

Crawford, Rowena; Karjalainen, Heidi

**Research Report**

## Retirement saving of the self-employed

IFS Report, No. R181

**Provided in Cooperation with:**

Institute for Fiscal Studies (IFS), London

*Suggested Citation:* Crawford, Rowena; Karjalainen, Heidi (2020) : Retirement saving of the self-employed, IFS Report, No. R181, ISBN 978-1-80103-007-6, Institute for Fiscal Studies (IFS), London, <https://doi.org/10.1920/re.ifs.2020.0181>

This Version is available at:

<https://hdl.handle.net/10419/235067>

**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.*

IFS Report R181

Rowena Crawford  
Heidi Karjalainen

# Retirement saving of the self- employed



Chartered  
Insurance  
Institute



Department  
for Work &  
Pensions



Money &  
Pensions  
Service

# **Retirement saving of the self-employed**

**Rowena Crawford and Heidi Karjalainen**

Copy-edited by Rachel Lumpkin

The Institute for Fiscal Studies

*Published by*

The Institute for Fiscal Studies

7 Ridgmount Street  
London WC1E 7AE

Tel: +44 (0) 20-7291 4800

Fax: +44 (0) 20-7323 4780

Email: [mailbox@ifs.org.uk](mailto:mailbox@ifs.org.uk)

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

*Printed by*

Pureprint Group, Uckfield

© The Institute for Fiscal Studies, October 2020

ISBN 978-1-80103-007-6

# Preface

This research is funded by the IFS Retirement Saving Consortium, which comprises Age UK, Association of British Insurers, Aviva UK, Canada Life, Chartered Insurance Institute, Department for Work and Pensions, Investment Association, Legal and General Investment Management, and Money and Pensions Service. Support from the ESRC-funded Centre for the Microeconomic Analysis of Public Policy at IFS (grant reference ES/M010147/1) is also gratefully acknowledged.

This work is based on data from the Family Resources Survey (FRS) and Wealth and Assets Survey (WAS). The FRS data were made available by the Department for Work and Pensions. The WAS data were produced by the Office for National Statistics (ONS) and supplied by the UK Data Archive. These data are Crown Copyright. All errors are those of the authors.

# Contents

<b>Executive summary</b>	<b>5</b>
<b>1. Introduction</b>	<b>9</b>
<b>2. Characteristics of the self-employed and pension membership</b>	<b>13</b>
2.1 The changing characteristics of the working-age self-employed	13
2.2 Do changing characteristics explain trends in pension membership?	16
2.3 Changing pension saving among particular types of self-employed individuals	19
2.4 Summary	22
<b>3. Have attitudes towards pensions changed among the self-employed?</b>	<b>23</b>
3.1 Self-reported reasons for not saving in a pension	23
3.2 Attitudes towards pensions as an asset choice	25
3.3 Expected retirement income	26
3.4 Summary	29
<b>4. Are the self-employed saving for retirement in other ways?</b>	<b>30</b>
4.1 Financial assets	30
4.2 Housing wealth	34
4.3 Summary	36
<b>5. Conclusions</b>	<b>38</b>
<b>References</b>	<b>40</b>

# Executive summary

The proportion of self-employed workers contributing to a private pension has been steadily declining since the 1990s. This is in contrast to private-sector employees, for whom the rate of pension participation has dramatically increased as a result of automatic enrolment. Furthermore, even before the introduction of automatic enrolment, the rate of decline in pension participation was faster among the self-employed than private-sector employees.

In this report, we seek to explain this decline in pension saving amongst the self-employed. We examine the extent to which the decline has been driven by the changing characteristics of the self-employed population. We then explore changing attitudes towards pension saving, and changes in other forms of saving that might represent alternative ways of saving for retirement (and therefore provide an explanation for the patterns in pension saving).

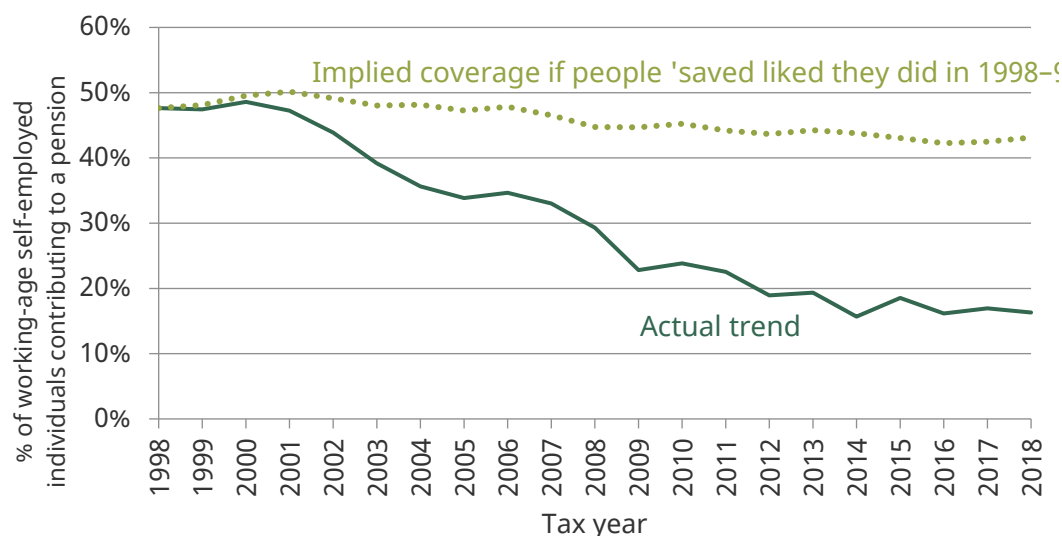
## Key findings

- In 1998, 48% of the self-employed contributed to a private pension, and by 2018 this had declined to just 16%.** The proportion of private-sector employees contributing to a pension fell more gradually over this period and, since 2012, has increased sharply due to automatic enrolment. As a result, while, in 1998, pension participation among private-sector employees was on average around the same level as for the self-employed, by 2018 private-sector employees were approximately four times more likely to be contributing.
- This decline in pension participation of the self-employed has taken place at the same time as the population of workers who are self-employed has grown. The number of self-employed workers rose from 3.4 million (12.9% of the workforce) in 1998 to 4.8 million (15.1% of the workforce) in 2017.
- The characteristics of the self-employed have been changing over time.** The proportion of self-employed who are female increased from 27% to 32% between 1997–98 and 2018–19, their average age increased from 43.7 to 45.3 years and the proportion working part-time increased from 18% to 24%. Average earnings increased in real terms until the start of the 2000s, but were then flat for some years before falling sharply during the financial crisis. By 2018–19, average earnings among the self-employed were still lagging behind the level they were in 1997–98: a remarkable two decades of lost income growth among this group.
- Self-employed people who are older, have higher earnings, higher levels of education and have been self-employed for longer have historically been more likely to contribute to a private pension. Given such associations between pension membership and individuals' characteristics, a change in the average characteristics of the self-employed over time may be expected to be an important driver of changed rates of pension coverage.
- We find that at most one-seventh of the decline in pension participation among the self-employed could be attributed to these changing characteristics of the self-employed. If

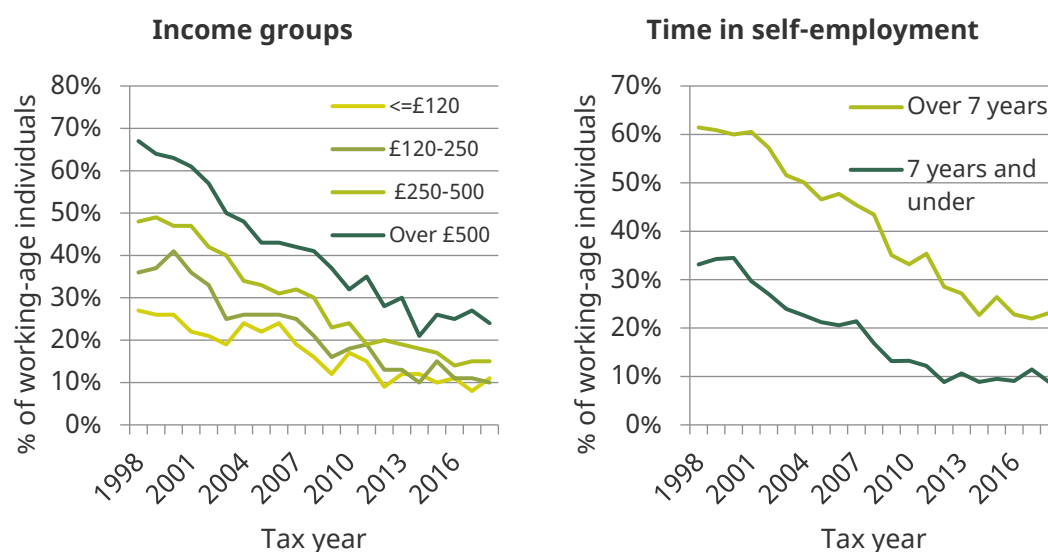


the relationship between individual characteristics and pension saving stayed as it was in 1998–99, then the changing characteristics of self-employed workers over the subsequent years would be expected to lead to a fall in pension saving of 5 percentage points – compared with an actual decline of 31 percentage points, as shown in Figure E.1.

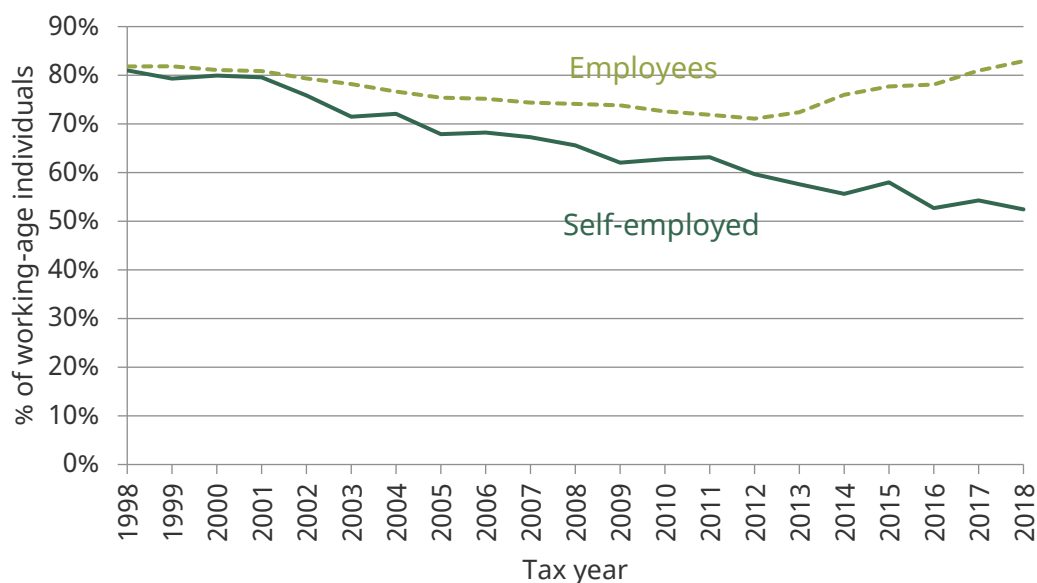
**Figure E.1. Role of changing composition**



- Pension participation has fallen more dramatically among those groups who had higher proportions saving in 1998–99, such as those who had been in self-employment for a long time or those with higher levels of income. Nearly 70% of the self-employed who were earning over £500 per week were saving in a pension in 1998–99; by 2018–19, this was just 24%. Over 60% of those who had been self-employed for more than seven years were saving in a pension in 1998–99; by 2018–19, this was 23%. (Both are illustrated in Figure E.2.)
- As a result, the individual characteristics (that we can observe) have a much less strong association with pension saving by 2018–19 than in 1998–99. For example, in 1998–99, self-employed men were 21 percentage points more likely to save in a pension compared with women, but by 2018–19 they were only 4 percentage points more likely. In 1998–99, those earning over £500 per week were 40 percentage points more likely to be saving than someone earning £120 per week or less, but by 2018–19 they were only 13 percentage points more likely. In 1998–99, those who had been self-employed for more than seven years were 28 percentage points more likely to save in a pension than those who had been self-employed for seven years or fewer, but by 2018–19 they were only 14 percentage points more likely.
- In fact, the decline in the association between individuals' observable characteristics and their probability of saving in a pension is such that changes in the composition of the self-employed population would no longer be expected to result in noticeable changes in pension membership rates. One could therefore attribute all of the decline in pension saving over the last two decades to the decline in pension saving conditional on individuals' characteristics, and none to the changing composition of the self-employed population.

