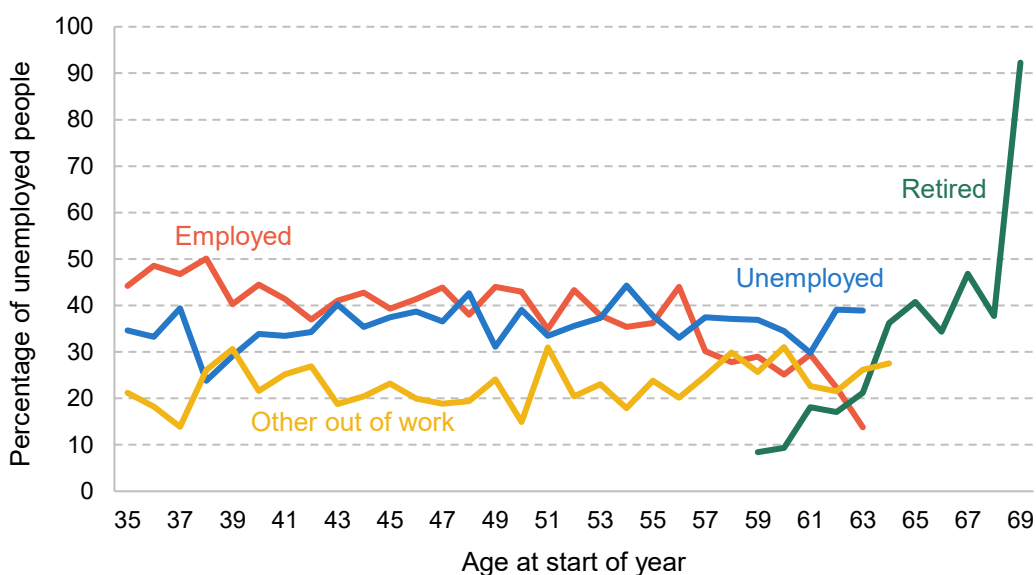
employment could be indicative of some older individuals finding it difficult to find more stable employment in the years leading up to retirement.

- **Job tenure:** Related to the findings on employment type, we find older workers with a job tenure of less than one year are around 2 ppts less likely to still be in work a year later compared with those who have been with their current employer for over five years, as they are more likely to become unemployed or to go into ‘other out of work’.
- **Hours of work:** Part-time workers are around 3 ppts less likely to still be in work a year later than full-time workers, mainly because they are more likely to go into retirement. This would be consistent with workers moving into part-time work (fewer than 30 hours per week) for a short time before retiring, something that we explore in more detail when looking at long-run transitions into retirement via part-time work in Chapter 3.
- **Task content:** Here, some common perceptions are not borne out in the data. For example, those with more manual jobs are no more likely to retire or otherwise move out of work (if anything, they are less likely to become unemployed). Thus the perception that people in manual work have to leave work at younger ages because of the physical demands of the work is not supported by this evidence. Those with more stressful jobs are also less likely to retire and less likely to move out of work and not class themselves as unemployed. It is those in jobs involving more interpersonal or cognitive tasks who have a lower probability of staying in work.

2.2 Movements out of unemployment

It is also important to examine how likely people in their 50s and 60s are to move out of unemployment – in particular, how likely they are to re-find work – particularly in the context of relatively high rates of furloughing of older workers during 2020 and early 2021: at the end of April 2021, 14% of workers over 65 were furloughed, compared with 10% of those aged 40–49 (HMRC, 2021). We therefore now turn to examining the subsequent economic activity of older unemployed individuals: the probability that they become employed, or retired, or that they remain unemployed, or that they remain out of work but no longer report themselves to be unemployed a year later, and the characteristics associated with those different transitions.

Figure 2.3. Share of unemployed moving into employment, retirement, or ‘other out of work’, or remaining unemployed, over the course of a year, by age



Note: For those who are unemployed in wave 1, the graph shows the percentage who are employed, retired, unemployed, or otherwise out of work in wave 5. Points with fewer than 10 people are suppressed.

Source: Labour Force Survey.

In Figure 2.3, we plot, for unemployed people aged 35–69 between 2012 and 2019, the proportions who make different transitions over the following year. Most strikingly, we see that the proportion of unemployed people who are employed a year later declines significantly with age. For unemployed individuals in their mid to late 30s, around 45–50% of them were in paid work one year later, while the rate was just 25–30% for those in their late 50s. In part this is driven by more longer-term unemployment among older workers (who generally find it harder to find new work) – in 2019, 37% of 50- to 69-year-old jobseekers had been unemployed for at least a year, compared with 33% of 35- to 49-year-old jobseekers. In addition, a recent report by the Resolution Foundation found that over the period 1998–2020, 62% of *newly* unemployed people aged 50 or over returned to work within six months, compared with 74% among those aged 16–29 and 72% among those aged 30–49 (Cominetti, 2021).

The proportion of unemployed individuals who are still unemployed one year later does not vary in a clear way with age; rather, unemployed people are more likely to go into retirement or ‘other out of work’ as they get older. These trends are still true

after controlling for many other characteristics, such as the education level of the individual, and the length of time they have been unemployed for.

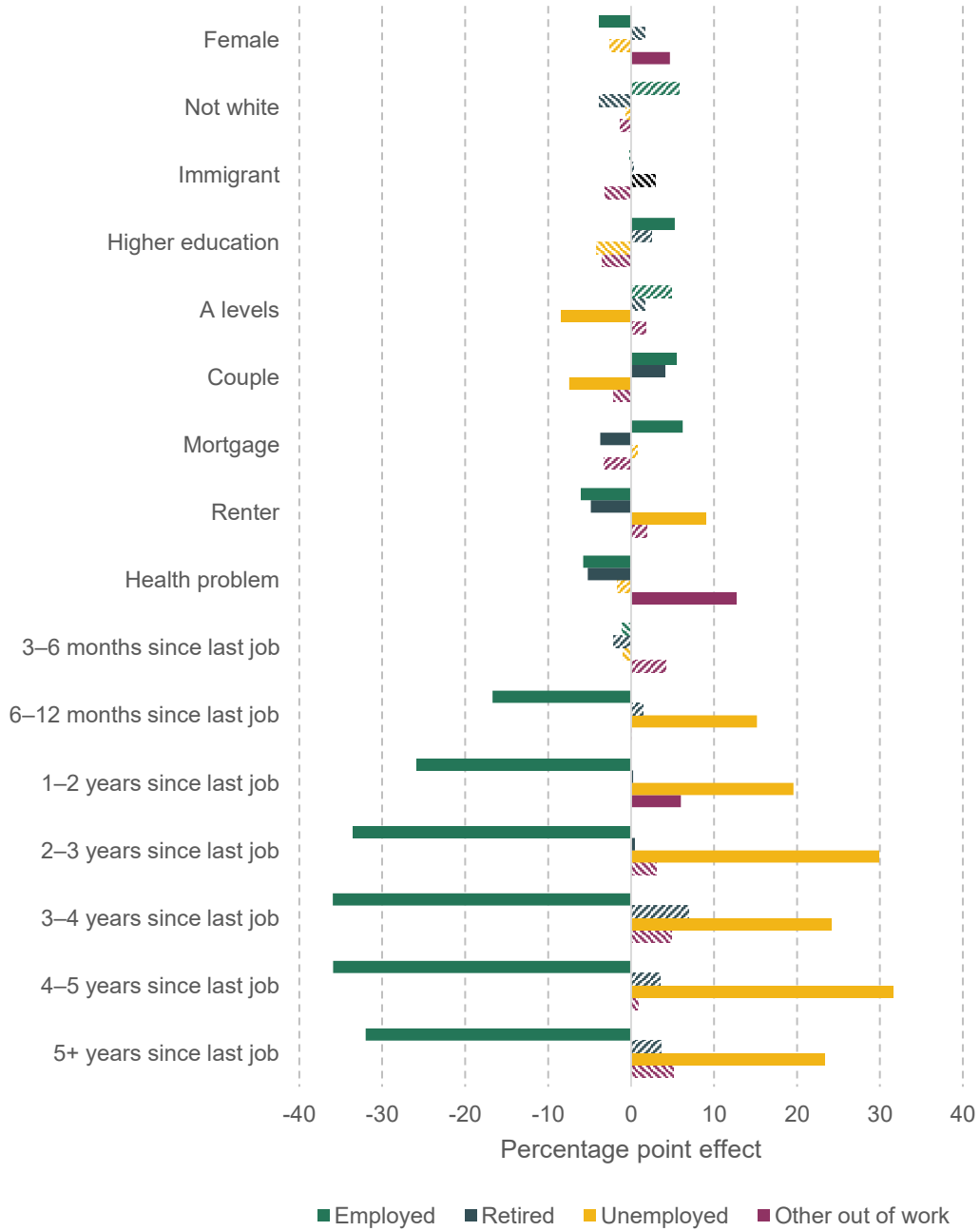
The fact that the older unemployed are less likely to find jobs than younger unemployed people means that older individuals are more vulnerable to long-term spells out of the labour market after losing their jobs. This is especially worrying in the current circumstances: recent analysis published by the Office for National Statistics (2021) suggests that around 1.3 million over-50s were on furlough in early 2021. 30% of these employees think there is a 50% chance or higher that they will lose their job when the scheme ends. While there is appropriately a lot of policy focus on the youngest adults, the risk of long-term unemployment among older jobseekers implies that there should also be particular attention paid to the challenges facing older jobseekers. Of course, age is not the only characteristic associated with the likelihood of a jobseeker finding employment. Figure 2.4 presents results from a similar multinomial logit regression to Figure 2.2, restricting the sample to those who are unemployed when they first appear in the LFS.³

We find that there are important associations between the following characteristics and the probabilities of making different transitions:

- **Sex:** Unemployed older women are nearly 4 ppts less likely to be in work one year later than similar older men. This is not because they are more likely to remain in unemployment; if anything, they are also less likely to be unemployed one year later. Rather, they are nearly 5 ppts more likely to be in ‘other out of work’, suggesting weaker attachment to the labour force.
- **Education:** Whereas education did not have a significant effect on the probability of staying in work, it does seem to matter for the likelihood of finding work. Those with some form of higher education are around 5 ppts more likely to be in work a year later compared with those whose highest qualifications are GCSEs or lower. This is principally due to the fact that unemployed individuals with higher education are less likely to end up in ‘other out of work’.

³ A slightly different set of variables are controlled for since we do not observe job tenure, task content of occupation, hours of work, and so forth for those individuals who are unemployed. However, for those variables that are observed for both employed and unemployed people (such as sex, age and education), we control for the same variables, and in addition we examine the association between length of time unemployed and the probability of leaving unemployment.

Figure 2.4. Characteristics associated with leaving unemployment among 50- to 69-year-olds



Note: Average marginal effects from a multinomial logit regression. The sample is 50- to 69-year-olds who join wave 1 between 2012q3 and 2019q1 and who are unemployed in wave 1. The outcome is whether they are employed, retired, unemployed, or otherwise out of work in wave 5. The independent variables are individual characteristics in wave 1. Solid bars indicate the effects are statistically significantly different from zero at the 10% significance level. See Table DA.2 in the data appendix for a full list of controls and base covariates.

Source: Labour Force Survey.

- **Health:** Those with a long-standing health problem are almost 6 ppts less likely to be in work a year later, and over 5 ppts less likely to be retired, compared with similar jobseekers not reporting such a health problem. Instead, they are around 13 ppts more likely to be in ‘other out of work’, suggesting that these individuals also particularly struggle to find a job, and often leave the labour force altogether in response. Repeating this analysis separately for 50- to 59-year-olds and 60- to 69-year-olds, we find that this effect is driven by those in their 50s, indicating that these ages could potentially benefit more from extra support.
- **Length of time unemployed:** The length of the unemployment spell matters hugely for how likely older jobseekers are to enter employment. Those who have already been out of work for 6–12 months are around 17 ppts less likely to be in work one year later than someone who has been out of work for less than 6 months, while those who have already been out of work for over two years are over 30 ppts less likely to be in work one year later. This supports evidence from other research that individuals in long-term unemployment are especially likely to need support to find a job, particularly given the individual costs borne by the long-term unemployed (Nichols, Mitchell and Lindner, 2013; Mueller, Spinnewijn and Topa, 2021).

There are also some characteristics that are not (statistically) significantly associated with the likelihood of an unemployed older individual entering work. For example, the probability that an unemployed non-white person enters work is not statistically different from the probability for an otherwise-similar white person, although there may of course be different effects between more disaggregated ethnic groups. Similarly, we do not see strong evidence that the probability of entering employment is different for immigrants than for those born in the UK.

In summary, women, those with lower levels of education, those with health problems and the long-term unemployed are particularly less likely to re-enter work at older ages after becoming unemployed. And older unemployed individuals are much less likely to move back into paid work than younger unemployed individuals. As emphasised earlier, these groups may be particularly vulnerable if there is an unemployment spike after the end of the furlough scheme. This is important for people in their 50s and 60s, not only for their current circumstances, but for their future resources too, as the last few years of work before retirement can be crucial for building up retirement savings (Crépon et al., 2013). It has also been

shown that job loss at older ages and involuntary retirement have negative effects on physical and mental health (Gallo et al., 2000; Mandal and Roe, 2008; Riumallo-Herl et al., 2014). Policymakers should therefore pay particular attention to the challenges facing older workers who lose their jobs as the furlough scheme is wound down, which is scheduled to occur over Summer 2021.

3. Movements between full-time and part-time work

Part-time work is a prevalent form of work among older workers, especially women, and can offer valuable flexibility for those in later parts of their career. But hours of work, and satisfaction with them, vary across the population. For some people, part-time work brings them earnings while balancing other responsibilities in their personal or family life. Whereas for others, part-time work does not provide enough income to meet their financial needs. Careful analysis of people's hours of work, satisfaction with their hours and transitions between different hours of work is important for understanding later-life economic activity.

In this chapter, we show how the proportion of workers in part-time work changes with age, and the extent to which older workers are satisfied with their current level of hours. We then discuss in more detail movements between full-time and part-time work among older workers. In particular, we look at which kinds of individuals are more or less likely to move into part-time work between ages 50 and 69. Throughout, we define full-time work as working 30 or more hours per week, and part-time work as working fewer hours than that.

Key findings

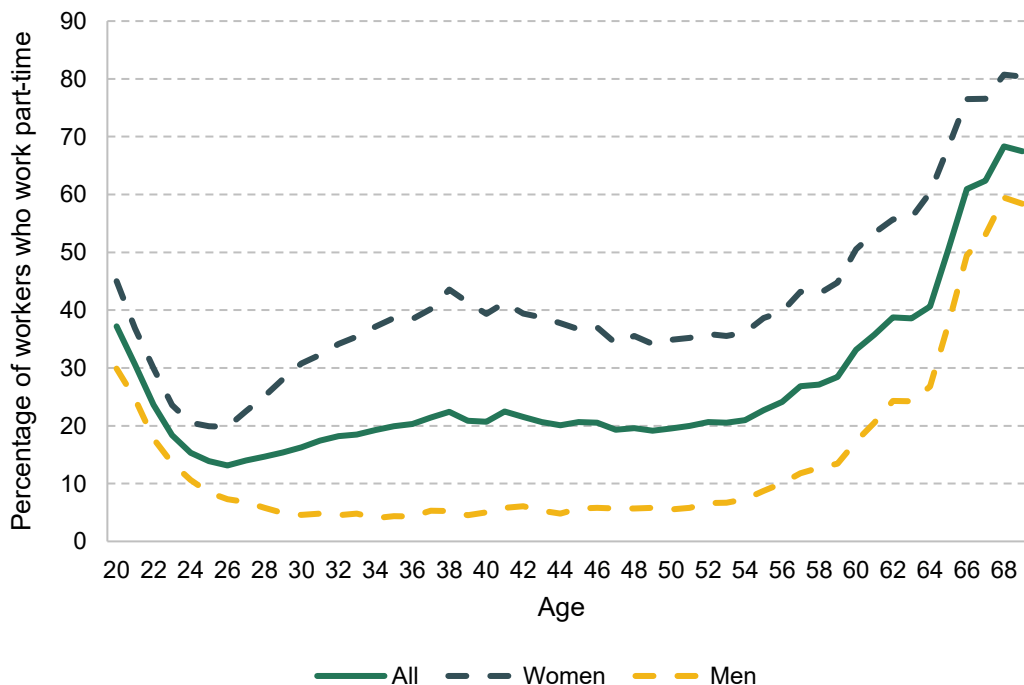
- 1 Part-time work is more prevalent among older workers than younger workers, but the share of 50- to 69-year-olds in this type of work has remained fairly stable over the past 30 years.
- 2 The proportion of older working women in part-time work has decreased from 62% in 1992 to 53% in 2019, while there has been a slight increase in the proportion of older working men in part-time work (from 25% in 1992 to 27% in 2019).
- 3 Despite the higher prevalence of part-time work among older workers, a significant minority of older workers, about 16%, would like to work fewer hours, compared with 7% of older workers who would like to work longer hours. In contrast, over three-quarters of part-time workers are happy with their hours of work.
- 4 The proportion of workers moving from full-time to part-time work increases with age, and these transitions are particularly common among workers in their 60s.
- 5 Transitions into part-time work are more common among older workers with indicators of higher socio-economic status, such as higher levels of education or living in less deprived areas.
- 6 These transitions are also more common among workers who have less secure work arrangements, such as those who are temporarily employed, are self-employed, earning less or have shorter job tenures.
- 7 Part-time work plays an important part in retirement transitions; of full-time workers who we first observe in 2002–03 and then follow for 16 years, we find that 30% move from full-time to part-time work during this period.

