

The Economic Circumstances of Cohorts Born between the 1940s and the 1970s

IFS Report R89

Andrew Hood
Robert Joyce

The Economic Circumstances of Cohorts Born between the 1940s and the 1970s

Andrew Hood

Institute for Fiscal Studies

Robert Joyce

Institute for Fiscal Studies

Copy-edited by Judith Payne

Institute for Fiscal Studies
7 Ridgmount Street
London WC1E 7AE

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

© The Institute for Fiscal Studies, December 2013

ISBN 978-1-909463-30-1

Preface

The authors gratefully acknowledge funding from the Joseph Rowntree Foundation (project reference 1112004A), the IFS Retirement Saving Consortium, and the Economic and Social Research Council (ESRC) through the Centre for the Microeconomic Analysis of Public Policy at IFS (grant reference RES-544-28-5001). The IFS Retirement Saving Consortium comprises Age UK, Department for Work and Pensions, HM Treasury, Institute and Faculty of Actuaries, Investment Management Association, Just Retirement and Money Advice Service. The authors would like to thank Aleks Collingwood, Rowena Crawford, Jonathan Cribb, Chris Curry, Carl Emmerson, Kathie Fishwick, Paul Johnson, Steve McKay, Cormac O’Dea, Adrian Richards, Gemma Tetlow and members of the IFS Retirement Saving Consortium for comments and advice. The authors are particularly grateful to Rowena Crawford, Soumaya Keynes, Cormac O’ Dea, Gemma Tetlow and Joshua Walker for invaluable assistance with the construction of some of the data in the report. The views expressed and any remaining errors are the authors’ alone. The Expenditure and Food Survey, Family Expenditure Survey, Family Resources Survey (FRS), General Household Survey, General Lifestyle Survey, Living Costs and Food Survey, and Wealth and Assets Survey (WAS) are Crown copyright material and are reproduced with the permission of the Controller of HMSO and the Queen’s Printer for Scotland. The data sets are available from the UK Data Service (<http://ukdataservice.ac.uk/>). The UK Data Service, the original owners of the data (the Department for Work and Pensions (DWP) in the case of the FRS, the DWP and the Office for National Statistics (ONS) in the case of WAS, and the ONS in the case of the other data sets) and the copyright holders bear no responsibility for their further analysis or interpretation.

Contents

Executive Summary	1
1. Introduction	3
2. Incomes and saving	4
2.1 Levels of income, spending and saving	5
2.2 Inequalities	15
2.3 Income prospects for the 1960s and 1970s cohorts up to pensioner ages	19
3. Wealth and assets	22
3.1 Levels and composition of current wealth for different age groups	22
3.2 Cohort comparisons of state pension wealth	25
3.3 Cohort comparisons of private pension wealth	31
3.4 Cohort comparisons of property wealth	39
4. Inheritances	48
5. Conclusion	53
References	54

Executive Summary

This report compares and contrasts the economic circumstances of individuals born between the 1940s and the 1970s, currently aged between their mid-30s and mid-70s. In doing so, it aims to provide a sense of the likely economic position of the younger cohorts in later life, in absolute terms and relative to their predecessors.

The main conclusion is that individuals born in the 1960s and 1970s are likely to be reliant on inherited wealth if they are to be any better off in retirement than their predecessors. When compared with those born a decade earlier at the same age, these cohorts have no higher take-home income; have saved no more previous take-home income; are less likely to own a home; are likely to have lower private pension wealth; and will tend to find that their state pensions replace a smaller proportion of prior earnings. Many more people in younger cohorts expect to inherit wealth; but expected inheritances are distributed unequally and are higher for those who are already wealthier.

Incomes and saving

- There has been a lack of household income growth for the working-age population over the past decade. As a result, the 1960s and 1970s cohorts have not been experiencing the rapid rise in income between the ages of 30 and 50 that their predecessors did; and younger cohorts do not have higher income than those born 10 years earlier had at the same age. This is true through most of the income distribution.
- For much of their earlier adulthood, the 1960s and 1970s cohorts *did* have higher take-home incomes than prior cohorts had at the same age. For example, age-30 real median income was 20% higher for the 1970s cohort than for the 1960s cohort, 52% higher than for the 1950s cohort and 77% higher than for the 1940s cohort.
- These income differences between birth cohorts at younger ages were (at least) matched by differences in spending. As a result, the 1960s and 1970s cohorts had higher living standards during early adulthood than their predecessors had, but they have not actively saved more take-home income than their predecessors had by the same stage in life.
- Because of the large rise in income inequality during the 1980s, individuals born in the 1960s and 1970s had significantly more unequal incomes in early adulthood than the 1940s and 1950s cohorts did.

Wealth and assets

- Under current policy, state pension entitlements for individuals born in the 1960s and 1970s will tend to replace a smaller proportion of prior earnings

than is the case for those currently above, or around, the state pension age. However, this difference across cohorts is smaller for low earners and for those who have spent time out of work caring for children. As a result, state pensions may have a more equalising effect on the retirement incomes of younger cohorts than for their predecessors.

- Membership rates in private pension schemes have changed little overall for cohorts born between the 1950s and 1970s, masking a significant decline among men offset by a rise among women. An important trend has been the rapid switch away from occupational defined benefit pension plans towards less generous defined contribution plans in the private sector. This will have affected younger cohorts more than older ones.
- Individuals born in the 1970s are taking longer than their predecessors to get on the housing ladder. 66% of individuals born between 1970 and 1976 owned a home at age 35, compared with 71% of those born in the 1950s and 1960s. In recent years, the homeownership rate among the 1970s cohort appears to have stopped rising altogether, remaining at around two-thirds – far below the 80% rate at which it peaked for those born in the 1940s and 1950s.
- The proportion of individuals born in the 1970s who own homes outright (i.e. without mortgage debt) is as high as it was for previous cohorts at the same age, despite the decline in overall homeownership. This is tentative evidence that property wealth is less equally distributed among the 1960s and 1970s cohorts than it was among the 1940s and 1950s cohorts at the same age.

Inheritances

- If people's expectations are correct, then the number in younger cohorts who will receive an inheritance is far larger than the number in older cohorts who have done (or will do) so. 28% of individuals born in the early 1940s and 70% of those born in the late 1970s have received, or expect to receive, an inheritance. It is particularly important to account for this when comparing successive cohorts, as prior generations are the sources of most inheritances.
- Individuals are more likely to expect inheritances – and to expect large inheritances – if they already have relatively high net wealth. Of the 30–34 age group in 2006–08 (born between 1972 and 1978), 78% of the wealthiest third and 45% of the least wealthy third expected a future inheritance, while 35% of the wealthiest third and 12% of the least wealthy third expected a future inheritance worth at least £100,000. Expected future inheritances also tend to be concentrated within the same households: individuals expecting inheritances are far more likely to have partners who also expect them.

1. Introduction

This report compares and contrasts the economic circumstances of individuals born between the 1940s and the 1970s inclusive. In doing so, it aims to provide a sense of the likely economic position of cohorts currently in the middle of working-age life (roughly the 1960s and 1970s cohorts) as they age, both in absolute terms and relative to their predecessors who are already at or around pensioner ages (roughly the 1940s and 1950s cohorts).

Huge changes in the economy and society over a number of decades mean that individuals born at different times can face radically different economic environments. Due to sustained economic growth in the post-war period, successive birth cohorts have been better off than the last – though, as this report shows, there are several reasons to doubt whether this recent norm continues to apply. A rapid rise in income inequality during the 1980s means that people old enough to have spent much of life in a pre-1980s environment would have spent early adulthood as a far more equal group than subsequent cohorts. There have also been major changes in demographics, government policy and the way that we plan and save for retirement, which have had differential impacts across cohorts.

We proceed as follows. Chapter 2 compares the evolution of incomes, spending and saving over the life cycles of different birth cohorts. Chapter 3 examines the wealth holdings of these cohorts, with a focus on the three largest sources of household wealth – state pension wealth, private pension wealth and property wealth. Chapter 4 provides important analysis of the likely impact of inheritances on these cohort comparisons. Chapter 5 summarises and concludes.

2. Incomes and saving

The income received over an individual's lifetime is a key determinant of their material living standards; and, at a given point in the life cycle, the amount of past income that has been set aside (i.e. saved) is an important input into current wealth, and hence the standard of living enjoyed from that point on.

This chapter compares the flows of income received by different birth cohorts and examines how that income was divided up between expenditure and saving at each age. As background, we first set out trends in household incomes over time across the population as a whole, and trends in incomes across those birth cohorts who have already reached pensioner age – the predecessors of the cohorts who are the focus of this report. We then look at how incomes, spending and saving have evolved throughout the life cycles thus far of individuals born between the 1940s and the 1970s.

All analysis of income, expenditure and saving data in this chapter uses the Family Expenditure Survey (FES) and its subsequent incarnations (the Expenditure and Food Survey (EFS) and the Living Costs and Food Survey (LCF)). These provide consistent measures of both household incomes and expenditures from 1974 to 2011. Incomes are measured net of taxes and benefits but before housing costs are deducted (BHC) unless otherwise stated. Here and throughout this report, we split cohorts into 10-year bands to ensure sufficient sample sizes, and we compare those born in the 1940s, 1950s, 1960s and 1970s.¹ All analysis relates to Great Britain, as comparable data on Northern Ireland were not collected in earlier years.

These data are 'cross-sectional': they are based on surveys of different households each year. Therefore we cannot follow particular individuals over time. We can, however, follow a birth cohort, because we have a representative sample from that cohort in each year of data (and we can identify birth cohorts by their age in a given year). This is known as 'synthetic cohort' analysis.

Survey data typically fail to capture all household income and expenditure. The under-recording of expenditure has grown over time: the FES captured 87% of household spending recorded in the National Accounts in 1974, but the LCF captured only 63% in 2011, the latest year available. To deal with this, we apply a proportional adjustment to the income and expenditure of each household such that the aggregates match the National Accounts in each year.² The key implicit assumption for our purposes is that the scale of under-recording in any given

¹ When looking at the economic outcomes of a cohort at a given age, we are therefore pooling 10 years of data.

² We are very grateful to Cormac O'Dea for providing the necessary scaling factors and for his advice on the analysis of the expenditure data.

year is the same for all cohorts.³ The effect of the adjustment is to reduce measured saving, and to reduce it by a larger amount in more recent years. This is because the share of expenditure recorded in the survey is lower, and has fallen faster, than the share of income recorded.

Employer pension contributions are not captured in these data, and for consistency we therefore do not include employee pension contributions as income (or saving) either. However, we consider trends in both employee and employer pension contributions in Chapter 3.

All monetary values are expressed in average 2011–12 prices, so all the differences in incomes we refer to are after inflation. The retail price index (RPI) excluding council tax is used to deflate before-housing-cost (BHC) incomes, and the RPI excluding housing costs is used to deflate after-housing-cost (AHC) incomes. We use price indices based on the RPI because they are available on a consistent basis over a long period. As far as possible, we have confirmed that our conclusions are not sensitive to the choice of inflation measure (see Box 2.1 later for details). Unless otherwise stated, household incomes are ‘equivalised’ to adjust for differences in household size and composition using the modified OECD equivalence scale and are expressed as equivalent cash amounts for a childless couple.

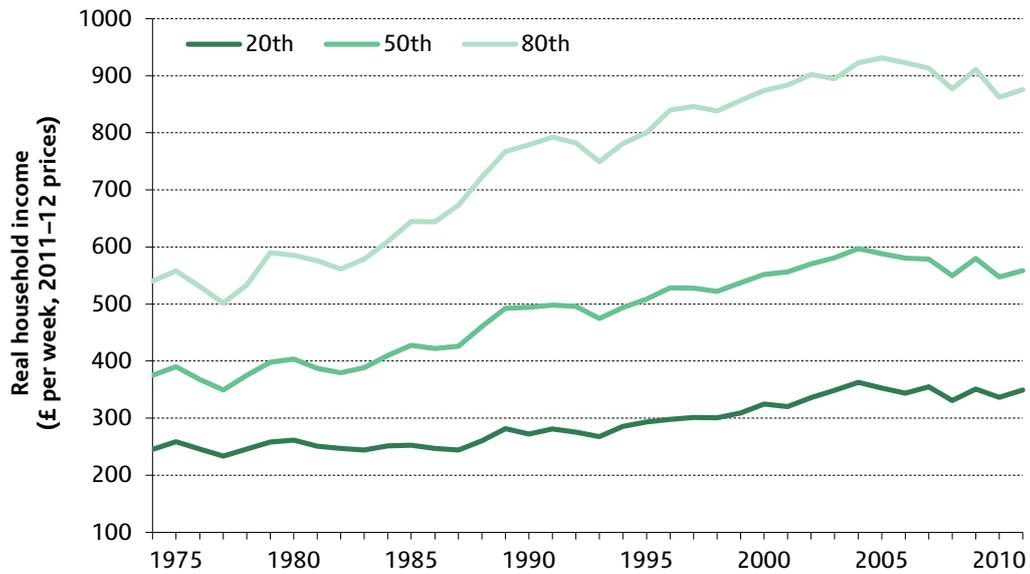
2.1 Levels of income, spending and saving

Figure 2.1 sets the context by showing overall growth in household incomes over time. In the period between 1974 and 2001–02, incomes grew substantially. For example, they rose by around 50% at the median, from £375 to £556 per week. However, incomes grew by significantly more towards the top of the income distribution than towards the bottom (both in absolute terms and proportionately). More recently, there has been a well-documented slowdown in household income growth, beginning in the early 2000s and hence pre-dating the recent recession by a long way. This has affected the working-age population most acutely, largely reflecting the poor performance of real incomes from employment over the period.⁴

³ Barrett, Levell and Milligan (2013) compare the performance of household expenditure surveys across countries and conclude that growing inequality contributed to declining coverage rates. This suggests that, if anything, expenditure coverage may be lower for younger cohorts, who have tended to be more unequal than their predecessors (see Section 2.2). That would tend to mean that we underestimate spending, and hence overestimate saving, for younger cohorts relative to older ones.

⁴ For detailed analysis of this, see Cribb et al. (2013).

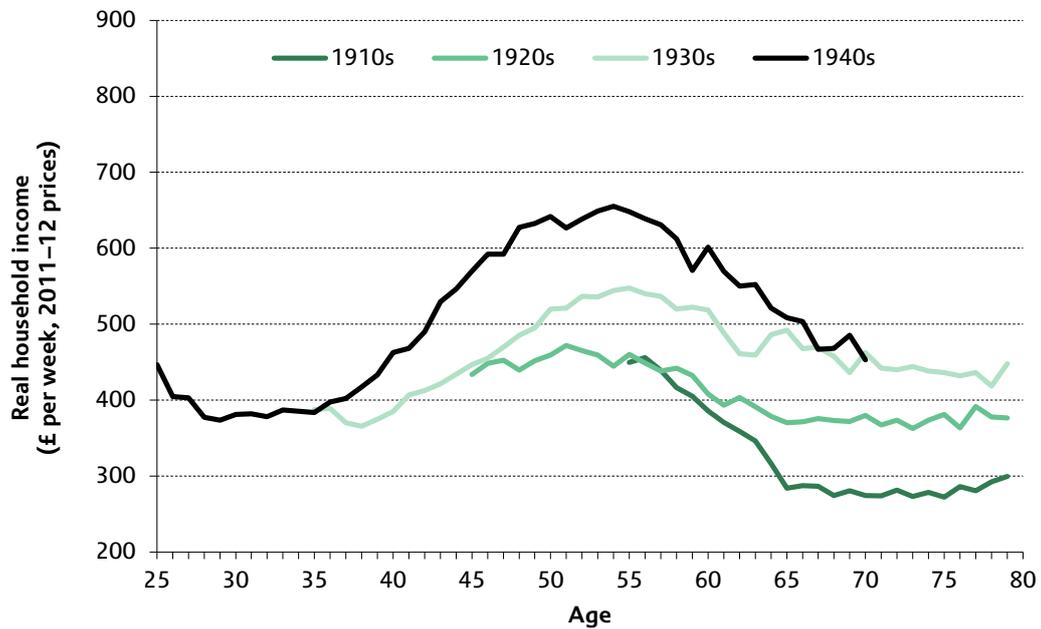
Figure 2.1. Equivalised household incomes at the 20th, 50th and 80th percentiles



Note: Incomes are measured before deducting housing costs. Years from 1993 to 2005 inclusive are financial years.

Source: Authors' calculations using Family Expenditure Survey, various years.

Figure 2.2. Equivalised median household income by age and birth cohort



Note: Incomes are measured before deducting housing costs.

Source: Authors' calculations using Family Expenditure Survey, various years.

Given the rapid income growth seen over much of recent history, it is not surprising that we have been used to seeing successive cohorts of pensioners with higher incomes than the last. Figure 2.2 plots median household income at different ages for successive cohorts who have already reached the basic state pension age⁵ – individuals born in the 1910s, 1920s, 1930s and 1940s. The shapes of these ‘age profiles’ of incomes are broadly what we would expect, given rising earnings with age or experience: cohorts’ incomes rise until middle age, before starting to fall as they retire. Looking across cohorts, the more recent ones have typically had higher incomes than their predecessors when compared at the same age, both during their working-age years and during their retirement. In addition, falls in income as cohorts pass pensioner age become significantly less pronounced after the 1910s cohort,⁶ who reached the basic state pension age in the 1970s and early 1980s. This is driven mainly by rapid increases in both private and state pension provision, as highlighted in Cribb et al. (2013, chapter 5).

However, Figure 2.1 showed that income growth has been much slower over the last 10 years than in previous decades. After growing at an average rate of 1.5% a year between 1974 and 2001–02, median income grew by less than 0.1% a year over the 10 years between 2001–02 and 2011.⁷ Consequently, as Figure 2.3 shows, those born in the 1960s and 1970s faced sluggish income growth (at best) at a time of life when their predecessors had seen rapid growth. The upper panel (Figure 2.3a) shows how median equivalised household income has evolved for those born in the 1940s, 1950s, 1960s and 1970s throughout their adult lives.

We again see that the norm in recent decades has been for those born later to have significantly higher incomes than their predecessors had at the same age. As discussed above, this reflects the sustained economic growth seen during most of the post-war period. For example, age-30 median income was 20% higher for the 1970s cohort than for the 1960s cohort, 52% higher than for the 1950s cohort and 77% higher than for the 1940s cohort. However, the prolonged period of slow income growth from the early 2000s and the sharp recession of the late 2000s have combined to leave those born in the 1950s, 1960s and 1970s with no higher real incomes – if anything, somewhat lower real incomes – than those born 10 years earlier had at the same age. Box 2.1 discusses the inflation measure used to make these long-run real-terms comparisons and verifies, as best we can, that the conclusions are not sensitive to this choice.

⁵ Or cohorts who will reach the state pension age very shortly, in the case of men born in the late 1940s.

⁶ This was also shown in Banks, Blundell and Tanner (1998).

⁷ Note that, because these figures are based on FES/EFS/LCF data (for consistency with the spending and saving data later in this chapter), they are not identical to the corresponding figures obtained from the Family Resources Survey (FRS) – the UK data set most commonly used when looking only at household incomes. However, the differences are minor. Splicing together the FES up to 1993 and the FRS from when it began in 1994–95, median income grew by an average of 1.6% per year between 1974 and 2001–02 and was the same in 2011–12 as in 2001–02.