**Figure E.2. Pension participation among different groups of the self-employed**

- Attitudes towards pensions among the self-employed do not appear to have changed over the past decade in a way that could explain the decline in pension saving. Affordability remains the main reason most give for not saving in a pension. Most self-employed believe that saving in property is safer and gives a higher return than pension saving, but this has been the case throughout the period.
- **A declining proportion of the self-employed expect to get private pension income in retirement.** This is in some sense reassuring, in that on average the self-employed are at least aware of the consequences of not saving in a pension during working life for their sources of income in retirement.
- The proportion of the self-employed saving in other forms, such as savings accounts, individual savings accounts (ISAs) and shares, has also been declining over the past two decades. The likelihood of saving, and changes in this over time, are similar between employees and the self-employed.
- **It therefore does not appear that these financial assets are acting as a substitute for pension saving among the self-employed.** Overall, the proportion of individuals saving in either a pension, savings account, ISA or shares has been declining over the past 20 years, and more rapidly for the self-employed than for employees (shown in Figure E.3).

**Figure E.3. Prevalence of non-housing saving**

- The average wealth held in primary housing has increased dramatically over the last two decades as a result of rising house prices (while rates of owner occupation have fallen). Primary housing is therefore taking up an increasing proportion of the resources of the self-employed, which for some may crowd out pension saving. However, the trends over time in owner occupation and average housing wealth are similar for employees and the self-employed, so it is not obvious that this would explain the faster decline in pension saving among the self-employed.
- Without fully understanding the drivers of the decline in pension saving among the self-employed, it is difficult to be precise about the extent to which policymakers should be concerned by these trends. However, given that pension coverage has declined most rapidly among high-income and long-tenure self-employed, and that other saving outside of primary housing has not increased over this period, this does appear to be an issue that deserves policy attention.

# 1. Introduction

As the number of self-employed workers in the UK has increased, the retirement saving of this group has gained a great deal of attention from policymakers.

The Pensions Commission, established by the government in 2002 to review the regime for UK private pensions, noted in their first report in 2004: ‘The expansion of self-employment during the 1990s has not therefore been accompanied by the emergence of a new category of retirement provision for other than a small minority. The fact that pension saving among the self-employed is not increasing therefore remains a concern.’ They reiterated in their final report a year later that in their analysis: ‘A disproportionate percentage of the self-employed appeared in danger of inadequate pension income in retirement.’<sup>1</sup>

Since then, the number of self-employed has grown rapidly, from around 3.6 million people in 2004 (12.8% of the workforce) to around 4.8 million (15.1% of the workforce) in 2017.<sup>2</sup> At the same time, private pension membership among the self-employed has declined dramatically. According to data from the Family Resources Survey (FRS), illustrated in Figure 1.1, just under one in two (48%) of the working-age self-employed contributed to a private pension in 1998–99, and 43% in 2002–03 (the latest data available at the time of the Pensions Commission analysis), compared with just one in six (16%) in 2014–15. In the last few years, pension coverage among the self-employed has remained broadly unchanged.<sup>3</sup>

The similar long-running, but more gradual, decline in pension membership observed among private-sector employees was ended by the introduction of ‘automatic enrolment’. Recommended by the Pensions Commission, this policy reform mandates that all eligible employees<sup>4</sup> are automatically enrolled into a pension by their employer, and they must actively choose to opt out if they do not wish to save in the workplace pension. Gradually rolled out since 2012, this policy has considerably increased pension coverage among employees (as can be seen in Figure 1.1). This has been attributed partly to the increased availability of workplace pensions since automatic enrolment, but largely due to inertia in individuals’ decision-making.<sup>5</sup>

The self-employed are not directly affected by automatic enrolment – by definition they have no employer who can enrol them into a pension scheme by default. However, the Pensions Commission recommended that: ‘A process should ideally be created therefore to make it easy for the self-employed to become regular saving members’ and that ‘[t]his might be achieved by allowing the self-employed to make payments [...] alongside their monthly Class 2 National Insurance contributions. We recommend that this option should be investigated.’<sup>6</sup> More recently, the government has pledged to take lessons from the

<sup>1</sup> See Pensions Commission (2004, p. 204) and Pensions Commission (2005, p. 278). For a short background on the Pensions Commission, see Institute for Government (2012).

<sup>2</sup> Office for National Statistics, 2018.

<sup>3</sup> See the Appendix for a detailed description on how the self-employed status is defined here.

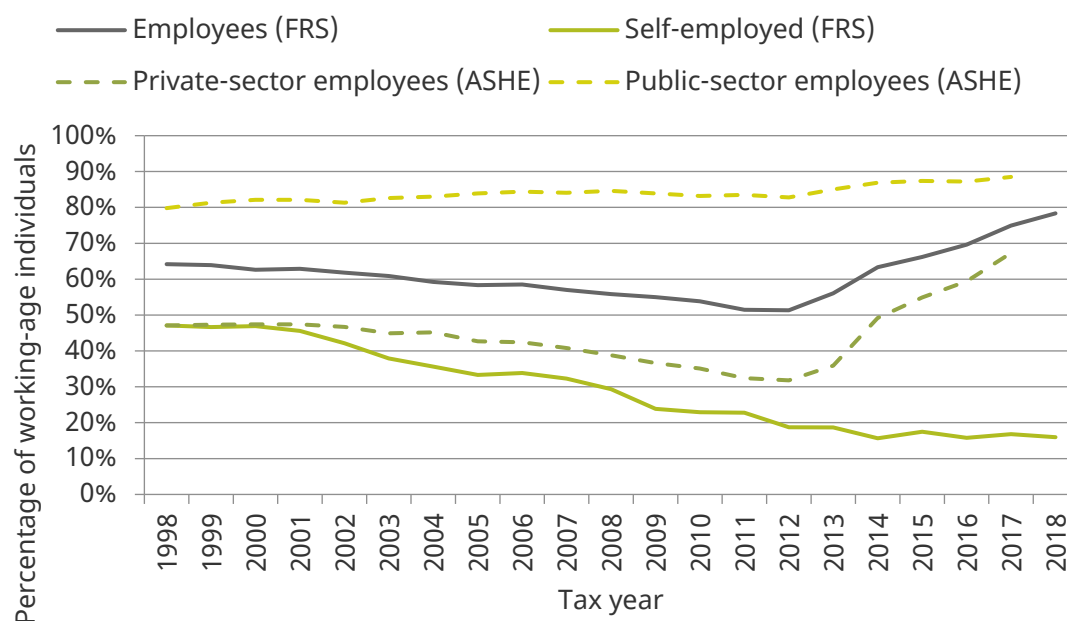
<sup>4</sup> Eligible employees are those aged 22 up to state pension age who have been with their employer for at least three months and are earning over the equivalent of £10,000 a year.

<sup>5</sup> Bourquin, Cribb and Emmerson, 2020; Cribb and Emmerson, 2020.

<sup>6</sup> See Pensions Commission (2005, p. 370).

success of automatic enrolment to increase pension saving among the self-employed,<sup>7</sup> and a number of trials on the best mechanisms for nudging the self-employed into pension saving are currently being run. This includes, for example, email messaging trials run by Nest that aim to evaluate whether framing of the messages encouraging pension saving affects the rate at which people engage with pensions.<sup>8</sup> The next steps of the trials will aim to investigate how new technology could be used to create mechanisms for automatic and flexible saving.<sup>9</sup>

**Figure 1.1. Private pension membership, 1998–99 to 2018–19**



Note: Solid lines are calculated using FRS data. Definitions of employees and self-employed are based on self-reported employment status, as discussed in more detail in the Appendix. Dashed lines are from Annual Survey of Hours and Earnings (ASHE) data. The sample is working-age individuals (defined as aged 22–64).

Source: Authors' calculations using the FRS, 1998–99 to 2018–19. Data from the ASHE are reproduced from Cribb and Emmerson (2019).

Alongside these trials examining how behaviour can be altered, there is a need for greater understanding of the decline in pension coverage – in particular, what the drivers of this trend are, whether it is an issue across the self-employed or a particular issue for some groups, and ultimately to what extent it is a concern. Some discussion of these questions are discussed in D'Arcy (2015). In this report, we seek to shed further light on these issues.

The self-employed are a diverse group, working across a wide range of sectors from agriculture and construction to retail and professional services, and consisting of both

<sup>7</sup> The 2017 Conservative Party manifesto, FORWARD, TOGETHER: Our Plan for a Stronger Britain and a Prosperous Future, stated that 'we will continue to extend auto-enrolment to small employers and make it available to the self-employed' (<http://ucrel.lancs.ac.uk/wmatrix/ukmanifestos2017/localpdf/Conservatives.pdf>).

<sup>8</sup> Department for Work and Pensions, 2018, 2020.

<sup>9</sup> Nest Insight, 2020.

sole traders and partners. The rapid growth in self-employment over the past two decades has not been the same across all types of self-employed. For example, as first illustrated by Cribb, Miller and Pope (2019), most of the increase in the number of self-employed was driven by an increase in the sole trader population.<sup>10</sup> Sole traders have much lower incomes than partners, on average, so as the proportion of sole traders has increased, the average income of the self-employed as a group has declined. The incomes of the self-employed have also been dramatically affected by the financial crisis. Cribb et al. (2019) found that the aggregate profit of all sole traders fell 2% in real terms between the financial crisis and 2015–16, despite there being 25% more sole traders – in other words, there were very large falls in average sole trader profits. In addition to changes to average incomes, other individual characteristics of the self-employed population have also been changing over time.

Recent research has highlighted the correlation between such characteristics and pension saving (Aviva and Royal London, 2017; Capparotto, 2017). An important question is therefore the extent to which the decline in pension participation is simply the result of the changing nature of the self-employed workforce.

In this report, we examine this question using data from the FRS for the period 1998–99 to 2018–19. First, in Chapter 2, we present descriptive statistics on how key characteristics have evolved over time among the self-employed. We then examine the extent to which the decline in pension membership is due to the changing composition and characteristics of the self-employed, rather than a change over time in the likelihood that a self-employed individual with a given set of observed characteristics contributes to a pension. We go on to document how trends in pension membership differ between subgroups of the self-employed population. The results of this analysis are presented in Section 2.3. While some of the decline in pension coverage is attributable to changing characteristics, the vast majority is due to a falling likelihood of saving, even for someone with the same observed characteristics. Declines in the probability of saving are greatest among those groups that used to be most likely to save in a pension – the long-term self-employed, and those with the highest incomes.

In the analysis presented in Chapter 3, we seek to understand more about the drivers of the decline in pension membership by examining changes in self-reported attitudes towards pensions and retirement saving. We do this using data drawn from the Wealth and Assets Survey (WAS) for the period 2006–07 to 2017–18. We find no strong evidence for the self-employed becoming more averse to pensions over this period. We do see that the proportion of self-employed expecting private pension income is declining over time, suggesting that on average the expectations match the declining trend in participation.

In Chapter 4, we explore whether the self-employed are substituting away from pension saving towards other types of saving that may be more accessible (such as ISAs) or may be perceived to offer better returns (such as property). We do this using data from both the FRS and WAS, and we examine how the proportion of the self-employed who hold other forms of savings and investments has changed over time. We find that the trends in other forms of savings are very similar between the self-employed and employees, and

<sup>10</sup> Sole traders are self-employed people who run their business and are personally liable for any debts of the business. A partnership is an unincorporated business owned by more than one person. In a general partnership, the partners are personally liable for any losses and debts the company incurs. Owner-managers of incorporated businesses count as employees in both survey and administrative data.

the participation rates in other savings are also falling over time (although less dramatically than the rate of pension saving).

We conclude, in Chapter 5, with a summary of our findings and a discussion of the implications. Overall, we are left with a puzzle. We find that the decline in pension saving is not explained by the changing composition of the self-employed workforce – despite the fact that we consider a rich set of observed characteristics. Also, there is not much evidence of a shift in attitudes against pensions or an increase in saving in other forms, which might indicate that individuals are substituting their saving into other assets. Further research is therefore required to understand more fully why pension saving among this important, and growing, group of the population has been declining.

## 2. Characteristics of the self-employed and pension membership

Figure 1.1 showed that the proportion of working-age self-employed contributing to a private pension declined from 48% in 1998–99 to 16% in 2018–19. This decline could arise as a result of any combination of the following:

- a change in the composition of the self-employed population (e.g. an increase in the proportion of those who are less likely to save towards a pension);
- a change in pension saving across everyone, irrespective of characteristics;
- a greater or lesser decline in saving among individuals with particular characteristics (equivalently, a change in the association between individual characteristics and pension saving).

In this chapter, we start by describing how the characteristics of the self-employed changed over this period, before examining the extent to which the decline in pension membership was caused by a change in the composition of the self-employed population, and whether the decline was concentrated among individuals with particular characteristics. We do this using data from the Family Resources Survey (FRS)<sup>11</sup>: a cross-sectional household survey of the UK population with around 20,000 households interviewed in each year. The data set we use covers the period from 1998–99 to 2018–19. We define an individual as ‘self-employed’ if they self-report working as a self-employed person (as opposed to an employee) in their current main job, and if their income from self-employment in the past week was higher than income from employment. There are around 2,000 to 3,000 such self-employed respondents in each year of data. More information on the data set, variables and definitions used can be found in the Appendix.