3.1 Older workers and part-time work

Most people in paid work work full-time and overall this remains true even of those in paid work in their early 60s (though not at older ages). However, analysing the patterns of part-time work is important for understanding the diversity of economic activity that people in their 50s and 60s undertake. In this section, we document the share of workers who work part-time, focusing again on people aged between 50 and 69.

Figure 3.1 shows the share of workers working fewer than 30 hours per week in 2017–19, by age and sex. Two things stand out. First, the share of part-time workers is relatively stable at around 20% from the late 30s to the mid 50s, after which point it starts to rise, with the largest increases at the ages of 65 and 66. By age 69, almost 70% of workers work part-time. Second, at all ages, a higher share of women work part-time than men.

Figure 3.1. Share of workers who work fewer than 30 hours a week, by age and sex (2017–19)



Note: Part-time workers are defined as those who work fewer than 30 hours in a normal week.

Source: Labour Force Survey.

The proportion of older workers in part-time work has remained remarkably stable over time – Figure B.1 in Appendix B shows that the proportion of workers aged 50–69 in part-time work has been around 40% throughout the period from 1992 to 2019. However, the share of employed women in this age group working part-time has fallen steadily over this period, from 62% in 1992 to 53% in 2019, whereas the prevalence of part-time work has increased only slightly among working men in this age group: from just under 25% of workers in 1992 to just over 27% in 2019.

3.2 Hours satisfaction

Are older workers choosing to work fewer hours, or simply not able to find jobs that would allow them to work full-time? One way to address this question is to assess whether older workers are happy with the number of hours they are working. Some research finds evidence of underemployment among UK workers (Bell and Blanchflower, 2018), implying that workers would like to work more hours than they are currently working. In this section, we investigate this issue further, and examine the extent to which older workers would like to work more or fewer hours.

Figure 3.2 shows the proportion of workers of each age who would prefer longer hours (green lines) and those who would prefer shorter hours (yellow lines). The dashed lines show the responses for workers currently in full-time work, and the solid lines show the responses for workers currently in part-time work.

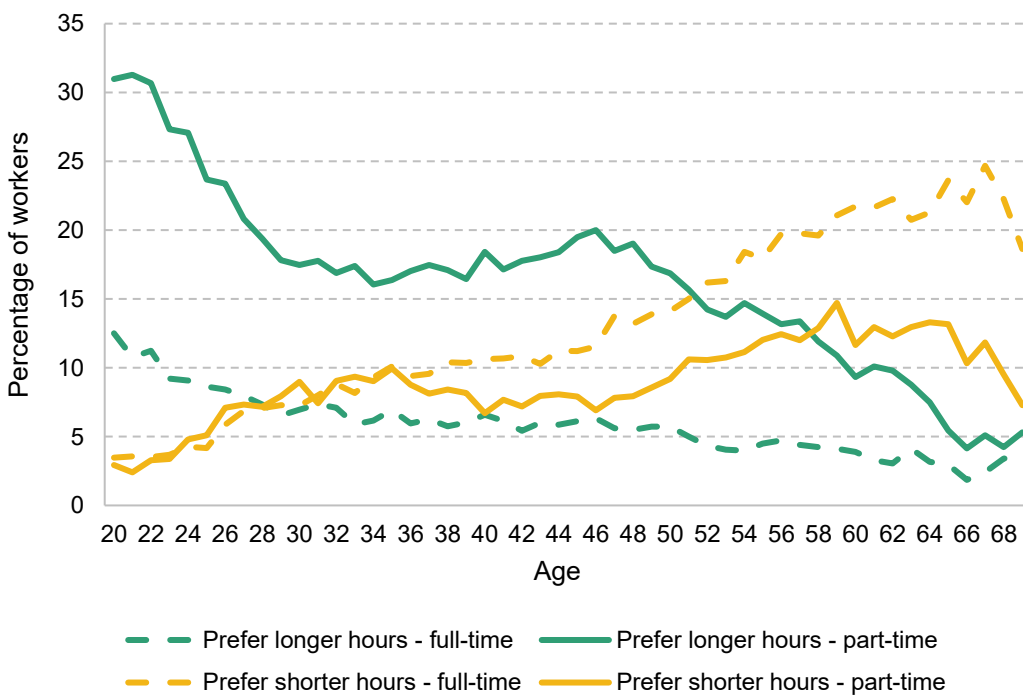
We can see that about one-in-three workers in their early 20s who are working part-time would like to work longer hours, and about one-in-ten of those in full-time work would also prefer longer hours. This proportion falls by age for both full-time and part-time workers, and the difference between the two groups decreases over time as well. Preference for longer hours of work is more common among part-time workers also in the older age groups, but out of part-time workers aged over 60, less than 10% would like to work more hours. Overall, 7% of workers aged 50–69 would like to work longer hours.

The age profile of the proportion of workers who would like to work fewer hours looks nearly the opposite. About 3% of workers in their early 20s would like to work fewer hours, and the trends are very similar across both full-time and part-time workers in their 20s and 30s. From about age 40, preference for shorter hours is more common among full-time workers, reaching about 20% of full-time workers in their 60s. However, it is interesting to note that over 10% of people over the age

of 50 who are already in part-time work report that they would like to work even shorter hours.

To get a sense of whether significant numbers of older workers preferring shorter hours (and a smaller fraction desiring more hours of work) is a recent phenomenon, Figure 3.3 shows how the proportions of older workers (aged 50–69) wanting to work longer or shorter hours have changed since the early 2000s. The proportion of older workers wanting to work shorter hours gradually increased between 2012 and 2016, from around 14% to 16%, but the level has been relatively close to 15% all the way since the early 2000s. In the aftermath of the 2008 financial crisis, there was also a large increase in the proportion of older workers wanting to work longer hours, up from 5% in 2007 to 9% in 2012, but this has decreased again in recent years to reach 7% in 2019.

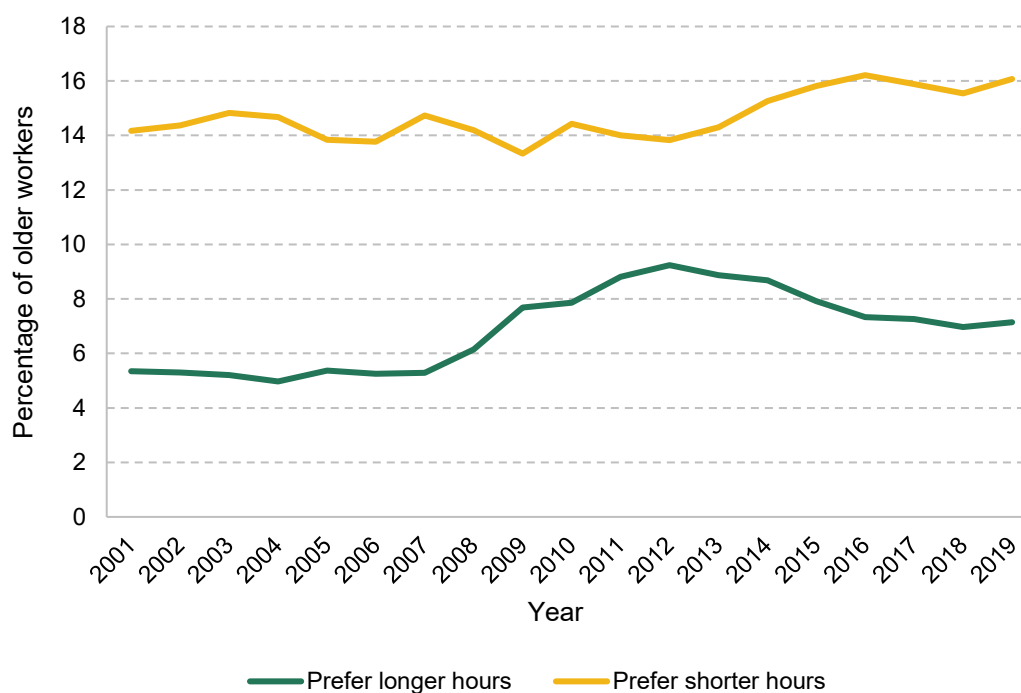
Figure 3.2. Hours satisfaction by age and current hours status (2017–19)



Note: 'Prefer longer hours' includes respondents who are either (i) looking for an additional job, or (ii) looking for a different job with longer hours preferred, or (iii) not looking for a job but would prefer longer hours. 'Prefer shorter hours' includes respondents who are either (i) looking for a different job with shorter hours preferred, even if it meant less pay, or (ii) not looking for a job but would prefer shorter hours, even if it meant less pay.

Source: Labour Force Survey.

Figure 3.3. Hours satisfaction among workers aged 50–69 over time



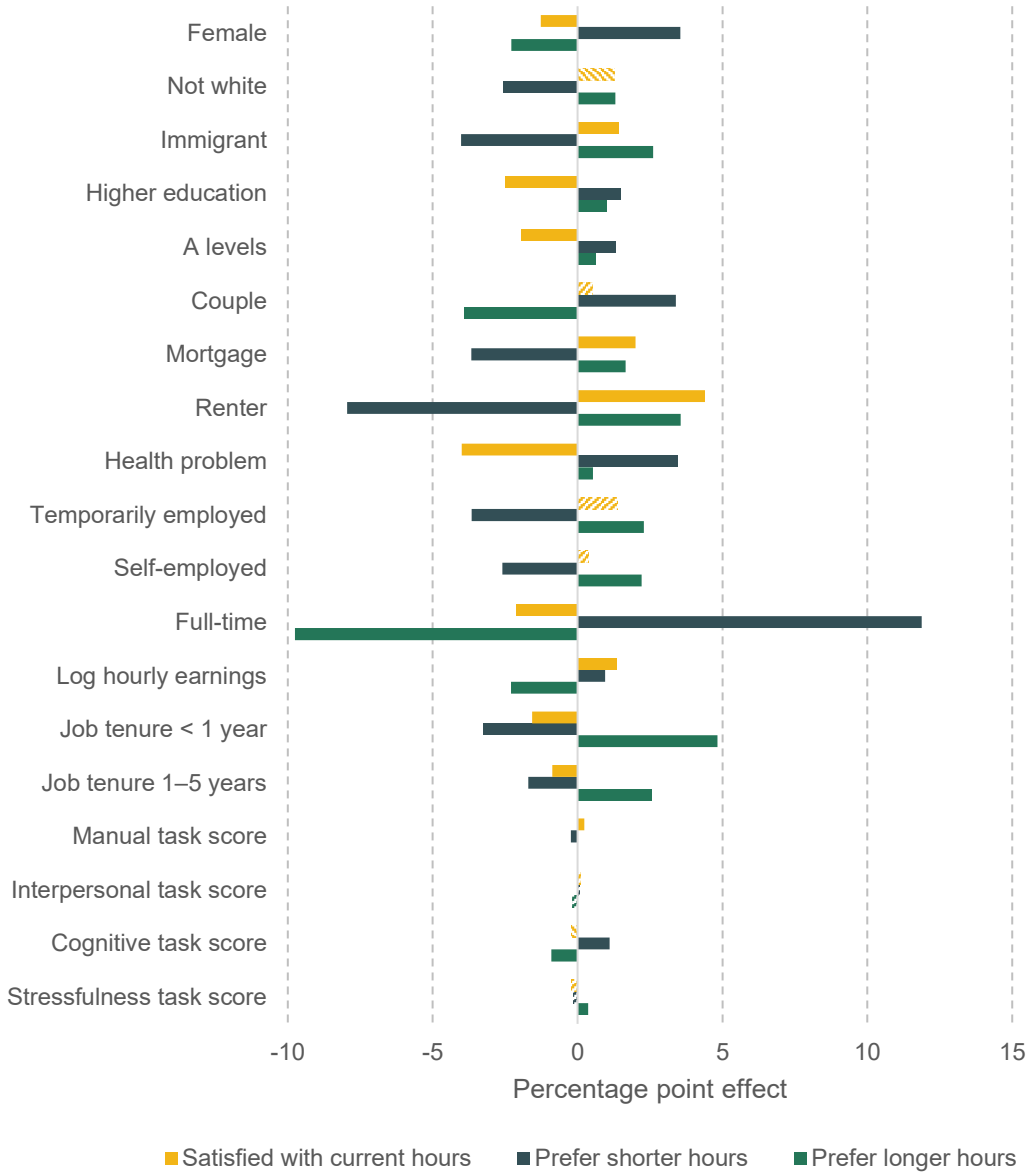
Note: See Figure 3.2 for definition of hours satisfaction.

Source: Labour Force Survey.

In order to understand the potential drivers of satisfaction with hours, we can run a multinomial logit model to examine the associations between hours satisfaction of older workers and various characteristics of the individual and their job. Figure 3.4 shows the results from the regression. The bars can be interpreted as a percentage point change in the likelihood of being satisfied with hours / wanting more hours / wanting fewer hours, compared with individuals without the given characteristic.

We find that working women are more likely than men (by 3.6 pts) to want shorter hours of work, as are those living in a couple compared with single people (by 3.4 pts). Being born outside the UK is, on the other hand, negatively correlated with wanting to work shorter hours and positively correlated with wanting to work longer hours.

Figure 3.4. Characteristics associated with hours preference among workers aged 50–69



Note: Average marginal effects from a multinomial logit regression. The sample is workers aged 50–69 in 2017–19. The outcome is whether they are satisfied with their current hours, would prefer longer hours or would prefer shorter hours, defined as in Figure 3.2. The independent variables are individual characteristics in wave 1. Solid bars indicate the effects are statistically significantly different from zero at the 10% significance level. See Table DA.3 in the data appendix for a full list of controls and base covariates.

Source: Labour Force Survey.

Those with higher socio-economic indicators are also generally more likely to want to work shorter hours – for example, those with higher levels of education and those living in less deprived areas.⁴ Those with a mortgage are more likely to want more hours, and less likely to want fewer hours, than those who own their property outright, and those who are renting are more likely still to want more hours and less likely to want fewer hours. This highlights the importance of financial concerns for work patterns at older ages. If more people reach later working life with outstanding mortgages, or not owning property, as current trends in owner-occupation at younger ages suggest might be the case (Cribb, 2019), this would be expected to be associated with even more older workers wanting to work longer hours in the future.

Those reporting a health problem are around 3.5 ppts more likely to want shorter hours and less likely in general to be satisfied with their current hours than those without a health problem. This could highlight that some of those managing health conditions having difficulty finding flexible employment to suit their needs.

In terms of job characteristics, unsurprisingly it is those working full-time who are much more likely to want to work fewer hours and those working part-time who are more likely to want to work more hours. The self-employed might be expected to be more satisfied with their hours than employees, since they have more agency over how much they work. However, self-employed workers are actually more likely to want to work more hours than employees (by around 2.2 ppts) – which could indicate that while self-employment provides some flexibility, a lack of suitable work is still an issue for some older self-employed people.

Employees with higher levels of hourly pay and those with permanent jobs are more likely to want to work shorter hours and less likely to want more hours than those with lower levels of earnings or temporary jobs – suggesting that underemployment is a bigger issue for those in less stable and less financially well-off positions.

Finally, the association of the task content of people's occupations and their satisfaction with their hours is somewhat unexpected. Controlling for all the other

⁴ As measured by the English Index of Multiple Deprivation (IMD); coefficients are reported in the full results in Table DA.3 in the data appendix.

factors, those in more manual jobs are less likely to want shorter hours, while those in more stressful jobs are more likely to want more hours than those in less stressful jobs – despite manual work and stressful work being perceived to be activities that older workers might want to move away from. However, this is not true when other factors are not controlled for. These findings are similar to the results we saw in Figure 2.2, where those in jobs with higher manual and stressfulness task content scores were less likely to retire or move out of work over the subsequent year.

3.3 Movements into part-time work

Figure 3.1 showed that the proportion of workers working part-time increases with age, which could be driven by part-time workers staying in paid work for longer or by people moving into part-time work at older ages (or both). However, despite this, a significant minority of older workers would like to work fewer hours (particularly among those working full-time), and wanting to work shorter hours is more common among older workers than wanting to work longer hours.