Figure 2.3a. Equivalised median household income by age and birth cohort

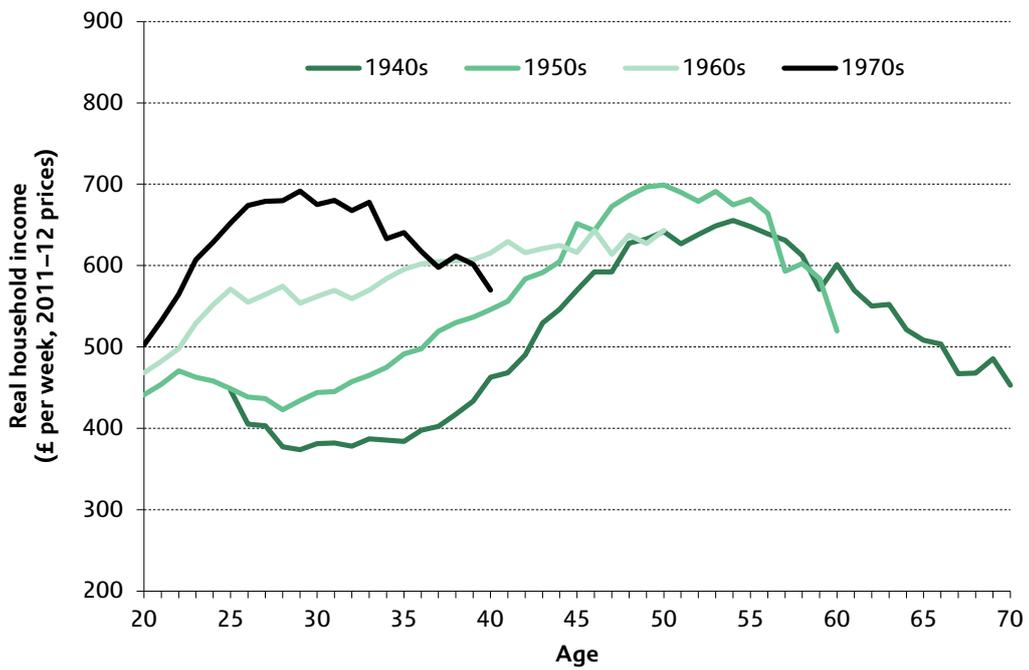
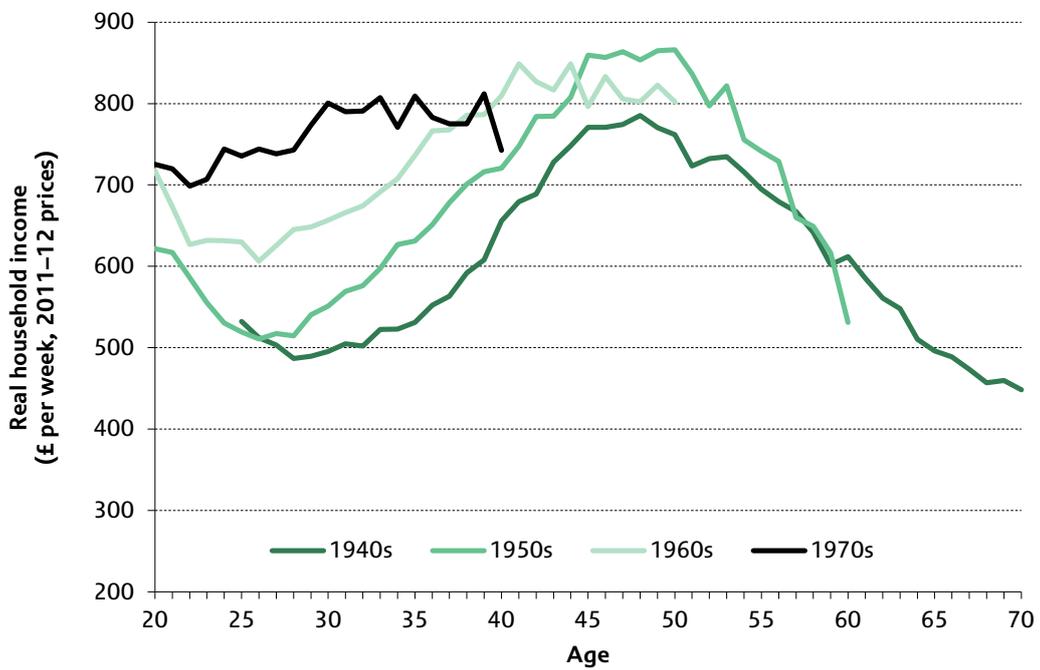


Figure 2.3b. Unequalised median household income by age and birth cohort



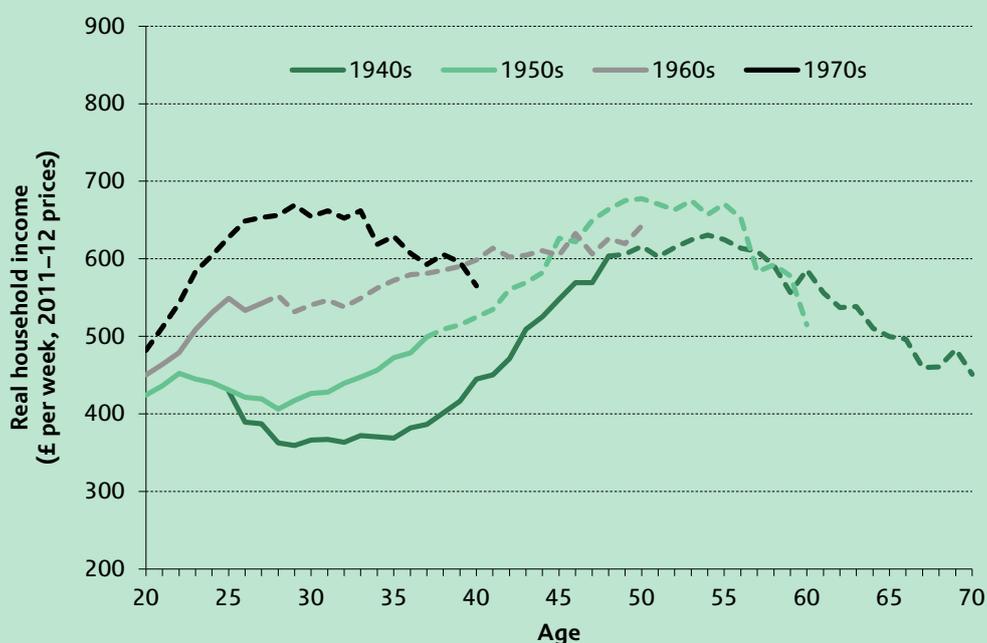
Note: Incomes are measured before deducting housing costs.
 Source: Authors' calculations using Family Expenditure Survey, various years.

Box 2.1. Adjusting for inflation

The consistent historical data we use in this report are adjusted for inflation using a variant of the retail price index (RPI). The Office for National Statistics (ONS) acknowledges that, due to the formula used, the RPI tends to overstate inflation. The size of this ‘formula effect’ increased dramatically in 2010 after a change to the way that clothing prices are sampled. The ONS has since responded by reporting a new inflation index, the RPIJ, which can be thought of as approximately RPI minus the formula effect.

This report is concerned with long-run changes across cohorts, but the RPIJ series is not available before 1997 and therefore cannot be used to produce consistent real-terms measures for our purposes. To illustrate the sensitivity of the analysis to the inflation measure as best we can, Figure A replicates Figure 2.3a (the critical figure relating to incomes across and within cohorts in this chapter) but instead deflates incomes using the RPIJ rather than the RPI from 1997 onwards. Dashed lines indicate the parts of the ‘age profiles’ of each cohort that are affected by this switch of the price index. Comparing Figure A with Figure 2.3a shows that, although using the RPIJ rather than the RPI does of course affect the exact measured real income changes, the key patterns are unchanged (both within and across cohorts). In particular, it remains the case that the slowdown in income growth over the last decade has left those born in the 1950s, 1960s and 1970s with no higher incomes than their predecessors had at the same age.

Figure A. Equivalised median household income by age and birth cohort using the RPIJ



Note: Incomes are measured before deducting housing costs.

Source: Authors' calculations using Family Expenditure Survey, various years.

Figure 2.3b presents the same age–income profiles on an unequivalised basis, i.e. with incomes unadjusted for household size and composition. This highlights any differences between cohorts, or changes over time within a cohort, that are driven by patterns in household formation (for example, the birth of children). The shapes of the age profiles for different cohorts are indeed sensitive to equivalisation. For example, on an unequivalised basis, median income between ages 30 and 40 for the 1970s cohort was broadly flat, whereas on an equivalised basis it fell markedly, most likely as the result of the arrival of children. In other words, the small increase in (unequivalised) incomes did not keep pace with the higher living costs associated with an increase in household size, and so the standard of living for this cohort as measured by *equivalised* household income fell. But with or without equivalisation, the 1960s and 1970s cohorts have experienced much less income growth over the past decade (during their 40s and 30s respectively) than their predecessors experienced at the same age. Hence, the closing of the ‘age-adjusted’ income gap between cohorts is not driven by any cohort differences in household formation; it is driven by trends in unequivalised incomes.

Note that, as revealed by a comparison with Figure 2.2, the deterioration in the 1940s cohort’s income relative to the prior cohort at the same age has been less severe than for younger cohorts over the past decade. Median income for the 1940s cohort in their late 60s remains at, or slightly above, median income at the same age for the 1930s cohort. Cribb et al. (2013) made essentially the same point: real incomes were higher for those aged in their 60s and 70s in 2011–12 than for individuals of that age a decade earlier, but the same is not true for younger age groups of adults. Those authors also showed that the same is true when looking specifically at the period since 2007–08, when the financial crisis began.⁸

These recent differences in income trends by age arise despite the fact that interest rates have been very low and income from savings interest tends to be more important for older individuals. Other factors have been offsetting this, on average: the failure of pay to keep pace with inflation primarily hits working-age individuals; and cuts to the social security budget during the post-recession fiscal tightening are being heavily focused on the working-age population.⁹

On the other hand, the recent low-interest-rate environment is also helpful to those with debts, who are relatively likely to be younger.¹⁰ This would not be captured by the income measures shown in the figures so far. Instead, low interest rates make the *consumption* of borrowers cheaper. However, mortgage debt is by far the largest source of debt,¹¹ so the main impacts of low interest rates on debtors should be captured by using an after-housing-costs measure of

⁸ See figure 5.7 in Cribb et al. (2013).

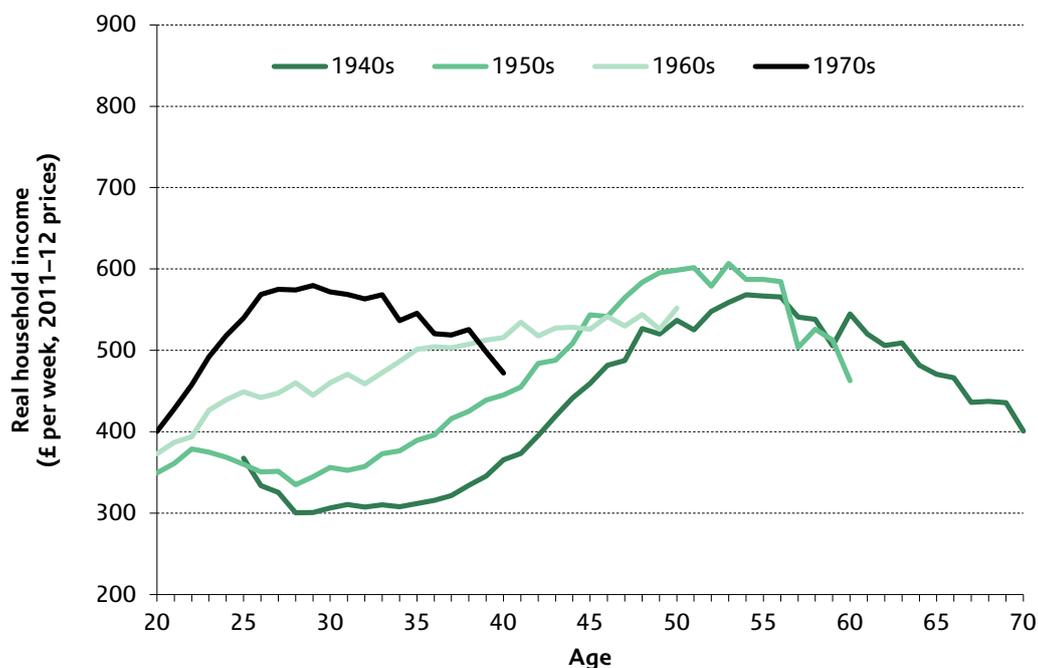
⁹ Browne, Hood and Johnson, 2013; Joyce and Phillips, 2013.

¹⁰ See Figure 3.1 in the next chapter.

¹¹ See Figure 3.2 in the next chapter.

income. As Figure 2.4 shows, the same broad patterns of income changes within and across cohorts are evident when using an AHC measure (over the longer term, as well as in recent years).¹² It is important to note, however, that older individuals who do suffer negative income shocks – perhaps because of falls in interest rates – may have less scope to adjust their behaviour accordingly (for example, by accumulating more wealth or increasing labour supply).¹³

Figure 2.4. Equivalised median household income after housing costs by age and birth cohort



Source: Authors' calculations using Family Expenditure Survey, various years.

This pattern of relative incomes across cohorts is not confined to the middle of the distribution. Figures 2.5a and 2.5b show the age profile of equivalised household (BHC) income for the same four cohorts at the 20th percentile and at the 80th percentile respectively. In both cases, the relative incomes of different cohorts display the same pattern. Younger cohorts now have no higher incomes than their counterparts born 10 years earlier had at the same age. The elimination of the income differential between cohorts compared at the same age is also seen across the country, as well as across the income distribution: it has

¹² Housing costs at given ages have increased in real terms across cohorts, but so – for the most part – have before-housing-cost incomes, as Figures 2.2 and 2.3 showed. For analysis of the impacts of different ways of accounting for housing when measuring living standards using current income or current consumption, see Brewer and O'Dea (2012). We look at housing *wealth* across cohorts in Chapter 3.

¹³ The same is true of wealth shocks such as those caused by the significant fall in asset prices since the Great Recession. Banks et al. (2012) estimated that these shocks reduced gross wealth by an average of 10% among individuals aged 50 and over.

Figure 2.5a. Equivalised household income at the 20th percentile by age and birth cohort

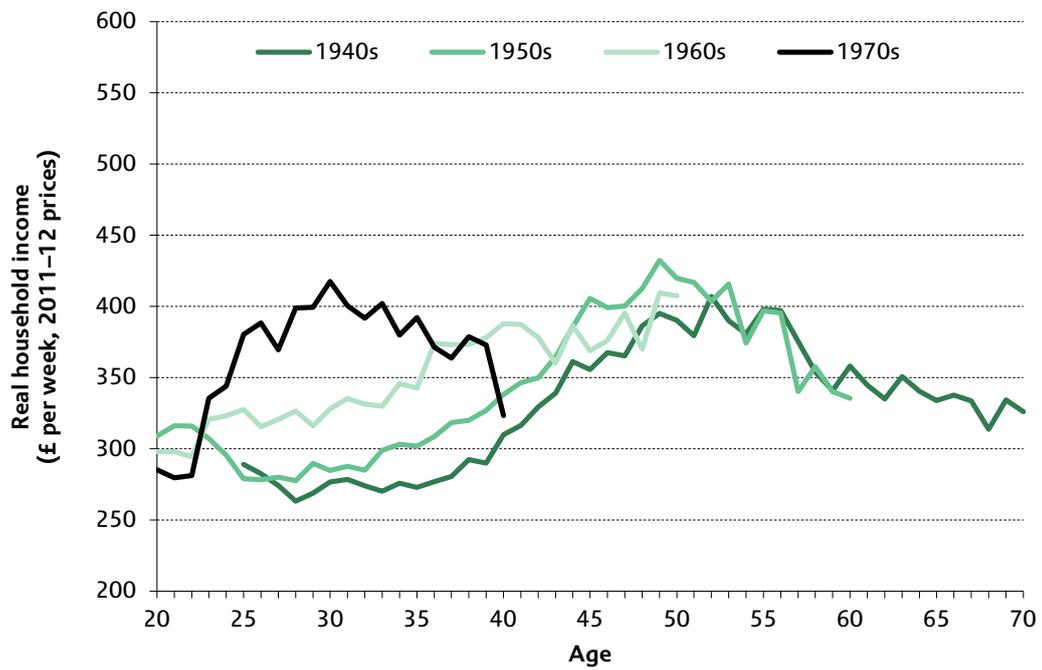
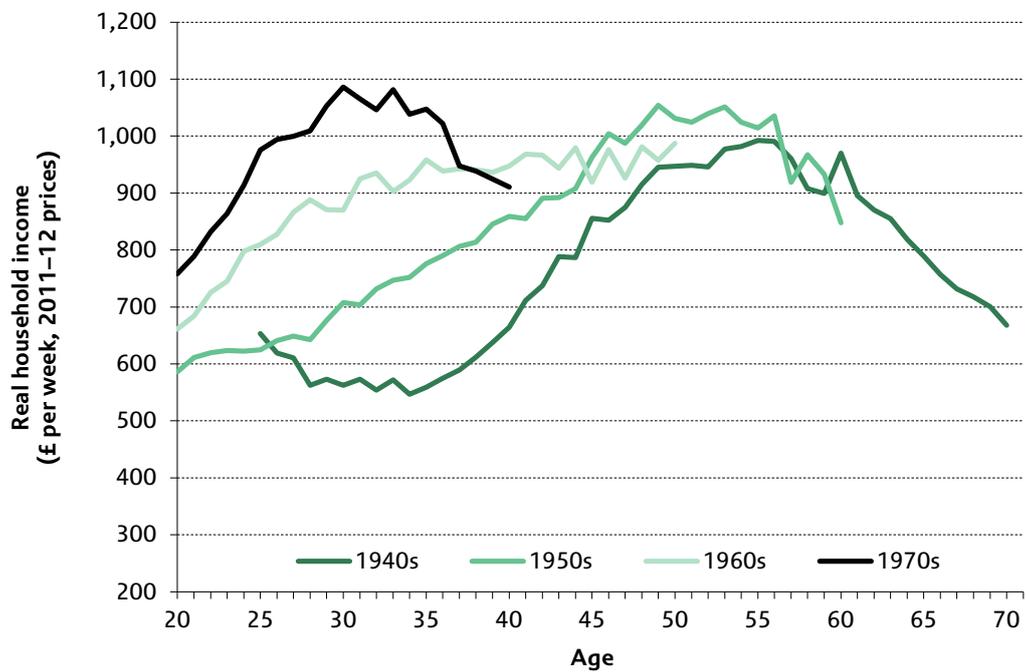


Figure 2.5b. Equivalised household income at the 80th percentile by age and birth cohort



Note: Incomes are measured before deducting housing costs.

Source: Authors' calculations using Family Expenditure Survey, various years.

occurred in each of the North, Midlands, South, London, and Scotland and Wales.¹⁴

Despite recent trends, Figures 2.3a and 2.5 show that the 1960s and 1970s cohorts had a much larger flow of income than older generations from which to put aside savings in their early adult years. When thinking about their current economic position and their preparedness for retirement, this is potentially crucial. But whether these higher lifetime incomes (so far) have in fact translated into a greater accumulation of wealth by younger cohorts depends on their past spending and saving behaviour. If they had continued to save the same proportion of their income as previous cohorts, then all else equal they would be left with higher stocks of wealth, due to their higher past incomes. But this would not be the case if these younger cohorts had spent rather than saved the extra income that they had.

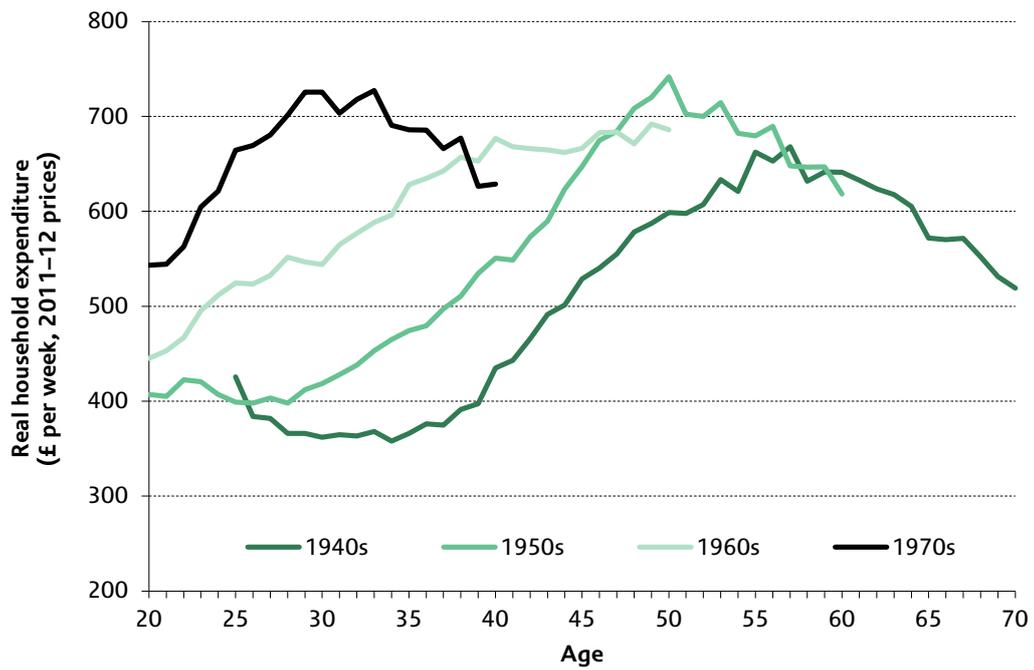
Figure 2.6 shows the age profiles of median equivalised household expenditure for the same cohorts. The cohorts have generally increased expenditure across most of their working-age lives. We would expect this if people build up buffers of precautionary saving early on to guard against adverse shocks later; or if credit constraints prohibit borrowing to finance spending early in the life cycle; or if people are surprised by how much their incomes grow with age, and hence spend the unexpected windfall when they get it, rather than earlier in anticipation of it. Indeed, the patterns of spending look very similar to patterns of income. Most interestingly for our purposes, this is true not just within cohorts over time, but also *across* cohorts.