### 2.1 The changing characteristics of the working-age self-employed

The composition of the working-age self-employed population, in terms of the proportion of individuals with various characteristics, has been changing over time. Selected characteristics in 1998, 2008 and 2018 are summarised in Table 2.1. This table shows that the proportion of self-employed people who are foreign-born, women, working part-time or have a degree has been rising over time. This is also true for the average age of the self-employed – the age split shows that in 1998, 48% of the self-employed were 45 or older versus 54% in 2018–19. However, the average (mean and median) time spent in self-employment (based on self-reported year of starting self-employed work) has remained roughly the same over time.

<sup>11</sup> Department for Work and Pensions, Office for National Statistics, NatCen Social Research. (2020). Family Resources Survey, 1998–1999 to 2018–2019. [data collection]. UK Data Service. SN: 8633, <http://doi.org/10.5255/UKDA-SN-8633-1>



**Table 2.1. Selected characteristics of the self-employed**

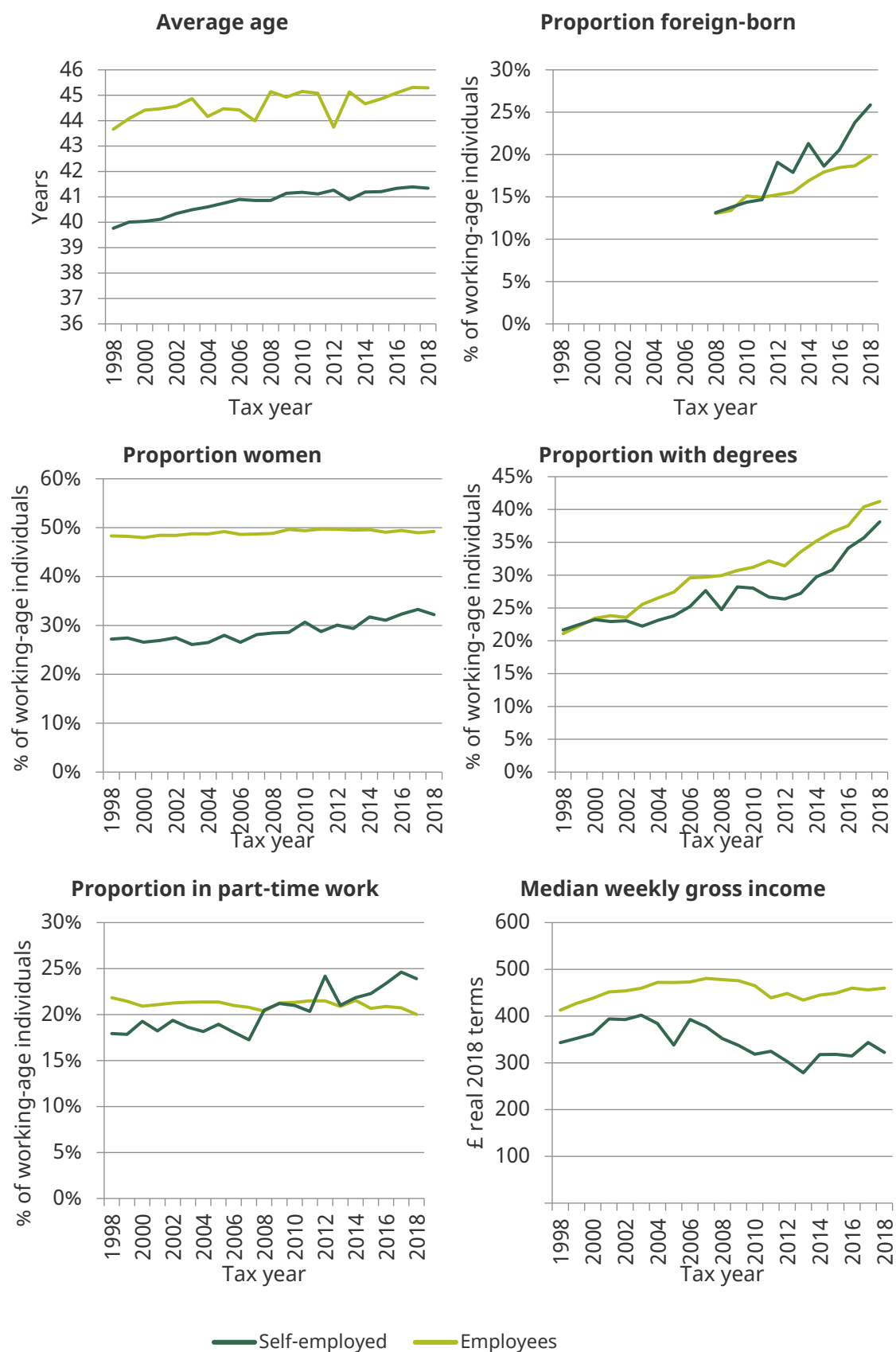
	1998	2008	2018
Proportion foreign-born	N/A	13.1%	25.9%
Proportion working part-time	17.9%	20.5%	23.9%
Proportion female	27.2%	28.4%	32.2%
Proportion with degree	21.7%	24.7%	38.1%
Mean age (years)	43.7	45.1	45.3
Proportion aged 22–34	23.2%	17.9%	20.9%
Proportion aged 35–44	28.7%	30.2%	24.7%
Proportion aged 45–54	29.8%	28.2%	29.1%
Proportion aged 55–64	18.2%	23.7%	25.3%
Mean time in self-employment (years)	10.3	10.5	10.5
Median time in self-employment (years)	8.0	7.0	7.0
Proportion self-employed 2 years or less	21.3%	24.7%	22.7%
Proportion self-employed 3–7 years	26.1%	26.7%	27.3%
Proportion self-employed 8–14 years	25.3%	19.7%	22.0%
Proportion self-employed 15 years or more	27.3%	28.9%	28.0%
Median weekly gross earnings (real 2018 £)	343	352	322
In construction and production	36.4%	37.0%	30.2%
In wholesale and retails	18.2%	12.9%	9.5%
In finance and other business services	24.2%	26.6%	34.7%
In public sector and community services	21.2%	23.2%	24.1%

Note: The question on country of origin was introduced in 2008 so the proportion of foreign-born respondents is not available in 1998. Industry classification codes changed between 2008 and 2009, so the industry classifications in periods before 2009, versus 2009 and after, are not exactly comparable.

A number of these changes in characteristics are also true for the workforce as a whole (rather than self-employed only), but there are some notable differences. The charts in Figure 2.1 compare changes in characteristics of the self-employed to changes in the characteristics of employees over the same period.

The self-employed are, on average, older than employees (by nearly four years in 2018–19), and while the overall workforce is ageing over time, the average age of the self-employed is increasing at a slightly faster rate than the average age of employees. The proportion of self-employed with degrees is increasing and reached 38% by 2018–19, but the growth has not been as fast among the self-employed as it was among employees; the proportion of employees with degrees is 41%. The proportion of the workforce who are women has been rising faster among the self-employed than employees, although only a third of the self-employed were women in 2018–19, compared with almost a half (49%) of

**Figure 2.1. Changes in characteristics of the self-employed compared with employees**



employees. The question on country of origin was introduced in the FRS in 2008, and while the proportion of foreign-born individuals has been rising overall among the workforce, the growth has been faster among the self-employed, reaching just over one-quarter (26%) by 2018–19. The proportion of employees working part-time has remained relatively constant throughout the period between 20% and 22%, whereas among the self-employed sample the incidence of part-time workers increased from 18% to 24%.<sup>12</sup>

The fact that the self-employed have lower incomes, on average, than employees has been well recorded, both in survey and administrative tax data (see, for example, Cribb et al., 2019). The bottom-right panel of Figure 2.1 illustrates the median weekly gross income of the self-employed and employees (where income is defined here as the sum of earnings from employment and self-employment). The earnings of the self-employed have been consistently lower than those of employees, but the gap widened significantly after 2007, and has not recovered since. The median earnings of the self-employed were slightly lower in 2018–19 than in 1998 (in real terms), while for employees they were 11% higher.

## 2.2 Do changing characteristics explain trends in pension membership?

To examine the extent to which the changing characteristics explain the decline in pension participation, we start by illustrating which characteristics were associated with a higher probability of contributing to a private pension at the start of the period in 1998. We do this by running a linear probability model<sup>13</sup> to estimate the association between whether a self-employed individual saves in a pension and a number of characteristics. The results, in the first column of Table 2.2, are largely intuitive. Those who are older are more likely to contribute to a pension, although the effect is smaller at older ages as shown by the negative coefficient on the ‘age squared’ regressor. Those with higher incomes are also more likely to save – a 1% increase in earnings leads to an approximately 6.1 percentage point (ppt) increase in probability of contributing to a pension. Pension saving is also more likely among men (women were 8 ppt less likely to save to a pension), those living in a couple (6.9 ppt more likely than those who were single), those working full-time (19.6 ppt more likely than those who were part-time), those who employ others (5 ppt more likely than those who do not), and those who are partners in a business (9.3 ppt more likely than those who were not). The self-employed who have non-degree qualifications are the most likely to save towards a pension, and the probability of saving increases with time spent in self-employment.

With these results, we then conduct the following thought experiment. Suppose that the relationship between characteristics and the probability of saving in a pension that we find in 1998 stayed the same over time. What would we then predict the proportion of

<sup>12</sup> This is not solely explained by the increased proportion of self-employed workers who are female – the proportion of part-time self-employed workers who are male increased from 29% in 1998 to 30% in 2018.

<sup>13</sup> The conclusions are unchanged between a linear probability, probit and logit models. We cannot include industry variables here due to a discontinuity over time, meaning that we cannot make predictions for time periods where the industry variable had changed. Figure 2.3 illustrates that the results are similar even when controlling for industry.

individuals contributing to a pension to be in each subsequent year, if we allow for the characteristics to change as observed, but the associations between saving and

**Table 2.2. Linear probability model of pension participation on characteristics**

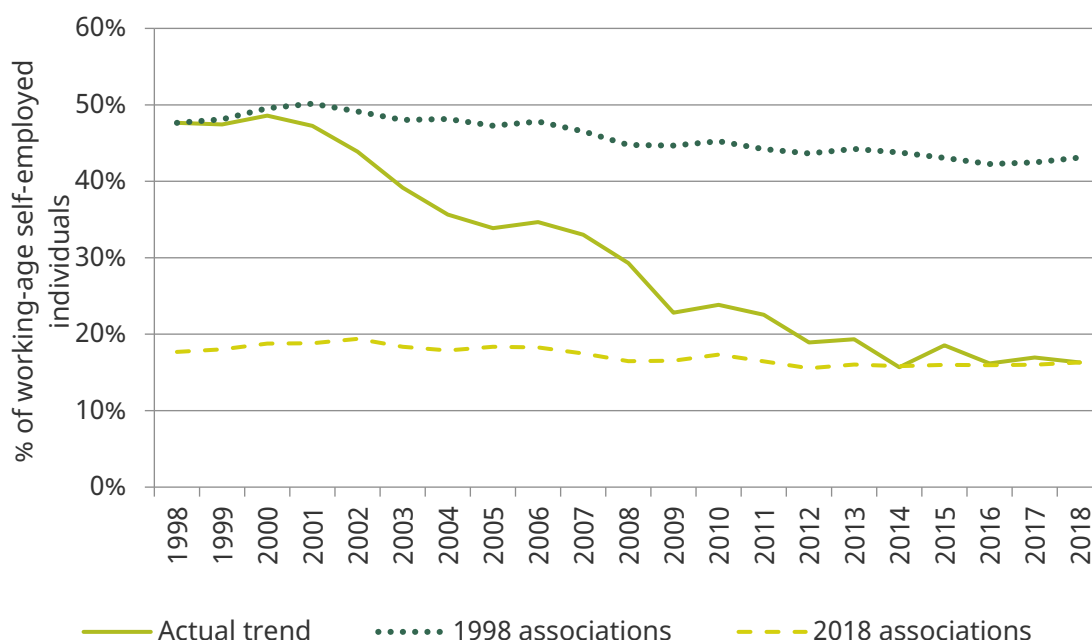
Pension member	In 1998	In 2018
Age	4.2***	1.4*
Age squared	−0.0***	0.0
Log earnings	6.1***	2.9**
Female	−8.0**	0.3
Living as couple	6.9*	3.2
Works part-time	−19.6***	−4.7*
Has employment income	4.8	25.8**
Has employees	5.0	9.4*
Is a partner	9.5***	6.3
Woman above state pension age	4.1	—
<b>Highest qualification</b>		
No degree	Reference category	Reference category
Degree	3.7	7.5*
Non-degree qualification	10.5***	4.0
<b>Time in self-employment</b>		
2 years or less	Reference category	Reference category
2–7 years	8.4**	0.1
7–15 years	24.2***	2.6
More than 15 years	23.7***	16.1**
$R^2$	0.203	0.120
Observations	2,032	1,938

Note: Figures are coefficients (multiplied by 100) from a linear probability model of pension participation on individual characteristics. For example, the interpretation of −8.0 for ‘female’ in 1998 is that the probability of a female self-employed person saving in a pension in 1998 was 8 ppt lower than for a man (all else equal). \*, \*\* and \*\*\* indicate statistical significance at the 5%, 1% and 0.1% levels, respectively. The number of observations is nearly unchanged, despite the increase in the self-employed population, because the total target sample for the FRS was reduced from 24,000 to 20,000 households in 2011.

characteristics remain constant? The results of this prediction are shown by the dotted dark green line in Figure 2.2, which is compared with the actual pension membership among the sample each year (the solid line). This reveals that if individuals saved like they did in 1998, then the changing composition of the self-employed population would have led to a decline in pension membership of 5 ppt. In fact, pension membership declined by 31 ppt. In other words, the changing composition explains around one-seventh (14%) of the total decline.