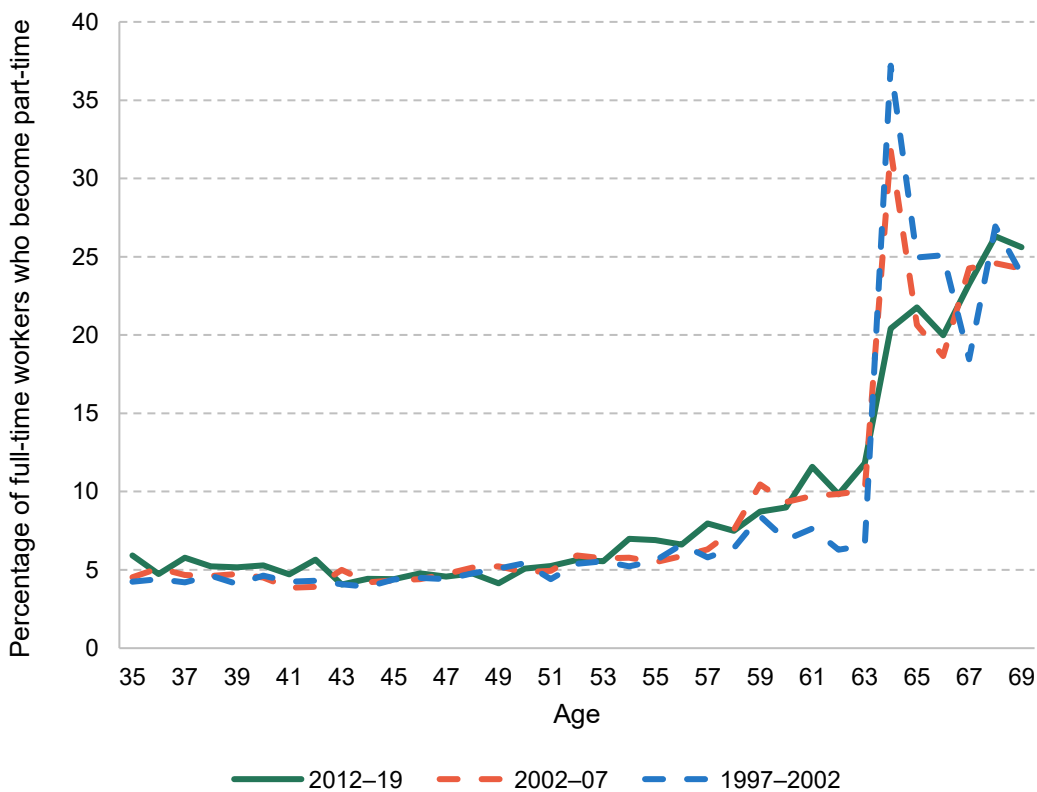
In this section, we examine the prevalence of transitions into part-time work at older ages, and seek to understand what kind of workers choose and are able to move into part-time work at older ages.

Figure 3.5 shows the proportion of people in paid work of different ages who move from full-time to part-time work within the next year. The three lines indicate different periods: data from the eight years prior to the COVID-19 pandemic (2012–19) and two six-year periods prior to the Great Recession (1997–2002 and 2002–07). Between 2012 and 2019, the proportion of full-time workers moving each year to part-time work is relatively stable for age groups below age 50, with around 5% of full-time workers making this switch at each age. After age 50, the proportion of workers moving to part-time work starts to increase with age – and particularly so since the early 2000s. Among workers aged 60, about 10% move from full-time to part-time work in the next year. After age 60, the proportion of workers reducing their hours increases even more, with about a quarter of workers in their mid 60s moving from full-time to part-time work within the next year. This peak in the proportion of workers moving to part-time work in the year they turn 65 in the earlier periods⁵ is driven by two effects – fewer full-time workers stay in

⁵ This was the state pension age for men until October 2018.

employment in this year (as they move to retirement instead), and also more of the remaining full-time workers do start working part-time. The proportion moving to part-time work levels off after the peak at 65 (especially in the earlier periods), as a smaller proportion of full-time workers still working at those ages retire in each year, and also a smaller proportion of the remaining full-time workers move into part-time work.

Figure 3.5. Movements from full-time to part-time work

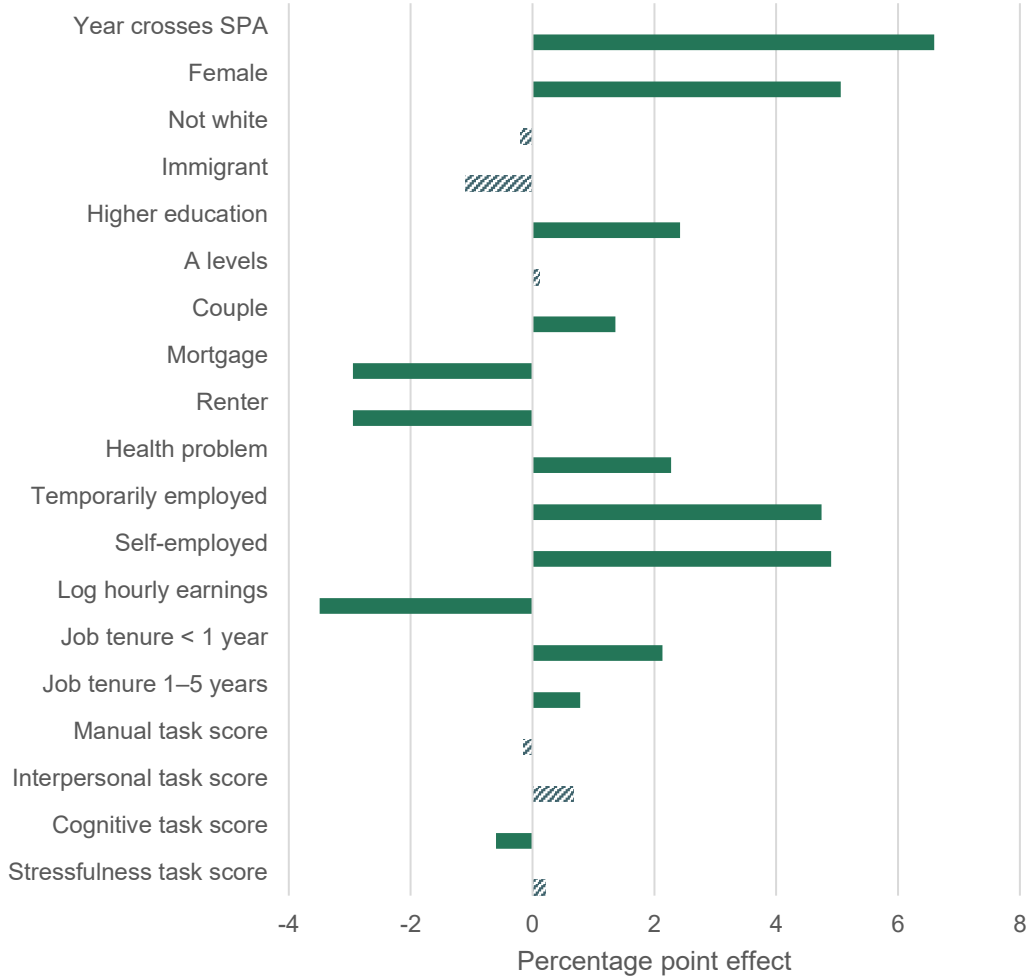


Note: The graph shows the percentage of full-time workers in wave 1 who work part-time in wave 5, conditional on still being in work in wave 5. Part-time work is defined as fewer than 30 hours in a normal week.

Source: Labour Force Survey.

Figure 3.6 shows the results from a logit regression that examines the characteristics associated with whether an older full-time worker changes to part-time work rather than staying in full-time work. The reported coefficients can be interpreted as the percentage point change in the likelihood of moving from full-time to part-time work, while keeping all other variables constant.

Figure 3.6. Characteristics associated with full-time to part-time movements among 50- to 69-year-olds



Note: Average marginal effects from a logit regression. The sample is those who join wave 1 between 2012q3 and 2019q1 and who are in full-time work in wave 1 and working in wave 5. The outcome is whether they are in part-time work in wave 5. The independent variables are individual characteristics in wave 1. Solid bars indicate the effects are statistically significantly different from zero at the 10% significance level. See Table DA.4 in the data appendix for a full list of controls and base covariates.

Source: Labour Force Survey.

We find that those who cross the state pension age (SPA) threshold in the next year are 6.6 ppts more likely to move from full-time to part-time work, even after controlling for age. In other words, reaching the SPA is associated both with greater retirement (shown in Figure 2.1), and with a greater reduction in work hours among those staying in employment, than is the case at other ages.

Figure 3.1 showed that women are more likely to work part-time at all ages than men, and Figure 3.6 indicates that this is at least in part because they are 5.1 ppts more likely to move from full-time to part-time work in a given year. Those living as a couple are also more likely to move to part-time work than those who are single.

Movements to part-time work seem to be associated with certain indicators of higher socio-economic status. In particular, those with higher levels of education, those who own their house outright, and those living in less deprived areas are all more likely to move to part-time work in a given year.

However, movements to part-time work are also more common among those with less secure work arrangements. Those who are self-employed or temporarily employed are more likely to move to part-time work, as are those with lower earnings and shorter job tenures. Those in full-time work who have a health problem are also more likely to move into part-time work.

This suggests that there are two groups of workers moving into part-time work at older ages: one group that can afford to work fewer hours to enjoy more leisure time, and another that may well prefer to work longer hours but cannot find a suitable full-time job. Among the group of older workers moving from full-time to part-time work, 13.9% would prefer to work longer hours after becoming part-time, compared with 12.3% of all part-time workers. This share is higher for non-white workers, immigrants, renters, those with a health problem and people living in more deprived areas, suggesting that these groups are more likely to be moving into part-time work despite preferring longer hours.

3.4 Part-time work in retirement pathways

The previous section focused on movements from full-time to part-time work over the course of a year. However, it is also interesting to take a longer-run view and consider how important part-time work is as a step as people move from full-time work into retirement. We know that, increasingly, labour market trajectories and pathways into retirement are considerably more complex than the traditional model where people retire directly from one full-time job (Banks, 2016).

In particular, the pattern where individuals reduce their hours of work before retiring fully is often called ‘gradual retirement’. The evidence from the US on the

importance of gradual retirement is somewhat mixed. For example, Cahill et al. (2006) find that only 10% of older workers reduce their hours by more than 20% in later life, while Boissonneault and de Beer (2018) find that about half of their sample go through gradual retirement with periods of part-time work or partial retirement before full retirement. A UK study by van der Horst et al. (2017) suggests that most of the prevalence of part-time work at older ages is driven by women who have been working part-time most of their careers.

Here we focus on a sample of workers from the English Longitudinal Study of Ageing who are aged 50–59 in 2002–03 and remain in the survey over the following 16 years. We can examine how important part-time work is for that particular group of workers as they transition from paid work towards retirement over the following 16 years.⁶ Considering all workers in our sample, we find that half work part-time at some point in the 16 years that we observe them.

In the following analysis, we focus specifically on the extent to which people use part-time work for transitioning from full-time work to retirement. Thus, in the rest of the chapter, we only consider a sample of workers who in 2002–03 were in full-time work, leaving out those who were already working part-time in the first period. Our pathway of interest is a ‘gradual retirement’ pathway, which we define to include anyone who moves from full-time to part-time work during the 16-year observation period. When considering the sample of individuals who were in full-time work in 2002–03, we find that nearly half of the sample retire directly from full-time work. However, a significant minority, about 30% of full-time workers, take the gradual retirement pathway and move from full-time to part-time work during the period before leaving the labour market.

We also find that about 8% of our sample moved to retirement via being out of work, and about 6% are ‘unretired’ in that they return to work after being retired. It is worth noting that the size of the ‘unretired’ group can vary based on the definition of unretirement. For example, Platts et al. (2017) find, using data from the British Household Panel Survey and Understanding Society, that 25% of UK workers experience a ‘retirement reversal after reporting being retired’, but their definition of unretirement includes also those who return to full-time work after

⁶ More details on the data are available in Appendix A.

periods of part-time work. Kanabar (2015) finds rates of unretirement more similar to ours using the same ELSA data we use here.

To assess what kind of individual and job characteristics are associated with gradual retirement, we use a multinomial logistic regression. We focus on how characteristics in the first period, 2002–03, are associated with pathways in later life.

Key results are shown in Figure 3.7. We focus on reporting results for our key pathway of interest, the gradual retirement pathway via part-time work.⁷ The figure shows the magnitude of the association, which can be interpreted as the percentage point change in the likelihood of a person with that characteristic being in the gradual retirement pathway.

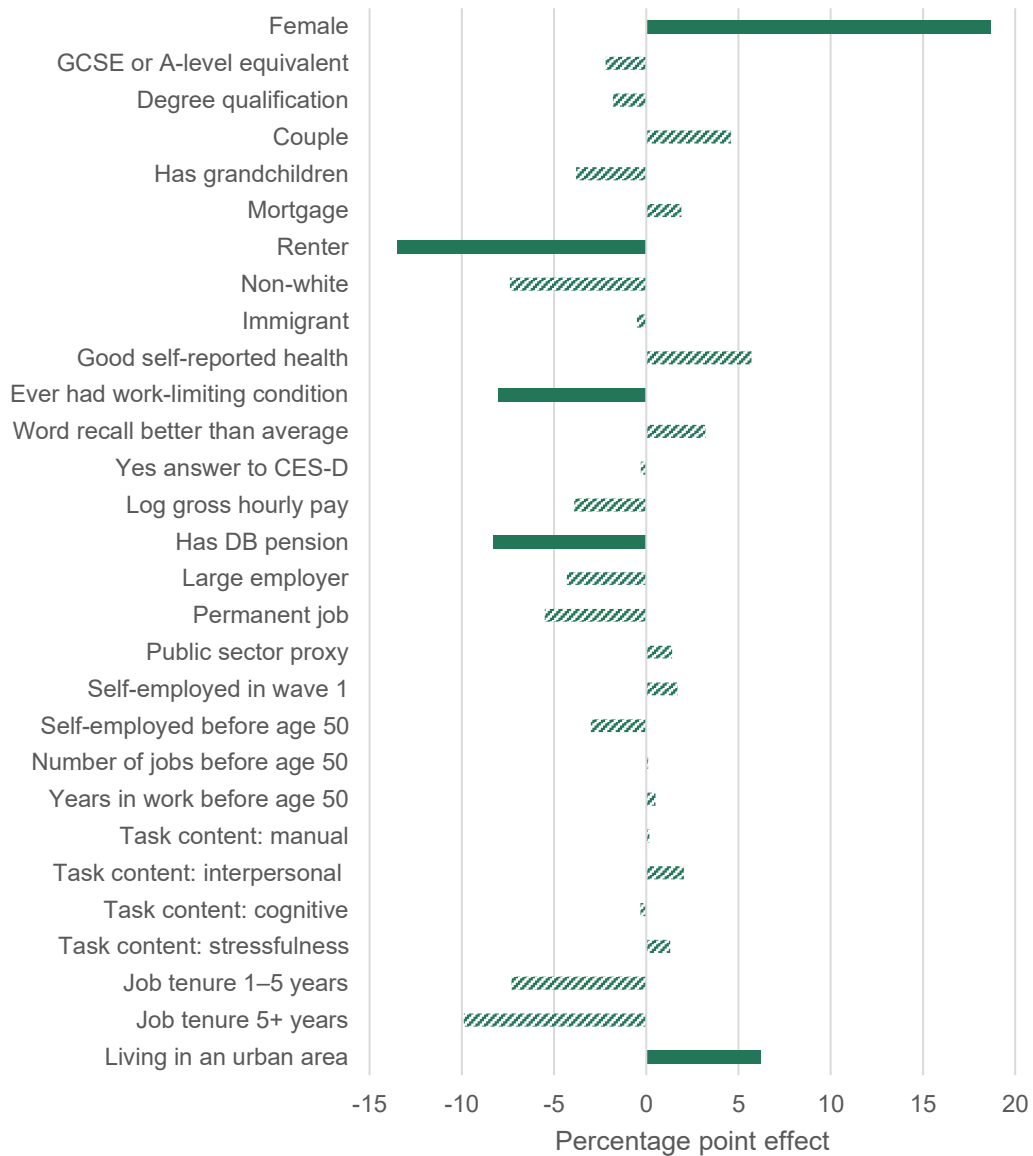
We find that women are 19 ppts more likely than men to be in the gradual retirement category. This is a very large effect in magnitude, which shows that even when controlling for a number of other job and individual characteristics, strong gender differences in prevalence of gradual retirement remain.

Renters are much less likely to move into retirement through part-time employment: 14 ppts less likely to do so than those who own their property outright. This suggests that financial constraints may be an important factor in gradual retirement decisions, which may become increasingly important if more people reach later working lives as renters.

Another interesting finding in these results is about health. The short-term transition analysis in the previous section showed that those with a health condition were more likely to move into part-time work within a year, conditional on staying in work. However, in our long-run analysis, those who have ever had a work-limiting health condition are less likely to move to retirement through gradual retirement, and more likely to retire via periods of being outside the labour market. This suggests that although transitions into part-time work can be important for some workers with health problems, overall it is more common for them to leave the labour market altogether.

⁷ The full results are in Table DA.5 in the data appendix.

Figure 3.7. Characteristics associated with gradual retirement among those aged 50–59 and working full-time in 2002–03



Note: Solid bars indicate that the association between the characteristic and the probability of taking the gradual retirement pathway is significant at least at the 10% level. Striped bars indicate that the results are not statistically significantly different from zero. Results are from a multinomial logit regression of a pathway indicator on wave 1 characteristics that also controls for age (indicator for being aged over 55 in wave 1), having a missing wage, and wealth quintiles. ‘Yes answer to CES-D’ means that the respondent answered yes to a Center for Epidemiologic Studies Depression Scale question that might indicate depressive symptoms. ‘Ever had work limiting condition’ means that the respondent had a work-limiting condition at any point during waves 2–9 of the survey. Number of observations 934. See Table DA.5 in the data appendix for the full set of results.

Source: English Longitudinal Study of Ageing.