Figure 2.7 confirms that differences in income across cohorts have translated more or less fully into differences in spending. In other words, the amounts being actively saved by younger cohorts have been no higher, despite their higher incomes. The figure shows age profiles of median household saving – defined as income minus expenditure – for the same four cohorts shown in Figure 2.6.¹⁵ If savings rates had remained constant over time and between cohorts, we would expect to see higher absolute savings amounts among more recent cohorts, as they would have been saving the same proportion of a higher income. In fact, at almost every age, the 1960s and 1970s cohorts saved less at the median than their predecessors had; and this ‘age-adjusted’ saving gap between cohorts has been growing (to around £60 per week between the 1940s and 1970s cohorts) as

¹⁴ We define the North of England as including Government Office Regions (GORs) North West, North East, and Yorkshire and Humberside; the Midlands as including East Midlands and West Midlands; and the South as including East Anglia, South East, and South West. We aggregate GORs to ensure sufficient sample sizes.

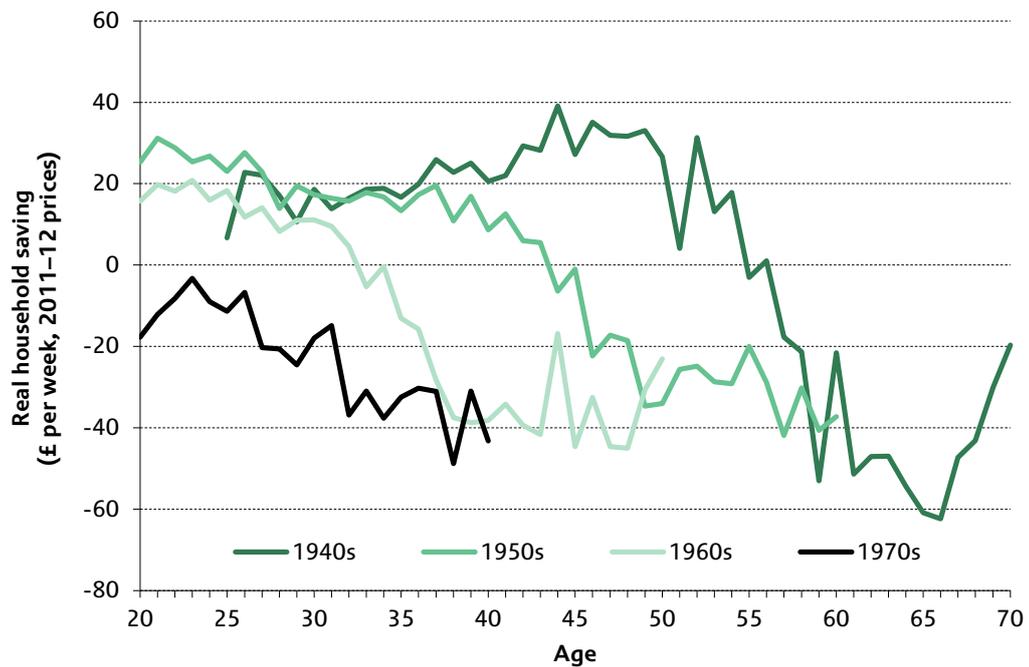
¹⁵ Recall that the measure of saving used here does not capture either employee or employer contributions to pension schemes (employer pension contributions are not recorded in the FES data). Both types of pension contribution are discussed in Chapter 3. We do, however, include mortgage capital repayments as saving (i.e. we do not count them as expenditure), as the repayments reduce debt and hence increase net wealth.

Figure 2.6. Equivalised median household expenditure by age and birth cohort



Source: Authors' calculations using Family Expenditure Survey, various years.

Figure 2.7. Equivalised median household saving by age and birth cohort



Source: Authors' calculations using Family Expenditure Survey, various years.

savings rates declined significantly across the population from the late 1990s.¹⁶ Such a decline matters more for younger cohorts, all else equal, as it affects their accumulation of wealth over a larger portion of their lives (if the trend is persistent). For example, the median flow of active saving out of take-home income was positive up to the age of 55 for the 1940s cohort, but has been negative for the 1960s cohort since they were in their mid-30s.

Two important points are worth noting. First, the higher spending of younger cohorts relative to older ones suggests that, all else equal, they have had higher living standards early in adulthood than their predecessors had. Second, it is possible that their lower savings rates are 'optimal' for them if, for example, they reflect lower credit constraints during periods of temporary low income than were faced by previous cohorts. Indeed, there is evidence from the US suggesting that most individuals born between 1931 and 1941 had actually built up *at least* as much wealth as was optimal for them, and many appeared to have 'over-saved'.¹⁷ In other words, under the assumption that people generally prefer to have smooth flows of consumption over time (all else equal), they appeared to have spent too little early in life relative to the resources they will have available later. It is possible that the same is true in the UK and that the lower savings rates of later cohorts are actually a move towards optimality.¹⁸ This does not change the implications of this analysis for the relative economic position later in life of different cohorts, but it may affect the appropriate policy response.

In summary, individuals born in the 1960s and 1970s have saved no more past take-home income than their predecessors had by the same stage in life, despite having had considerably higher incomes from which to make such provisions. In addition, the lack of income growth over the past decade means that, when compared with the previous 10-year cohort at the same age, they no longer have higher flows of income.

2.2 Inequalities

We now consider the *distribution* of income and expenditure within each cohort. As background, Figure 2.8 plots the overall level of income inequality in Great Britain over time as measured by the Gini coefficient. This measure condenses a distribution into a single number between 0 and 1: the higher the number, the greater the degree of inequality. The figure highlights the rapid rise in income inequality during the 1980s.

¹⁶ Van de Ven (2011) highlighted a very similar point, although his focus was more on trends in savings rates than comparisons of absolute savings amounts across cohorts.

¹⁷ Scholz, Seshadri and Khitatrackun, 2006.

¹⁸ Ongoing research at IFS is looking empirically at the optimality of wealth accumulation in the UK.

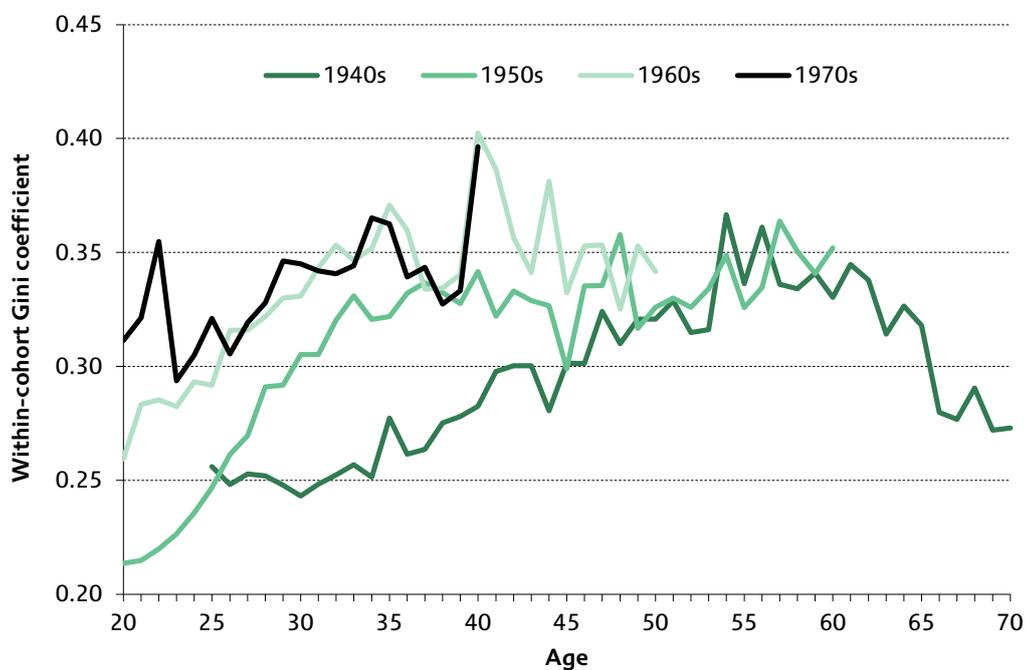
Figure 2.8. The Gini coefficient for equivalised household income



Note: Incomes are measured before deducting housing costs. Years from 1993 to 2005 inclusive are financial years.

Source: Authors' calculations using Family Expenditure Survey, various years.

Figure 2.9. Gini coefficients for equivalised household income by age and birth cohort



Note: Incomes are measured before deducting housing costs.

Source: Authors' calculations using Family Expenditure Survey, various years.

To compare income inequality across cohorts, we calculate the Gini coefficient *within each cohort* at each age, rather than across the economy as a whole. We are then able to track income inequality within cohorts as they age, as shown in Figure 2.9.

We have seen that, across the population as a whole, income inequality rose dramatically during the 1980s. This affected different cohorts at different ages. The 1940s cohort saw significant increases in within-cohort inequality during their 30s and 40s, and the 1950s cohort experienced this during their 20s. The younger cohorts had substantially higher *starting* levels of income inequality – particularly those born in the 1970s, all of whom began adulthood in the higher-inequality post-1980s environment. Inequality has generally remained higher for the 1960s and 1970s cohorts than it was for the 1940s and 1950s cohorts at the same age, although the current gaps are smaller than they were at younger ages.

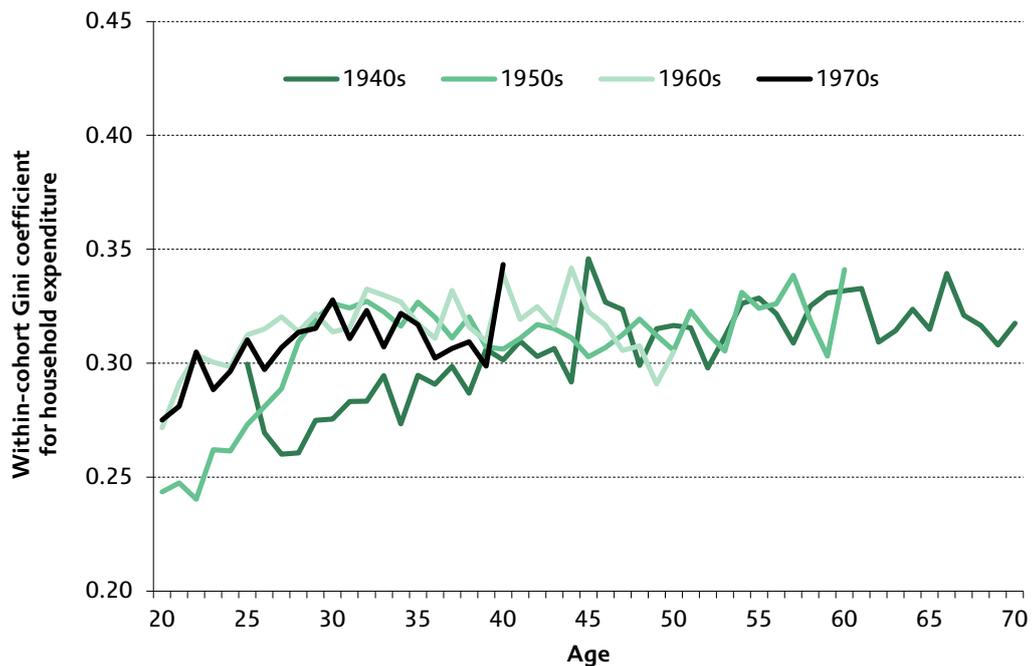
It is important to remember that these are repeated cross-sections of data – they do not follow the same individuals over time. Low- or high-income people in one year are not necessarily the same individuals as low- or high-income people the next year.¹⁹ Income and expenditure data have been used in combination to shed light on whether increases in income inequality over time have been due to increases in short-term income volatility or in permanent income inequality between individuals.²⁰ The intuition is that people's expenditure should respond less to temporary income shocks than to permanent ones. Hence, a rise in measured income inequality is more likely to reflect a rise in permanent (rather than temporary) inequality between individuals if it is accompanied by a rise in expenditure inequality.

Figure 2.10 presents the same analysis for inequality in household expenditure. Two points stand out. First, rises in expenditure inequality have tended to be smaller. Among the 1960s cohort, for example, income inequality rose from 0.29 at age 22 to 0.37 by the age of 35, while expenditure inequality rose from 0.30 to 0.32 over the same period. Second, younger cohorts began adulthood with higher levels of expenditure inequality than previous cohorts, mirroring the patterns for income inequality. Blundell and Preston (1998) concluded that the rise in within-cohort income inequality during the 1980s was partly due to an increase in short-term income volatility, but that the higher starting level of income inequality for younger cohorts reflected a higher degree of permanent income inequality within those cohorts.

¹⁹ Indeed, work using panel data on incomes has shown that inequality between individuals in incomes averaged over a number of years is significantly lower than inequality in incomes measured in just one year (Brewer, Costa Dias and Shaw, 2012).

²⁰ For example, Blundell and Preston (1998).

Figure 2.10. Gini coefficients for household expenditure by age and birth cohort



Source: Authors' calculations using Family Expenditure Survey, various years.

The distinction between short-term income volatility and permanent income inequality is very important when thinking about inequalities in wealth accumulation. An increase in income volatility could mean that people save relatively large amounts when their income is high but less in subsequent periods when their income is low (or vice versa). This would tend to increase the dispersion in amounts of saving being done in any single year, but would not necessarily reflect more inequality across individuals in total savings being accumulated over longer periods. Hence, it would not necessarily act to increase inequality in stocks of wealth. We cannot distinguish between these two explanations for trends in saving inequality without panel data on both income and expenditure – which unfortunately we do not have in the UK. For this reason, we do not analyse inequality in flows of saving. However, we look directly at measures of accumulated wealth across cohorts – including inequalities in wealth, wherever possible – in Chapter 3.

In summary, individuals born in the 1960s and 1970s had more unequal flows of income in early adulthood than their predecessors. There is evidence that some of this reflects higher short-term income volatility; but it also reflects higher permanent income inequality between individuals. This may have important implications for inequalities in the stocks of wealth that different cohorts have accumulated, which we turn to in Chapter 3.

2.3 Income prospects for the 1960s and 1970s cohorts up to pensioner ages

Individuals born in the 1960s and 1970s still have more than a decade – some more than three decades – to accumulate wealth before they reach state pension age. The flows of income that they receive between now and then will clearly be very important in affecting their later economic position, in absolute terms and relative to their predecessors. Any comment on future trends such as these must be speculative, but we do have some indicators of how things could develop.

Major factors that have been putting pressure on working-age incomes recently, and accounting for the poor performance of working-age incomes relative to pensioner incomes, include a lack of real earnings growth and substantial cuts to the working-age social security budget. With this in mind, the prospects for working-age incomes across (at least) much of the income distribution do not look good in the short-term future either, or arguably even in the medium term. The latest year of data available for the analysis in this section is 2011–12. According to labour market data since then and the Office for Budget Responsibility's (OBR's) forecasts, the average earnings of those in work will grow by just 4.9% in real terms according to the consumer price index, CPI (and will fall by 3.3% according to the RPI) over the seven subsequent years to 2018–19.²¹ And those of working age who are out of work are the group taking the biggest proportional hit from the benefit cuts being implemented as part of the post-recession fiscal tightening, with further real cuts to working-age benefits confirmed for 2014–15 and 2015–16. Indeed, it is the cohorts already of pensioner age who are being relatively protected from cuts to the benefits budget.²²

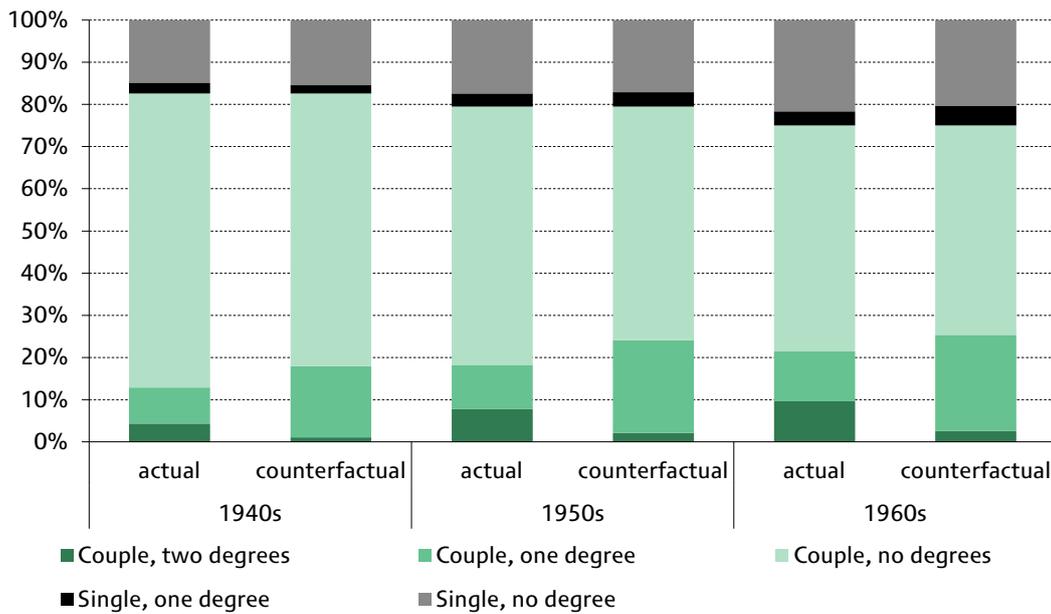
What about the outlook for income *inequality* among the 1960s and 1970s cohorts? Although overall income inequality fell during and immediately after the recent recession, projections by IFS researchers suggest that this will be a temporary phenomenon, approximately unwound by 2015–16. The main reason identified for the projected increase in inequality in the short term is the cuts to the working-age social security budget.²³ Hence, it seems highly likely that income inequality among cohorts currently of working age, such as the 1960s and 1970s cohorts, will shortly rise.

²¹ The RPI is likely to overstate the true inflation rate faced by households and this problem appears to have got worse since 2010 (see Box 2.1 for discussion). Hence, our preference when looking forwards would be to use CPI rather than RPI inflation forecasts to deflate household incomes (although this is not perfect because, for example, the CPI excludes owner-occupied housing costs) even though the consistent historical income data available are deflated using a variant of the RPI. Note that neither the new RPIJ nor the CPIH (a variant of CPI including a measure of owner-occupied housing costs) is forecast by the OBR.

²² Browne, Hood and Johnson, 2013; Joyce and Phillips, 2013.

²³ Brewer et al., 2013.

Figure 2.11. Family type and education at age 40 by birth cohort



Note: The stacked bars labelled ‘actual’ show the distribution of degree-level education across family types observed in the data. The stacked bars labelled ‘counterfactual’ show what the distribution would have been if degrees were randomly allocated across individuals within a cohort at age 40.

Source: Authors’ calculations using Family Expenditure Survey and Family Resources Survey, various years.

Where will this leave income inequality among the 1960s and 1970s cohorts relative to the inequality experienced by prior cohorts? We have already seen that, so far, income inequality among these cohorts has tended to be at least as high as it was for their predecessors at comparable ages. The likely rise in inequality in the short term would tend to reinforce that. Looking further ahead is, of course, much more difficult. One relevant indicator of the likely inequality in household incomes that a cohort might expect in future is the degree to which individuals with high or low earnings *potential* are concentrated within the same households. A good proxy for future earnings potential²⁴ is education level. For each of the 1940s, 1950s and 1960s cohorts, Figure 2.11 shows the distribution of degree-level education across families (using a snapshot of individuals in each cohort at age 40) alongside a ‘counterfactual’ distribution. The ‘counterfactual’ distribution shows what would have happened if degrees were randomly allocated across individuals within a cohort (i.e. if the likelihood that an individual has a degree bears no relation to whether they are single or in a couple or to the education level of their partner).

Comparing the actual and counterfactual distributions in Figure 2.11 reveals that the increase in degree-level education across cohorts has been distributed unevenly across families. For example, the rise in the number of two-degree

²⁴ This is sometimes referred to as ‘human wealth’ and can be thought of as a component of wealth (albeit a component that is not directly observable).

couples between the 1940s and 1960s cohorts is more than three times as large as it would have been if degrees were randomly distributed across individuals.²⁵ This relates to a phenomenon known as ‘assortative matching’ – the observed tendency for people to partner others with similar characteristics. As a result of this tendency, individuals with relatively high earnings *potential* (as measured by education level) appear to be more concentrated within the same families for younger cohorts than for older ones.