It is therefore clear that individuals do not save in the same way they did in 1998. The final column of Table 2.2 illustrates the association in 2018–19 between individual characteristics and whether or not they were saving in a pension. Comparing the

**Figure 2.2. Role of changing composition**



coefficients between the 1998 and 2018 regressions, we can see that by 2018–19, women became as likely to save towards a pension as men, whereas having employment income now has a significant positive association with pension saving. Being a partner has no significant impact on pension saving, whereas those with degrees are more likely to save towards a pension than those with no degree or a non-degree qualification. In 2018–19, only those who have been self-employed for longer than 15 years are more likely to be pension savers, but those self-employed for 2–7 years or 7–15 years are no more likely to save than those who have been self-employed for less than 2 years.

One implication of this is that the amount of the decline in pension saving that is attributable to the changing composition of the self-employed population is sensitive to the choice of period in which the associations between pension saving and characteristics are estimated. For example, suppose we conduct a similar thought experiment as before, but assume that individuals always used to save like they now do in 2018–19. What proportion would we predict would contribute to a pension in each previous year given the characteristics of the population? The results in this case are illustrated by the dashed light green line in Figure 2.2. Under this scenario, the change in the characteristics of the population had a very small – if any – effect on pension participation, with theoretical participation in 1998 just 1.4 ppt higher than in 2018.

In summary, if everyone saved like they used to, the changing composition of the self-employed population would be expected to lead to a decline in pension membership of 5 ppt. In fact, pension coverage actually declined by 31 ppt. The probability of someone with a given set of observable characteristics saving in a pension also declined, and in such a way that characteristics are much less important for saving today. This has happened to

such an extent that changes in the composition of the self-employed population, such as have been seen over the last two decades, would no longer be expected to result in noticeable changes in pension membership rates. We can therefore only attribute between zero and one-seventh of the decline in pension participation to changing characteristics, and instead the decline can be attributed to a change in the probability of saving conditional on characteristics. In other words, it is not a 'composition effect', but factors other than individuals' observable characteristics that have been driving the decline in pension saving.

## 2.3 Changing pension saving among particular types of self-employed individuals

The estimated relationship between individuals' characteristics and the probability that they save in a pension changed between 1998 and 2018. For example, the decline in the association was greater among those who have been self-employed for longer than those who have been self-employed for less time (as shown by the different estimates in columns 2 and 3 of Table 2.2). This indicates that saving behaviour has changed differently over time for those with different characteristics, and we can see this visually when comparing some key groups in Figure 2.3. The charts show that pension participation declines across all groups, but the rate of decline is steeper among some groups than others. In particular, pension participation among men fell more dramatically than among women (decline of 37 ppt versus 19 ppt for women), and the same is true for those who had been self-employed for more than 7 years for compared with those self-employed for 7 years or fewer (declines of 38 ppt versus 24 ppt). The trends between different age groups seem roughly similar, but among the different income groups the decline was greatest among those earnings over £500 per week – their pension participation rate fell by 43 ppt from 67% to 24%.

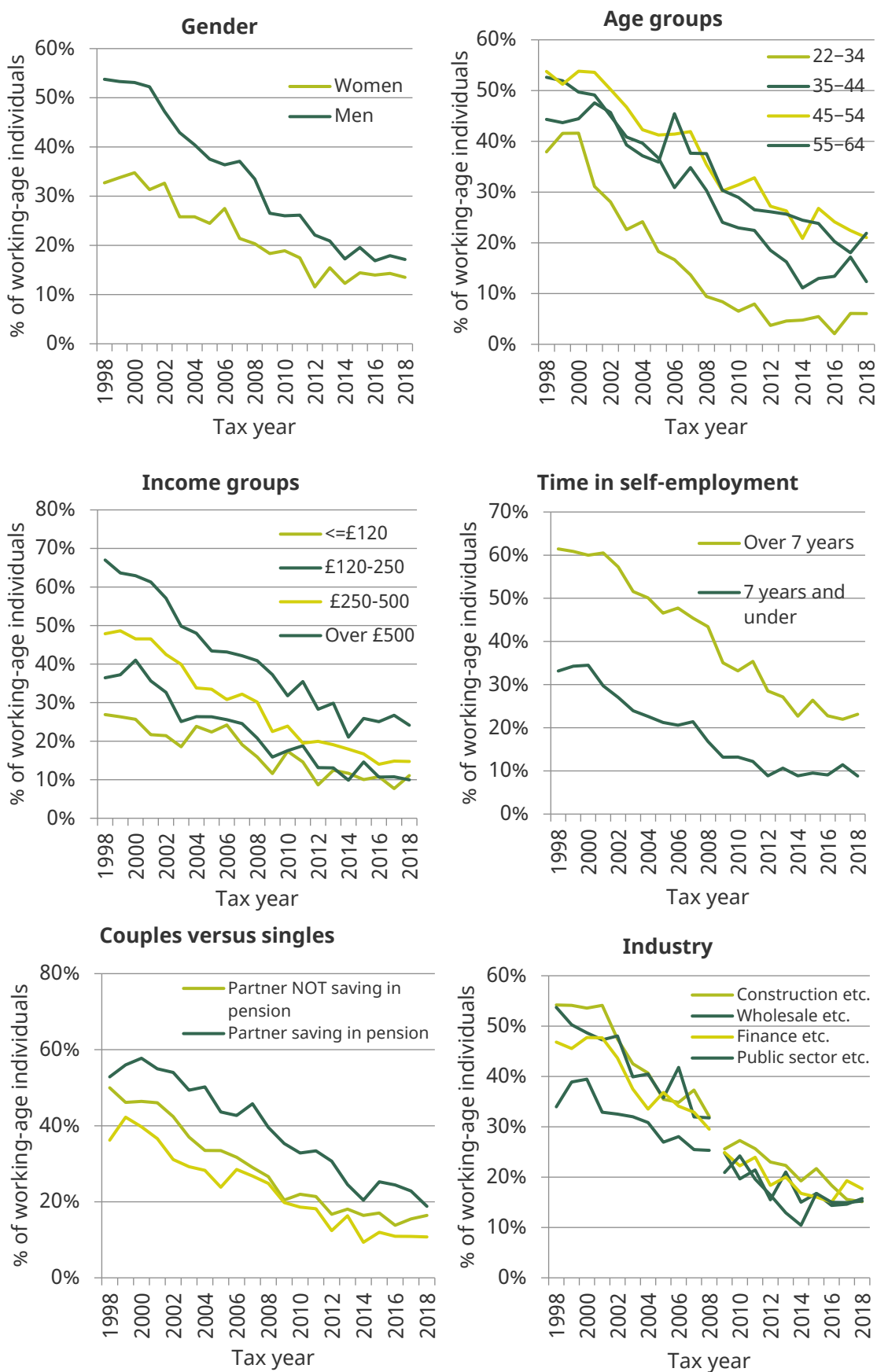
To see this more formally, we again run a linear probability model to estimate the association between whether a self-employed individual saves in a pension and a number of characteristics, but we now estimate this on all years of data and interact the characteristics with an indicator of whether the individual is observed prior to 2009.<sup>14</sup> This enables us to see if the correlation between pension saving and a particular characteristic changed over time, when the associations between other characteristics and pension saving are also allowed to change. We chose the split between 1998–2008 and 2009–18 because it is aligned with the industry variable discontinuity, and it splits the sample roughly in half.

The results of this analysis are summarised in Figure 2.4. The solid bars illustrate the estimated association between each characteristic and the probability of saving in a pension in 1998–2008 and 2009–18 (the lines indicate the 95% confidence intervals around those estimated associations). Out of the coefficients shown here, those estimated for age, earnings, gender, whether someone works part-time and the tenure coefficients were all statistically significantly different between the pre-2009 and post-2009 periods. For example, a 1% increase in earnings pre-2009 was associated with a 4.4 ppt increase in the probability of pension participation, whereas post-2009 a 1% increase in earnings was associated with a 3.1 ppt increase in that probability. The size of the decline in association

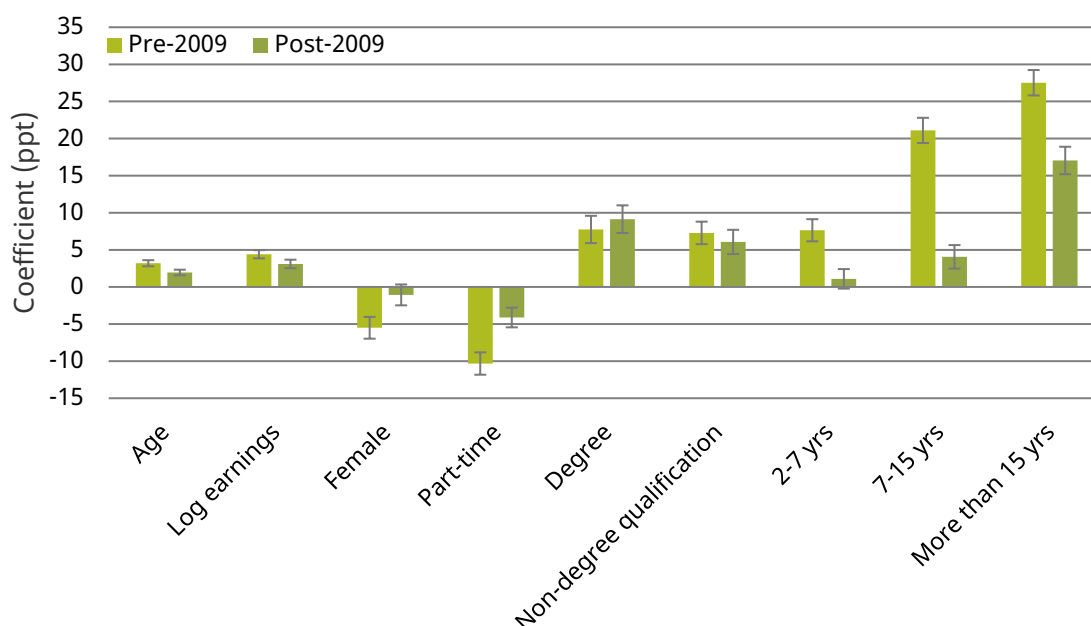
<sup>14</sup> The sample size of the FRS does not allow us to run a fully interacted model with all year dummies.

is particularly notable for time spent in self-employment: the likelihood of being a pension member for those self-employed for more than 15 years was 10 ppt lower after 2009 than in the period before 2009.

**Figure 2.3. Trends in pension participation between different groups**





**Figure 2.4. Difference in selected coefficients before and after 2009**

Note: The bars indicate 95% confidence intervals on the coefficients.

It is also notable that all of the characteristics that had a statistically different association in the earlier versus later period had an association that was greater in magnitude in the earlier period. In other words, participation rates have declined at a faster rate among those groups that, in 1998, had higher levels of pension saving. This means that the smaller difference in the savings rates of different groups by the end of the period is due to all groups' pension participation levels converging to a new low level of saving.

## 2.4 Summary

This chapter has illustrated that the changing composition of the self-employed workforce only explains a small portion of the declining trend in pension participation. Pension participation has been falling among all groups, and falling at a faster rate among those groups whose levels of pension participation in 1998 were higher. This pattern is seen most clearly among those who have higher earnings and those who have been self-employed for longer.

This is potentially worrying from a policy perspective. Some low-income individuals may be well served by the state pension provision, and increasingly so given reforms to state pensions over this period (most obviously with the introduction of the single-tier pension in 2016). Also, those only in self-employment for a few years may have ample time to build up a pension through savings while they are an employee. But the lifetime self-employed on relatively high incomes will need to undertake private retirement saving to avoid falls in their standards of living when they cease work, and so the decline in pension saving among this group is particularly concerning.