Those with a defined benefit (DB) pension are also significantly less likely to retire gradually (by 8.3 ppts compared with those without a DB pension), and more likely to retire directly from full-time work. This is likely to be driven by financial incentives to stay in the same job until the normal pension age that can come from being a member of a DB scheme. Decline of the provision of DB pensions may lead to an increased demand for more flexible pathways into retirement in the future, although this will be less evident in sectors where DB pensions are more prominent, specifically the public sector.

Those living in urban areas are more likely to retire gradually, by 6.2 ppts compared with those living in rural areas. This is likely driven by the fact that urban areas have more part-time jobs available – for example, due to larger hospitality and retail sectors. This highlights the different opportunities facing those ageing in different areas.

4. Changes in occupation

For people's quality of life and material standard of living, it is important not only whether they are in work, and the hours or form of work they undertake, but also what work they actually do while in work. In this chapter, we document the type of occupations that older workers work in, as well as the sort of tasks they undertake at work. We then examine how common it is for older workers to change occupation, and which types of individuals are more likely to do this. In particular, we examine whether older workers are more likely to move into less manual or less stressful jobs, as well as the broader individual circumstances that are associated with individuals changing occupation. We then examine how occupation changes feature in long-run retirement pathways, and for which groups they are more prevalent.

Key findings

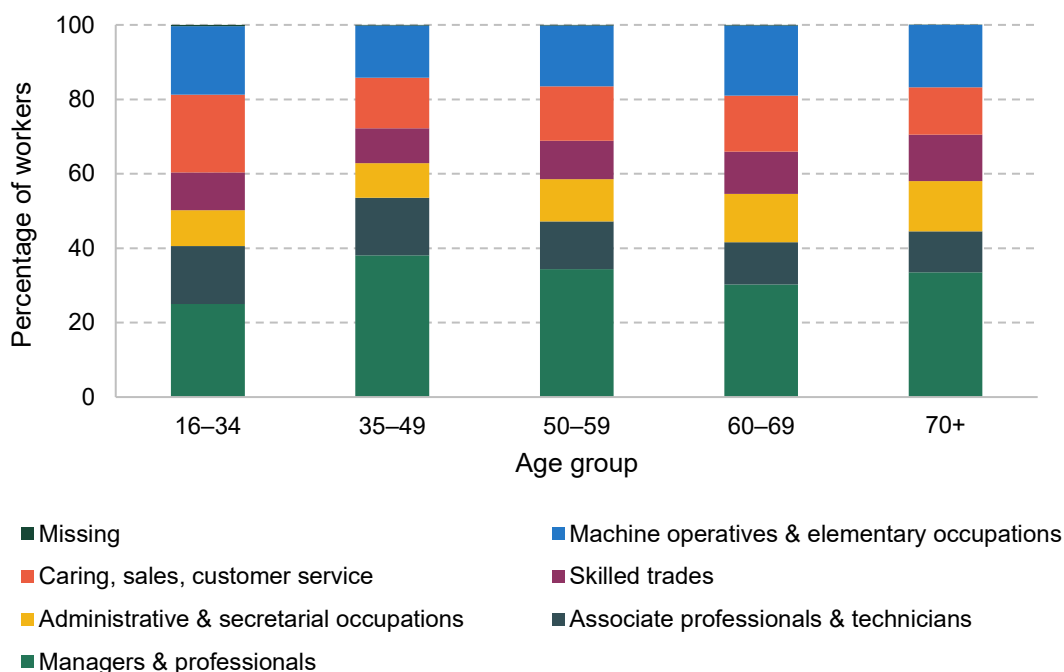
- 1 Older workers change occupation – and employer more generally – less often than younger workers. The probability of changing occupation over a year declines steadily with age, from 6% among workers aged 35, to 4% among workers aged 50 and 1% among workers in their late 60s.
- 2 We find no evidence that workers in more stressful or more manual occupations are more likely to change occupation, although there is some evidence that workers who do change occupation tend to move towards less stressful jobs.
- 3 Those who have been in their job for less than a year are (all else equal) more likely to change occupation over the following year. There is, therefore, a group of older workers not in stable, long-term employment.

- 4 On their pathway to retirement, people with health problems are less likely to change occupation, while those with better self-reported health and better cognitive function are more likely to change occupation. This raises concerns that people with less good health face greater barriers in adjusting their work at older ages.
- 5 Workers who have had more jobs before age 50 are more likely to have multiple occupations in their retirement pathways than those with fewer jobs before age 50. This suggests that some people tend to switch occupations more throughout their working lives, including at older ages. This could be because they prefer to move to different occupations and/or because the roles they work in are more precarious.

4.1 Occupations and task content at older ages

We start in Figure 4.1 by showing the occupational composition of different age groups in 2017–19. Compared with 35- to 49-year-olds, a higher proportion of older workers are in machine operative and elementary occupations, skilled trade occupations, administrative and secretarial occupations, and caring, sales and customer service occupations. On the other hand, a lower proportion of older workers are in managerial and professional occupations and associate professional and technical occupations. This is particularly important given that earnings are higher on average in these occupational groups (Office for National Statistics, 2020a). This pattern could be the result of two different trends: either workers are disproportionately moving out of managerial, professional and technical occupations as they age (age effects), or perhaps those in earlier-born generations are less likely to have been in these occupations at all ages than later-born generations (generation effects).

Figure 4.1. Share of workers in different occupations, by age (2017–19)



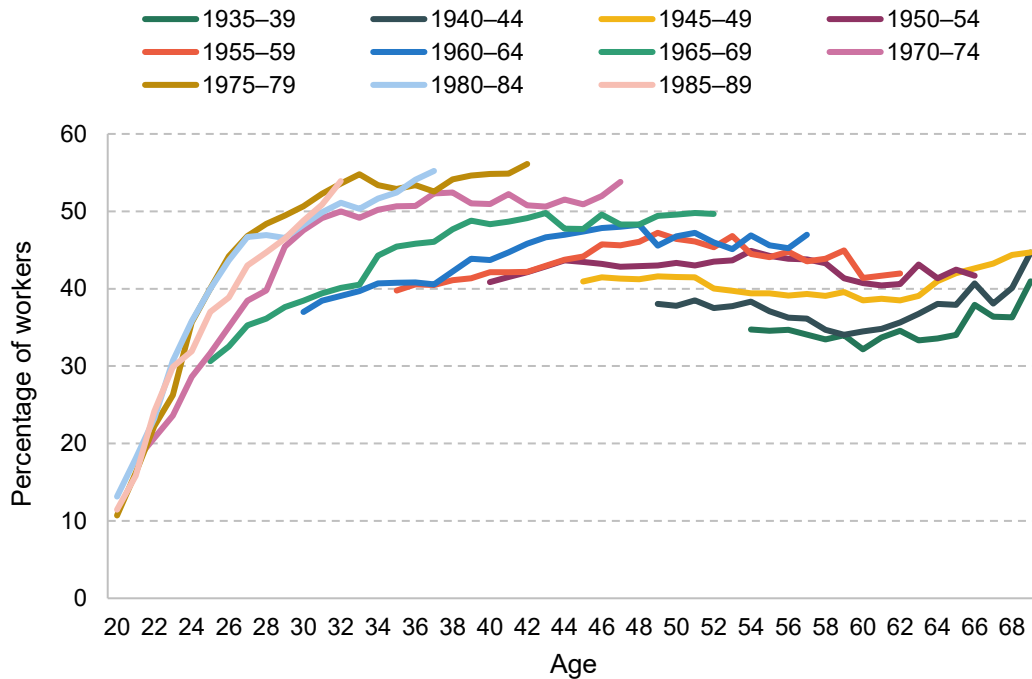
Note: Categories refer to 2010 Standard Occupational Classification major groups. The following categories include two major groups: ‘Managers and professionals’ includes major groups 1 and 2; ‘Caring, sales, customer service’ includes major groups 6 and 7; ‘Machine operatives & elementary occupations’ includes major groups 8 and 9.

Source: Labour Force Survey.

To unpick this, we examine how the proportion of workers in ‘managerial and professional’ and ‘associate professional and technical’ occupations has changed for successive generations as they have aged. In Figure 4.2, we group people into generation or ‘birth cohort’ groups, where each group contains all individuals born within a given five-year period. Then, for each year, we plot the proportion of workers in each birth cohort group who are working in managerial, (associate) professional and technical occupations against the average age of the birth cohort group in that year. We can use this to ‘follow’ each birth cohort group over time as they get older, and to see what happens to the proportion in these occupations.⁸

⁸ This is not done using longitudinal data but using repeated ‘cross-sections’ of the population, which, when grouping people together by year of birth, allows us to track the economic circumstances of different generations as they age.

Figure 4.2. Share of workers in managerial, professional, associate professional and technical occupations, by birth cohort and age



Note: Managerial, professional, associate professional and technical occupations include the first three major groups of the 2010 Standard Occupational Classification.

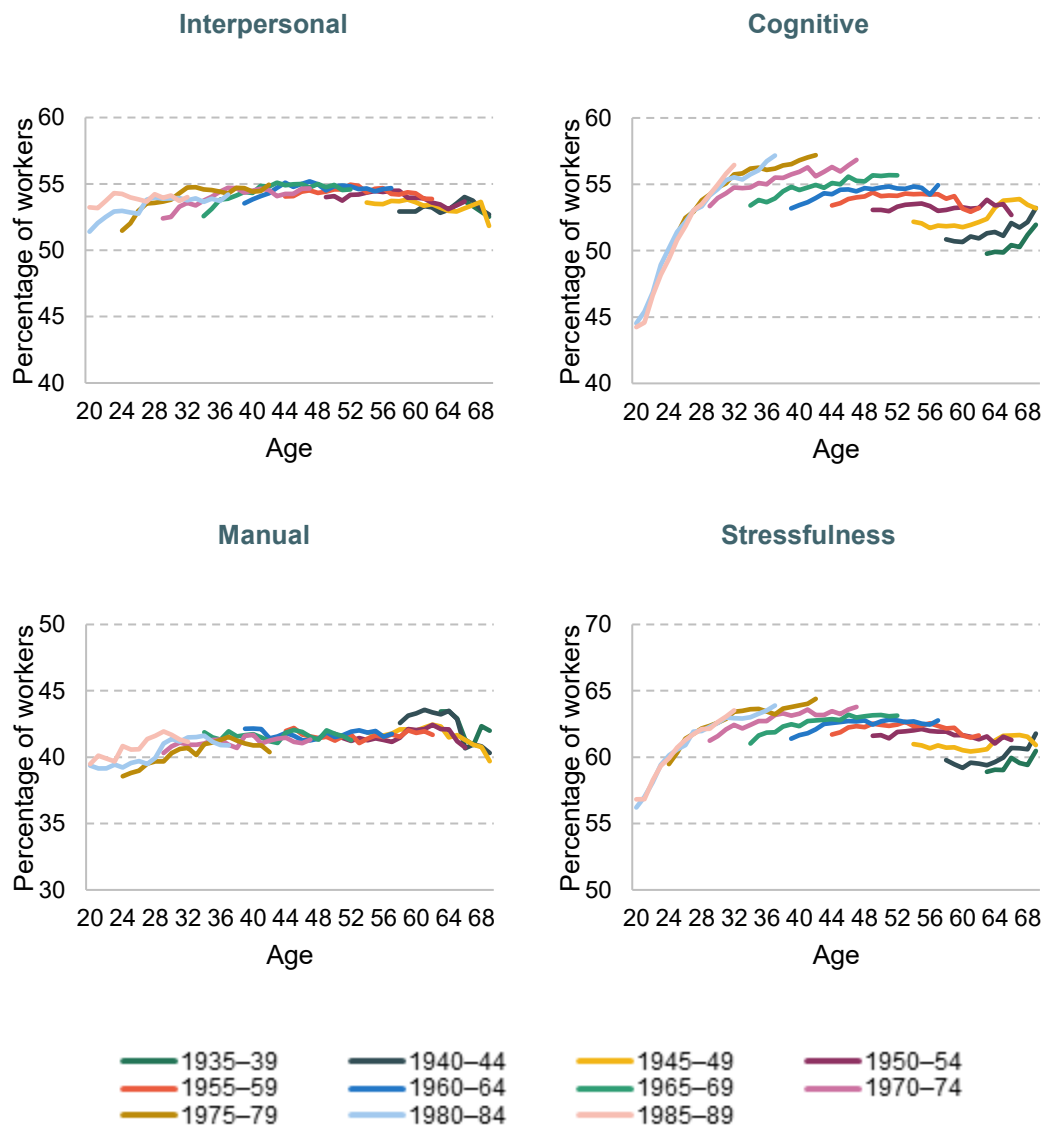
Source: Labour Force Survey 1992–2019.

The resulting picture suggests that the differences in occupation between older age groups shown in Figure 4.1 are largely the result of differences between generations, with earlier-born generations being less likely to be in managerial, (associate) professional and technical occupations, rather than due to individuals systematically moving out of these occupations at older ages. We can see this by noting that, when comparing different birth cohort groups at the same age, the share of workers in these occupations is lower in earlier-born cohorts and higher in later-born cohorts. When we follow a given birth cohort group over time at older ages, we see little consistent evidence of a falling share of workers in these occupations.⁹

⁹ For some birth cohorts, we see a rise in the share of workers in managerial, (associate) professional and technical occupations as they reach their late 60s. This might be driven by workers in these occupations being more likely to stay in work until older ages.

This pattern – of a greater share of workers being in managerial, (associate) professional and technical occupations in younger cohorts – is true even when comparing cohorts born in the 1960s and 1970s. This suggests that people approaching retirement in the coming decades are likely to be working in considerably higher occupational class jobs (such as in the professions) than people who retired in the last decade or so.

Figure 4.3. Average interpersonal, cognitive, manual and stressfulness task content, by birth cohort and age (2001q2–2019q4)



Note: See Appendix A for detail on how task content measures are constructed.

Source: Labour Force Survey and O*NET database.

The analysis so far in this section has compared the share of workers in six different occupational groups. However, these occupational groups are very broad and can contain some notably different occupations. For example, civil engineers, pharmacists and librarians are all examples of professional occupations, yet workers in these jobs perform quite a different set of tasks at work. There are also examples of occupations in different categories that involve similar, or related, sets of tasks: nurses and dental practitioners are examples of professional occupations, while dental nurses are classified as caring, leisure and other service occupations.

Figure 4.3 shows how the average manual, interpersonal, cognitive and stressfulness task contents of occupations change as generations age. The cognitive and stressfulness measures follow a similar pattern to Figure 4.2, with earlier-born cohorts on average in less cognitive and less stressful occupations than later-born cohorts at all ages. In contrast, there is little difference between generations in terms of the manual or interpersonal task content of their jobs. This suggests that those reaching retirement in future are likely to look fairly similar to current older workers in terms of the manual and interpersonal task content of their jobs, but they are likely to be in more stressful and more cognitively demanding jobs.

There is little suggestion from Figure 4.3 that workers systematically move out of more stressful, more cognitive, more interpersonal or more manual occupations as they age. However, in the rest of this chapter, we examine this more explicitly, describing how common it is for older workers to change occupation, who does so, and how the task content of work changes for those who do change occupation.

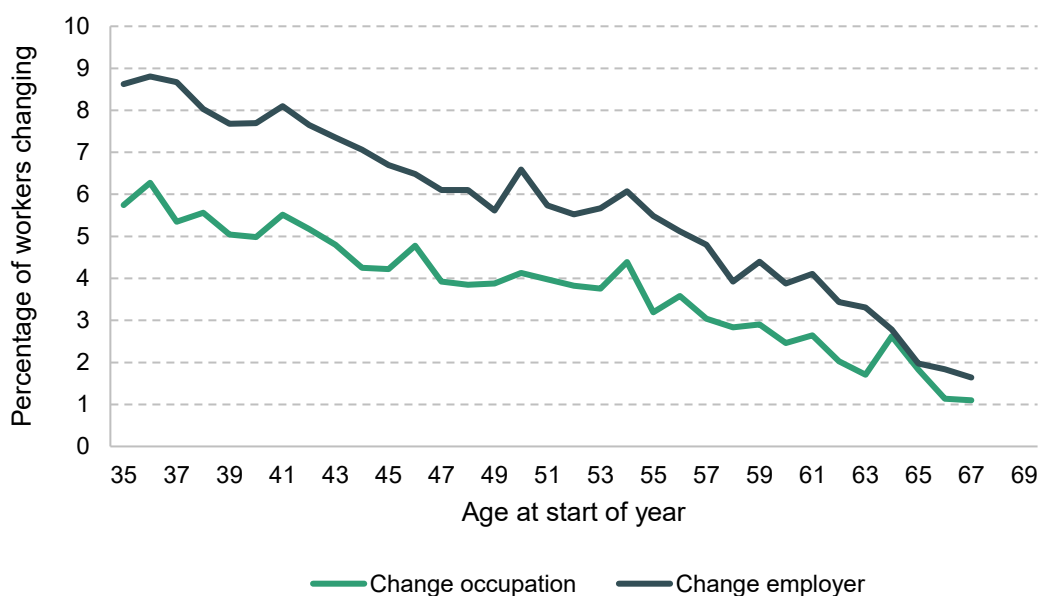
4.2 How common are changes in occupation year to year?

We now turn to analysing changes in occupation at older ages. We start by examining how the share of workers who change occupation over the course of a year varies with age. In the rest of this chapter, occupation switches are measured by comparing the (four-digit) occupation a respondent reports working in during the survey period with the four-digit occupation they report working in one year prior.