The figure also shows that single people remain relatively unlikely to be educated to degree level, and this means that the rise in degree-level education across cohorts has increased the number of single people with degrees by less than it would otherwise have done.

There are clearly huge uncertainties, but at this stage there seems little reason to expect that the 1960s and 1970s cohorts will face lower income inequality than their predecessors did in the latter part of working-age life – and there are factors pointing in the opposite direction, particularly in the near future.

Of course, another crucial factor is the incomes that these cohorts will receive *after* the end of their working-age lives, and how these will compare with those of previous generations. In large part, this depends upon their pension wealth. How does the accrual of state pension rights compare across cohorts? And how is the private pension provision of the 1960s and 1970s cohorts likely to compare with that of their predecessors once they reach pensioner ages in decades to come? We explore these questions as part of our comparison of wealth across cohorts in the following chapter.

²⁵ With a random allocation of degree-level education across individuals, the proportion of people in a couple where both are educated to degree level would have been 1.1% for the 1940s cohort and 2.6% for the 1960s cohort – a rise of 1.5 percentage points. In fact, this proportion has risen from 4.3% to 9.7% across the cohorts – a rise of 5.4 percentage points.

3. Wealth and assets

Wealth accumulated by a point in time is a key determinant of the standard of living likely to be enjoyed after that point. This is particularly true at older ages, when the income flows still to come are smaller. In assessing the economic position of cohorts and how well prepared they are for retirement, an analysis of wealth holdings is therefore central.

As background, we begin by setting out levels of wealth, and the key components of wealth, for different age groups. For much of this, we are able to use the rich data provided by the second wave of the Wealth and Assets Survey (WAS) – a comprehensive survey of the wealth and asset holdings of 20,170 households conducted between 2008 and 2010.²⁶

We then compare the most important components of wealth across cohorts. Wherever possible, we do this using synthetic cohort analysis of the kind presented in the previous chapter, enabling precise comparisons across cohorts observed at the same ages. To do this, we utilise long time series of repeated cross-section data from the Family Expenditure Survey (FES), the Family Resources Survey (FRS) and the General Household Survey (GHS).

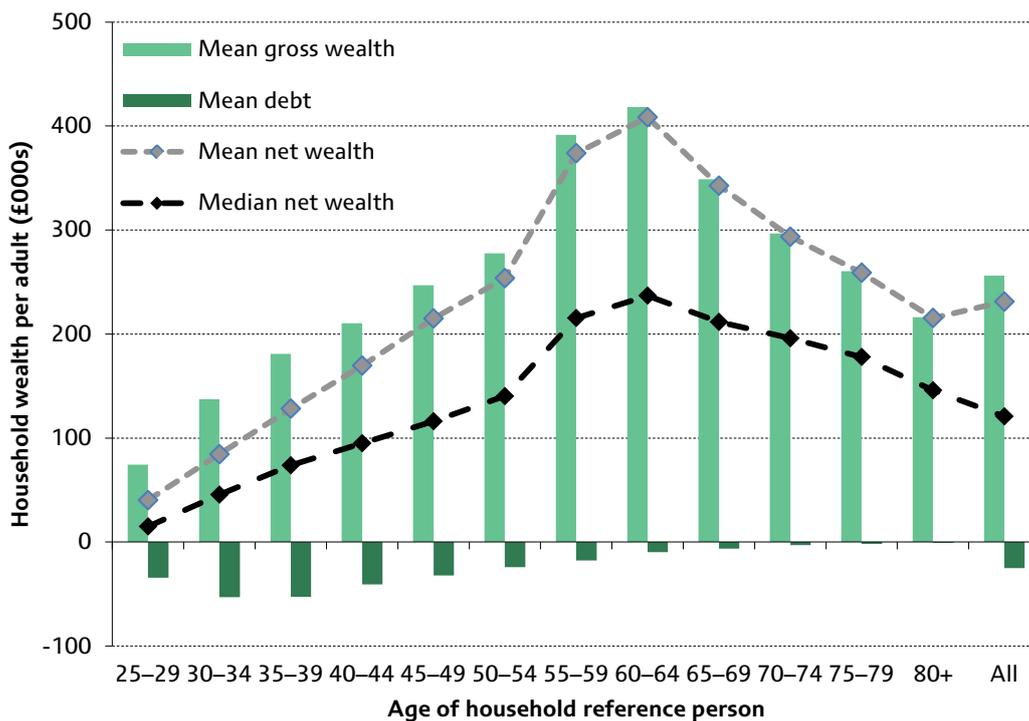
3.1 Levels and composition of current wealth for different age groups

Figure 3.1 shows the average household wealth of different age groups, before and after deducting debts (gross and net wealth respectively). Note that this does not include state pension wealth (see below), but does include private pension wealth. We would expect wealth to be accumulated as cohorts age (at least until they retire) so, unsurprisingly, the wealth holdings of those at or approaching retirement are substantially greater than those of people in their 30s and 40s: mean net wealth among those in their early 40s is around £170,000, compared with just over £400,000 among those in their early 60s. This gap in the levels of net household wealth is largely driven by higher gross wealth among older individuals, but is also partly explained by falls in average household debt as age increases. While those in their early 40s have around £40,000 of debt on average, that figure is less than £10,000 for those in their early 60s. As Figure 3.2 shows, this is driven by mortgage debt: older individuals tend to have paid off more of their mortgages than younger ones, and indeed many own homes outright.²⁷

²⁶ We are very grateful to Joshua Walker for excellent research assistance with the WAS data used in this chapter and in Chapter 4.

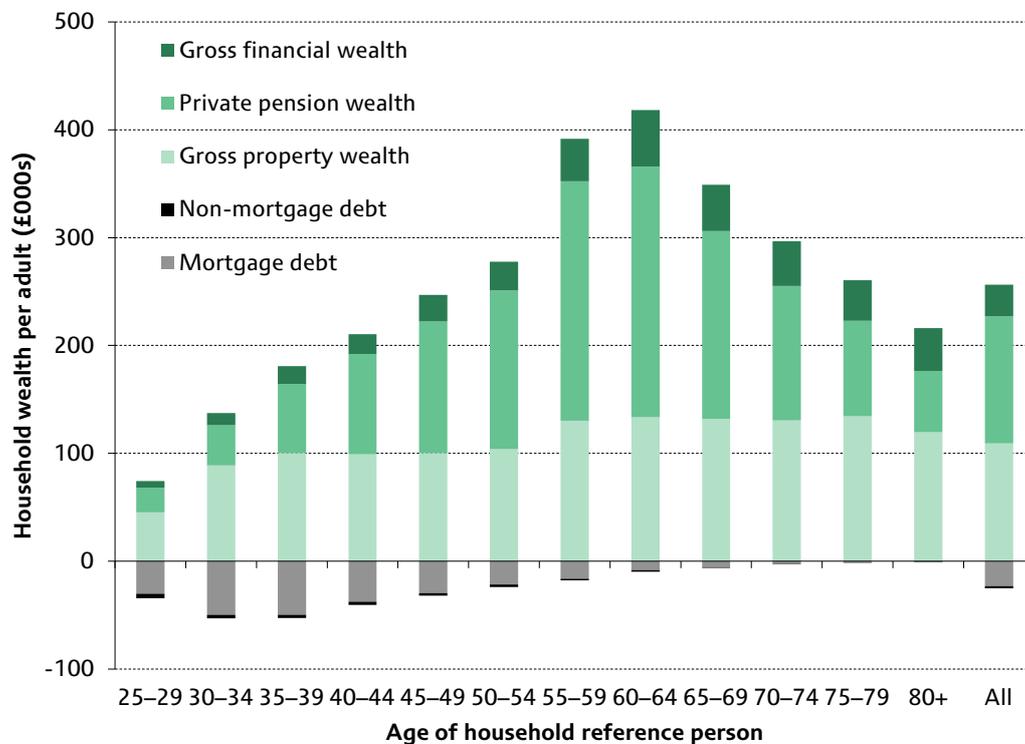
²⁷ Age differences in wealth (or components of wealth) at a particular point in time could be due to cohort differences, rather than indicating variation in wealth over the life cycle for given cohorts. However, the peak in net wealth just before retirement would be predicted by economic theory, and we would of course expect mortgage debt to tend to decline with age as people make mortgage repayments. Hence, those particular features of Figures 3.1 and 3.2 are likely to largely reflect ‘age effects’ rather than cohort effects, although cohort differences do also play an important role in patterns of wealth formation (as the rest of this chapter shows).

Figure 3.1. Net household wealth, gross household wealth and debt by age, 2008–10 (excludes state pension wealth)



Source: Authors' calculations using wave 2 of the Wealth and Assets Survey.

Figure 3.2. Components of mean net household wealth by age, 2008–10 (excludes state pension wealth)



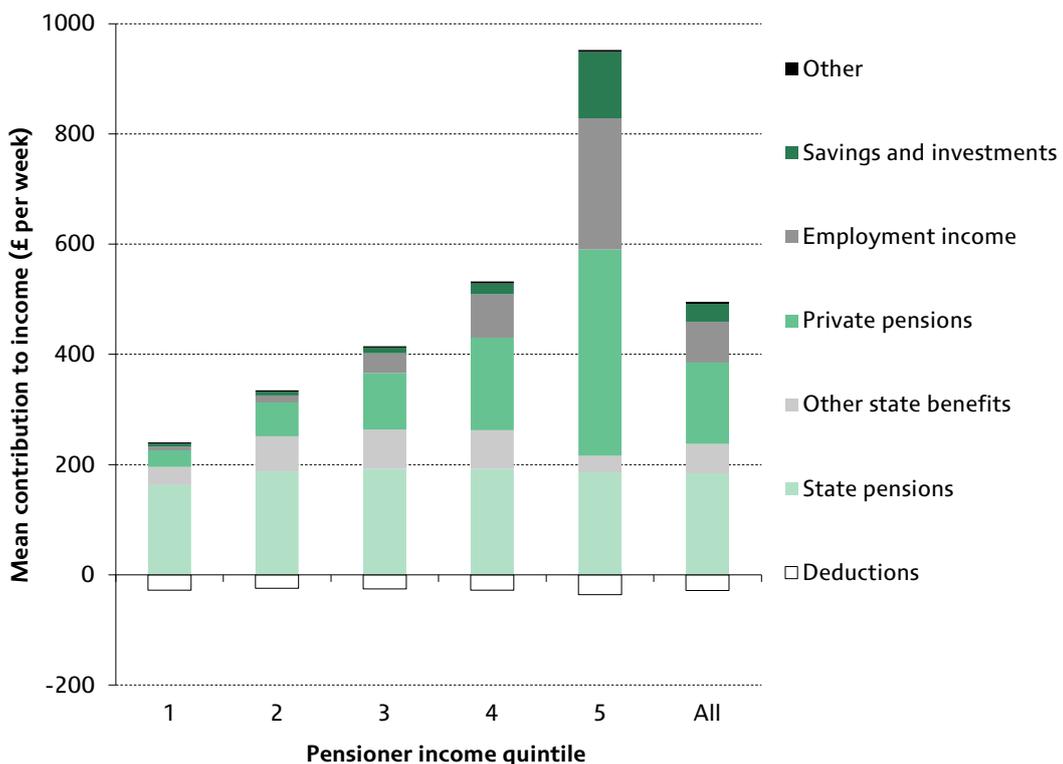
Source: Authors' calculations using wave 2 of the Wealth and Assets Survey.

There are a small number of individuals in each age group with extremely large wealth holdings. This pushes up mean net household wealth but does not affect the median, explaining why the former is so much higher than the latter. Median net wealth rises from less than £100,000 among those in their early 40s to over £200,000 among those in their early 60s.

Figure 3.2 splits mean net wealth into its major components – gross financial wealth (positive balances held in formal financial assets), private pension wealth,²⁸ gross property wealth, mortgage debts and other debts. For all age groups, property and private pensions are by far the most important sources of wealth shown in the figure.

As already mentioned, one important component of wealth that the WAS data do not provide precise measures of is state pension wealth – that is, accrued rights to future state pension income. Estimates from the English Longitudinal Study of Ageing (ELSA) for cohorts born up to the mid-1950s suggest that state pension

Figure 3.3. Pensioner income sources by pensioner income quintile, 2011–12



Note: All monetary amounts have been equivalised using the modified OECD equivalence scale and are expressed in terms of equivalent amounts for a childless couple. ‘Private pensions’ include incomes from both occupational and personal pensions.

Source: Authors’ calculations using Family Resources Survey 2011–12.

²⁸ Private pension wealth is defined as the value, at the date of interview, of defined benefit (DB) pensions, additional voluntary contributions (AVCs), free-standing additional voluntary contributions (FSAVCs), employer-provided defined contribution (DC) pensions and personal pensions. It includes pension rights based on a former spouse/partner’s contributions.

wealth is at least as large as private pension wealth overall for those cohorts, and considerably larger for the low-educated.²⁹ Figure 3.3 suggests a similar conclusion, breaking down the *incomes* of all current pensioners into their component sources, separately by pensioner income quintile. This shows that state pensions are particularly important for lower-income pensioners, but are the largest single source of pensioner income as far up as the fourth pensioner income quintile.

In summary, the most important sources of wealth for individuals at or around retirement are state pensions, private pensions and property. Between them, they account for the large majority of total wealth when people reach pensioner age. In the remainder of this chapter, we therefore analyse how cohorts born in the 1960s and 1970s compare with those already at or around retirement with respect to these components of wealth.

3.2 Cohort comparisons of state pension wealth

The history of state pensions policy in the UK is long and complicated. Different birth cohorts have been subject to different policy regimes at various stages of their lives, and rules have been changed in ways that impact some cohorts but not others. This has affected the state pension rights that otherwise-identical individuals born at different times have accrued. The timeline in Figure 3.4 gives an overview of the major reforms in question.³⁰

To draw out the main implications of this series of reforms, Figures 3.5a to 3.5e simulate income replacement rates from state pensions for cohorts born between 1925 and 1980, for five different ‘types’ of people. We define ‘replacement rates’ as the ratio of state pension entitlements at the state pension age (SPA) to gross earnings at age 50. Hence, these are estimates of the importance of state pensions in replacing working-age incomes for different cohorts. Details of the underlying simulations are given in the notes to the figure.³¹

Figures 3.5a to 3.5c illustrate the impacts of the reforms for individuals earning continuously throughout working-age life. As examples of ‘middle’, ‘low’ and ‘high’ earners, we take men earning continuously at the median, the 20th percentile and the 80th percentile of their cohort respectively.

Three main features stand out. First, for cohorts born between 1925 and 1950, the basic state pension declines relative to prior earnings across cohorts. This is a straightforward consequence of its price indexation since 1981, at a time when earnings have tended to grow in real terms.

²⁹ See table 2 of Banks et al. (2012).

³⁰ For a comprehensive history of state pensions policy in the UK, see Bozio, Crawford and Tetlow (2010).

³¹ We are very grateful to Soumaya Keynes and Gemma Tetlow for their help and advice in producing these calculations.

Figure 3.4. Major state pension reforms in the UK by date of implementation

1948:	Basic state pension (BSP) introduced
1961:	Graduated retirement benefit (GRB) introduced (not uprated)
1974:	BSP increased with (at least) earnings growth/inflation by law GRB abolished
1978:	State Earnings-Related Pension Scheme (SERPS) introduced Childcare time deducted from qualifying years needed for BSP entitlement
1981:	BSP increased with prices
1986:	SERPS accrual rate reduced
2002:	SERPS replaced with state second pension (S2P) ; earnings-related component reduced gradually
2010:	Female state pension age starts to rise (to 66 by 2020) SERPS accrual reduced further 30 years of credits/contributions for full BSP entitlement (down from 39/44 for women/men) BSP crediting for unpaid activities expanded (partly retrospectively)
2011:	BSP increased using 'triple lock' for current parliament; and with earnings growth thereafter
2016:	Single-tier flat-rate pension

Note: The 'triple lock' refers to the rule of uprating the basic state pension by the highest of earnings growth, inflation and 2.5%. The measure of inflation used for these purposes was switched from RPI to CPI in April 2012. For full details of these reforms, and discussion, see Bozio, Crawford and Tetlow (2010) and Crawford, Keynes and Tetlow (2013).

Second, the overall generosity of the state pension system peaked for cohorts born around 1933.³² This was driven by additional state pension entitlements. In particular, the 1933 cohort got the best deal out of the State Earnings-Related Pension Scheme (SERPS). Introduced in 1978, SERPS originally provided a top-up to the basic state pension, linked to the level of earnings received in the highest-earning 20 years of life. Hence, cohorts retiring before 1998–99 (i.e. men born before 1933 and women born before 1938) could not benefit in full from SERPS, as they had less than the maximum 20 years of accrual. On the other hand, cohorts retiring after 1998–99 were affected by subsequent reductions to the generosity of the rules governing SERPS accrual.³³ The peak of the state pensions

³² For more on this, see Disney and Emmerson (2005).

³³ The accrual rate was originally set at 25% of earnings between the lower earnings limit (LEL) and the upper earnings limit. The Social Security Act 1986 gradually reduced this (for earnings earned from 1988–89) for cohorts reaching the SPA after 1998–99, until it reached 20% for cohorts reaching the SPA in 2009–10. The same Act also cut SERPS entitlements by making them depend on earnings in all years of working life after 1978–79, rather than just the highest-earning 20 years. The other major cut to the generosity of SERPS was announced in the Pensions Act 1995. This changed the measure of the LEL used to identify qualifying earnings in each year, for cohorts reaching SPA from 2010–11 onwards (and retrospectively affected all the accrued rights of those cohorts). For a detailed discussion of the rules underpinning the original version of SERPS and each of its subsequent incarnations, see section 4.2 of Bozio, Crawford and Tetlow (2010).

replacement rate for cohorts born around 1933 is most pronounced for higher-earning groups, who gained most from SERPS.

Third, cohorts born in the early 1950s or later will be affected by the latest major state pension reform – the new single-tier flat-rate state pension to be introduced in 2016.³⁴ Under the current plan to uprate this in line with earnings, the replacement rate will start to flatten out for cohorts born in the early 1950s or later (and will eventually remain constant).³⁵ It will eventually settle at a level below that of the 1940s cohort (and even further below that of the 1930s cohort) – particularly for higher earners, who are relative losers from the removal of an earnings-related element to the state pension system.

For lower earners in the 1960s and 1970s cohorts (Figure 3.5b), the replacement rate will be only slightly lower than that for the 1940s cohort (and a little higher than that for the 1950s cohort). The new single-tier pension will tend to be more generous to low earners than the old two-tier system with SERPS (although less generous than the current two-tier system with the state second pension (S2P), which replaced SERPS in 2002–03). This acts to strengthen the position of low earners in later cohorts, relative to those who spent much time accruing second-tier entitlements under SERPS before 2002–03.

Figures 3.5d and 3.5e show the corresponding analysis for those who take time out of the labour market to care for children. We use the examples of middle-earning (median) and low-earning (20th percentile) women who stop working and claim child benefit between the ages of 25 and 40. (Note the different vertical-axis scale for the low-earning woman in Figure 3.5e, which reflects the much higher replacement rate for someone with earnings that low.) For these carers, the 1960s and 1970s cohorts will have slightly higher replacement rates than most of the 1950s cohort and similar replacement rates to some of the 1940s cohort. A key factor behind this is that the rules governing accrual of second-tier entitlements for carers are more generous under S2P than under SERPS (and those more generous rules will effectively be retained in the crediting for the new single-tier pension³⁶). This acts to benefit cohorts who spend longer caring for children after 2002–03, when S2P was introduced. The growth in second-tier entitlements for low-earning carers (from a very low level) is clearly visible in Figure 3.5e for cohorts who could accrue them after S2P's introduction (i.e. women born after 1942).