### 3. Have attitudes towards pensions changed among the self-employed?

In an attempt to understand the drivers of the decline in pension saving among the self-employed, we turn to data on self-reported attitudes towards pension saving. These data come from the Wealth and Assets Survey (WAS)<sup>15</sup> – a household survey designed to be representative of the population of Great Britain that collects detailed information on individuals' wealth holdings and their financial attitudes. The survey has been running since summer 2006, and so we are able to examine roughly the last decade of the period examined in Chapter 2 – specifically financial years 2006–07 to 2017–18. The sample size of the WAS is smaller than the FRS; in WAS there are around 800 self-employed people per year of data.

We examine 'attitudes' towards pensions and saving for retirement using the following survey questions:

- What are your reasons for not currently contributing towards a pension? [from a list of options]
- Which [of a list of options] do you think would be the safest way to save for retirement? Which do you think would make the most of your money?
- Which [of a list of options] do you expect to use to provide money for your retirement? Which do you think will make up the largest part of your income?
- How confident are you that your household income in retirement will give you the standard of living you hope for?

Together, these questions give a sense of individuals' attitudes towards pensions compared with other assets as a means of saving for retirement, and a reflection of their own circumstances and expectations as regards their retirement income. In the following, we describe how answers to these questions have changed over the last decade.

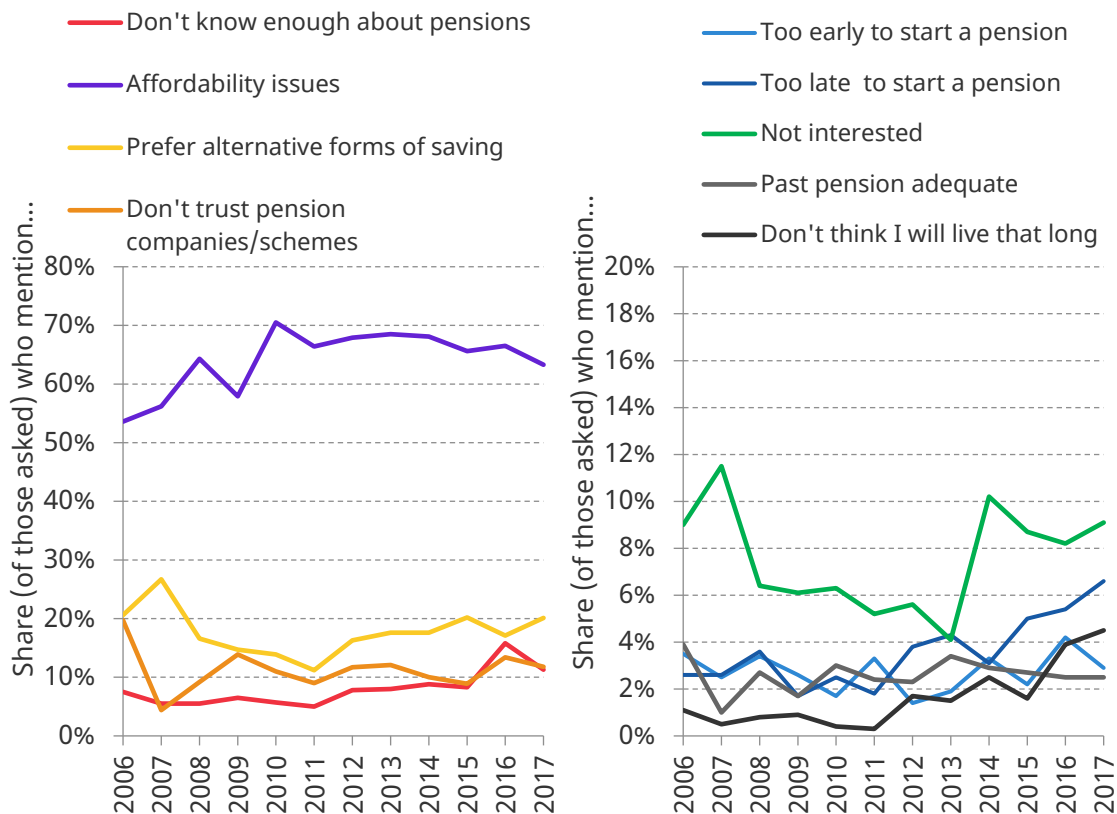
#### 3.1 Self-reported reasons for not saving in a pension

All respondents to the WAS who report that they are not currently contributing to a pension are asked why not. The precise question wording and the detailed list of options that individuals can pick (multiple) reasons from is included in the Appendix. Grouping 'affordability' reasons together, this was the most commonly reported reason among the self-employed for not saving in a pension – mentioned by 63% of those not saving in a pension in 2017–18. The purple line in the first panel of Figure 3.1 indicates that the proportion of non-savers reporting not saving for affordability reasons increased between

<sup>15</sup> Office for National Statistics, Social Survey Division (2020), Wealth and Assets Survey, Waves 1–5 and Rounds 5–6, 2006–2018. [data collection]. 11th Edition. UK Data Service. SN: 7215, <http://doi.org/10.5255/UKDA-SN-7215-11>.

2006 and 2012 (from 54% to 68%), before starting gradually to fall again. This pattern mirrors the pattern in average real income of the self-employed over this period (shown in the bottom-right panel of Figure 2.1).

**Figure 3.1. What are your reasons for not currently contributing towards a pension?**



Note: Self-employed people only. The question is asked of most of those who are not currently saving in a pension. The exact wording of the question and possible responses are described in the Appendix.

Source: WAS, waves 1–5 and round 6.

The other three responses plotted in the left panel of Figure 3.1 ('Don't know enough about pensions', 'Prefer alternative forms of saving' and 'Don't trust pension companies/schemes') all reflect negative attitudes towards pensions as an asset. Around one-in-five self-employed people who are not saving in a pension mention that they prefer alternative forms of saving. The proportion reporting this has varied over time, but was as commonly reported in 2006–07 as in 2017–18. Over the period, there has been a small increase in the proportion reporting that they do not know enough about pensions, but also a small fall in the proportion reporting that they do not trust pension companies/schemes. Overall, these responses are not indicative of a strong movement in preferences away from pensions among the self-employed.

The right panel of Figure 3.1 describes the changes over time in the proportion of non-saving self-employed individuals who mention the other main responses ('Too early to start a pension', 'Too late to start a pension', 'Not interested/not got around to it', 'Past pension arrangements are adequate' and 'Don't think I will live that long'). These other responses can be thought of as representing attitudes towards saving for retirement in

general, rather than in pensions specifically. There have been increases, particularly since the middle of the decade, in the proportion reporting that they don't think they will live long enough and the proportion reporting that it is too late to start a pension. However, while there have been proportionately large increases in the prevalence of these responses, still very few individuals overall report these reasons.

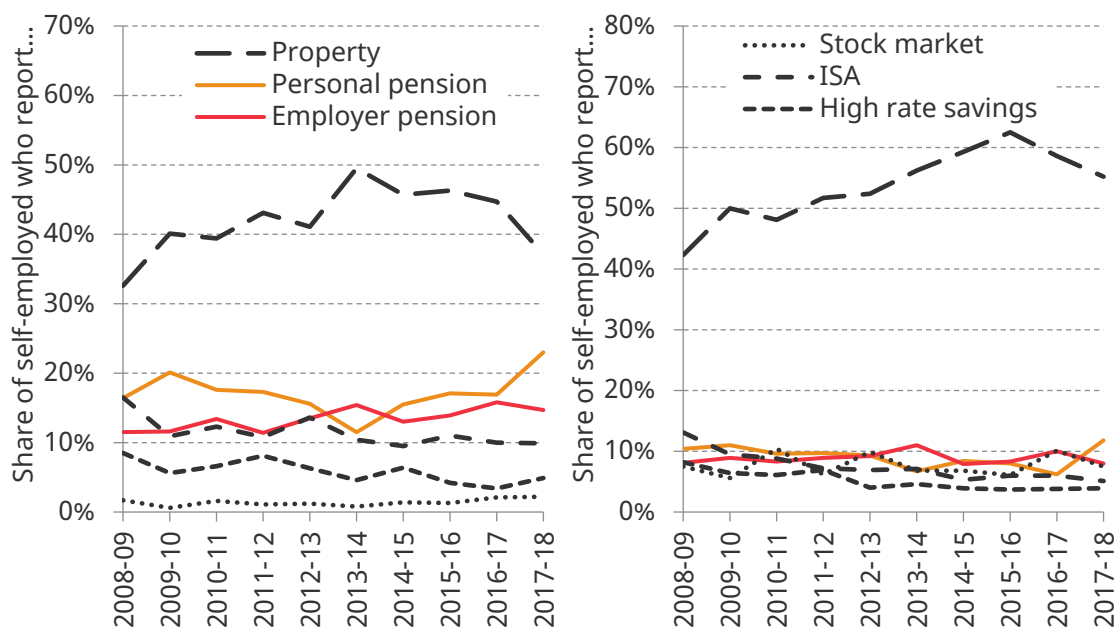
Taken together, these self-reported reasons for not saving in a pension do not suggest there is one obvious explanation for the trend in the decline in pension saving. Individuals' answers suggest that affordability plays a key role, but the analysis in Chapter 2 controls for the changing income of the self-employed over time, and pension membership declined over the early 2000s even while average earnings were increasing.

### 3.2 Attitudes towards pensions as an asset choice

There is also no evidence of a shift in attitudes away from pensions and towards other assets on grounds of either perceived risk or expected return. The left panel of Figure 3.2 shows that the proportion of the self-employed who thought pensions were the safest way to save for retirement increased slightly over the decade as a whole (though fell between 2008–09 and 2013–14). The right panel shows that a similar proportion of the self-employed in 2017–18 as the proportion in 2008–09 were reporting that saving in a pension would make the most of their money.

**Figure 3.2. Attitudes towards different assets among the self-employed**

Which do you think would be the safest way to save for retirement?      Which do you think would make the most of your money?



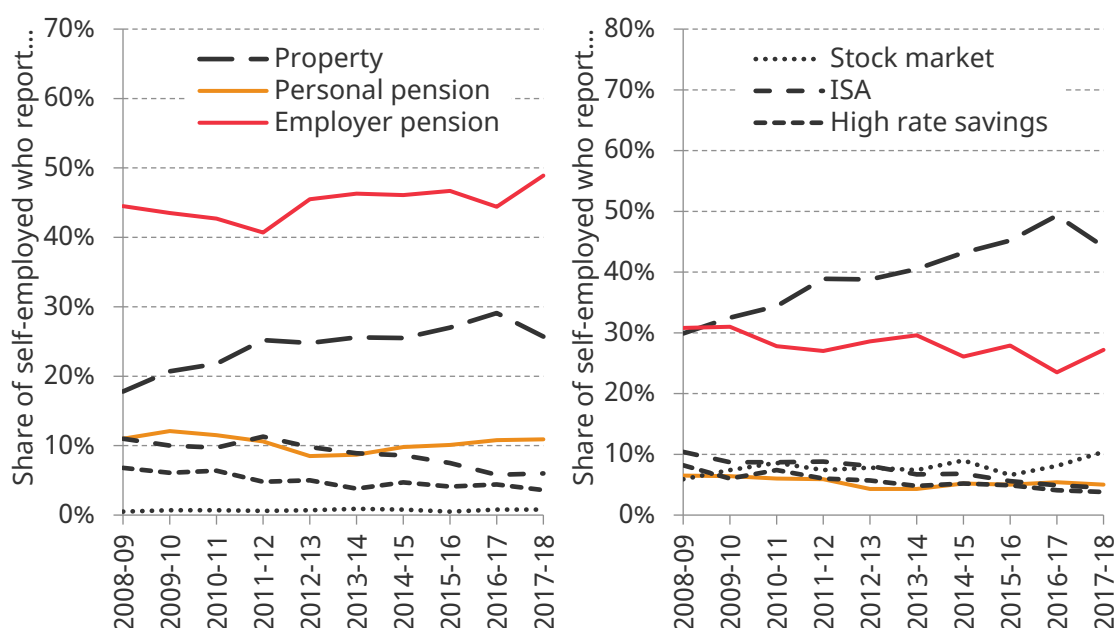
Note: Self-employed aged 20–64 only.

Source: WAS, waves 2–5 and round 6.

The self-employed have been increasingly attracted to housing. Investing in property has increasingly been seen as the way to make the most of one's money and the safest way to save for retirement. In contrast, attitudes have been shifting away from high rate savings accounts and ISAs. This likely reflects the decline to very low levels in the interest rates available on savings accounts since the financial crisis. These trends over the past decade – towards housing and away from interest-bearing saving assets – are similar for employees (shown for comparison in Figure 3.3).<sup>16</sup>

**Figure 3.3. Attitudes towards different assets among employees**

Which do you think would be the safest way to save for retirement? Which do you think would make the most of your money?