Figure 4.4 shows that the share of workers switching occupation over a year decreases fairly consistently with age. Around 6% of 35-year-old workers who are in work at the start and the end of the year switch four-digit occupation, compared

with 4% of 50-year-old workers and around 1% of 67-year-old workers. This is a similar pattern (although at a lower level) to the share of workers switching employer, which is also shown in the figure for comparison.

Figure 4.4. Share of workers switching occupation or employer over the course of one year, by age (2012–19)



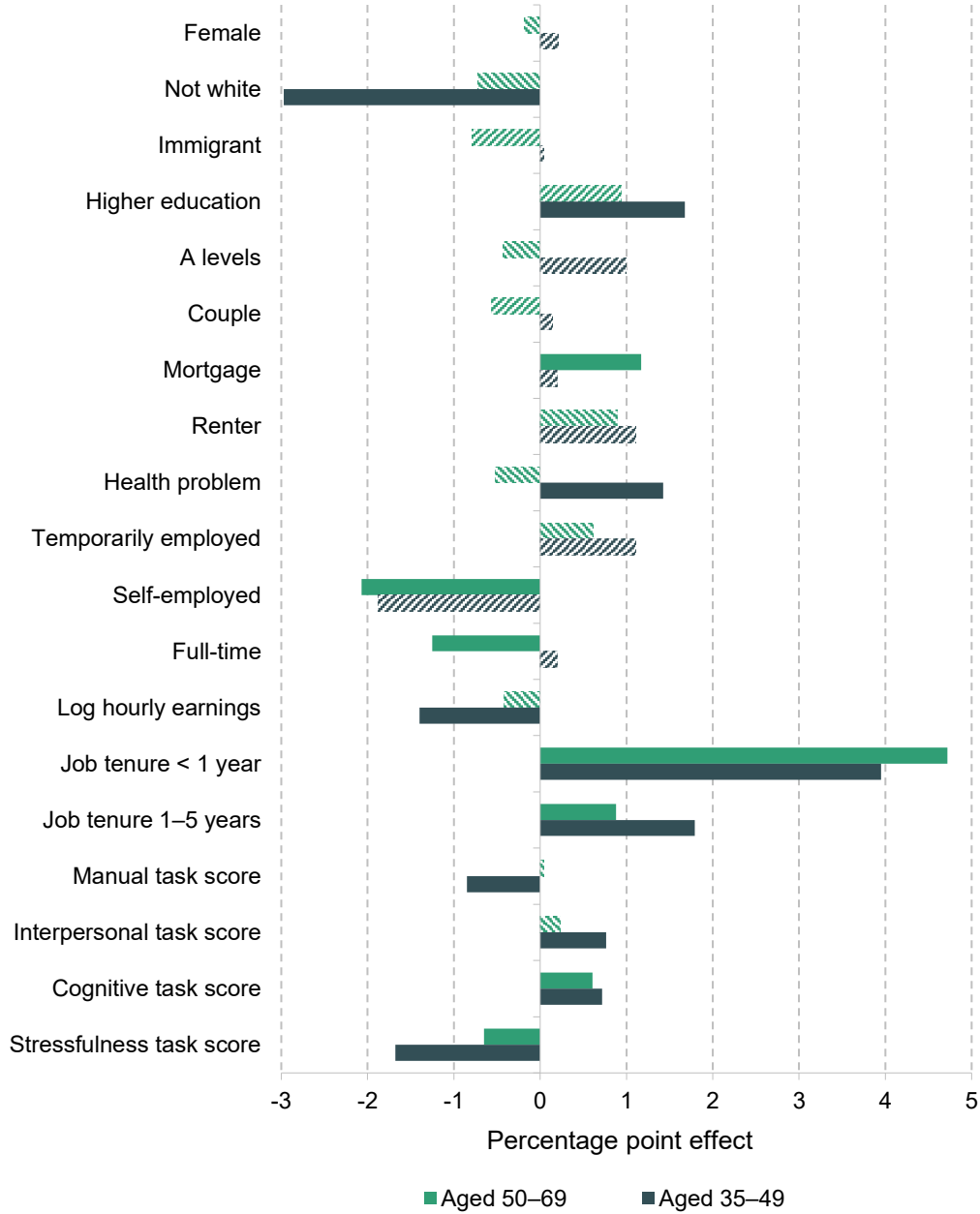
Note: Sample includes individuals aged 35–69 in work who also report working 12 months earlier. The graph shows the share that report changing four-digit occupation or employer over the past 12 months. Points with fewer than 10 individuals reporting having changed occupation/employer over the past 12 months are suppressed.

Source: Labour Force Survey, q2 data from 2013 to 2019.

4.3 Who changes occupation?

This decline in occupation changes, and employment changes more generally, with age could be driven by many different factors. For example, it could be that older workers generally have less of a desire to change job, perhaps because they are satisfied with their current job as they have accumulated job-specific skills, or because they do not want the hassle when they are near the end of their careers. Alternatively, it could be that older workers find it harder to find a new job than younger workers, and this reduces their chance of moving.

Figure 4.5. Characteristics associated with changing occupation over the course of a year among 50- to 69-year-olds and among 35- to 49-year-olds



Note: Average marginal effects from two separate logit regressions. The samples are 50- to 69-year-olds and 35- to 49-year-olds who join wave 1 between 2012q3 and 2019q1, and report being in work in the survey period and one year previously in wave 5. The outcome is whether they report having changed four-digit occupation over the past year in wave 5. The independent variables are individual characteristics in wave 1. Solid bars indicate the effects are statistically significantly different from zero at the 10% significance level. See Table DA.6 in the data appendix for a full list of controls and base covariates.

Source: Labour Force Survey.

To help shed light on this issue, we examine which individual characteristics are associated with a higher probability of changing occupation among those who remain in paid work, and how this differs between older workers (aged 50–69) and younger workers (aged 35–49). Figure 4.5 shows the results from logit regressions that examine the characteristics associated with changing occupation over the course of a year. The regressions are run separately for samples of older and younger workers. The reported coefficients can be interpreted as the percentage point change in the likelihood of changing occupation, while keeping all other variables constant.

Figure 4.5 shows the results. The largest predictor of whether someone changes occupation over the next year is their current job tenure, both for older and younger workers. Older workers who have started working for their employer in the past year are 4.7 ppts more likely to switch occupation compared with those with a job tenure of over five years. Workers with a job tenure of between one and five years are also more likely to make these switches than workers with a job tenure of over five years. These results suggest that job changes at older ages are not just one-off career changes for many workers; rather, there is a group of older workers who are not in stable, long-term employment. For some, it could be that, with fewer job-specific skills having been accumulated, a move to a better job is more feasible. But it is also consistent with the findings of Chapter 2, that those who have recently joined their job are more likely to be out of work one year later, suggesting that the first year of a job is a particularly precarious time. Linked to this, we find that people who were unemployed during the observation year were much more likely to switch occupation than those who did not spend time in unemployment. This further suggests that a significant fraction of the occupation switches we are measuring are workers who are made redundant and return to the labour force in a new occupation.

Self-employed workers, on the other hand, seem relatively more stable. Compared with older permanent employees, older self-employed workers are less likely to switch occupation over the course of a year by 2.1 ppts, and again we see a similar effect at younger ages.

Many individual characteristics are not associated with a significant difference in the probability of changing occupation for older workers. For example, the probability of switching occupation at older ages is not estimated to be different (all else equal) between men and women, between white people and non-white people,

or between those with and without a work-limiting health problem. Younger workers reporting a work-limiting health problem are, however, more likely to switch occupation than younger workers who do not report such a health problem.

There are also some differences by education, although we have to analyse this separately for workers in their 50s and in their 60s to understand it fully. We find that those with higher education are 1.8 ppts more likely to switch occupation in their 50s compared with those with (the equivalent of) GCSE-level education or lower. This is essentially the same effect we see among 35- to 49-year-olds. However, among workers in their 60s, those with higher education are in fact 1.6 ppts less likely to switch occupation compared with those with GCSE-level education or lower.

The association between the task content of people's jobs and their probability of changing occupation at older ages is not what one would perhaps expect. For example, those with more 'stressful' jobs are actually less likely to switch occupation, while those in more manual occupations are no more likely to change occupation. It is those with relatively more cognitively intensive jobs who are more likely to change occupation, perhaps suggesting that it is people with these types of jobs who are better placed to change occupation.

In addition to examining who changes occupations, it is informative to examine the task content of jobs of the people who change occupations at later stages of their working life. For 50- to 69-year-olds who changed occupations between 2012 and 2019, the average stressfulness score in the original job was 0.628, compared with 0.615 for the jobs that people moved to. This change is also highly statistically significant, giving some evidence that those who do switch occupations at older ages are more likely to switch into less stressful occupations. In comparison, the decline in the average manual task score is much smaller, with the average manual score being 0.391 before changing occupation and 0.384 after.¹⁰ Nevertheless, we do find that this decrease rises to 0.015 for occupation-switchers who experience unemployment at some point during the intervening 12 months, suggesting that workers in manual jobs who are made redundant might struggle to find work in a job with a similar manual component.

¹⁰ This change is statistically different from zero at the 10% significance level.

4.4 Occupation changes as part of retirement pathways

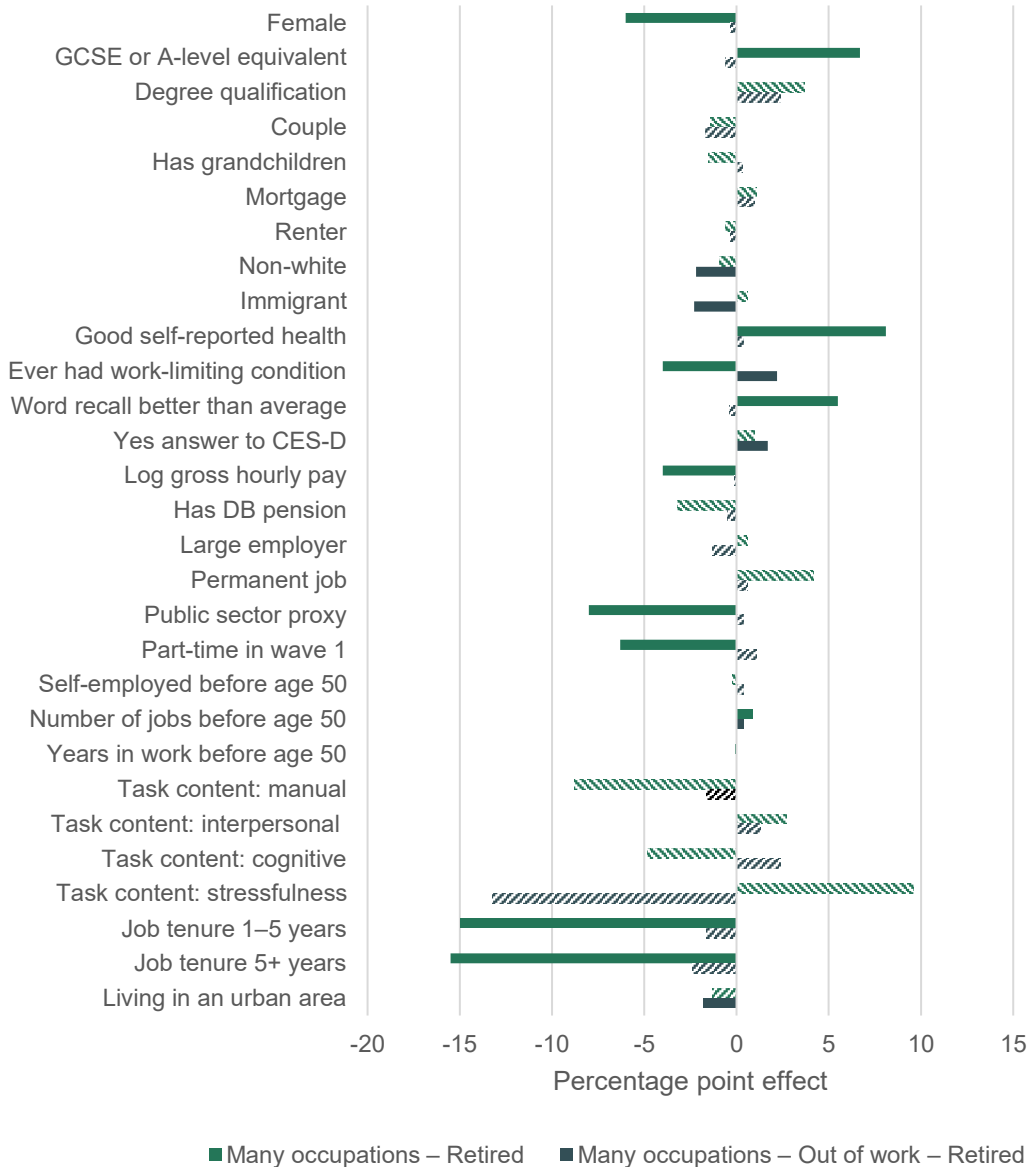
So far in this chapter, we have considered changes in occupation over the course of a year. However, it is also important to see whether people make changes to their occupation in the run-up to retirement, how common occupation changes are in later working life overall, and which characteristics are associated with changing occupation in the years leading up to retirement.

To do so, we focus on a sample of workers aged 50–59 in 2002–03, follow them for the next 16 years, and see what proportion of them change occupation before moving into retirement. Out of this sample of workers, 22% worked in more than one occupation during this period. However, four-in-five of the occupation-changers only changed occupation once, meaning that only 5% of workers had more than two occupations during the period they were observed before retirement.

When following individuals into retirement, we find that 54% of the sample stayed in the same occupation before moving straight from paid employment to retirement, while 17% had more than one occupation but then moved straight into retirement. We then have two pathways capturing workers who leave the labour force before retiring – for example, by being unemployed, permanently ill or disabled, or because they are taking care of family. We find that 11% of workers have just one occupation before leaving the labour force, while 2% of workers have multiple occupations before leaving the labour force. We now turn to analysing how individual and job characteristics, measured in the first period, are associated with the retirement pathways containing changes in occupation using a multinomial logistic regression. The estimated association between characteristics with the two pathways involving multiple occupations are presented in Figure 4.6.

As would be expected, many of the characteristics that were found to be associated with individuals being more likely to change occupation over a one-year period are also associated with the likelihood that an individual changes occupation at some point in the run-up to retirement. In particular, people who had been in their jobs for less than one year were much more likely than those with longer job tenures to change occupation in the run-up to retirement.

Figure 4.6. Characteristics associated with retirement pathways involving multiple occupations among those aged 50–59 in 2002–03



Note: Solid bars indicate that the association between the characteristic and the probability of being in one of these pathways is significant at least at the 10% level. Striped bars indicate that the results are not statistically significantly different from zero. Results are from a multinomial logit regression of a pathway indicator on wave 1 characteristics that also controls for age (indicator for being aged over 55 in wave 1), having a missing wage, being self-employed in wave 1, and wealth quintiles. ‘Yes answer to CES-D’ means that the respondent answered yes to a Center for Epidemiologic Studies Depression Scale question that might indicate depressive symptoms. ‘Ever had work-limiting condition’ means that the respondent had a work-limiting condition at any point during waves 2–9 of the survey. Number of observations 1,183. See Table DA.7 in the data appendix for the full set of results.

Source: English Longitudinal Study of Ageing.

Some characteristics, however, seem to have a slightly different relationship with occupational changes in retirement pathways compared with their relationship with changes in occupation over the space of a year. For example, this analysis suggests that women are less likely to change occupation in the run-up to retirement – Figure 4.6 shows that women are 6.0 ppts less likely to have multiple occupations before retiring than men. This differs from the short-run LFS analysis, where we did not see any difference in the probability of changing occupation over the course of a year, conditional on staying in work, between men and women. This could be rationalised by those women who do change occupation in the run-up to retirement on average changing occupations more times than men.

The rich health data in ELSA enable us to examine the association between health and changes in occupation in more detail than is possible in the LFS. We find that those with good self-reported health initially are 8.1 ppts more likely to have multiple occupations before retiring than those without good self-reported health. We also find that those with better word recall (a measure of cognitive function which is positively correlated with health) are more likely to retire after having multiple occupations, and less likely to be in the pathways where they only have one occupation. This again suggests that those with better health are better able to adjust their work settings at older ages by changing occupations.

Workers in the public sector (and those with a defined benefit pension, though this effect is not statistically significant) are estimated to be less likely to have multiple occupations in their retirement pathway.

Workers who have had more jobs before age 50 are also estimated to be more likely to have multiple occupations in their retirement pathways than those with fewer jobs before age 50: each extra job before age 50 is associated with a 0.9 ppt increase in the probability of having multiple occupations from age 50 before retiring straight from the labour market, and with a 0.4 ppt increase in the probability of having multiple occupations from age 50 before leaving the labour force in advance of retiring. This suggests that occupation changes at older ages are not necessarily just one-off transitions as a path to retirement, but rather that some people tend to switch occupations more throughout their working lives, and continue to be more likely than average to do so at older ages. Of course, this could be because they prefer to move to different occupations, or because the roles they work in are more precarious, or a combination of both.