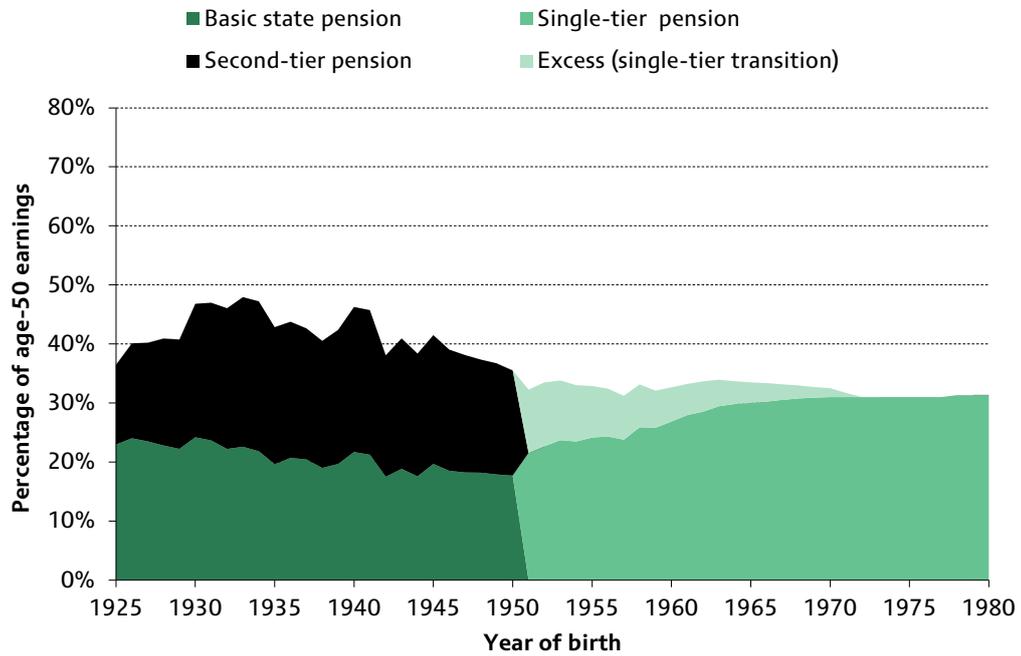
³⁴ For detailed analysis of this reform's impacts in both the short and long run, see Crawford, Keynes and Tetlow (2013).

³⁵ The reason for the 'transitional period' before the replacement rate settles at a constant level is that accrued rights in excess of the new flat rate will be retained (and uprated in line with prices). This is labelled as 'Excess (single-tier transition)' in Figure 3.5.

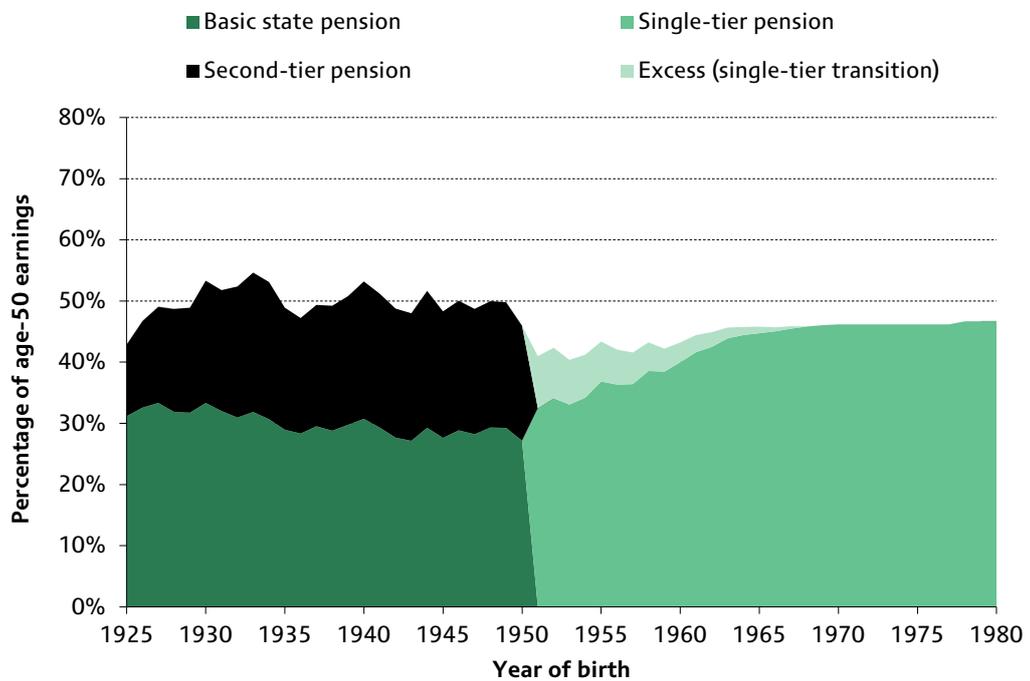
³⁶ See Crawford, Keynes and Tetlow (2013) for more details.

Figure 3.5. Income replacement rates from state pensions at state pension age (SPA), by birth cohort

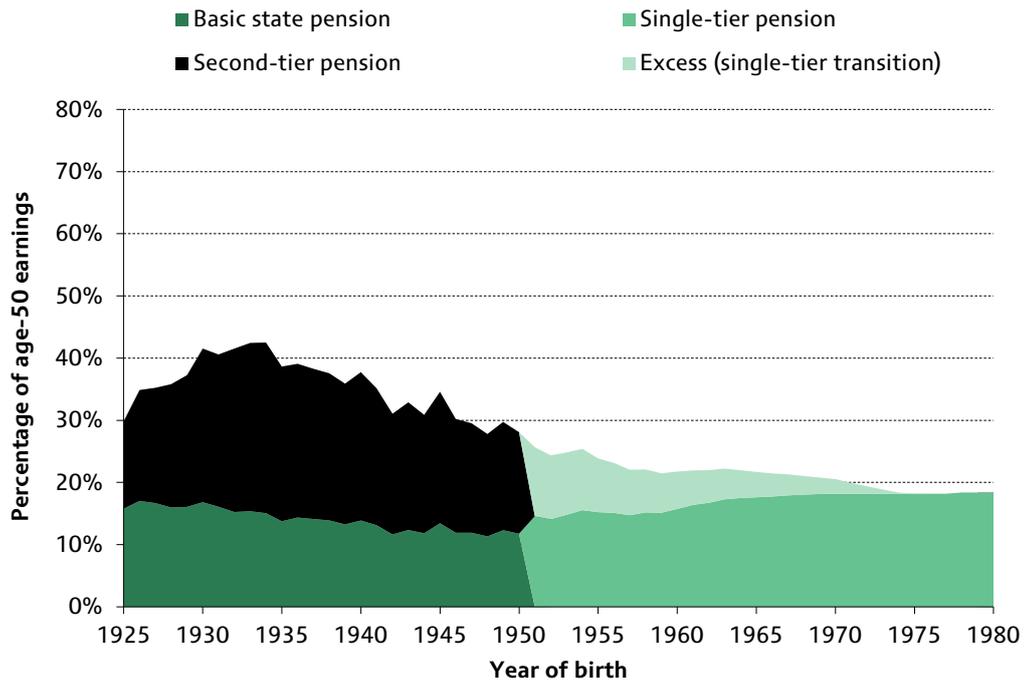
a. Male median earner who works continuously up to SPA



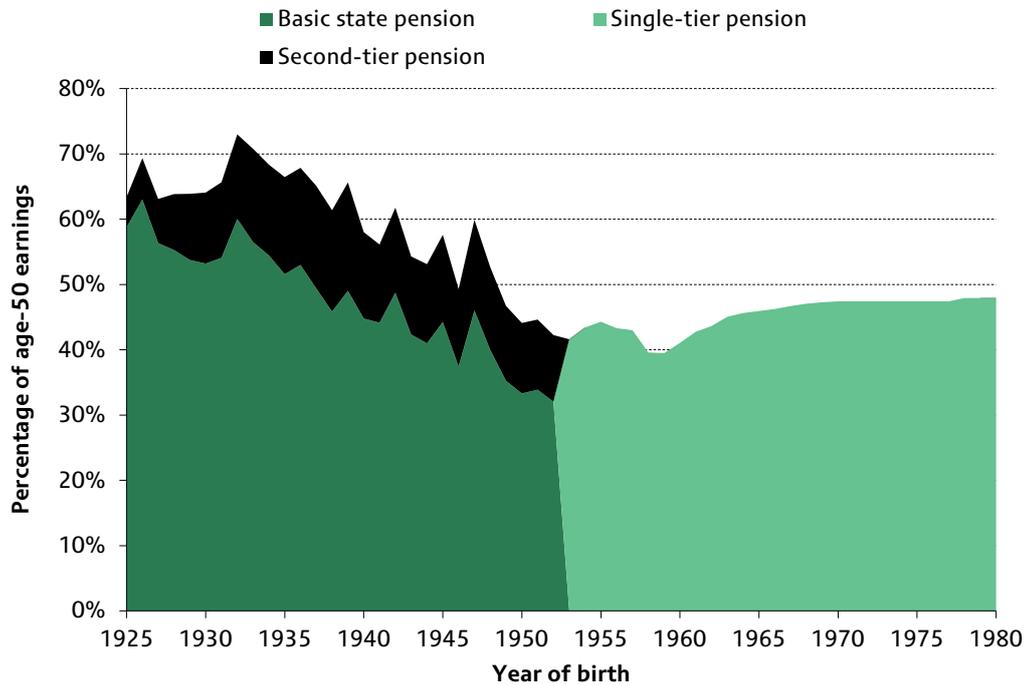
b. Male 20th percentile earner who works continuously up to SPA



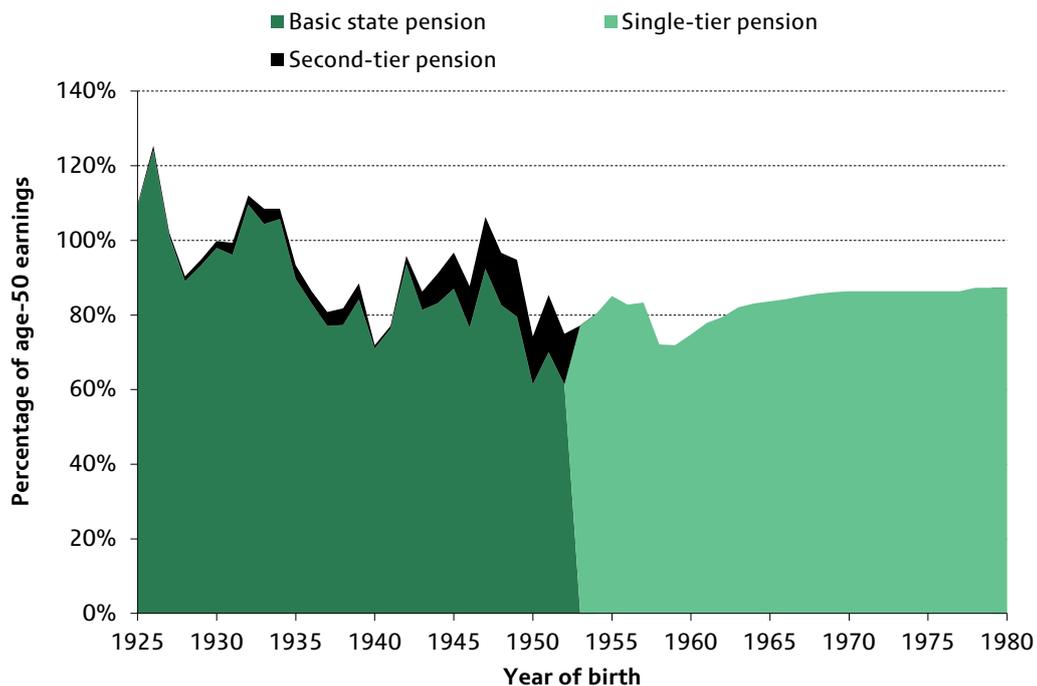
c. Male 80th percentile earner who works continuously up to SPA



d. Female median earner who takes time out of work between ages 25 and 40 to care for children (and claims child benefit)



e. Female 20th percentile earner who takes time out of work between ages 25 and 40 to care for children (and claims child benefit)



Note and source: Means-tested benefits have not been included in the calculations. From 2016, it will no longer be possible to accrue more state pension than the level of the single-tier pension. Any excess entitlement already accrued will be frozen and uprated to retirement in line with prices. This component is labelled ‘Excess (single-tier transition)’. The single-tier pension and the basic state pension are assumed to increase with the ‘triple lock’ (i.e. the maximum of earnings growth, CPI inflation and 2.5%) to the end of this parliament and with earnings growth thereafter. Simulations use age–earnings profiles for each birth-year cohort estimated from the FES/EFS/LCF up to the present, combined with long-run earnings growth forecasts from the Office for Budget Responsibility (OBR) for future years. We pool five birth-year cohorts at each age when estimating age–earnings profiles. For example, our estimate of age-30 median male earnings for the 1960 birth cohort is median age-30 male earnings for the 1958 to 1962 cohorts (i.e. using FES data between 1988 and 1992). For earnings at age–cohort combinations in the future, we first take the youngest cohort whose earnings were observed at that age. We then uprate their earnings at that age for X years at a (nominal) rate of 4.4% per year, where X is the difference in birth year between the two cohorts. The nominal earnings growth assumption is taken from the OBR’s long-run assumptions (Office for Budget Responsibility, 2013). This implicitly assumes uniform future earnings growth rates across age groups and across the earnings distribution, and should only be taken as illustrative.

Note also that the state pension age is rising for women and is set to rise (by less) for men. By 2020, the SPA for both men and women will be 66 (up from its current level of 65 for men and its 2009–10 level of 60 for women). Hence, younger cohorts will have to wait until older ages before they get any state pension income at all. Of course, this is related to rising life expectancy³⁷ and hence the fact that younger cohorts will continue to receive a state pension until older ages. It could reasonably be thought of not as a reduction in the generosity

³⁷ If passed, the Pensions Bill 2013–14 (available at <http://services.parliament.uk/bills/2013-14/pensions.html>) will formalise the link between future changes to life expectancy and future changes to the SPA.

of state pensions, but as a measure to stop the rise in generosity that would otherwise have occurred alongside higher life expectancies.

Finally, it is very important to acknowledge that any changes to the level of public spending on pensions have consequences for the public finances. Increases in pension spending would ultimately have to be paid for through higher taxes or reduced public spending elsewhere.³⁸ To the extent that state pension policy has already impacted the direct taxes paid or (non-pension) social security benefits received by different cohorts, this would be captured in our analysis of net incomes in Chapter 2.

In summary, under current policy, income from state pensions will tend to replace a higher share of prior earnings for individuals born in the 1940s than it will for the 1950s, 1960s and 1970s cohorts. This difference between the 1960s and 1970s cohorts and the 1940s cohorts is smaller for two broad groups – low earners, and individuals who have spent time out of the labour market caring for children (mostly women). This suggests that the state pension system may have a more equalising effect on retirement incomes for the younger cohorts than for their predecessors – acting to offset, at least partly, the greater income inequality that younger cohorts have tended to face during their working-age years.

In longer-term perspective, it is worth noting that state pensions were most generous in replacing prior earnings for a cohort older than any of those focused on in this report – namely, cohorts born in the mid-1930s, who reached SPA at around the turn of the century.

3.3 Cohort comparisons of private pension wealth

The second major source of wealth for elderly individuals is private pensions. This refers to pensions other than the basic state pension or additional state pensions (SERPS and/or S2P). Private pensions comprise occupational pensions and personal pensions, including those arranged via public sector employers.³⁹

Annual measurements of active membership⁴⁰ in private pension schemes are available since 1972 from the General Household Survey. The GHS is another large-scale repeated cross-section micro data set, with sample sizes typically ranging between about 9,000 and 13,000 households (or about 21,000 to 35,000 individuals) each year.⁴¹ It is therefore ideally suited to synthetic cohort analysis

³⁸ However, changes in pension spending do not, of course, have to be paid for by the same cohorts as those who benefit from them.

³⁹ Note also that personal pensions can be either workplace-based or individually arranged.

⁴⁰ ‘Active membership’ excludes schemes into which contributions are not being made (either by an employer or the individual). There is some cyclical activity in active membership due to increases in contributions with employment. Data on accrued rights from previously active schemes are not available over the majority of the sample period.

⁴¹ There were no surveys in 1997 or 1999. In 2010, the GHS was renamed the General Lifestyle Survey, but we continue to refer just to the GHS for simplicity. Before 2000, no survey weights were provided. To help ensure representativeness of the sample, for years before 2000 we have

of the kind presented in Chapter 2. Here, we compare the participation of different cohorts in private pension schemes, observed at the same ages. This includes schemes to which only the individuals, only the employer or both are contributing. Note that the self-employed are excluded from this analysis. This is because, unlike the rest of the population, the self-employed could belong to personal pension schemes before 1988, but personal pension questions were not included in the GHS until then.

Figure 3.6 shows individual private pension membership rates by age and cohort. Because trends have differed greatly by sex, we present separate series for men and women as well as the overall figures.

Individuals in the 1940s cohort were less likely to belong to a private pension scheme in their 20s and 30s than later cohorts. This is because personal pensions were not introduced until the late 1980s. The sharp rise in cohorts' private pension membership rates at that time largely reflects people contracting out of SERPS in response to favourable contracting-out terms associated with personal pensions at the point of introduction.⁴² Hence, this partly reflects displacement of additional state pension rights with private pension wealth, as opposed to an increase in overall pension wealth. Since the late 1980s, changes in private pension membership rates across cohorts compared at the same age have been relatively small. At age 40, 54–57% of the 1950s, 1960s and 1970s cohorts were active members of a private pension scheme.

However, the overall picture of little change masks very different trends by sex. There has been a clear downwards trend across cohorts for men, but a clear upwards trend across cohorts for women (due mainly to a large increase in female employment across cohorts). For the 1970s cohort, rates of private pension membership by the middle of working-age life have almost converged between men and women, at around 50–60%.

Given how different the trends in private pension membership have been for men and women, it is interesting to consider how they have combined within households. Figure 3.7 shows the proportion of individuals living in a family where someone belongs to a private pension scheme. A family here is simply a single person or couple plus any dependent children. Hence, for single individuals, the individual- and family-level membership measures are the same; for individuals in couples, however, they can be different.

Between the ages of 30 and 40, the proportion of individuals in a family with an active member of a private pension scheme was consistently lower for the 1970s cohort than for either the 1950s or 1960s cohorts. This is somewhat different from trends in the individual-level membership rates (shown in the top panel of Figure 3.6). Those rates were a little lower for those born in the 1970s than they

derived our own survey weights using control totals based on a 17-way split by family type and age.

⁴² Disney, Emmerson and Wakefield, 2008.

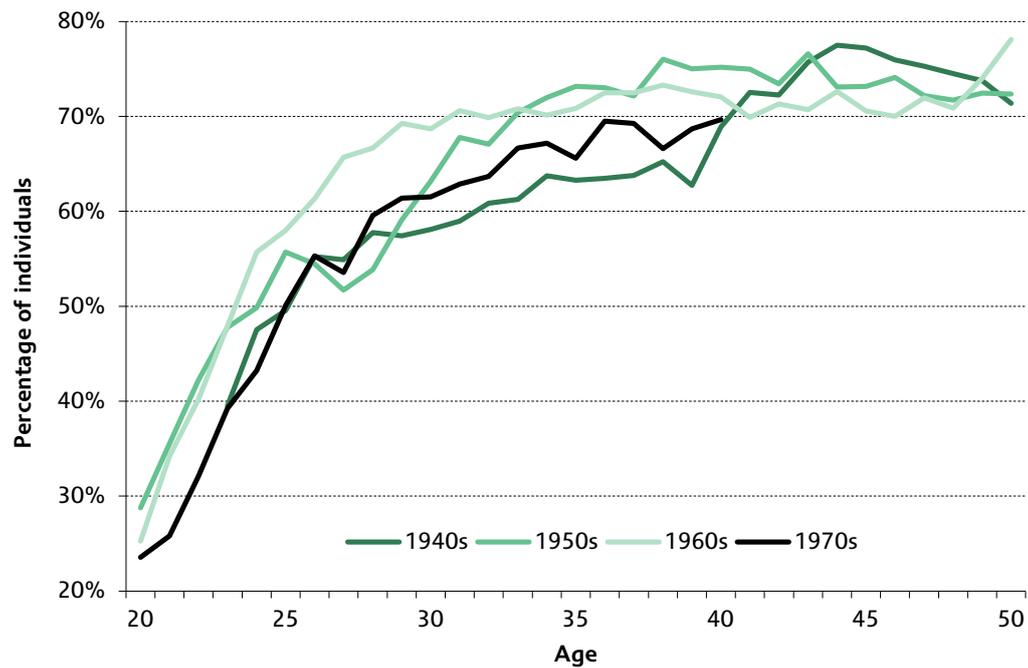
Figure 3.6. Active membership of private pension schemes by age and birth cohort



Note: Excludes the self-employed.

Source: Authors' calculations using General Household Survey, various years.

Figure 3.7. Percentage of individuals in a family containing an active member of a private pension scheme, by age and birth cohort



Note: Excludes the self-employed.

Source: Authors' calculations using General Household Survey, various years.

had been for the 1960s cohort, but still generally no lower than they had been for the 1950s cohort. Hence, the trends across cohorts in the number of families that have private pension wealth look less favourable than the trends in the number of individuals who do so.