Note: Employees aged 20–64 only.

Source: WAS, waves 2–5 and round 6.

### 3.3 Expected retirement income

We now turn to individuals' reported expectations regarding their future retirement incomes. The left panel of Figure 3.4 illustrates what proportion of the self-employed expect to receive money from different income sources in retirement. Because individuals can, and indeed often do, expect to receive income from more than one source, these proportions sum to more than 100.

The orange line shows that around 80% expect to receive some money from the state pension (and/or other state benefits) – a proportion that has been stable over the past decade. This is somewhat lower than the proportion of employees who expect to receive any income from the state pension (shown in the left panel of Figure 3.5): among employees in 2009, 82% expected some income from the state pension in retirement,

<sup>16</sup> Comparison of preferences between the self-employed and employees is complicated by the fact that the options available to the two groups, in particular in terms of employer pensions are very different. The self-employed do not have access to defined benefit pensions, or pensions involving an employer contribution, while many employees do.

rising to 89% in 2017. As previously documented by Crawford (2018), there is also a strong age gradient in these expectations. Around 90% of the self-employed aged 55–64 expect to receive state pension income in retirement, compared with just under 70% of those aged 25–34.

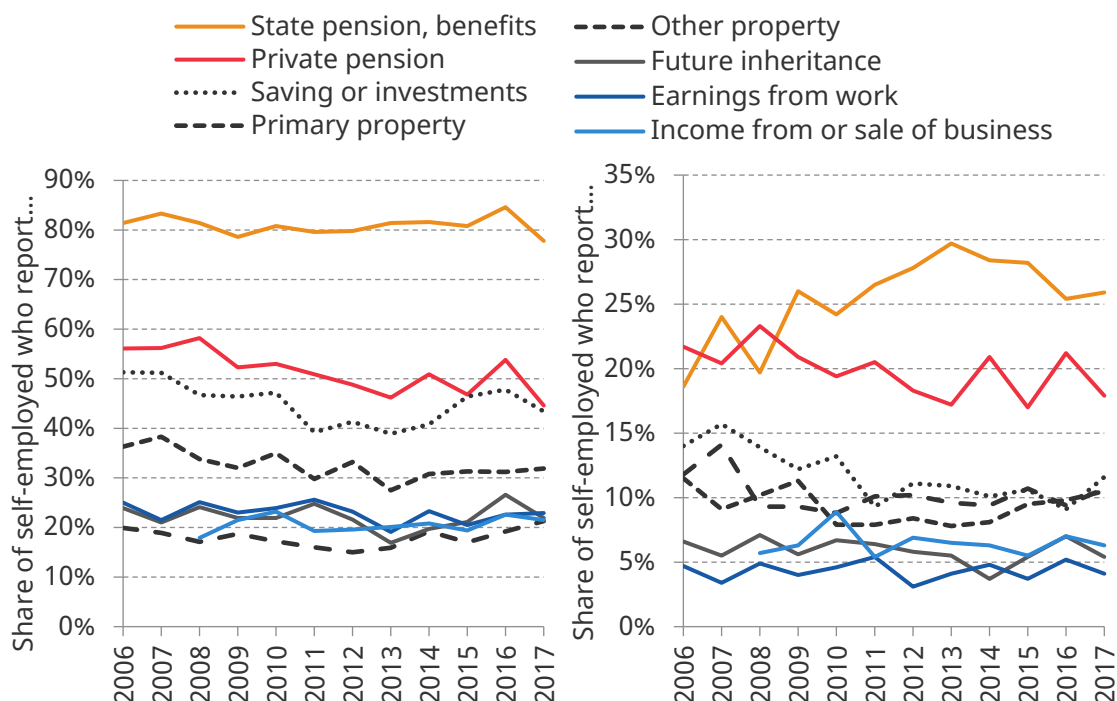
In terms of private pensions, a declining proportion of the self-employed expect to receive private pension income in retirement: in 2006–07 this was 56%, and by 2017–18 it was 45%. This is consistent with the decline in active private pension saving among this group, and is in some sense reassuring – in that the self-employed are at least aware of the consequences of not saving in a pension during working life for their sources of income in retirement.

The right panel of Figure 3.4 illustrates the proportions of the self-employed who expect each asset to be their *main* source of income in retirement (these proportions therefore do sum to 100% each year). This shows a slight decline in the proportion expecting a private pension to be their main source of income, from 22% in 2006–07 to 18% in 2017–18. More generally, private sources of income are increasingly less likely to be seen as the major source of retirement income by the self-employed, with the proportion saying that they expect state pensions and benefits to be their largest source of income having increased from 24% in 2006–07 to 22% in 2017–18.

**Figure 3.4. Sources of retirement income expected by the self-employed**

Which do you expect to provide money for your retirement?

Which do you think will make up the **largest** part of your income?



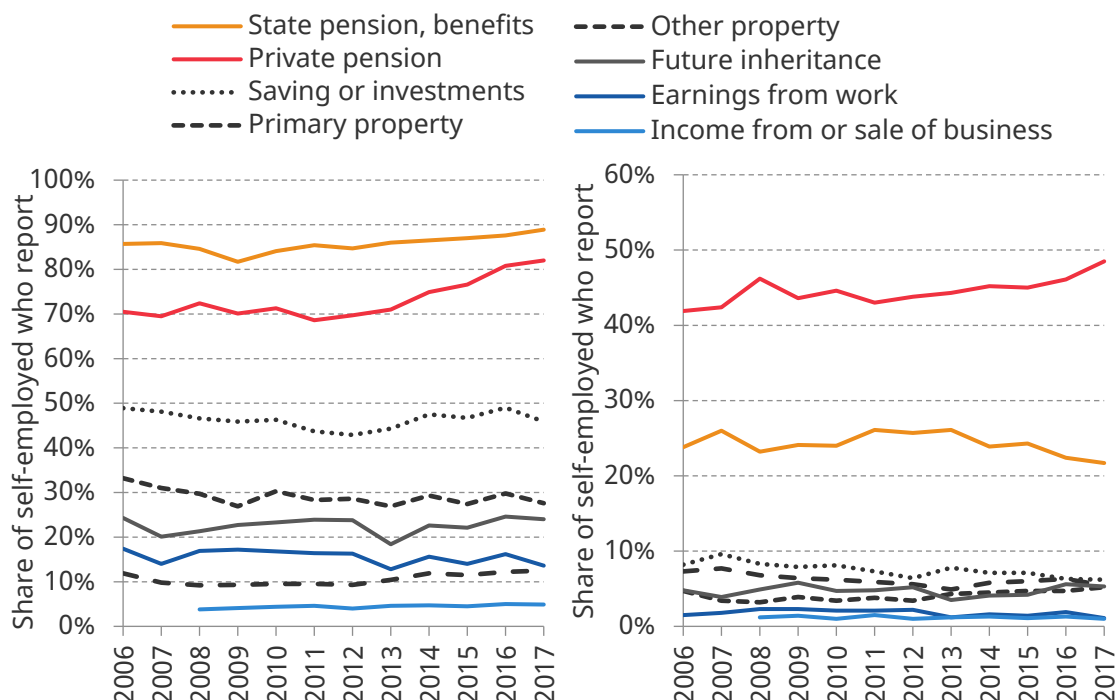
Note: Self-employed people only.

Source: WAS, waves 1–5 and round 6.

**Figure 3.5. Sources of retirement income expected by employees**

Which do you expect to provide money for your retirement?

Which do you think will make up the **largest** part of your income?



Note: Employees only.

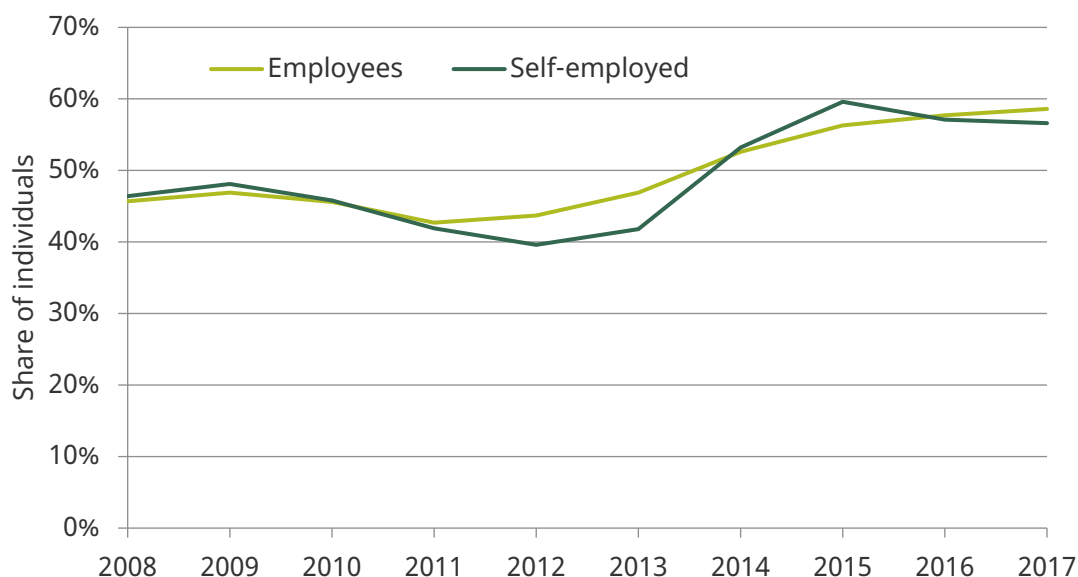
Source: WAS, waves 1–5 and round 6.

The trends in expectations regarding private pension income in retirement are somewhat different among employees, as would be expected given the effects of automatic enrolment. Figure 3.5 shows that the proportion of employees expecting any private pension income increased from 2012 onwards, and there was a (more muted) increase in the proportion expecting private pension income to make up the largest source of income. In contrast to the trend among the self-employed, the proportion of employees expecting the state pension to be the largest source of retirement income has declined, from 24% in 2006–07 to 22% in 2017–18.

Despite the decline in active private pension saving, and the decline in the proportion expecting to get money from a private pension in retirement, confidence among the self-employed in their retirement outcomes has improved over the last decade as a whole. Figure 3.6 shows that the proportion of the self-employed reporting that they are 'very' or 'fairly confident' that their retirement income would give them the standard of living they were hoping for fell between 2008–09 and 2012–13 but increased between 2012–13 and 2017–18. In 2017–18, 57% of the self-employed were confident in their retirement income outcome, compared with 46% in 2008–09. A similar pattern is observed among employees, and this is likely driven by the financial crisis and movements in real incomes and consumer confidence over this period.<sup>17</sup>

<sup>17</sup> Crawford et al., 2020.

**Figure 3.6. Proportion 'very' or 'fairly confident' that retirement income will give the standard of living hoped for**



Source: WAS, waves 1–5 and round 6.

### 3.4 Summary

Overall there is little obvious explanation from individuals' reported attitudes towards pension saving, and towards pensions compared with other assets, for the decline in pension saving among the self-employed. Pensions are not the most commonly favoured asset for retirement saving among the self-employed – there are strong preferences for investing in property – but attitudes do not appear to have shifted against pensions any further over the past decade. Some reassurance can perhaps be taken from the fact that the self-employed seem to be aware of the long-run consequences of the choices they are making – there has been a decline in the proportion who expect to have private pension in retirement. There has also been an increase in reported confidence in retirement outcomes over the past decade as a whole, and the self-employed are, on average, no less optimistic about their retirement prospects than employees.



## 4. Are the self-employed saving for retirement in other ways?

Private pensions are only one way individuals may choose to save for retirement. It is therefore important, when thinking about whether the observed decline in pension saving among the self-employed ‘matters’, to consider whether other forms of saving might have changed over this period in a way that might offset the decline in pension saving. This could be particularly important for the self-employed, as pensions are often argued to be a less appropriate savings vehicle for the self-employed than for employees. The self-employed may have a greater need for liquid savings (their income may be more volatile, and they do not normally benefit from some protections – such as statutory sick pay – that are available to employees). The self-employed also do not benefit from employer contributions to private pensions, and so do not have that financial incentive to save in this form.

In this chapter, we examine the trends over time in three forms of saving, which could represent alternatives to saving in a pension: financial assets, primary housing and non-primary housing. With the exception of primary housing (which is typically jointly held by members of a couple), we examine wealth held at the individual level. In other words, we are seeking to understand whether the decline in individuals’ pension saving may be offset by increased saving in other forms by the individual. We do not examine whether the saving of partners has changed over time, or how the overall saving of the household has changed. This is potentially an important factor for couples, as resources may be pooled and saving for retirement may be done disproportionately by one or other individual. However, we do not believe such behaviour is likely to be driving the decline in pension saving among the self-employed, as a similar decline is observed among singles as among couples (shown in Figure 2.3).