5. Movements between employment and self-employment

Self-employment is an important type of work for the UK labour force, in particular for older workers. It is also a form of work that has been growing significantly across the population, particularly since the Great Recession (Cribb, Miller and Pope, 2019). In this chapter, we show how the share of workers in self-employment changes with age, and how the prevalence of self-employment has changed over time among older workers. We then focus on one particular aspect of self-employment – flows from employment to self-employment at older ages – to help understand in more detail the kind of work that older workers undertake and what drives these decisions.

As shown in Chapter 2, self-employment is associated with longer working lives compared with being an employee. Given this, it is important to consider what types of people are more likely to switch into self-employment in later life, and whether any particular job characteristics are associated with a higher likelihood of moving into self-employment at older ages. Finally, we look into the role that self-employment plays in pathways into retirement.

Key findings

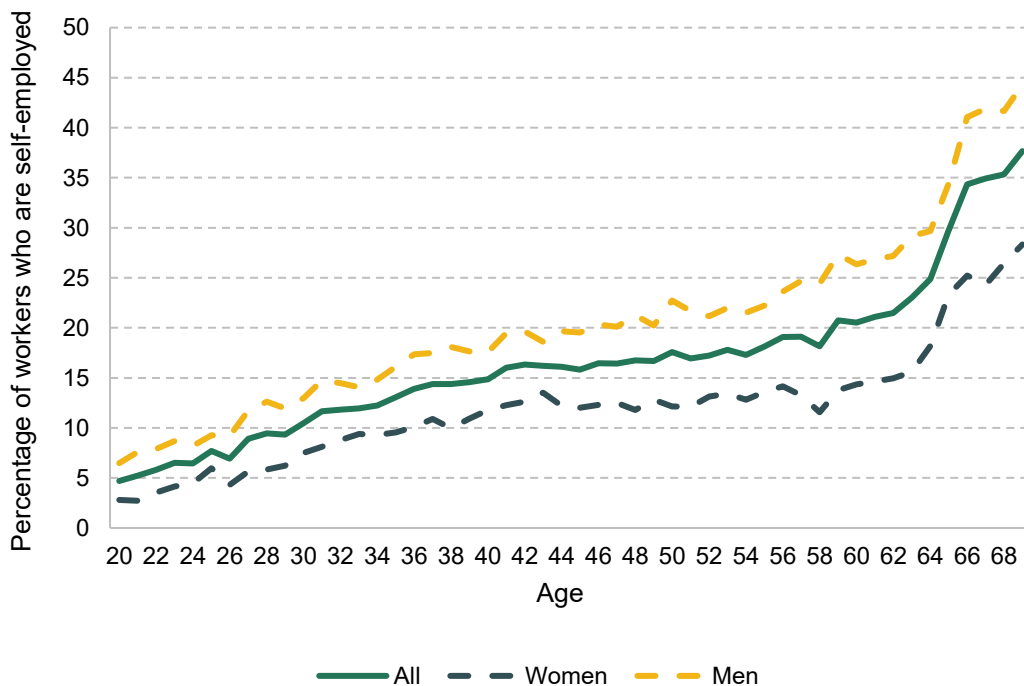
- 1 Self-employment is more prevalent among older workers than among younger workers. The share of 50- to 69-year-olds in this type of work has remained fairly stable over the past 30 years, especially among men. However, there has been an increase in the share of older working women in self-employment over the last decade.
- 2 Transitions into self-employment are an important job market movement among older workers, with the prevalence of these transitions increasing with age in particular after age 60.
- 3 Transitions into self-employment are more likely among men and people with higher socio-economic indicators. However, certain job characteristics that suggest less stable work arrangements, such as part-time work, temporary work and shorter job tenure, are also positively associated with transitions into self-employment.
- 4 When considering long-run transitions into retirement, we find that self-employment is part of the retirement pathway for 21% of all workers in our sample.
- 5 Those who have already spent time in self-employment are more likely to return to self-employment later in life. As self-employment is associated with longer careers, it is important for policymakers to consider measures that could be taken to ensure that this pathway is available to people who may not previously be familiar with it.

5.1 Older workers and self-employment

Self-employment is an increasingly prevalent form of work in the UK, with self-employed workers now accounting for 15% of the UK workforce (Office for National Statistics, 2020b).

Figure 5.1 shows that self-employment is also particularly important among older workers. Among those in paid work in 2017–19, the share who are self-employed increases steadily with age, with around 20% of 60-year-olds in self-employment. As we saw in the analogous graph for part-time work (Figure 3.1), a particularly large increase occurs at the age of 65 – nearly 40% of working 69-year-olds are in self-employment. However, whereas part-time work is more prevalent among women, at all ages self-employment is more prevalent among men.

Figure 5.1. Share of workers in self-employment, by age and sex (2017–19)



Source: Labour Force Survey.

Figure B.2 in Appendix B shows that the overall proportion of older workers (aged 50–69) in self-employment has remained relatively flat at around 20% of workers since the early 1990s, although there has been a more noticeable increase in the

proportion of older women who are self-employed, from around 10% in 2008 to nearly 15% in 2019.

5.2 Movements into self-employment

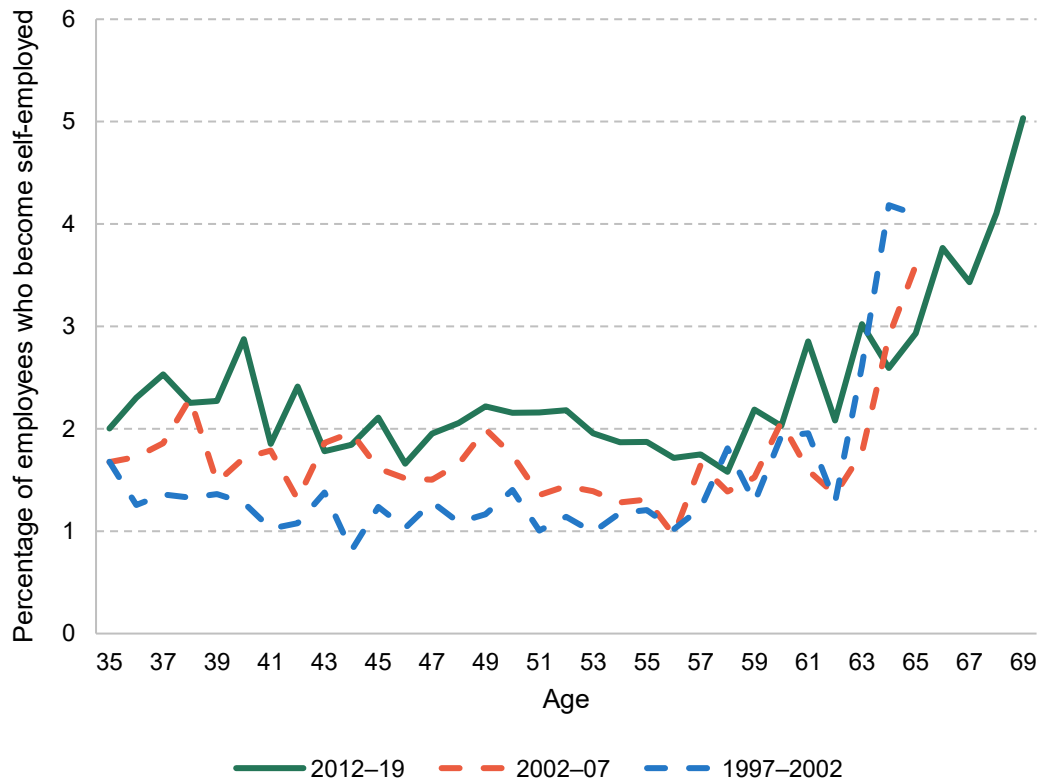
As with part-time work and its prevalence among older workers, there are two possible explanations for the increasing prevalence of self-employment with age. Workers might either be more likely to move into self-employment as they get older, or self-employed workers may stay in work for longer than employees. Chapter 2 shows that self-employed workers are indeed more likely to stay in work at older ages. In this section, we focus on the other possible explanation by examining the prevalence of transitions from employment to self-employment by age, and other characteristics.

First, we consider how movements from being an employee into self-employment differ by age. Figure 5.2 shows the percentage of employees of different ages who move into self-employment during the next year, in three different time periods.

Among employees aged 35–60, a similar proportion in each age group – around 1–2% (depending on the time period) – move into self-employment in a given year. After age 60, there is a large increase in the proportion of older employees moving into self-employment; for example, between 2012 and 2019, approximately 5% of workers aged 69 did so (though clearly a much smaller fraction of the population are in paid work at age 69 than in their 50s). It is clear that the prevalence of employment to self-employment transitions in each year at all ages is much lower than the prevalence of full-time to part-time transitions discussed in Chapter 3, but the age profiles of these transitions look very similar, with a sharp increase in the proportions of workers in their 60s transitioning to self-employment and to part-time work.

Figure 5.2 also shows how the age profile of transitions has changed over time. We see that, especially among the younger age groups, the proportion of workers who transition into self-employment is higher in the later time periods, which is consistent with the fact that the size of the self-employed workforce has increased sharply during this period. This trend is somewhat less clear among the age groups over 60 – the proportion of workers transitioning into self-employment looks relatively stable over time for the oldest workers.

Figure 5.2. Movements from employment to self-employment over the course of one year



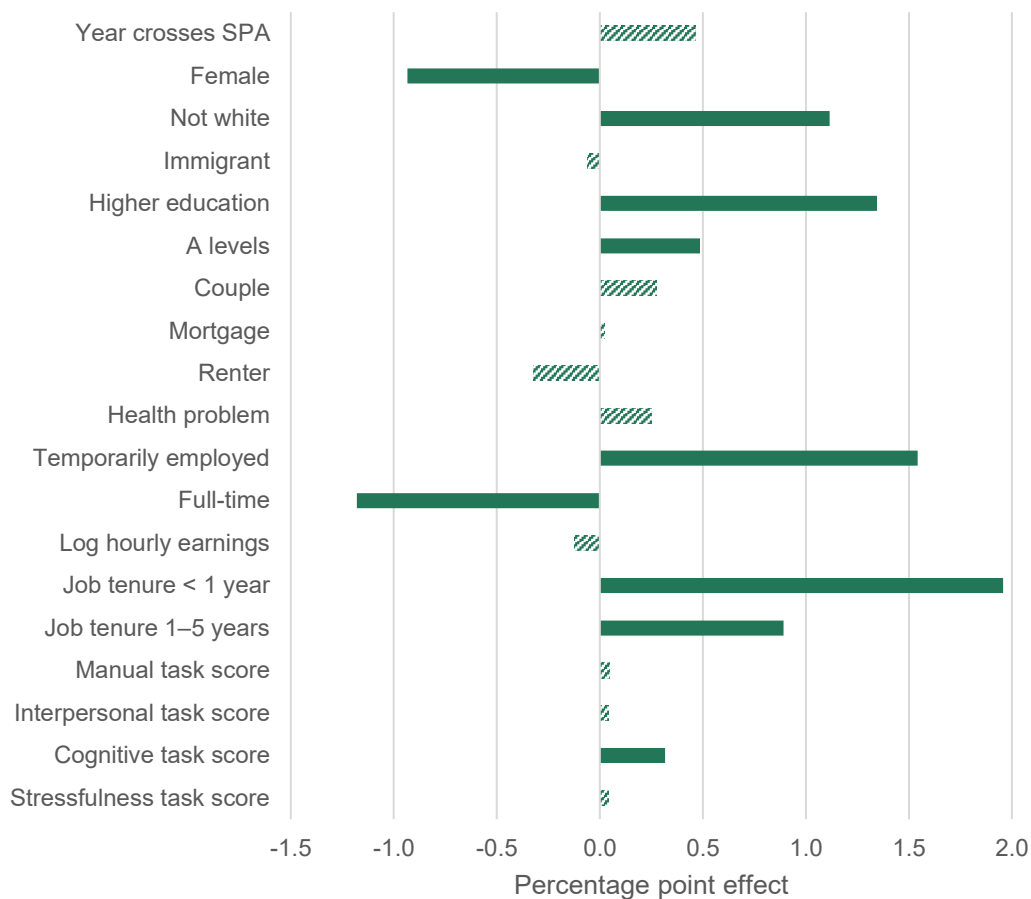
Note: The figure shows the percentage of employees in wave 1 who are self-employed in wave 5, conditional on still being in work in wave 5. Points with fewer than 10 individuals moving from employment to self-employment are suppressed.

Source: Labour Force Survey.

As discussed in Chapter 2, among older workers, being self-employed is associated with being more likely to remain in paid work over the next year. Given this association between self-employment and longer careers, it is important to understand what kind of people and jobs are associated with moving to self-employment at older ages. To assess that, we present results from a logit regression, examining the association between whether an employee moves into self-employment within the next year and their characteristics and circumstances.

Figure 5.3 shows the results. They can again be interpreted as the percentage point change in the likelihood of an employee moving from employment to self-employment over the course of one year, while holding all other factors constant.

Figure 5.3. Characteristics associated with probability of employee aged 50–69 moving into self-employment over the course of a year



Note: Average marginal effects from a logit regression. The sample is 50- to 69-year-olds who join wave 1 between 2012q3 and 2019q1 and who are employees in wave 1 and working in wave 5. The outcome is whether they are self-employed in wave 5. The independent variables are individual characteristics in wave 1. Solid bars indicate the effects are statistically significantly different from zero at the 10% significance level. See Table DA.8 in the data appendix for a full list of controls and base covariates.

Source: Labour Force Survey.

The results show that transitions to self-employment are less common among women (by 1 ppt relative to men) and more common among non-white ethnic minorities (by 1 ppt relative to white people). This is consistent with previous evidence; the self-employed population has a higher proportion of men and immigrants (who are more likely than the population average to belong to an ethnic minority) than the employee population (Cribb, Miller and Pope, 2019). However, it is interesting to see it is not just that men and non-white people are more likely to

become self-employed at younger ages; it is also that older men and older people from ethnic minorities are more likely to move from being employees into self-employment than older women and older white people respectively. It seems that movements to self-employment are associated with higher socio-economic indicators as well. For example, those with higher levels of education and those living in less deprived areas are more likely to move to self-employment during the year.

However, certain job characteristics are also associated with moving into self-employment. In particular, those who have less secure work arrangements are more likely to move to self-employment – workers who are temporary employees, working part-time or have a job tenure of under five years. Those in the private sector are also more likely to transition into self-employment, as are those with a higher cognitive task score in their job.

Therefore, we see that movements into self-employment are common for more highly educated people in less deprived areas, but also for certain groups with lower labour market attachment. This suggests that there are two groups making these transitions: one group of people who seem to be relatively well-off and want to benefit from the flexibility of self-employment, and another group who become self-employed because they cannot find a suitable job as an employee. This is a similar pattern to what we found for transitions into part-time work.

Consistent with this, among older workers who have recently moved from employment to self-employment, 7% are looking for a different job, compared with just 3% of all self-employed workers aged between 50 and 69. For some older workers, therefore, self-employment is seen as a short-term solution while they continue looking for a suitable job as an employee.

5.3 Self-employment in retirement pathways

So far, we have focused on transitions from being an employee into self-employment in a given year among older workers. The next step is to consider what kind of role self-employment plays in the long-run transitions of people moving from work to retirement. Evidence from the US suggests that transitions into retirement that involve some form of self-employment are an important pathway

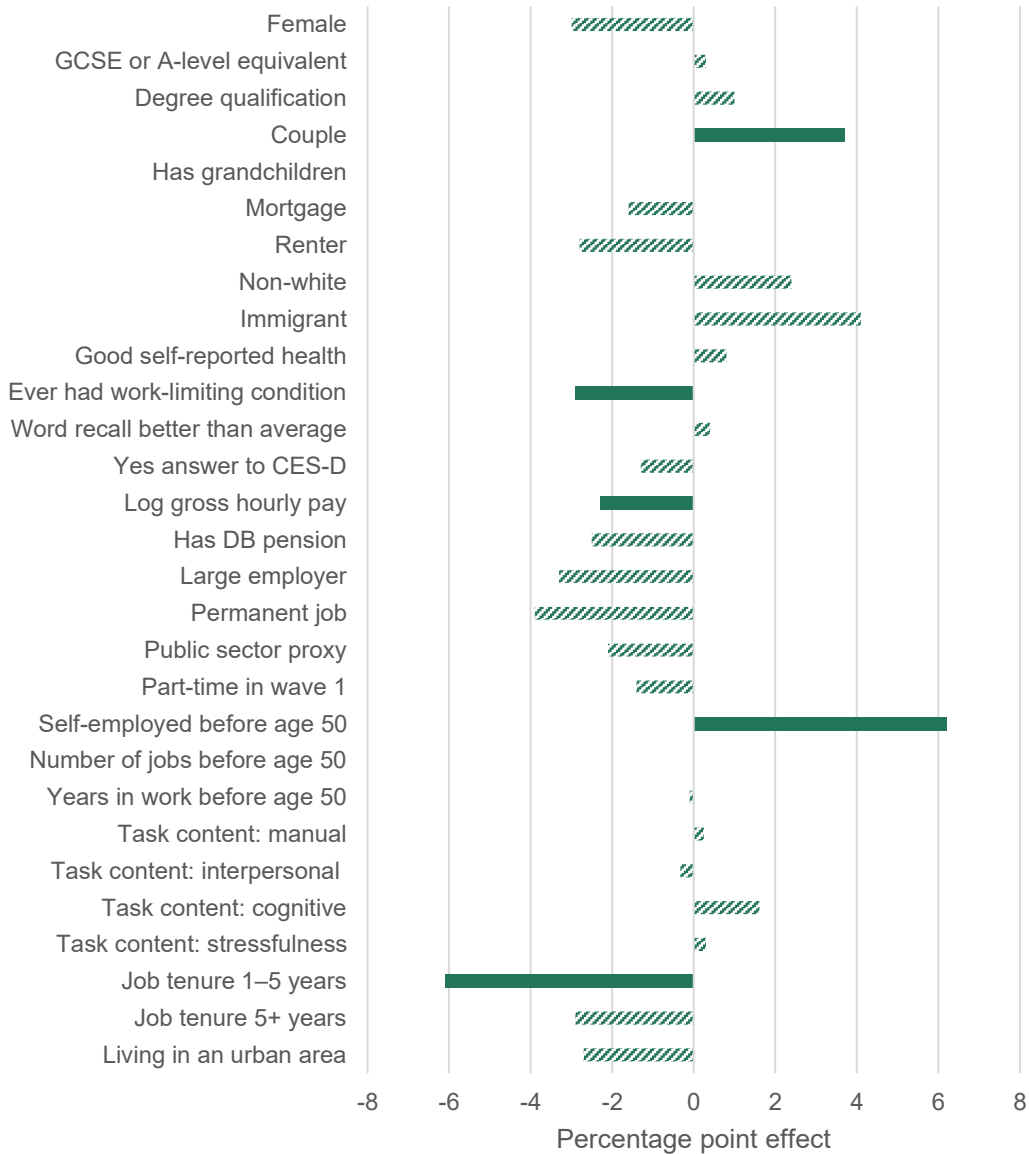
into retirement (Ramnath, Shoven and Slavov, 2021); we will consider this question in the UK context. We follow a sample of people in paid work and aged 50–59 in 2002–03 for 16 years, and find that 21% of them report being self-employed at some point during this period (14% who were self-employed in 2002–03 and 8% who were observed as becoming self-employed during the subsequent 16 years). Among those who were employees in 2002–03, 9% were subsequently observed as self-employed.