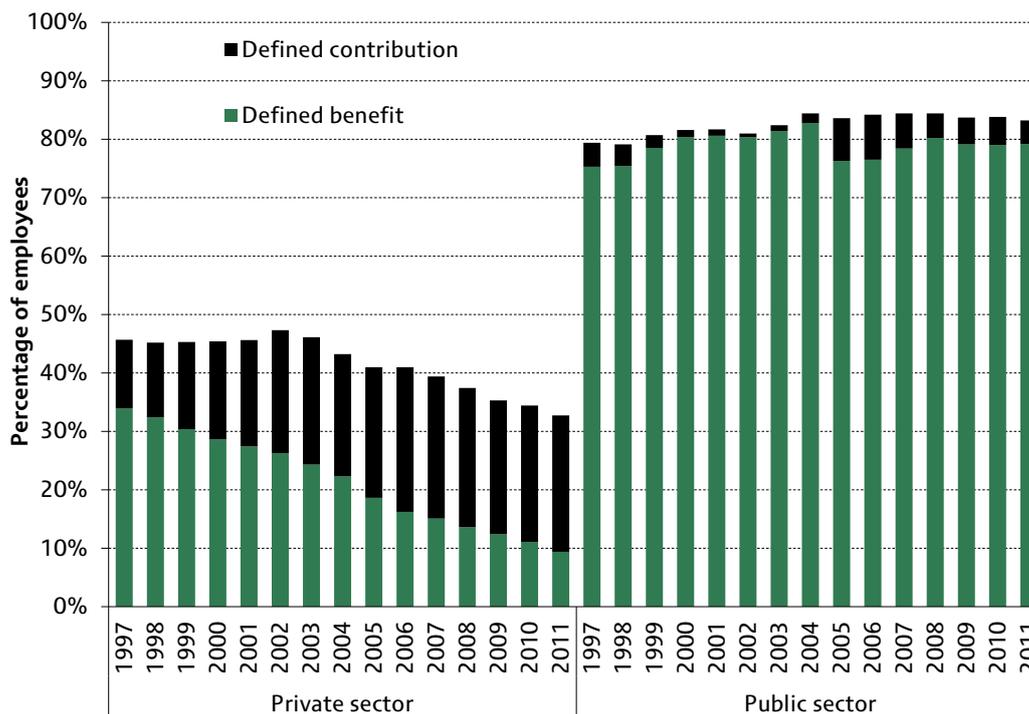
One natural interpretation is that a significant number of the 'additional' women who have private pensions in younger cohorts are the partners of men who also have private pensions. Hence, part of the impact of the upwards trend among women may have been to increase inequalities in private pension wealth across families.

The trends in private pension membership across cohorts have been very similar in the top and bottom halves of the income distribution⁴³ (not shown), although unsurprisingly the membership rate has always been significantly higher for those with higher incomes.

The other key piece of information, besides private pension membership rates, is the *value* of accrued private pension rights for different cohorts. An extremely important trend here has been the rapid switch away from defined benefit (DB) towards defined contribution (DC) pension schemes in the private sector, as

⁴³ The GHS provides a consistent measure of income *before* taxes (but inclusive of benefits and tax credits) over time. This makes it different from the net income measure used elsewhere in this report. However, the tax system results in relatively little re-ordering of individuals in the income distribution, so this matters little for ranking people into the top and bottom halves.

Figure 3.8. Percentage of employees with private pension to which employer contributes, by scheme type



Source: Authors' calculations using Annual Survey of Hours and Earnings data, various years.

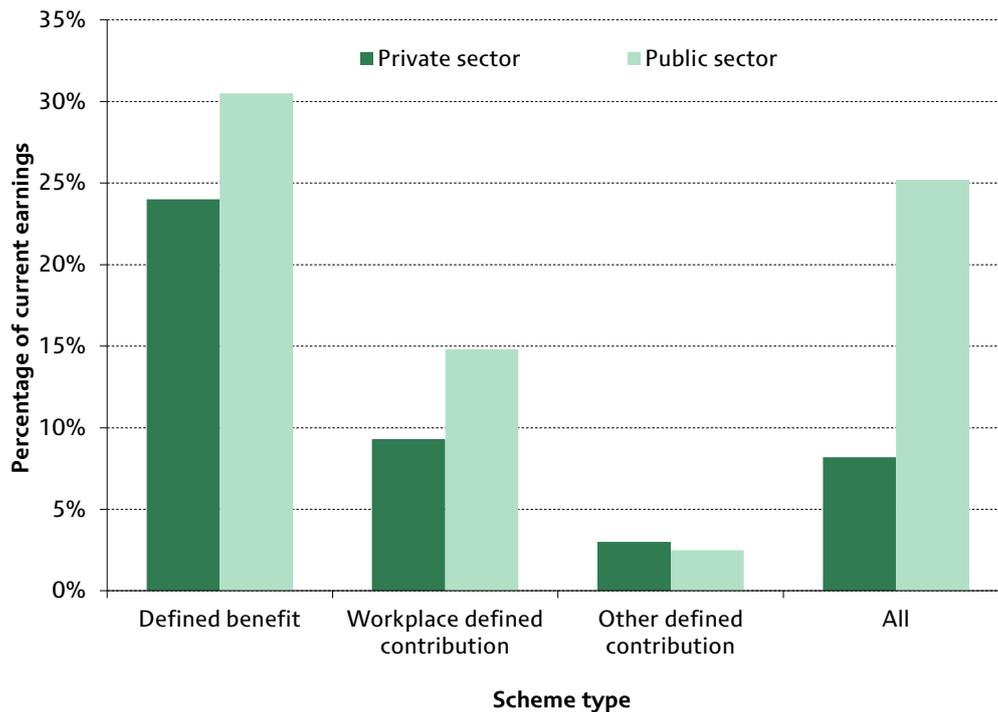
illustrated in Figure 3.8. In 1997, DB schemes accounted for 74% of private sector pension plans to which contributions were being made; by 2011, they comprised only 29% of them. In approximately the first half of this period, DB schemes were being largely displaced by DC schemes. More recently, there has been a fall in the total proportion of private sector employees with a workplace-based pension. As the figure shows, these trends are confined to the private sector. The vast majority of public sector pension plans continue to be DB, and if anything there has been a small rise in total workplace-based public sector pension coverage since 1997.⁴⁴

The rapid decline of DB schemes in the private sector is significant when comparing birth cohorts, for two reasons. First, it will affect younger cohorts more than older ones. This is not only because younger cohorts have more years of potential accrual of pension rights ahead of them; it is also because many DB schemes have been closed only to new entrants.⁴⁵ Second, the DC schemes that

⁴⁴ The Annual Survey of Hours and Earnings data shown in Figure 3.8 cover all schemes to which an employer contributes. This therefore excludes individually-arranged personal pensions, but will include virtually all workplace-based (both occupational and personal) pensions. For brevity, we use the phrase 'workplace-based schemes' interchangeably with 'schemes to which an employer contributes'.

⁴⁵ For example, data underlying figure 4 of Office for National Statistics (2013a) show that, in 2000, about 90% of the 4.6 million members of private sector occupational DB schemes were in schemes that were still open to new members; by 2012, only about 35% of the 1.7 million members were in open schemes.

Figure 3.9. Estimated mean values of annual pension accrual to scheme members in 2005, by scheme type



Note: Covers employees aged 20 to 59. Figures are the results of simulations based on British Household Panel Survey and Labour Force Survey data. See Crawford, Emmerson and Tetlow (2010) for details of the methodology and assumptions.

Source: Crawford, Emmerson and Tetlow, 2010.

now dominate in the private sector tend to be far less generous than the DB schemes that they have (to a large extent) replaced. Indeed, the background to the large-scale switch away from DB schemes was that many employers' schemes had built up large deficits⁴⁶ – something which, by definition, cannot happen with DC schemes. Crawford, Emmerson and Tetlow (2010) provided quantitative evidence in this direction by simulating annual accruals of pension rights as a percentage of current earnings for a large sample of employees in 2005. As Figure 3.9 shows, they estimated that average rates of accrual were at least twice as high in DB schemes as in DC schemes.⁴⁷

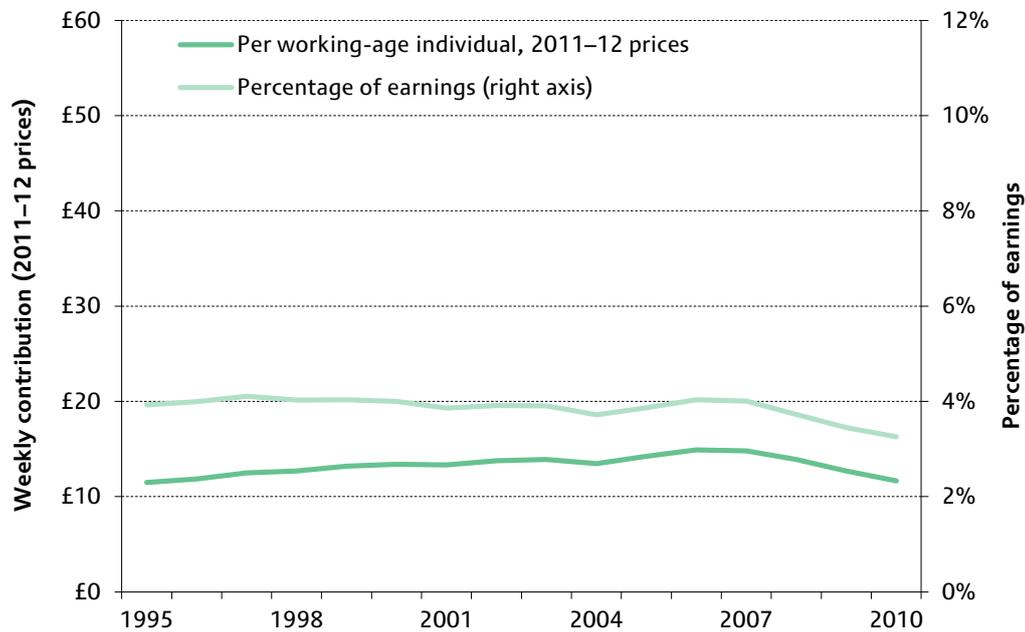
When thinking about expected future private pension income, another key factor is of course the amounts being contributed to private pensions – particularly now that a greater share of private pensions are DC schemes (see above). This is difficult to analyse at the cohort level, as it is not captured in household surveys (individuals' own contributions are captured, but other – most notably employer – contributions are not). However, the Office for National Statistics has published

⁴⁶ See Department for Work and Pensions (2013), and below for further discussion.

⁴⁷ This should be taken as indicative, and does not necessarily mean that the DB schemes that are being withdrawn are twice as generous as the DC schemes that replace them: DC schemes that replace DB schemes may be more generous than the average DC scheme.

aggregate data on private pension contribution amounts since 1995. These are shown in Figures 3.10 and 3.11, both per working-age individual and relative to total earnings.

Figure 3.10. Employee contributions to private pensions



Source: Authors' calculations using aggregate nominal pension contributions from 2012 edition of ONS, Pension Trends, chapter 8 (http://www.ons.gov.uk/ons/dcp171766_270207.pdf); ONS population estimates for males aged between 16 and 64 and females aged between 16 and 59; the retail price index excluding council tax (ONS code AGD 4111); ONS estimates of average weekly earnings for 2010 combined with changes in the prior average earnings index between 1995 and 2010 to estimate previous average earnings levels on a consistent basis; and total number of employed individuals (ONS code MGRZ).

Figure 3.11. Employer contributions to private pensions



Source: As for Figure 3.10.

These aggregate time-series data suggest that the amounts being contributed by employees to private pension pots have generally been quite flat in real terms since 1995. Falls in contributions since the recession mean that employee contributions per working-age individual⁴⁸ were about the same in 2010 as in 1995 after adjusting for inflation and that employee contributions were slightly lower than in 1995 as a proportion of earnings.

The trends for employer pension contributions are different. They also rose relatively slowly between 1995 and 2001, but they increased rapidly between 2001 and 2006, before flattening out at around the time that the financial crisis began. Importantly, the surge in contributions in the early to mid-2000s was driven largely by employers taking steps to reduce large deficits in DB pension funds, in light of legislative changes and the decline in the stock market in the early 2000s.⁴⁹ It is noteworthy that this contrasts with the slowdown in growth in take-home incomes at about the same time (see Chapter 2). Indeed, it mechanically accounts for much of the disjuncture over the period between growth in take-home incomes and growth in GDP and productivity.⁵⁰

From a cohort perspective, the interpretation of this increase in employer pension contributions is not straightforward. The key point to note is that, because it was driven by employer payments into deficit-stricken DB schemes, it was acting to protect the accrued (typically generous) pension rights of members of those unfunded schemes. Some of those rights belong to relatively young adults, but it is likely that most belong to those in older cohorts (including those already retired) who had been accruing for longer – particularly since many DB schemes have been closing to new members or new accruals. Hence, our judgement is that this is unlikely to make the economic position of the 1960s and 1970s cohorts look more favourable relative to those that preceded them, and indeed the opposite could easily be the case. But further micro evidence on who this was a transfer to and from would be a valuable area for future research.

To summarise the evidence on trends in private pension wealth across cohorts: membership rates in private pension schemes have changed little overall for cohorts born between the 1950s and 1970s, but this masks a significant decline among men offset by a rise among women. The most important change affecting the average position of different cohorts is probably the rapid switch away from occupational defined benefit pension schemes towards less generous defined contribution schemes. This will have affected cohorts currently in the middle of working-age life more than those already at, or close to, pensioner age.

⁴⁸ We include non-workers of working age, because for these purposes we want to capture any impacts of changes in the numbers of people making zero employee contributions due to non-employment.

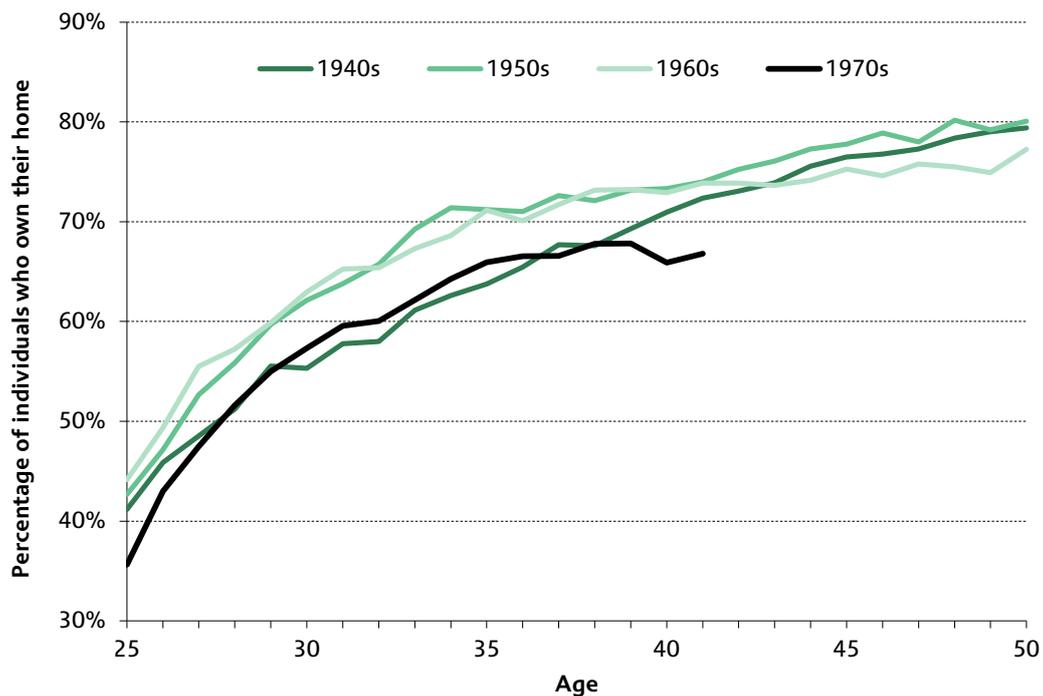
⁴⁹ For more detail, see Department for Work and Pensions (2013).

⁵⁰ Pessoa and Van Reenen, 2012. Those authors found that the other major factor accounting for the disjuncture was a rise in employer National Insurance contributions.

3.4 Cohort comparisons of property wealth

The final major source of wealth that we consider is property wealth. We begin with perhaps the most basic indicator of property wealth among a cohort – their rate of homeownership. For this, we use the Family Expenditure Survey between 1968 and 1993–94 and the Family Resources Survey (another large-scale repeated cross-section micro data set) from 1994–95 onwards due to its larger sample size. Figure 3.12 traces the evolution of the homeownership rate within birth cohorts as they have aged.⁵¹

Figure 3.12. Homeownership rates by age and birth cohort



Source: Authors' calculations using Family Expenditure Survey and Family Resources Survey, various years.

Those born in the 1950s and 1960s tended to 'get on the housing ladder' much more quickly than had those born in the 1940s. For example, at age 35, 64% of individuals born in the 1940s owned their own home, compared with 71% for the next two cohorts at the same age. However, for both the 1940s and 1950s cohorts, homeownership rates ended up peaking at about 80% by age 50 – the difference was merely one of timing. It is less clear that this will be the case for the 1960s cohort. Up to age 40, their homeownership rate had tracked that of the prior cohort very closely, but it has since generally plateaued rather than continuing upwards towards the 80% level reached by the previous two cohorts.

⁵¹ Housing tenure is recorded at the household level, but the individual is the unit of analysis here and we take care when assigning homeownership to individuals within households. In households where the home is owned, we consider only the head of the household and their partner (if applicable) as the owners. For example, any adult children with whom the household head lives would not be counted as homeowners.

The picture is strikingly different for individuals born in the 1970s. Their homeownership rate at each stage of adulthood has lagged behind that of the 1950s and 1960s cohorts (although, up to about age 35, it was still higher than that of the 1940s cohort). By age 35, 66% of individuals born between 1970 and 1976 owned a home, compared with 71% of those born in the 1950s and 1960s. In recent years, the age-adjusted gap between cohorts has been widening, as the homeownership rate for the 1970s cohort appears to have stopped rising altogether. Their homeownership rate remains at around two-thirds – far below the 80% rate at which it peaked for those born in the 1940s and 1950s.

One interpretation of these big differences between cohorts is that the sharp rise in house prices between the mid-1990s and mid-2000s (see Figure 3.15a later), combined with the marked slowdown in income growth from the early 2000s (see Chapter 2), has been associated with more difficulty getting on the housing ladder. This would matter chiefly for cohorts whose homeownership rates would not already have peaked when these trends began – roughly, those born after the 1950s.

One very important question is whether this falling-behind in homeownership of younger cohorts will persist in later life. Focusing on trends in homeownership at relatively young ages, Bottazzi, Crossley and Wakefield (2012) estimated the extent to which an early lack of homeownership can prove persistent for a cohort. Looking at individuals born between around 1940 and 1970, they found that cohorts with low homeownership rates at age 30 close about 80% of the ownership gap by age 40. Figure 3.12 shows clearly that this has not been the case for the 1970s cohort over that age range. Nevertheless, the future is difficult to predict. Are we just seeing a temporary plateau in the homeownership rate of the 1970s cohort, to be followed by the further increases in homeownership between the ages of 40 and 50 that we would normally expect? Or has the homeownership rate of the cohort now peaked, at only two-thirds?

The answer could have significant implications for the wealth of younger cohorts in retirement, but also wider impacts. For example, if future cohorts of pensioners are much more likely to be renters than their predecessors, this would increase the level of government spending on housing benefit. That could itself have consequences for the cohorts' incentives to save for their retirement: housing benefit is means-tested against both income and assets, so saving now can reduce housing benefit entitlement later.

It is also important to note that, even if low homeownership does not prove permanent for a cohort, delays in getting on the housing ladder can still have permanent effects on the amount of housing wealth that they ultimately accumulate via increases in property values. We analyse the interaction between house price growth and the timing of movements into homeownership for different cohorts later in this section.⁵²

⁵² Recent evidence suggests that individuals are taking longer to move up (as well as onto) the housing ladder. This further suggests that the housing wealth of younger cohorts may be growing

These patterns in homeownership across cohorts are widespread throughout Great Britain, rather than being driven only by particular regions such as London. In each of the North of England, the Midlands, the South, London and Wales,⁵³ rates of homeownership among the 1960s and (particularly) the 1970s cohorts have fallen behind those of their predecessors at comparable ages; and the ownership rate among the 1970s cohort has been flattening out at well below the peak reached by previous cohorts. The *extent* to which the 1970s cohort have fallen behind does vary by region, however. In the Midlands, for example, homeownership rates at age 40 were only slightly lower for the 1970s cohort than for the 1940s cohort (69% rather than 73%). In London, homeownership rates at 40 have fallen more substantially, from 67% among the 1940s cohort to 54% among the 1970s cohort. Hence, homeowners in more recent cohorts are significantly less likely to live in London than homeowners in previous cohorts.