### 4.1 Financial assets

The financial assets most commonly held by self-employed people aged 20–64 in 2017–18 were: current accounts with positive balances (99%), savings accounts (55%), ISAs (38%), life insurance policies (23%), national savings products (18%) and shares (12%). Table 4.1 shows that this is similar to the prevalence of these assets among employees. Relatively small amounts are held in national savings products and current accounts, however (the median value is £500 and £1,000 respectively, among the self-employed).

Figures 4.1 and 4.2 show how the proportion of the self-employed who hold the main financial assets – savings accounts, ISAs and shares – has changed over time. For all of these assets, the proportion holding them, and the change in this over time, are very similar for employees and the self-employed.

Looking at savings accounts (first panel), the prevalence of these has fallen from 61% to just 33% for the self-employed over this period. However, a close potential substitute for savings accounts are cash ISAs. Holdings of cash ISAs increased rapidly after their introduction in 1999, reaching over 30% by 2009. Consequently, the proportion of self-

employed individuals holding either a savings account or a cash ISA declined less sharply over the period, from 63% in 1998–99 to 45% in 2018–19.<sup>18</sup>

**Table 4.1. Financial wealth holdings of employees and self-employed in 2017–18**

	Proportion who hold...		Median value among holders (£)...	
	Self-employed	Employees	Self-employed	Employees
Current account (with positive balance)	98.8%	99.2%	1,007	873
Savings account	54.9%	60.6%	1,900	2,000
ISAs	38.2%	38.5%	6,006	4,074
Life insurance	23.3%	26.7%	36,276	36,276
National saving products	18.2%	14.9%	502	263
Shares	12.0%	14.1%	5,542	4,724
Fixed-term bonds	2.3%	2.7%	–	–
Unit/investment trusts	3.7%	1.7%	–	–

Note: Values are rounded and in March 2018 prices. Average value held in fixed-term investment bonds and unit/investment trusts not reported due to small sample sizes of the self-employed holding these assets. Sample is working individuals aged 20–64.

Source: WAS, round 6.

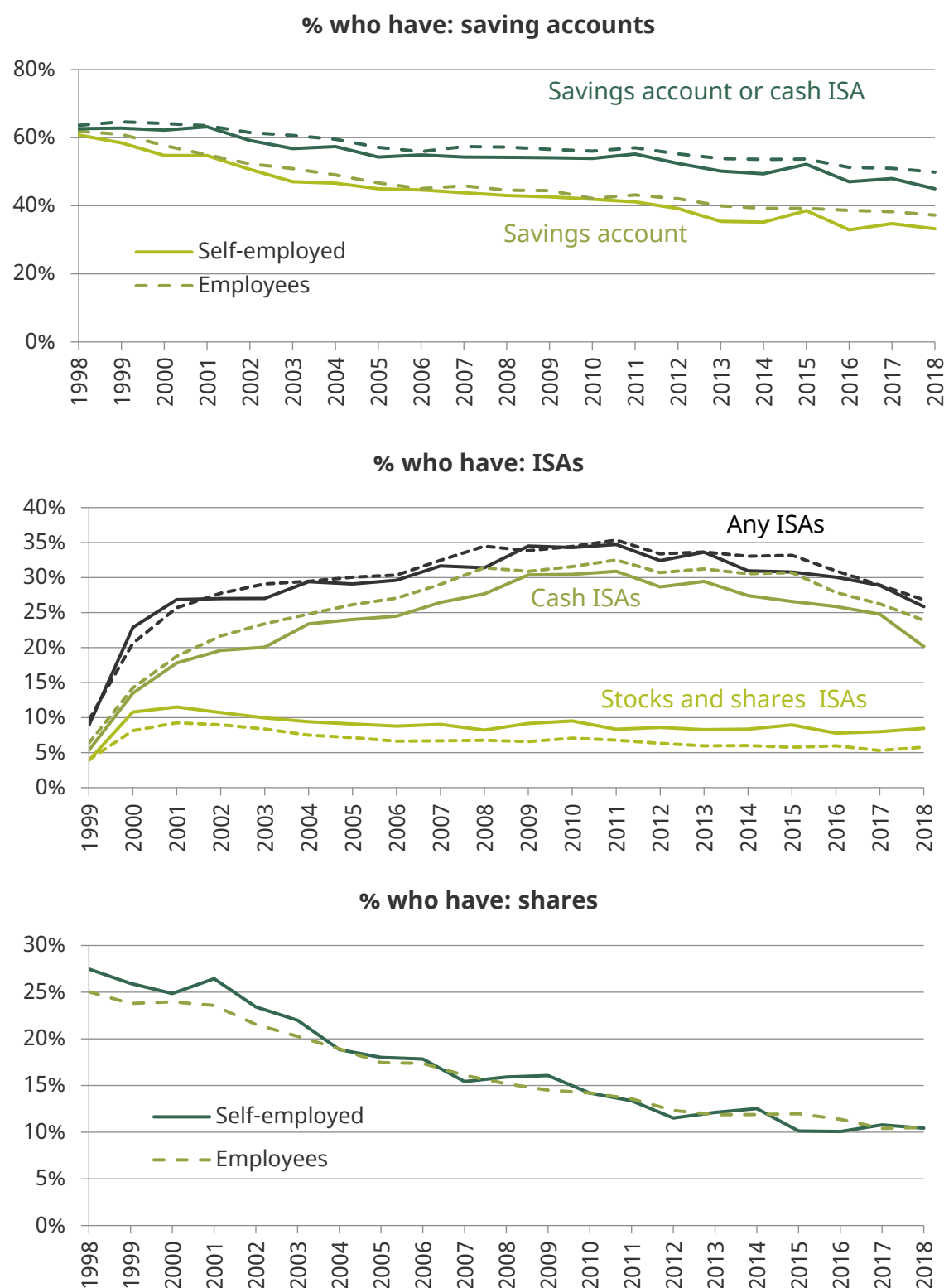
Far fewer individuals hold stocks and shares ISAs (Figure 4.1, middle panel), which might be considered relatively close substitutes to pension saving but with greater liquidity. These were held by 12% of the self-employed in 2001, but this has gradually fallen since, to 8% by 2018. Holdings of ISAs look similar between the self-employed and employees (albeit with a slightly greater proportion of the self-employed holding stocks and shares as opposed to cash ISAs), and have trended similarly over time.

The proportion owning shares has declined steadily over the past two decades: from 27% of self-employed individuals in 1998–99 to 10% in 2018–19. At the very beginning of the period, the decline could be explained by the rise of products such as stocks and shares ISAs but, as the middle panel shows, the level of these has stayed relatively stable over time and thus cannot explain the whole of the decline.

It is not possible to examine how the level of wealth held in these financial assets has changed over this period by using the FRS, as the survey does not ask all individuals about the amounts of wealth held. However, we can do so for the period since 2006 by using data from WAS. The results are shown in Figure 4.3.<sup>19</sup> This reveals that the self-employed who have savings accounts and who have ISAs tend to hold slightly more in these forms than do employees who hold these assets. However, the differences in the average amounts held are relatively stable over time and, if anything, the gap between the self-employed and employees has decreased over the decade.

<sup>18</sup> The 1998–99 data also include TESSAs, which were a similar product to cash ISAs.

<sup>19</sup> It is worth noting that the prevalence of savings accounts is quite different in WAS and FRS, and the decline since 2006 is starker in the FRS (12 ppt, compared with a 6 ppt decline in WAS). The proportion holding ISAs is slightly higher in WAS than in the FRS, but the trends over time are the same.

**Figure 4.1. Financial asset holding, 1998-99 to 2018-19**


Note: Solid lines are for the self-employed. Dotted lines are for employees. Sample is individuals aged 22-64. Shares include share options.

Source: FRS, 1998-99 to 2018-19.

**Figure 4.2. Financial assets: holding and average value (among holders) over time**

Note: Individuals aged 20–64. Years are financial years. Shares include share options.

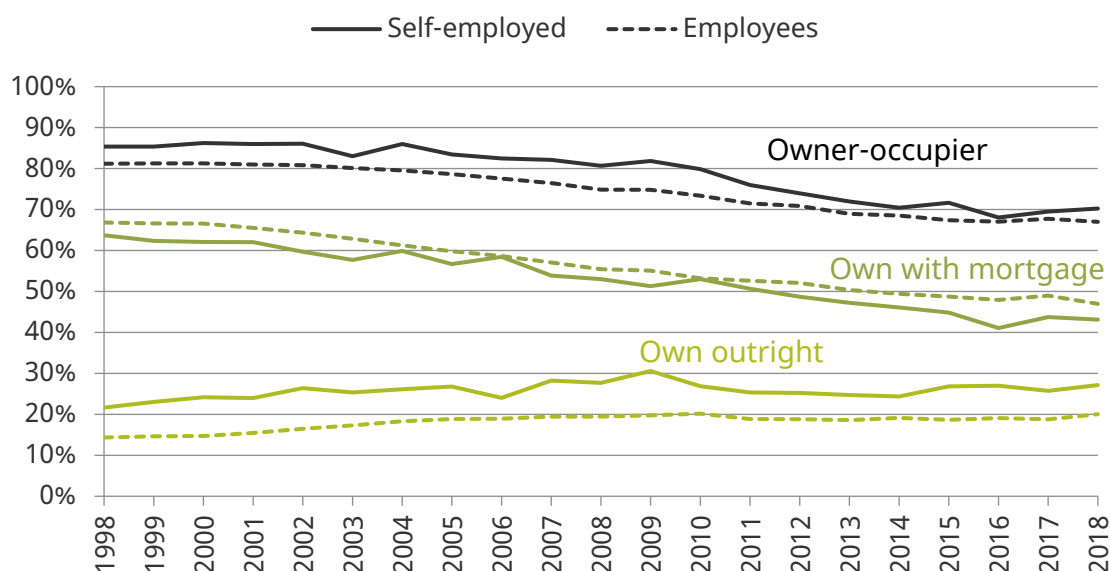
Source: WAS, waves 1–5 and round 6.

## 4.2 Housing wealth

It was shown in Figure 3.2 that the self-employed have strong preferences towards saving in property, with this being the asset most commonly reported to be both the safest way to save for retirement, and the way that would make the most of an individual's money.

Despite the increase in preferences towards property, owner-occupation rates have fallen over the last 20 years and particularly so over the last decade. As shown in Figure 4.3, 85% of the working-age self-employed were homeowners in 1998–99, but this has fallen to 70% in 2018–19. A similar decline has been observed for employees, and has widely been attributed to rising house prices relative to incomes, combined with tighter regulations of mortgages since the financial crisis, proving a barrier to young aspiring homeowners.<sup>20</sup>

**Figure 4.3. Housing tenure, over time**



Note: Solid lines are self-employed. Dashed lines are employees.

Source: FRS, 1998–99 to 2018–19.

Among those who own with a mortgage, the median estimated value of main residences in England is estimated to be higher among the self-employed than among employees (shown in Figure 4.4).<sup>21</sup> The amount of wealth held in primary property has increased over time (even after adjusting for inflation) as house prices have increased. Between 1998–99 and 2018–19, the median estimated house value for employees increased by over 138% and for the self-employed by around 118%. This increased saving in housing could be one important reason why saving in financial assets and pensions has declined over the past two decades. However, it would not obviously explain the greater decline in pension

<sup>20</sup> For example, see Cribb, Hood and Hoyle (2018), Cribb and Simpson (2018) and Corlett and Judge (2017).

<sup>21</sup> The current value of the main residence is not asked in the FRS. We estimate it using the reported purchase price and the average growth in house prices in the relevant local authority since the year of purchase. This can only be done for those who own with a mortgage as the question of purchase price of property is only asked of those who have a mortgage.

saving among the self-employed than among employees – particularly over the first half of the period when earnings grew similarly among the two groups.