We examine the associations between a range of individual and job characteristics and whether an employee is observed moving into self-employment using a multinomial logistic regression. Figure 5.4 shows the results, which can be interpreted as the percentage point change in the likelihood of a person with that characteristic being on the retirement pathway of moving from being an employee to being self-employed. We find that those living as a couple are more likely to move into self-employment, by around 4 ppts compared with single people. This might suggest that having two people in a household gives more financial security that enables people to take on self-employment in later life. On the other hand, those with higher earnings are less likely to be on the self-employment path. This may reflect the types of work that are traditionally more common among the self-employed, as self-employed earnings are on average much lower than employee earnings (Cribb, Miller and Pope, 2019).

Those with a work-limiting condition at any point during waves 2–9 of ELSA are around 3 ppts less likely to transition into retirement via self-employment, and more likely to spend time out of the labour market before retiring instead. These findings might indicate that those with poor health or work-limiting conditions either decide not to move to self-employment at older ages or do not have this option available to them.

ELSA collects data on people's activities before age 50, and this life-history data give us interesting information on how labour market activities earlier in life affect retirement pathways. In particular, having spent time in self-employment before age 50 is predictive of moving between employment and self-employment at older ages, even when we restrict the sample to those who were employees in 2002–03; they are around 6 ppts more likely to retire via a period in self-employment. Thus, it seems that those familiar with self-employment from previous periods in their life are much more likely to move back into self-employment, and less likely to stay in employment, than those with no experience of self-employment.

Figure 5.4. Characteristics associated with retirement via self-employment among those aged 50–59 in 2002–03



Note: Solid bars indicate that the association between the characteristic and the probability of taking pathway from employment to retirement via self-employment is significant at least at the 10% level. Striped bars indicate that the results are not statistically significantly different from zero. Results are from a multinomial logit regression of a pathway indicator on wave 1 characteristics that also controls for age (indicator for being aged over 55 in wave 1), having a missing wage, and wealth quintiles. ‘Yes answer to CES-D’ means that the respondent answered yes to a Center for Epidemiologic Studies Depression Scale question that might indicate depressive symptoms. ‘Ever had work-limiting condition’ means that the respondent had a work-limiting condition at any point during waves 2–9 of the survey. Number of observations 1,019. See Table DA.9 in the data appendix for the full set of results.

Source: English Longitudinal Study of Ageing.

6. Conclusion

This report has examined in detail the work patterns of people aged 50 and over in the UK and how they are changing over time. In order to get beneath the headline statistics, we have examined the transitions that people make in their later working life: movements into and out of work, changes in the number of hours they work, changes in the occupations they work in, and whether they start to work for themselves or for an employer. This has unveiled a great deal of variation across people, in terms of both the paths towards retirement that they take and the extent to which different groups are more or less likely to change their work situation in various ways at older ages.

In this final chapter, we take the opportunity to take a step back and reflect on the findings of this report to draw out some key issues facing older workers in the labour market in the coming years. These issues are important not only for the individuals themselves, but also for policymakers who are seeking to encourage people into longer – and more fulfilling – working lives, for employers who would benefit from employing them, and for civil society organisations and government agencies interested in assisting people in their 50s and 60s in finding productive work that allows them to balance their work and personal lives.

The key issues that we have identified are as follows.

Significant numbers of older workers would benefit from lower hours of work and more flexibility. 16% of 50- to 69-year-old workers would like to work fewer hours, equivalent to 230,000 more people than the 14% in 2006. People in their 60s, employees and full-time workers are particularly likely to want to work less. Part-time work has a key benefit of balancing life inside and outside of work, and for some it acts as a way of making a more gradual transition to a non-working retirement. However, switching from full-time to part-time work is more common amongst people with higher levels of education and living in less deprived areas – which could point to differences in access to part-time work or to differences in financial constraints that affect individuals' ability to reduce their hours.

Self-employment is another form of flexible work, in which people have more autonomy over their hours and generally high levels of job satisfaction (Cribb and Xu, 2020). While only 9% of older employees become self-employed in the run-up to retirement, among those aged 50–59 in paid work in 2002–03 one-in-five were self-employed at some point over the following 16-year period. Transitions into self-employment are more likely among men and those with a history of self-employment earlier in life. Policymakers should consider whether there are measures that could be taken to ensure that this pathway is available to people for whom it might be appropriate, but who may not previously be familiar with it.

Despite the benefits to some people of having a gradual retirement via a period of part-time work or self-employment, half of full-time employees move straight from full-time work to retirement, with men more likely to do this than women. One particularly important factor predicting moving straight from full-time work to retirement is having a defined benefit (DB) pension – those with such a pension are 13 pts more likely to go straight from full-time work to retirement than those without. Those with a DB pension are also significantly less likely to change occupation in the run-up to retirement.

The proportion of people reaching retirement with a DB pension from a private sector employer is declining, since such schemes have become much less prevalent over the last few decades. This may increase the extent to which older workers change their labour market activity at older ages. But DB pensions are still prevalent in the public sector. The moves in the public sector towards career-average pension schemes (and earlier reforms that improved flexibility), and the rules that now allow people to work for their employer and claim their DB pension simultaneously, should help to facilitate more gradual retirement. Nevertheless, these results raise questions over whether public sector employers (or public sector pension schemes) can be more supportive of their workers in either allowing them to reduce their hours of work more gradually as they get older, or helping them look for opportunities that allow them to take on a different challenge at older ages.

There is a small section of older society who would like to work more hours.

Around 7% of older workers in 2019 wanted to work more hours per week, higher than the 5% seen in 2007. This is equivalent to 190,000 individuals. While this measure of ‘underemployment’ is much lower for older workers than it is for younger workers, those who want more hours of work are particularly likely to look more disadvantaged in the labour market. They tend to have less secure work

arrangements, such as being employed on a temporary contract, and are more likely to have low earnings and shorter job tenures. They are also more likely to be in their 50s rather than their 60s, be men and be working part-time. They are also more likely to be self-employed, which highlights an important risk with working for oneself: while there is greater flexibility to choose one's hours and not work more than one would like, it is potentially harder to ensure that one has enough hours of paid work – as many more will have experienced since the outbreak of the pandemic.

There are likely to be significant challenges for older jobseekers finding new jobs after the end of the furlough scheme. Older workers, particularly those over 65, have been more likely to be furloughed than middle-aged people (Adams-Prassl et al., 2020; HMRC, 2021), and the furlough scheme is due to end on 30 September 2021. Combined with the fact that the demand for labour is likely to have shifted away from high street retail (an important employer for people in their 50s and 60s), there may be significant numbers of older jobseekers looking for new jobs in the coming months.

Many will succeed in finding new work. But there are a number of reasons why this might be challenging for many older jobseekers, particularly for certain groups. Most older workers have a high job tenure, meaning that they do not have much recent experience of looking for new work: 69% of 55-year-old workers have been with their employer for more than five years. Relatedly, older workers are less likely to change employment over the course of a year than younger workers – only 4% of those aged 50–69 did so on average each year pre-pandemic. Older workers are also less likely than younger workers to change occupation, which may be necessary for many if vacancies are slow to recover – or perhaps do not recover – in their current line of work.

In particular, it seems that people from lower socio-economic classes are more likely to struggle to find new work after a period of unemployment. Those with lower levels of education, the long-term unemployed, and women, are particularly less likely to re-enter work at older ages after becoming unemployed. These groups may therefore be particular groups of concern in the winter of 2021 and beyond. Previous evidence has shown that generic employment support works less well for older jobseekers (Parsons and Walsh, 2019), and thus knowing which groups are most at risk of not finding jobs again after spells of unemployment is particularly

important for government agencies and other stakeholders planning employment support programmes for these workers.

The position in the labour market of older people with long-standing health conditions requires special attention. Half of those aged 50–69 (and 39% of those in this age group who are in paid work) in 2019 report having a long-standing health problem. With significant numbers of people suffering from long-COVID and mental health difficulties during the pandemic and associated lockdowns, and the drop in non-COVID NHS activity resulting in growing waiting lists and many more not getting treatment in the last year, the prevalence of long-term health problems looks likely to be even higher over the next few years. As older people use hospital care, elective treatments and other health care more than younger people (Burn et al., 2021), the impact of the disruptions in the NHS is also likely to be greater on older workers than it is on younger workers.

Older workers reporting long-standing and work-limiting health problems are 5 ppts less likely to be in work in a year's time than are similar workers who do not report such a health problem, and they are significantly more likely to retire via a period out of the labour market. While for some, leaving paid work may be the right option, others may have preferred, and been able, to stay in work if they had more flexibility or better support. Indeed, those reporting a health problem are around 4 ppts more likely to want shorter hours than those without a health problem.

In addition, being out of paid work is, for many, an increasingly difficult option financially; the state pension age is now 66, and there is a significantly less generous out-of-work working-age benefit system than there was a decade ago (Bourquin, Joyce and Norris Keiller, 2020). If people are to be encouraged and incentivised to work longer and retire later, it is clearly important that policymakers and employers consider how best to support those who might want to work, but are disadvantaged with health problems that affect some aspect of their ability to work or the perception of others about their ability to work.

The work lives of people who are approaching retirement over the next decade may be very different from those of people who did so over the last decade.

There are long-running societal shifts that policymakers must be aware of that mean that each generation approaching retirement will have its own particular circumstances and challenges.

People now expect to retire later than previous generations did – for example, the average expected retirement age among men in their 40s and early 50s increased from 62.9 to 65.0 between 2006 and 2017, while for women it increased from 61.7 to 64.2 (Crawford et al., 2020). Many more people are therefore expecting to be in work at older ages in future.

People's wider circumstances will also differ. For example, those approaching retirement in the coming decades are more likely to have been born abroad (House of Commons Library, 2017) and less likely to own their own home (Cribb, 2019) than previous retirees. They are also less likely to have accumulated large defined benefit pensions. These factors may make them less financially prepared for retirement, and therefore more inclined to work longer for financial reasons. On the other hand, fewer people reaching retirement with a DB pension may increase overall flexibility with respect to employment choices in the run-up to retirement.

This report has identified another change, which is that people approaching retirement are increasingly likely to be in more stressful and more cognitively demanding jobs. People in jobs with high cognitive task content are significantly more likely to want to work shorter hours but are actually less likely to move into part-time roles, which could imply that finding appropriate flexible work may be a particular priority for this group in the years to come.

The focus of policymakers in the short term will rightly be on the fallout from the COVID-19 pandemic, and how best to support individuals of all ages who have been displaced from work to return to productive and satisfying employment. In doing so, it will be important to recognise the different constraints that different types of people in different circumstances face, which drive some of the differences in employment changes at older ages even in 'normal times' that we have documented in this report. However, it would also stand society in good stead for the longer term if we were to look ahead to how the labour market and circumstances of older people approaching retirement is likely to change over the coming years, and therefore design policies and create an environment in a way that will benefit the older workers of tomorrow as well as today.

Appendix A. Data and methodology descriptions

Labour Force Survey

Much of the analysis in this report uses the UK quarterly Labour Force Survey (LFS). The quarterly LFS is a survey of the UK population that has been running since 1992. All members of sampled households are included as either direct responses or proxy interviews. The sample size in 2019 was around 53,000 individuals per quarter, although in the mid 2000s the sample size was closer to 100,000 individuals per quarter.

The LFS is conducted as a five-quarter rolling panel, meaning that households enter the LFS in a given quarter and are interviewed for five consecutive quarters before leaving the survey. Therefore, around one-fifth of households are replaced with newly sampled households in each quarter. We accessed the LFS data through the Office for National Statistics (ONS) Secure Research Service (SRS).

The LFS contains detailed information on individuals' economic activities, such as their hours of work, occupation, industry, contract type, and length of time spent with their employer (job tenure). People who undertake paid work for 30 hours a week or more are categorised as being full-time workers. And importantly for this report, we can also match in the tasks undertaken in each occupation from the O*NET database. This is matched in at the four-digit Standard Occupational Classification (SOC) code. We then use principal component analysis to assign task content scores to each occupation based on the types of tasks undertaken, as described in more detail below.

For people who are not in paid work, there are variables that describe their main economic activity – whether they are searching for work and therefore unemployed (under the ILO definition), retired, looking after family, or out of work because they are long-term sick or disabled, or for other reasons (such as being in full-time education).

The data also contain a wide set of background characteristics, such as age, sex, ethnicity, housing tenure, self-reported health, and marital status. As month and year of birth are contained in the Secure Access version we used in the ONS's SRS, we can also identify whether individuals have already reached their state pension age. Using the household grid, we can also identify with whom any individual lives, their relationship with them, and the characteristics of partners or other household members.

For some of our analysis, we use the LFS longitudinally, comparing how respondents' situations have changed over the course of the year. For most of this analysis, this involves comparing people's responses the first time they answer the survey with their responses one year later in the fifth wave of interviews. This is true for the analysis in Chapters 2, 3 and 5 on movements into and out of work, movements from full-time to part-time work, and movements from employment to self-employment. Here, we restrict the sample to respondents who have their first interview between 2012q3 and 2019q1, and who respond to the survey in wave 5 too, and we compare their answers in waves 1 and 5.

However, the analysis on switching occupation and employer is slightly different (Chapter 4). Here, we define transitions using questions that are asked each year in q2 (April–June) on whether an individual has changed four-digit occupation or employer over the course of the year. For the multinomial logit results, we therefore need to further limit our sample from above to those who have their wave 5 interview in q2, so that we can observe both whether they have switched occupation or employer in the last year (the outcome variable), and their individual and job characteristics in their first interview (the independent variables).

English Longitudinal Study of Ageing

The second dataset used in this report is the English Longitudinal Study of Ageing (ELSA). This is a longitudinal study of people living in England who are aged 50 and over. Individuals are interviewed every two years, starting in 2002–03, with the latest wave available being the ninth, covering 2018–19. ELSA is very similar to studies in other countries, including the Health and Retirement Study (HRS) in the United States and the Survey of Health, Ageing and Retirement in Europe (SHARE).

As a longitudinal dataset, ELSA has a considerably smaller sample size than the LFS, with around 10,000 individuals per wave. However, it contains much more detailed information than the LFS. In addition to equivalent measures of economic activity, hours of work, job tenure, occupation (which can again be matched to the O*NET task database) and background characteristics (including date of birth), a wider range of other variables are available. This includes measures of earnings, household income, wealth (including pensions), much more detailed health measures, and ‘life history’ data which allow researchers to observe recalled measures of jobs and economic activity earlier in life.

In this report, we make use of the fact that ELSA follows people for a long period of time, allowing us to track people’s pathways into retirement. We therefore follow a ‘balanced panel’ of individuals from 2002–03 to 2018–19. Our sample consists of those who were aged 50–59 and in paid work in 2002–03, and consists of 1,637 individuals observed in all nine waves.

Dimensions and types of pathways

Building on the analysis in Banks (2016), we examine how individuals move into retirement along different dimensions – in particular, full-time versus part-time work, employment versus self-employment, and changing occupations versus staying in the same occupation throughout.

Based on existing literature, we wanted in particular to look at: (i) movements from full-time paid work to part-time work; (ii) changes in occupation before retirement;

and (iii) movements from employment to retirement made via a spell in self-employment.