The patterns in Scotland are slightly different. Homeownership rates at each age had been steadily increasing between the 1940s and 1960s cohorts. But this increase has now stopped – those born in the 1970s are no more likely to own a home than those born in the 1960s were a decade ago at the same age. Hence, in Scotland as in the rest of Great Britain, it is true to say that the 1970s cohort have a lower homeownership rate than they would have had if the previous trend across cohorts had continued.

The falls in homeownership have also been spread quite widely across income groups. There have been similar proportionate falls in ownership rates across cohorts in each income quintile, with the exception of the lowest income quintile, for whom the ownership rate has not changed appreciably (but has stayed at a relatively low level of less than 50% at age 40).

It is interesting to consider how housing tenure relates to active saving behaviour in different cohorts, for at least three reasons. First, the difficulty in getting on the housing ladder for younger cohorts could have resulted in renters actively saving more than they would otherwise have done, in order to get themselves in a position where they can buy a home in future. Second, the realisation that homeownership will be attained later in life could act like a negative shock to wealth. Economic theory would suggest that this could trigger a rise in active saving. Either of these mechanisms would act to make the overall wealth of those still renting in younger cohorts higher than their housing tenure alone might suggest. Third, however, in the past few years, the sharp falls in mortgage interest rates have acted to reduce the amount spent by homeowners on mortgage interest, and some of that reduction may have been saved (rather than

relatively slowly in ways not captured simply by homeownership rates. The average age of second-time buyers is now estimated at 42. This is an increase of 15 years since the 1960s, which is significantly larger than the five-year increase in the average age of first-time buyers over the same period (<http://www.postoffice.co.uk/average-age-second-time-buyer>).

⁵³ We define the North of England as including Government Office Regions (GORs) North West, North East, and Yorkshire and Humberside; the Midlands as including East Midlands and West Midlands; and the South as including East Anglia, South East, and South West. We aggregate GORs to ensure sufficient sample sizes.

spent on other things). That would act to *increase* active saving among homeowners relative to renters.

Figure 3.13a. Equivalised median household saving among homeowners, by age and birth cohort

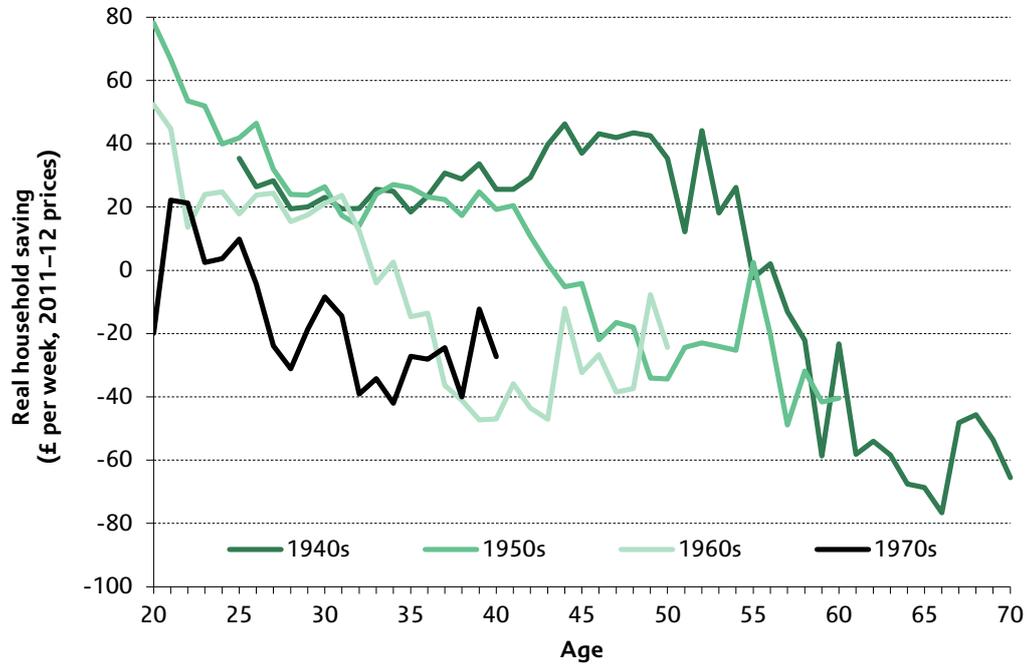
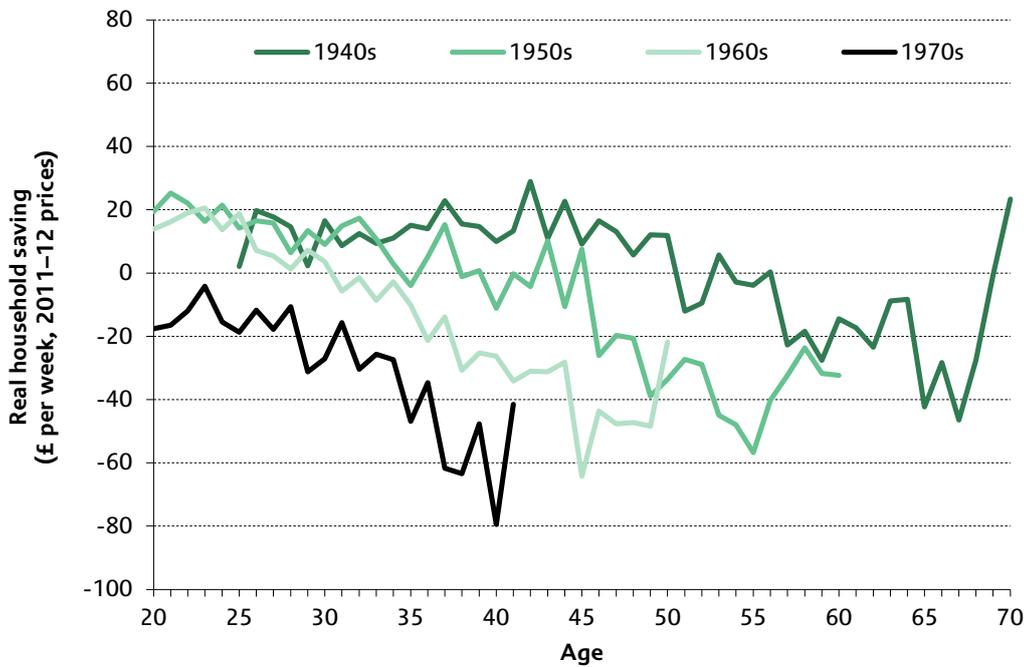


Figure 3.13b. Equivalised median household saving among renters, by age and birth cohort



Source: Authors' calculations using Family Expenditure Survey, various years.

Figures 3.13a and 3.13b compare trends in median saving across cohorts for homeowners and renters respectively. The series are relatively volatile, as sampling error grows once we split age-cohort combinations by housing tenure. But there is no evidence here that the active savings being accumulated by renters in younger cohorts have been ‘compensating’ for their lack of homeownership: trends in amounts being saved across cohorts look no better for renters than for homeowners.⁵⁴ A failure of lower housing wealth to depress the expenditure (and so increase the saving) of those still renting in younger cohorts would correspond to a finding in work by Attanasio et al. (2009). Those authors concluded that the observed correlation between house prices and consumer spending was the result of common factors driving both, rather than individuals’ expenditure responding to changes in housing wealth.⁵⁵

We can learn more about amounts of property wealth among different cohorts from the values of the properties owned (‘gross’ property wealth), changes in those values since the time of purchase and whether people own outright or are still paying off mortgages (both key determinants of the equity in the home, i.e. net property wealth).

A good proxy for property value is council tax band, which has been recorded in the Family Resources Survey since 1994–95. Higher bands indicate higher property values relative to the average.⁵⁶ Figure 3.14 plots the proportion of homeowners whose properties fall into council tax band D or higher, by age and cohort. About half of homeowners tend to end up in these bands (whilst most start out in cheaper properties). We do not see strong evidence here that the (more select) group of individuals in younger cohorts who *have* managed to get onto the housing ladder have done so only by settling for relatively cheap properties. In (only) the two most recent years of data, there does appear to have been a decline in the relative position of the 1970s cohort, but as yet we cannot be sure whether this is a temporary fluctuation (and, if so, whether it is real or driven by sampling error) or the beginning of a persistent difference opening up between cohorts.

To get a sense of how the housing equity (i.e. net property wealth) of different cohorts might compare, we can examine the changes in property values since different cohorts bought their homes. This is potentially very important for cohorts’ accumulation of wealth, given the magnitude of past changes in real

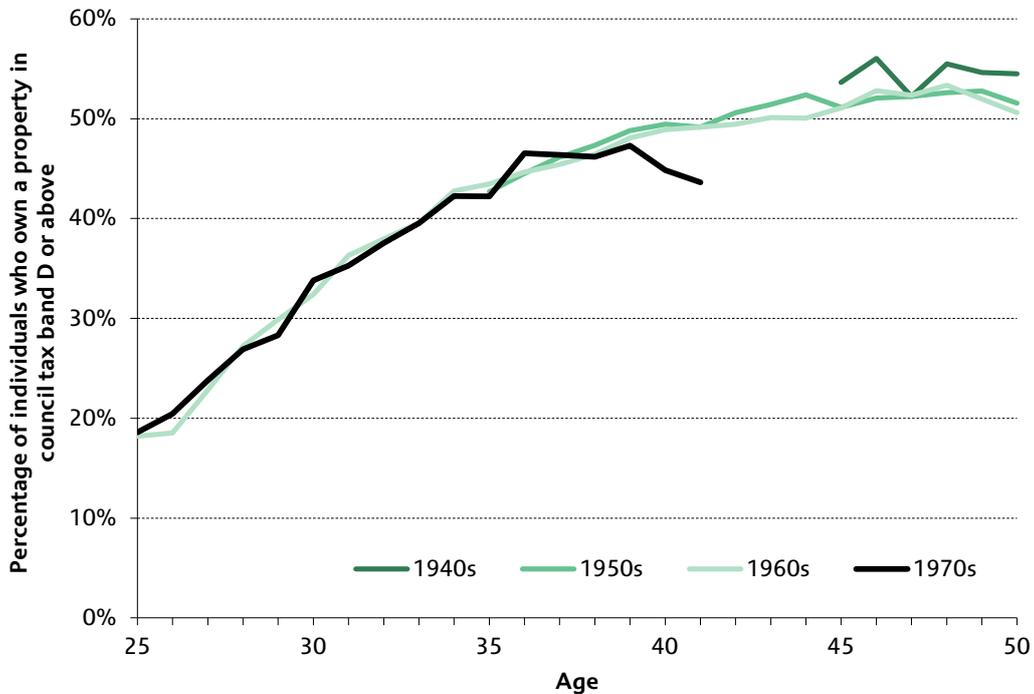
⁵⁴ This is despite a possible ‘compositional’ effect that would, if anything, be likely to produce relatively higher savings among renters. That is, there are some renters in younger cohorts who would have been homeowners at that age were they in an older cohort. These individuals are likely to have higher incomes and to save more (in absolute terms), on average, than individuals who would have been renting were they in either cohort. This would tend to mechanically increase the amounts of saving being done by renters in younger cohorts.

⁵⁵ However, the effects of house prices on consumption are somewhat contested. For example, see Campbell and Cocco (2007).

⁵⁶ Council tax bands are based on property values as of 1991. Many individual properties will have changed in relative value since then. But, by definition, some properties have increased in relative value since 1991 while others have decreased, so these changes should average out to (at least) a very substantial extent at an aggregated age-cohort level.

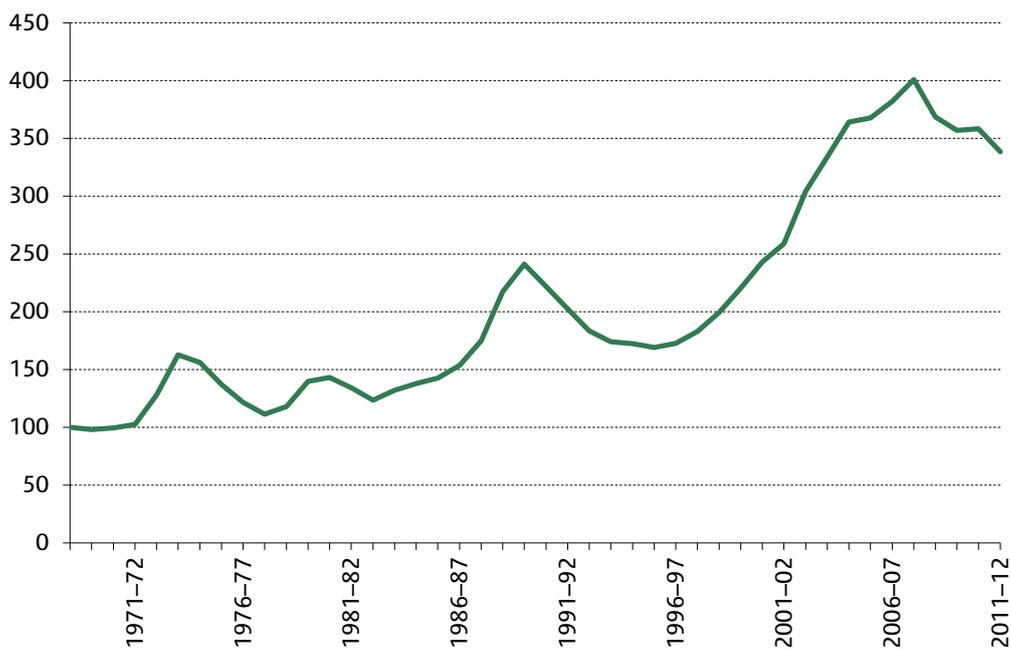
house prices: as Figure 3.15a shows, house prices in Great Britain have more than trebled in real terms since 1968–69. But house price growth can affect different cohorts very differently, as the growth rate has fluctuated considerably over time. For example, the rapid house price increases of the late 1980s and early 2000s were both followed by large falls.

Figure 3.14. Percentage of homeowners with properties in council tax bands D and above, by age and birth cohort



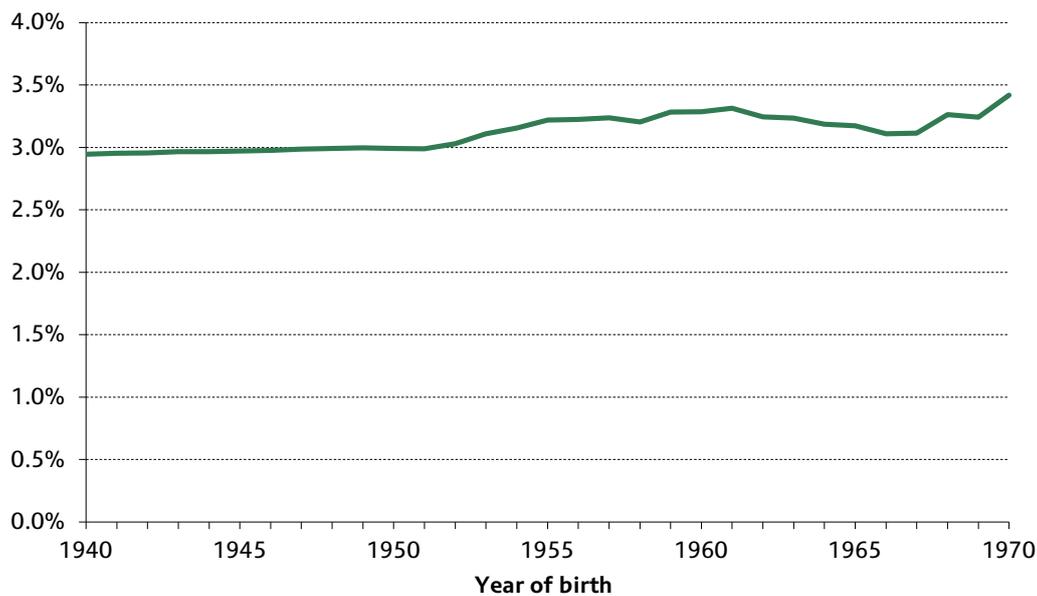
Source: Authors' calculations using Family Expenditure Survey and Family Resources Survey, various years.

Figure 3.15a. Real house prices in Great Britain (1968–69 = 100)



Source: Office for National Statistics, house price index (DCLG table 594).

Figure 3.15b. Average annual real house price growth since time of purchase among homeowners in different birth cohorts



Note: To estimate the proportion of each cohort who became homeowners in each year, we use the fitted values from regressions of the homeownership rate of a birth-year cohort on a quadratic in age (with separate regressions for each cohort). This smooths the age profiles of homeownership rates, reducing the impact of sampling error on measured year-to-year changes. We assume that any remaining *falls* in cohort homeownership rates from year to year are the result of house sales, and that those selling in a given year had achieved the same average annual return on their house as the rest of their cohort had achieved by that year.

Source: Authors' calculations using Family Expenditure Survey and Family Resources Survey, various years, and the real house price index from the ONS reproduced in Figure 3.15a.

How have these patterns of house price growth affected different cohorts? To get at this, we can combine information on house price growth over time with the proportions of each cohort who became homeowners in each year (which we can proxy by looking at year-on-year changes in the homeownership rate for a cohort). Figure 3.15b shows estimates of the average annual real increase in house prices since the time of purchase for homeowners in each birth cohort between 1940 and 1970.⁵⁷

Homeowners born in the 1940s have tended to see a somewhat lower average annual increase in the values of their homes than homeowners in the 1950s and 1960s cohorts. For example, the average annual real return for those born in the 1940s was just under 3%, rising to about 3.3% for those born in the late 1950s and early 1960s. This is largely because individuals born in the 1940s were more likely to own a house during the late 1960s and 1970s, when real house price growth was slower than in recent years (as Figure 3.15a shows).

For those born in the 1950s and 1960s, homeowners born later have tended to experience higher average annual real growth in the prices of their houses, as house price growth has generally accelerated over time. The key exceptions are

⁵⁷ The note to the figure gives technical details of how the estimates were produced.

those who became homeowners just before the house price crash of the early 1990s, who were relatively likely to have been born in the early to mid-1960s.

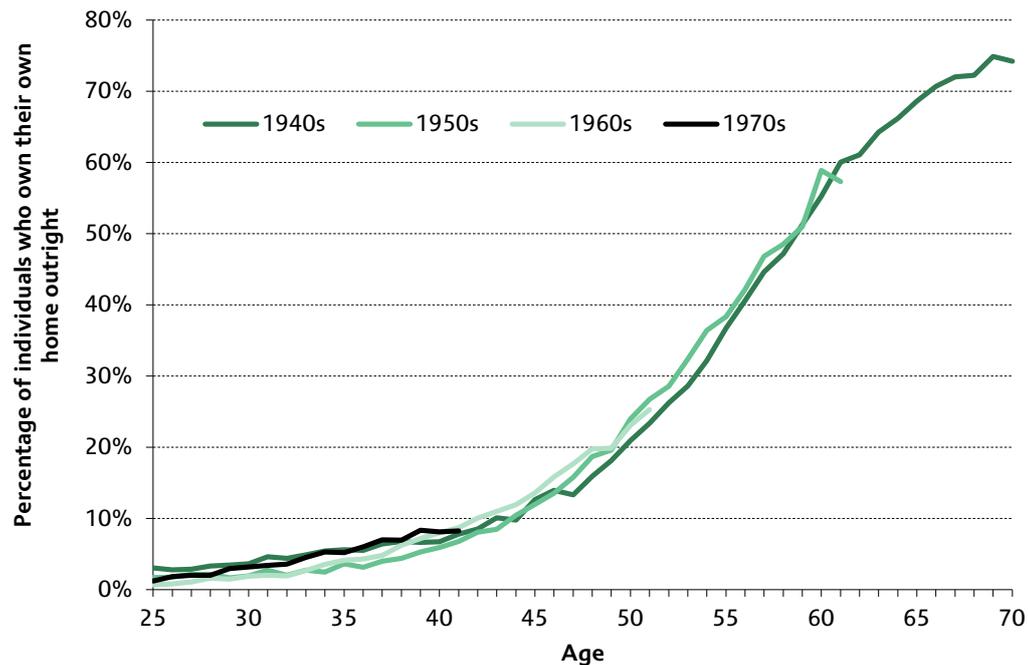
Of course, for homeowners in younger cohorts, these results need to be interpreted with caution. Their relatively high average annual returns are driven by the house price boom in the late 1990s and early to mid-2000s (just before the more recent fall in real house prices), and there is clearly huge uncertainty about what will happen over the 20 years or more before they reach retirement. (For these reasons, we do not include those born after 1970 in this analysis. The results for those cohorts would be dominated by very short-run, cyclical movements in house prices.) Note also that general house price growth after entering homeownership is not necessarily helpful to homeowners. By making upsizing more expensive, it may slow movements *up* the housing ladder. That could act to slow, rather than accelerate, the accumulation of housing wealth.⁵⁸

To summarise, homeowners in the two older birth cohorts considered in this report – the 1940s and 1950s cohorts – tend to differ in the rate of house price growth that they have experienced since becoming homeowners. The 1950s cohort have experienced slightly higher average annual growth than the prior 1940s cohort. The early 1960s cohort look similar in this respect to the 1950s cohort. Homeowners in the late 1960s cohort have so far experienced even higher average annual house price growth. However, this should not be weighted too highly at this stage when thinking about their likely economic position later in life. It is driven heavily by the house price boom in the late 1990s: much uncertainty remains about future movements in house prices over what will, for much of the cohort, be the majority of their time as homeowners.