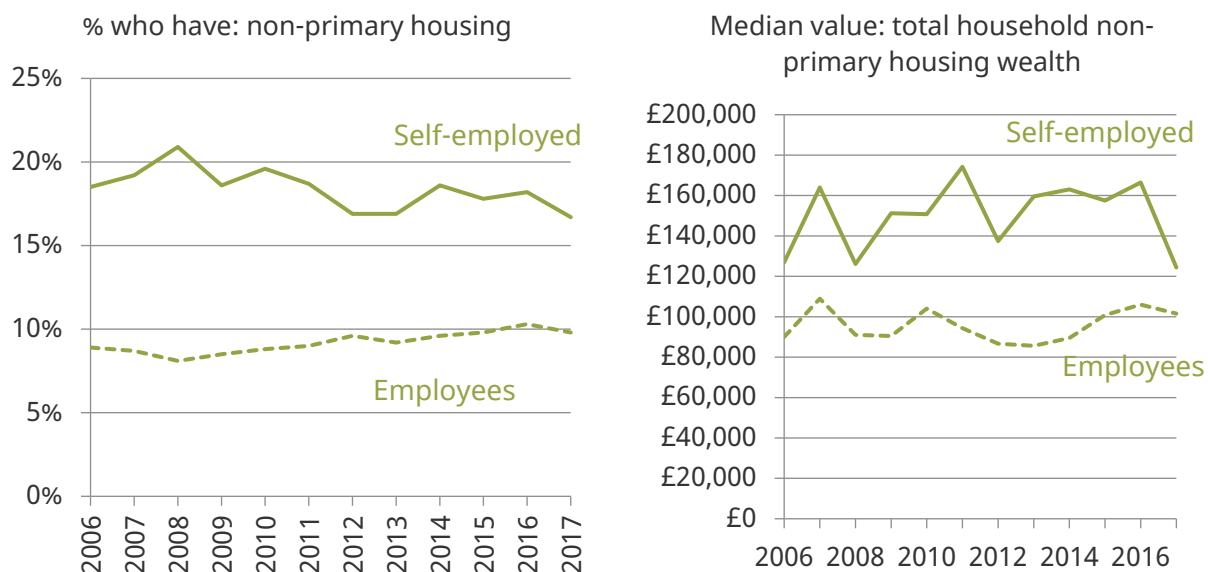
In 2017–18, 17% of the self-employed owned property or land that was not their main residence (for example, second homes, buy-to-let property, and other buildings or land). This is higher than the 10% of employees who had wealth in this form. Over the last decade, the proportion of the self-employed who hold non-primary housing wealth has declined somewhat, from around 19% in 2006–07 (shown in the left-hand panel of Figure 4.5). While volatile due to small sample sizes, the estimated average value of total household wealth in this form, among those who hold such wealth, looks relatively flat over the last decade as a whole.

**Figure 4.4. Average estimated house value among owner occupiers**



Note: House values are estimated using reported purchase price and the average growth in house prices in the relevant local authority since the purchase year.

Source: Authors' calculations using the FRS, 1998–99 to 2018–19, and House Price Index data from Hilber and Vermeulen (2016) and HM Land Registry (UK House Price Index).

**Figure 4.5. Non-primary housing wealth: holding and average value (among holders)**

Note: Individuals aged 20–64. Years are financial years.

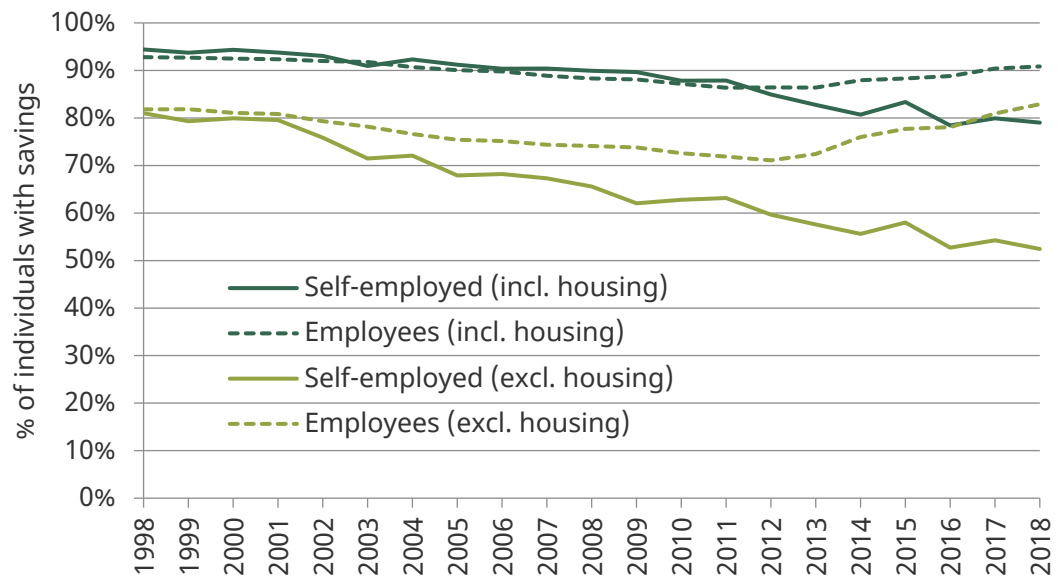
Source: WAS, waves 1–5 and round 6.

### 4.3 Summary

The evidence presented in this chapter is far from exhaustive. A particular constraint is that, for data reasons, we can only examine the level of wealth held in financial assets and non-primary housing wealth for the last decade. Therefore, we cannot know whether the amount of saving in these forms, among those who held these assets, increased over the late 1990s and early 2000s in a way that would offset the decline in pension saving. The evidence presented suggests that this was not the case since 2006–07, but the past decade has been one of considerable economic turmoil; the financial crisis, recession and persistently poor earnings growth (particularly for the self-employed) will all have affected saving and wealth.

However, with those caveats in mind, there is little obvious evidence that saving in financial assets or other property has increased to offset the decline in pension saving over the last two decades. Indeed, Figure 4.6 illustrates that the proportion of individuals saving in any of the following – a pension, a savings account, an ISA or shares – declined over the past two decades. The proportion saving in primary housing has declined, but the amounts accumulated in this form have increased, with rising house prices considerably pushing up average housing wealth. However, this is true for both employees and the self-employed, and so it is not clear that this can explain the faster decline in pension saving among the self-employed, particularly over the first half of the period.

**Figure 4.6. Prevalence of saving in a pension, savings accounts, ISAs, shares or primary housing over time**



Note: Individuals aged 22–64.

Source: Authors' calculations using the FRS, 1998–99 to 2018–19.



## 5. Conclusions

This report began with the observation that the proportion of the self-employed actively contributing to a pension has been declining over time. This is true across the whole period of analysis and the decline was faster among the self-employed than among employees before the launch of automatic enrolment. In recent years, pension coverage among the self-employed appears to have plateaued at a very low level.

The composition of the self-employed workforce has changed over time. However, the analysis in Chapter 2 showed that the decline in pension saving is not driven by this: at most one-seventh, and arguably none, of the decline can be attributed to changing characteristics of the self-employed population. Instead, the decline is driven by the fact that the probability that an individual with a given set of characteristics is contributing to a pension has fallen during the period. Groups for whom pension saving was initially higher – the higher-income and long-term self-employed – have seen the most dramatic declines in pension participation over time. This is potentially worrying from a public policy perspective as these are also the groups for whom it is most important to save privately for retirement while self-employed, as they are not going to have periods as an employee where they would be covered by automatic enrolment, and they are going to get a lower replacement rate from the state pension.

Given that the decline in pension saving cannot be explained by the changing characteristics of the self-employed, we turned to attitudes and other savings to examine why the propensity to save in a pension has fallen. However, the puzzle remains. The data from attitudinal questions do not suggest that attitudes have shifted against pensions. In terms of other savings, holdings of many substitutes to pensions have declined as well. The only obvious increase in saving is in primary housing wealth, but employees experienced a similar increase in their housing wealth during this period, so this does not easily explain the diverging trends in pension participation between employees and the self-employed.

This leaves the important question: what else might be driving the decline in pension saving? There are at least two avenues worthy of exploration. First, while our analysis controls for current income, the FRS does not contain data on income volatility or income expectations. These matter for individuals' savings choices (affecting both how much individuals might want to save for retirement, and the best timing of any saving), and may have evolved quite differently for the self-employed compared with employees over the last two decades. Second, an alternative avenue for exploring whether overall savings have declined for the self-employed and how that compares with employees is to examine how their respective spending patterns have changed over time. This could help determine what the self-employed do with the money they are no longer putting aside for retirement – whether it is going into higher spending today rather than other forms of saving, and if so, what kind of spending.

Without fully understanding the drivers of the decline in pension saving, it is difficult to be definite about the extent to which policymakers should be concerned by these trends. In some sense, it is reassuring that over the last decade a declining proportion of self-employed workers expect to receive private pension income in retirement. This is in line with the decline in participation, and suggests individuals are aware of the consequences of their current saving choices. However, given that pension coverage has declined most

rapidly among high-income and long-tenure self-employed, and that other saving outside of primary housing has not increased over this period, we can only assume this remains an issue that deserves policy attention.

That said, the policies that are considered a success among employees may not be straightforwardly applied to the self-employed, and it is important to consider the ways in which the self-employed differ from employees. Many self-employed are temporarily working in that way and may build up pension saving during permanent spells of employment. Many of the self-employed also have very low incomes, and if this is a permanent state for them, the state pension may provide a reasonable replacement rate for their lifetime earnings. Thus, before rushing into policies that target all self-employed people, it is important to consider who, within the self-employment population, policymakers might want to target, and how best to do this in a way that leaves flexibility for individuals to be able to make their own decisions about saving.

## References

- Aviva and Royal London (2017), 'Solving the under-saving problem among the self-employed', <https://www.royallondon.com/siteassets/site-docs/media-centre/avivaroyallondon-report-30jun17.pdf>.
- Bourquin, P., Cribb, J. and Emmerson, C. (2020), 'Who leaves their pension after being automatically enrolled?', Institute for Fiscal Studies (IFS) Briefing Note BN272, <https://www.ifs.org.uk/publications/14742>.
- Capparotto, S. (2017), 'Policies for increasing the pension saving of the self-employed', Pensions Policy Institute Report, <https://www.pensionspolicyinstitute.org.uk/research/research-reports/2017/2017-10-02-policies-for-increasing-long-term-saving-of-the-self-employed/>.
- Corlett, A. and Judge, L. (2017), 'Home Affront: housing across the generations', The Resolution Foundation, <https://www.resolutionfoundation.org/publications/home-affront-housing-across-the-generations/>.
- Crawford, R. (2018), 'The use of wealth in retirement', Institute for Fiscal Studies (IFS) Briefing Note BN237, <https://www.ifs.org.uk/publications/12959>.
- Crawford, R., Cribb, J., Emmerson, C. and Simpson, P. (2020), 'Retirement expectations, attitudes and savings behaviour: how have these changed during a decade of pension reforms?', Institute for Fiscal Studies (IFS) Briefing Note BN273, <https://www.ifs.org.uk/publications/14743>.
- Cribb, J. and Emmerson, C. (2019) 'Requiring auto-enrolment: lessons from UK retirement plans', Institute for Fiscal Studies (IFS) Report Summary, <https://www.ifs.org.uk/publications/14017>.
- Cribb, J. and Emmerson, C. (2020), 'What happens to workplace pension saving when employers are obliged to enrol workers automatically?', *International Tax and Public Finance*, vol. 27, pp. 664–93.
- Cribb, J., Hood, A. and Hoyle, J. (2018), 'The decline of homeownership among young adults', Institute for Fiscal Studies (IFS) Briefing Note BN224, <https://www.ifs.org.uk/publications/10505>.
- Cribb, J., Miller, H. and Pope, T. (2019), 'Who are business owners and what are they doing?', Institute for Fiscal Studies (IFS) Report R158, <https://www.ifs.org.uk/publications/14241>.
- Cribb, J. and Simpson, P. (2018), 'Barriers to homeownership for young adults', in C. Emmerson, C. Farquharson and P. Johnson (eds), *IFS Green Budget 2018*, London: Institute for Fiscal Studies, <https://www.ifs.org.uk/publications/13475>.

D'Arcy, C. (2015), 'The self-employed and pensions', The Resolution Foundation, <https://www.resolutionfoundation.org/app/uploads/2015/05/Self-employment-and-pensions.pdf>

Department for Work and Pensions (2018), 'Enabling retirement savings for the self-employed: pensions and long term savings trials', [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/789480/enabling-retirement-savings-for-the-self-employed-pensions-and-long-term-savings-trials.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/789480/enabling-retirement-savings-for-the-self-employed-pensions-and-long-term-savings-trials.pdf).

Department for Work and Pensions (2020), 'Automatic enrolment evaluation report 2019', <https://www.gov.uk/government/publications/automatic-enrolment-evaluation-report-2019>.

Hilber, C. and Vermeulen, W. (2016), 'The impact of supply constraints on house prices in England', *Economic Journal*, vol. 126, pp. 358-405.

Institute for Government (2012), 'The 'S' Factors', <https://www.instituteforgovernment.org.uk/publications/s-factors>.

Nest Insight (2020), 'Solutions for the self-employed: building the evidence base', Nest Insight Unit (blog), <https://www.nestinsight.org.uk/building-the-evidence-base/>.

Office for National Statistics (2018), 'Trends in self-employment in the UK', <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/trendsinselfemploymentintheuk/2018-02-07>.

Pensions Commission (2004), 'Pensions: Challenges and Choices: The First Report of the Pensions Commission', Norwich: HM Stationery Office.

Pensions Commission (2005), 'A New Pension Settlement for the Twenty-First Century: The Second Report of the Pensions Commission', Norwich: HM Stationery Office, <https://webarchive.nationalarchives.gov.uk/+http://www.dwp.gov.uk/publications/dwp/2005/pensionscommreport/main-report.pdf>.