To characterise the ways in which people move from work to retirement, we have to decide how to characterise activities as states. As we are interested in particular in changes in hours, changes in employment/self-employment, and changes in occupation, we look at those dimensions separately.

For those in paid work, we define the states as:

- On the hours dimension: **full-time** (working 30 or more hours a week) or **part-time** (working less than 30 hours a week).
- On the employment/self-employment dimension: **employee** or **self-employed** (both self-reported).
- On the occupation dimension: **having one occupation over the period** (no change of occupation at two-digit SOC code level) or **having more than one occupation over the period** (at least one change of occupation at two-digit SOC code level).

For those out of work, we define the states (across all dimensions) as:

- **out of work** (self-reportedly unemployed, taking care of family or home, permanently sick or disabled); **retired** (self-reported; includes those who report being semi-retired); or **dead**.

For the nine-wave sample we have nine waves and under each dimension we have five possible states in each wave. Thus, the number of potential unique paths is 5^9 for each dimension (although some of these paths are not possible as death is an absorbing state). In order to be able to analyse the prevalence of certain types of pathways and how pathways are associated with individual and job characteristics, we need to be able to group the individual paths into larger groups.

We do this by defining types of pathways that we think are interesting, based on existing literature and our observations of the raw data. Namely:

On the hours dimension:

1. **Unretired.** (Retirees who return to work. See Hudomiet, Parker and Rohwedder (2018).)
2. **Full-time work to retirement.**
3. **Part-time work to retirement.** (Not included as we focus on those in full-time work at wave 1.)
4. **Full-time work – part-time work – retirement.** (This includes everyone who has ever moved from full-time to part-time to retirement or part-time to full-time to retirement at any point.)
5. **Work – out of work – retired** (People who retire via a period of being out of work.)
6. **Other.** (This includes people whose retirement we have not yet observed and people who die before retiring.)

On the employment/self-employment dimension, groups 1, 5 and 6 are the same, but we now have:

2. **Employment to retirement.**
3. **Self-employment to retirement.** (Not included as we focus on those who were employees in wave 1.)
4. **Employment – self-employment – retirement.** (This includes everyone who has ever moved from employment to self-employment to retirement or self-employment to employment to retirement at any point.)

On the occupation changes dimension, groups 1 and 6 are the same, but we now have:

2. **One occupation to retirement.**
3. **Many occupations to retirement.**
4. **One occupation – out of work – retired.** (People who retire via a period of being out of work after having just one occupation.)
5. **Many occupations – out of work – retired.** (People who retire via a period of being out of work after having many occupations.)

It is worth noting that while we analyse these groups as one particular pathway into retirement, there is a fair amount of heterogeneity within each of the groups. For the

groups where people move directly to retirement from employment or full-time work, the majority of the heterogeneity comes from differences in timing of the transition into retirement. People who move between employment and self-employment, occupations, or between full-time and part-time work are also heterogeneous in terms of when they make the switch, but also whether they switch back, and what else they do after the switch. For the ‘unretired’ group, there is also a large amount of heterogeneity in terms of how long people stay in retirement and work before and after the first ‘unretirement’.

O*NET database

We use Occupational Information Network (O*NET) data to document the task content of occupations. The O*NET database describes occupations in terms of skill and knowledge requirements, work practices, and work settings. The data are collected through a survey administered by the US Department of Labor. Both workers and occupation analysts are asked a number of questions about the abilities and skills, knowledge and work activities required in a given occupation.

From this, each occupation in the database is given 970 descriptors. The dimensionality of the data must therefore be reduced in some way, to make them usable. We do this using principal component analysis (PCA) or factor analysis (e.g. Lise and Postel-Vinay, 2020). This involves creating new variables (principal components) that are linear functions of the original dataset, and which best fit the data while being uncorrelated with each other.

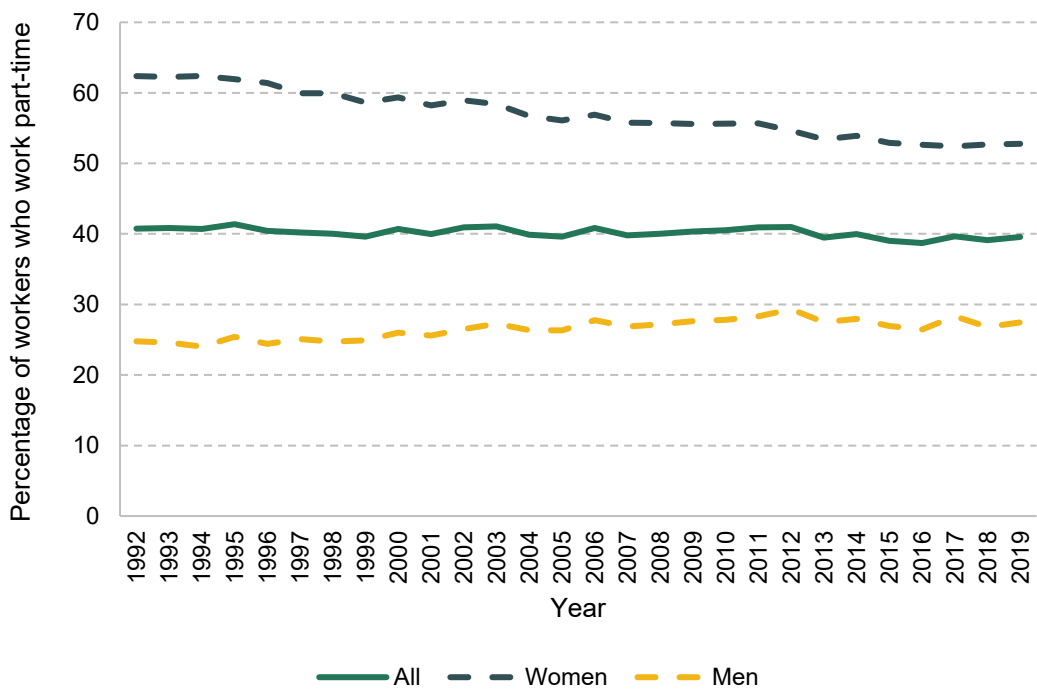
When using PCA with O*NET data, we must first choose the categories of descriptors to be used for the analysis. To make the cognitive, interpersonal and manual task content measures, we use descriptors for *Skills*, *Knowledge*, *Work Styles*, *Work Context*, *Activities* and *Abilities*. As Lise and Postel-Vinay (2020) point out, ‘descriptors contained in the other files (*Job Interests* and *Work Values*) are less directly interpretable in terms of skill requirements’. In the first instance, using our chosen descriptors, we apply PCA and create three principal components which are a linear combination of the underlying variables. Based on observing the factor loadings of each of the components, we then label the components as ‘manual’, ‘interpersonal’ and ‘cognitive’ indices.

To make the stressfulness task content measure, we follow Jolivet and Postel-Vinay (2020) and retain only the descriptors for *Work Styles* and the *Structural Job Characteristics* section of the *Work Context* category. Jolivet and Postel-Vinay point out that ‘the descriptors contained in the other files are less directly interpretable in terms of mental health contents’. We then apply PCA to these descriptors and label the first principal component the ‘stressfulness’ task content of an occupation. An alternative way to describe this measure would be how ‘demanding’ the occupation is. This alternative terminology recognises that some people may either enjoy or dislike demanding or challenging tasks depending on the exact task and their preferences, whereas stressfulness generally has negative connotations.

We standardise all four components to lie between 0 and 1, before then matching with the four-digit Standard Occupational Classification codes contained in the LFS and ELSA datasets.

Appendix B. Additional results

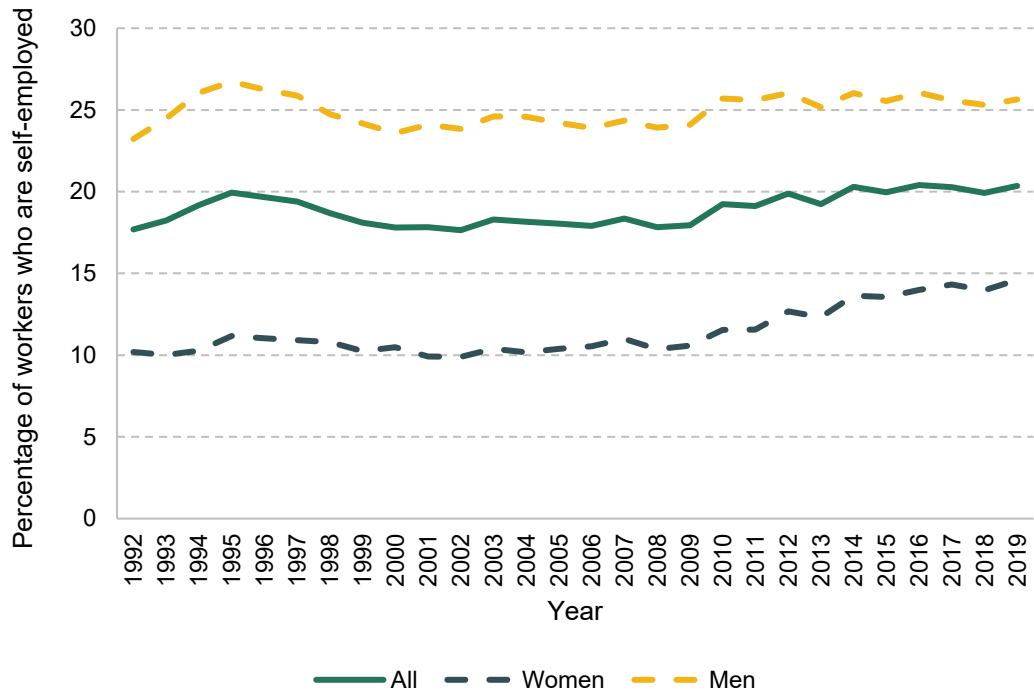
Figure B.1. Share of 50- to 69-year-old workers working fewer than 30 hours per week, by year and sex



Note: Part-time workers are defined as those who work fewer than 30 hours in a normal week.

Source: Labour Force Survey.

Figure B.2. Share of 50- to 69-year-old workers in self-employment, by year and sex



Source: Labour Force Survey.

References

Adams-Prassl, A., Boneva, T., Golin, M. and Rauh, C. (2020), ‘Furloughing’, *Fiscal Studies*, 41, 591–622.

Ameriks, J., Briggs, J., Caplin, A., Lee, M., Shapiro, M. and Tonetti, C. (2020), ‘Older Americans would work longer if jobs were flexible’, *American Economic Journal: Macroeconomics*, 12, 174–209.

Amin-Smith, N. and Crawford, R. (2018), ‘State pension age increases and the circumstances of older women’, in J. Banks, G. D. Batty, J. Nazroo and A. Steptoe (eds), *The Dynamics of Ageing: Evidence from the English Longitudinal Study of Ageing 2002–17*, London: Institute for Fiscal Studies.

Banks, J. (2016), ‘Employment and labour market transitions at older ages in England, 2002–03 to 2014–15’, in J. Banks, G. D. Batty, J. Nazroo and A. Steptoe (eds), *The Dynamics of Ageing: Evidence from the English Longitudinal Study of Ageing 2002–15*, London: Institute for Fiscal Studies.

Banks, J., Blundell, R. and Emmerson, C. (2015), ‘Disability benefit receipt and reform: reconciling trends in the United Kingdom’, *Journal of Economic Perspectives*, 29(2), 173–90.

Banks, J., Emmerson, C. and Tetlow, G. (2017), ‘Health capacity to work at older ages: evidence from the United Kingdom’, in D. Wise (ed.), *Social Security Programs and Retirement around the World: The Capacity to Work at Older Ages*, Chicago: University Chicago Press.

Bell, D. and Blanchflower, D. (2018), ‘Underemployment in the US and Europe’, NBER Working Paper 24927, <https://www.nber.org/papers/w24927>.

Boissonneault, M. and de Beer, J. (2018), ‘Work ability trajectories and retirement pathways’, *Journal of Occupational and Environmental Medicine*, 60(7), e343–8.

Bourquin, P., Joyce, R. and Norris Keiller, A. (2020), ‘Living standards, poverty and inequality in the UK: 2020’, IFS Report R170, <https://ifs.org.uk/publications/14901>.

Burn, S., Stoye, G., Aylin, P., Bottle, A., Propper, C. and Warner, M. (2021), ‘What happened to English NHS hospital activity during the COVID-19 pandemic?’, IFS Briefing Note BN328, <https://www.ifs.org.uk/publications/15432>.

Cahill, K., Giandrea, M. and Quinn, J. (2006), ‘Retirement patterns from career employment’, *The Gerontologist*, 46, 514–23.

Cominetti, N. (2021), ‘A U-shaped crisis: the impact of the Covid-19 pandemic on older workers’, Resolution Foundation Briefing, April.

Crawford, R., Cribb, J., Emmerson, C. and Simpson, P. (2020), ‘Retirement expectations, attitudes and saving behaviour: how have these changed during a decade of pension reforms?’, IFS Briefing Note BN273, <https://ifs.org.uk/publications/14743>.

Crépon, B., Duflo, E., Gurgand, M., Rathelot, R. and Zamora, P. (2013), ‘Do labor market policies have displacement effects? Evidence from a clustered randomized experiment’, *Quarterly Journal of Economics*, 128, 531–80.

Cribb, J. (2019), ‘Intergenerational differences in income and wealth: evidence from Britain’, *Fiscal Studies*, 40, 275–99.

Cribb, J., Miller, H. and Pope, T. (2019), ‘Who are business owners and what are they doing?’, IFS Report R158, <https://www.ifs.org.uk/publications/14241>.

Cribb, J. and Xu, X. (2020), ‘Going solo? How starting solo self-employment affects incomes and well-being’, IFS Working Paper W20/23, <https://ifs.org.uk/publications/14939>.

Gallo, W., Bradley, E., Siegel, M. and Kasl, S. (2000), ‘Health effects of involuntary job loss among older workers: findings from the Health and Retirement Survey’, *Journals of Gerontology, Series B, Social Sciences*, 55, S131–40.

HMRC (2021), 'Coronavirus Job Retention Scheme statistics: 3 June 2021', <https://www.gov.uk/government/statistics/coronavirus-job-retention-scheme-statistics-3-june-2021/coronavirus-job-retention-scheme-statistics-3-june-2021>.

House of Commons Library (2017), 'Migrant population of the UK', House of Commons Briefing Paper CBP8070, <https://researchbriefings.files.parliament.uk/documents/CBP-8070/CBP-8070.pdf>.

Hudomiet, P., Parker, A. and Rohwedder, S. (2018), 'Cognitive ability, personality, and pathways to retirement: an exploratory study', *Work, Aging and Retirement*, 4, 52–66.

Jolivet, G. and Postel-Vinay, F. (2020), 'A structural analysis of mental health and labor market trajectories', IZA Discussion Paper 13518, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3660265.

Kanabar, R. (2015), 'Post-retirement labour supply in England', *Journal of the Economics of Ageing*, 6, 123–32.

Lise, J. and Postel-Vinay, F. (2020), 'Multidimensional skills, sorting, and human capital accumulation', *American Economic Review*, 110, 2328–76.

Mandal, B. and Roe, B. (2008), 'Job loss, retirement and the mental health of older Americans', *Journal of Mental Health Policy and Economics*, 11, 167–76.

Mueller, A., Spinnewijn, J. and Topa, G. (2021), 'Job seekers' perceptions and employment prospects: heterogeneity, duration dependence and bias', *American Economic Review*, 111, 324–63.

Nichols, A., Mitchell, J. and Lindner, S. (2013), 'Consequences of long term unemployment', Urban Institute, <https://www.urban.org/sites/default/files/publication/23921/412887-Consequences-of-Long-Term-Unemployment.PDF>.

Office for National Statistics (2020a), 'Employee earnings in the UK: 2020', <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/bulletins/annualsurveyofhoursandearnings/2020>.

Office for National Statistics (2020b), ‘Coronavirus and self-employment in the UK’,

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/coronavirusandselfemploymentintheuk/2020-04-24>.

Office for National Statistics (2021), ‘Living longer: older workers during the coronavirus (COVID-19) pandemic’,

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/ageing/articles/livinglonger/olderworkersduringthecovid19pandemic>.

Parsons, D. and Walsh, K. (2019), ‘Employment support for over 50s: rapid evidence review’, Centre for Ageing Better, <https://www.ageing-better.org.uk/sites/default/files/2019-06/Employment-support-over-50s.pdf>.

Platts, L., Corna, L., Worts, D., McDonough, P., Price, D. and Glaser, K. (2017), ‘Returns to work after retirement: a prospective study of unretirement in the United Kingdom’, *Ageing and Society*, 39, 439–64.

Ramnath, S., Shoven, J. and Slavov, S. N. (2021), ‘Pathways to retirement through self-employment’, *Journal of Pension Economics and Finance*, 20, 232–51.

Riumallo-Herl, C., Basu, S., Stuckler, D., Courtin, E. and Avendan, M. (2014), ‘Job loss, wealth and depression during the Great Recession in the USA and Europe’, *International Journal of Epidemiology*, 43, 1508–17.

van der Horst, M., Lain, D., Vickerstaff, S., Clark, C. and Baumberg Geiger, B. (2017), ‘Gender roles and employment pathways of older women and men in England’, *SAGE Open*, 7(4).