Figure 3.16 shows the proportion of different birth cohorts who have owned homes outright – as opposed to having mortgage debt outstanding – at each age. The result is perhaps surprising. Despite the fact that the homeownership rate is now substantially lower for the 1970s cohort than for the 1940s and 1950s cohorts at the same age, the rate of *outright* homeownership (not simply among homeowners, but among all individuals) has not fallen. It would be interesting for future research to shed light on the reasons for this. One possibility, which we cannot test with these data, is that more young individuals are now being bought or gifted homes (most likely by parents), due to the greater perceived difficulty of getting on the housing ladder using their own resources. This is tentative evidence that property wealth is more unequally distributed in recent cohorts: more people are renting and fewer own homes with a mortgage, but just as many people own homes outright. It is important not to weight this too highly though. The rate of outright homeownership for the 1970s cohort at around age 40 is still only 8%. As the figure shows, the vast majority of movement into outright homeownership happens after this age.

⁵⁸ This could be related to the fact that the age of second-time buyers has increased by more than the age of first-time buyers in recent decades (<http://www.postoffice.co.uk/average-age-second-time-buyer>).

Figure 3.16. Outright homeownership rates by age and cohort



Source: Authors' calculations using Family Expenditure Survey and Family Resources Survey, various years.

In summary, trends in rates of homeownership across cohorts are one of the most striking of all the economic indicators considered in this report. The 1960s and (particularly) the 1970s cohorts are taking longer than their predecessors to get on the housing ladder, and the gap between cohorts has been growing over the last decade as homeownership rates for those born in the 1960s and 1970s have changed little.

We do not find evidence that renters in younger cohorts have been compensating for this by saving more. Those who do own homes appear to own properties of similar relative value to previous cohorts, and the proportion who own outright is no lower than for previous cohorts at the same age. Together, these factors provide tentative evidence that inequality in property wealth may be higher among the 1960s and 1970s cohorts than it was at the same age among those born in the 1940s and 1950s.

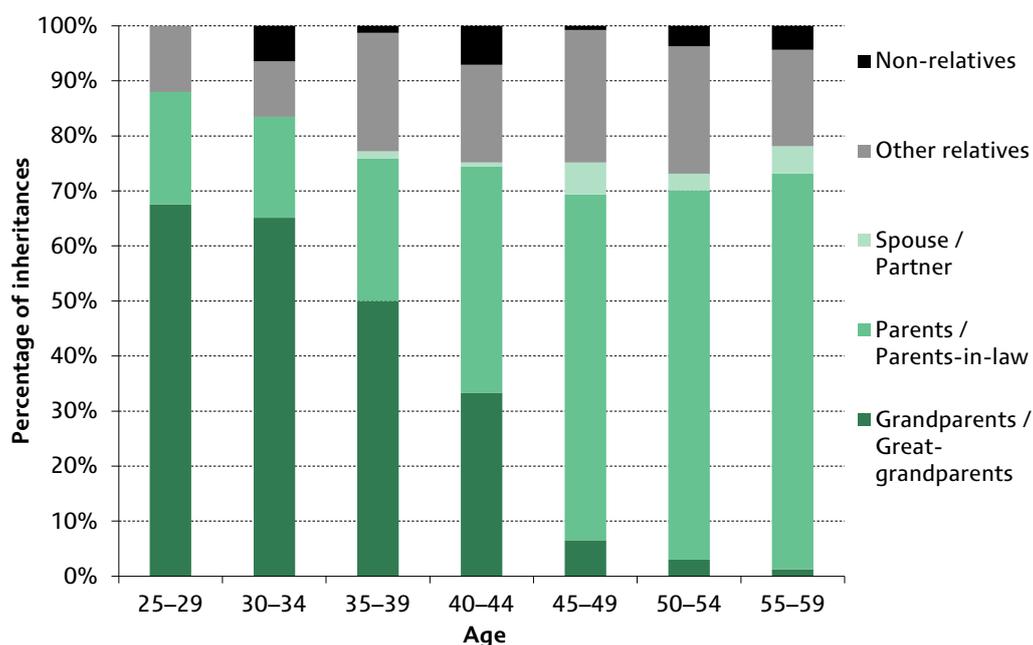
4. Inheritances

Another determinant of someone’s economic prospects is the wealth that they may inherit; and an expectation of substantial inheritances in future would be one good reason to accumulate less wealth now, all else equal. Having looked at the main components of wealth that cohorts have accumulated thus far, it is therefore important also to consider the likely role of inheritances.

We can look at this empirically using the Wealth and Assets Survey. The first wave of WAS, conducted between 2006 and 2008, asked about expected future inheritances and inheritances already received. The second wave, conducted between 2008 and 2010, again asked about inheritances received (but did not ask about expected inheritances).^{59,60}

Accounting for inheritances is particularly important when making cohort comparisons, for two reasons. First, as Figure 4.1 shows, a large majority of inheritances are transfers from one generation to the next. Most inheritances received during young adulthood are from grandparents or great-grandparents, and most of those received in middle age are from parents.

Figure 4.1. Sources of inheritances received in the past five years, by age (2008–10)



Source: Authors’ calculations using wave 2 of the Wealth and Assets Survey.

⁵⁹ Therefore these WAS data would not capture any significant effects of the financial crisis on expected inheritances.

⁶⁰ The ONS has published some statistics on the received inheritances reported in wave 2 of WAS (Office for National Statistics, 2013b). Rowlingson and McKay (2005) also provided a useful analysis of inheritances based on a (much smaller) survey of about 2,000 households in 2004.

Second, there are potentially big differences between birth cohorts in the importance of inheritances. Figure 4.2 plots the proportion of individuals who have received, or expect to receive, an inheritance at some point in their life, for cohorts born between the 1940s and the 1970s.⁶¹ Among individuals born in the early 1940s, 28% have received, or expect to receive, an inheritance. This proportion has risen steadily and rapidly across later birth cohorts, and is 70% for individuals born in the late 1970s. Hence, if people's expectations are correct, then the proportion of people in younger cohorts who will receive an inheritance looks far larger than the proportion in older cohorts who have done (or will do) so.^{62,63} This is perhaps a natural consequence of the sustained economic growth seen over the post-war period: each cohort's predecessors have had more wealth to pass on than the prior cohort's predecessors.

Figure 4.2. Percentage of individuals who have received, or expect to receive, an inheritance, by birth year (2006–08)



Source: Authors' calculations using wave 1 of the Wealth and Assets Survey.

Of course, for younger cohorts, the large majority of inheritances are expected rather than realised. It is therefore important to consider how these inheritances – if eventually realised – would relate to existing wealth holdings within cohorts. Figure 4.3 does this by correlating expected future inheritances with current household wealth. Note that, if an adult lives with someone whose wealth they

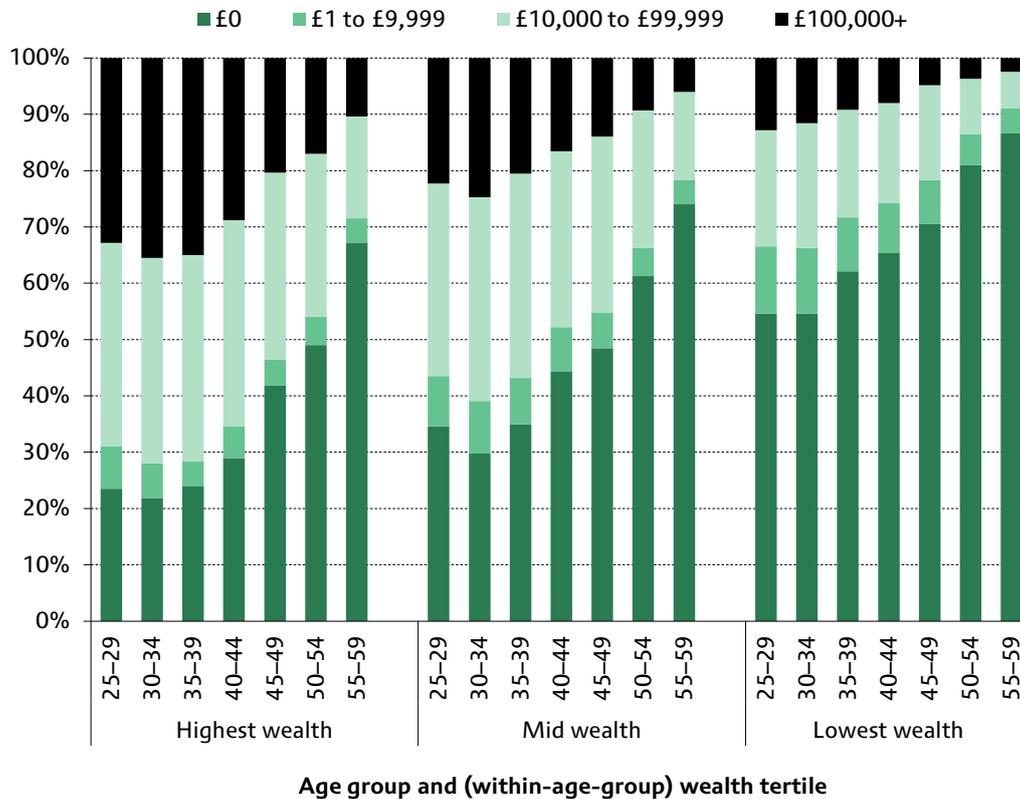
⁶¹ We define an expected inheritance as one that is deemed 'fairly likely', 'very likely' or 'definite'.

⁶² Estimates presented in figure 3.2 of Rowlingson and McKay (2005), using a different (much smaller) survey and hence looking at somewhat more broadly defined birth cohorts (approximately 20-year bands), suggested a similar conclusion.

⁶³ We acknowledge the possibility that differences between cohorts could be exaggerated if older individuals have more difficulty recalling previous receipts of inheritances, on the basis that they happened longer ago.

expect to (partly) inherit – most likely a parent or grandparent – this would create a mechanical relationship between current household wealth and expected inheritance. This analysis therefore excludes individuals in households that contain an adult other than the household head and their partner.

Figure 4.3. Expected value of future inheritances, by age and current net household wealth (2006–08)



Note: Monetary amounts are nominal values at the time of interview (between 2006 and 2008): unlike other monetary amounts in this report, they have not been uprated to 2011–12 prices. Analysis excludes individuals in households that contain an adult other than the household head and their partner (for example, it excludes individuals in households containing both a non-dependant and their parent(s)).
 Source: Authors’ calculations using wave 1 of the Wealth and Assets Survey.

The figure shows that the likely importance of future inheritances varies greatly within cohorts. The individuals who are most likely to think that they will receive inheritances – and to receive *large* inheritances – are those who already have the highest net wealth. For example, of the 30–34 age group in 2006–08 (born between 1972 and 1978), 78% of the wealthiest third expected a future inheritance, compared with 45% for the least wealthy third. Continuing with the same age group, 35% of the wealthiest third and 12% of the least wealthy third expected a future inheritance worth at least £100,000.⁶⁴

⁶⁴ Unsurprisingly, in all wealth groups, the prevalence of expected future inheritances is higher for younger people. This is not informative about cohort differences in lifetime inheritance (unlike Figure 4.2), because older individuals in any cohort are more likely to have already received any inheritances that they will get over their lifetime. To emphasise this point, we label the horizontal

Banks et al. (2005) also documented a positive correlation between expected future inheritances and current wealth, for a sample of individuals in England born between 1937 and 1953.⁶⁵ Figure 4.3 shows that a strong correlation persists for younger cohorts, for whom inheritance looks like it will also be far more important (see Figure 4.2). The findings also fit with earlier work by Rowlingson and McKay (2005). These authors were not able to look at current wealth and its association with inheritance, but they did show that expectations of future inheritance were associated with other correlates of economic advantage. For example, those on low incomes, social housing tenants and lone parents were less likely than average to expect an inheritance.⁶⁶

Another dimension of inequality in inheritances is the extent to which individuals who will get them are concentrated within the same households.⁶⁷ Figure 4.4 breaks down the expected value of individuals' future inheritances according to the expected value of their partner's future inheritances, for individuals in their 30s when the survey was conducted between 2006 and 2008. This reveals a substantial correlation between the expected inheritances of partners. Among individuals whose partner expects no inheritance, 36% expect an inheritance themselves and only 9% expect an inheritance of at least £100,000. Among individuals whose partner expects an inheritance of at least £100,000, 87% expect an inheritance themselves and 52% expect an inheritance of at least £100,000.⁶⁸

In summary, and contrary to many of the other indicators of economic position analysed in this report, younger cohorts expect to benefit from significantly higher inherited wealth than cohorts who are already at or around pensioner age. Most of this inheritance will almost certainly come from prior generations. Hence, this is an important angle to cover when comparing the economic circumstances of those born at different times. Inheritance looks set to act to make the younger cohorts significantly better off in retirement than they would otherwise be, on average, both in absolute terms and relative to their predecessors. On the other hand, the significant inheritances that younger cohorts expect to receive in future are very unequally distributed. They are far

axis in Figure 4.3 according to age rather than birth year, even though there is a correspondence between the two.

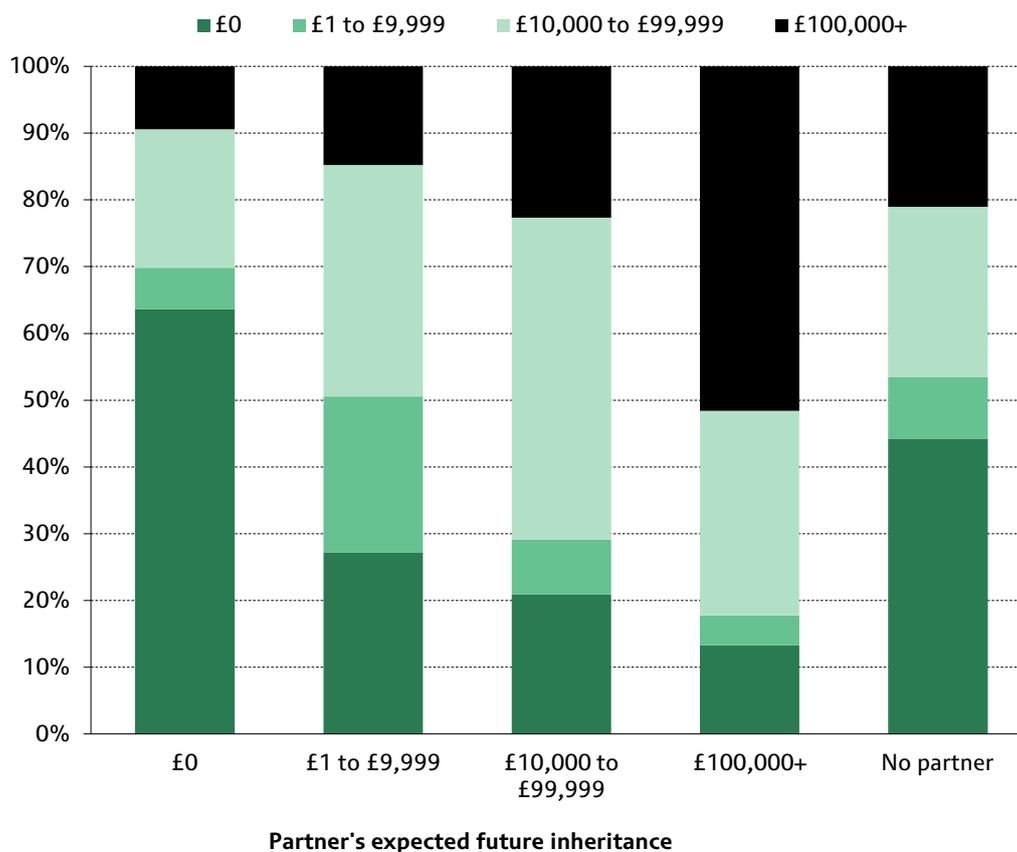
⁶⁵ See figure 5.1 of Banks et al. (2005). Those authors used the first wave of the English Longitudinal Study of Ageing, conducted in 2002–03. The individuals were aged between 50 and the state pension age at the time of interview.

⁶⁶ See table 2.2 of Rowlingson and McKay (2005).

⁶⁷ In other words, the extent of so-called 'assortative matching' on inheritance.

⁶⁸ We acknowledge that a correlation between partners' expected inheritances would be spurious if people count their partner's inheritance as their own inheritance. We judge that this is unlikely here, because inheritances are formally transfers to individuals (not families or households) and because each individual in surveyed households was asked about inheritances separately. To err on the side of caution, however, as in Figure 4.3 we do exclude individuals in households that contain an adult other than the household head and their partner. This is to guard against the possibility that both members of a couple might think of themselves as likely to inherit the house from a cohabitee (the most obvious example being where the couple lives with one of the member's parent(s)).

Figure 4.4. Expected value of future inheritances among individuals in their 30s, by partner's expectations of own inheritances (2006–08)



Note and source: As for Figure 4.3.

more prevalent, and far higher in value, for those who already have relatively high net wealth; and individuals who expect inheritances are far more likely to have partners who also expect them.

5. Conclusion

This report has analysed and compared the economic circumstances of individuals born between the 1940s and the 1970s inclusive. The results suggest that the rapid improvement in economic outcomes across birth cohorts that we have seen in recent decades may be coming to a halt.

When compared with those born a decade earlier at the same age, individuals born in the 1960s and 1970s have no higher take-home income, have saved no more previous take-home income, are less likely to own a home and are likely to have lower private pension wealth. They will also tend to find that their state pensions replace a smaller proportion of prior earnings than is the case for those currently above, or around, the state pension age – although that difference across cohorts is smaller for low earners and for those who have spent time out of work caring for children.

Many of these are straightforward consequences of economic and societal trends. The lack of working-age income growth over the past decade is why younger cohorts do not have higher incomes than those born 10 years earlier had at the same age. The rapid switch away from defined benefit pension schemes towards typically less generous defined contribution schemes means that younger cohorts are likely to be accumulating less private pension wealth. Policy changes – themselves often driven by the inevitable fiscal pressures associated with an ageing society – explain the key changes across cohorts in state pension entitlements. For some of the other trends, there are multiple possible explanations, and these should be the focus of future research. One particularly important issue is why younger cohorts spent all, and saved none, of the additional income that they had in young adulthood relative to their predecessors.

Inheritances look like the major potential reason why the later economic position of cohorts born in the 1960s and 1970s could yet turn out better than that of their predecessors, on average. If people's expectations are correct, then the number in younger cohorts who will receive an inheritance is far larger than the number in older cohorts who have done (or will do) so. In combination with the lack of positive signs with respect to other economic indicators, this suggests that the economic fate of the 1960s and 1970s cohorts may be relatively dependent on the fortunes of their parents. But the prevalence and value of expected future inheritances are distributed unequally, with households that are already relatively wealthy far more likely to benefit. It is important for policymakers to be aware of these signs. A challenge for future work is to consider the ways in which they could and should respond.

References

Attanasio, O. P., Blow, L., Hamilton, R. and Leicester, A. (2009), 'Booms and busts: consumption, house prices and expectations', *Economica*, vol. 76, pp. 20–50.

Banks, J., Blundell, R. and Tanner, S. (1998), 'Is there a retirement-savings puzzle?', *American Economic Review*, vol. 88, pp. 769–88.

Banks, J., Crawford, R., Crossley, T. and Emmerson, C. (2012), 'The effect of the financial crisis on older households in England', Institute for Fiscal Studies (IFS), Working Paper no. W12/09 (<http://www.ifs.org.uk/wps/wp1209.pdf>).

Banks, J., Emmerson, C., Oldfield, Z. and Tetlow, G. (2005), *Prepared for Retirement? The Adequacy and Distribution of Retirement Resources in England*, Report no. R67, London: Institute for Fiscal Studies (<http://www.ifs.org.uk/publications/3443>).

Barrett, G., Levell, P. and Milligan, K. (2013), 'A comparison of micro and macro expenditure measures across countries using differing survey methods', National Bureau of Economic Research (NBER), Working Paper no. 19544 (<http://www.ifs.org.uk/publications/6901>).

Blundell, R. and Preston, I. (1998), 'Consumption inequality and income uncertainty', *Quarterly Journal of Economics*, vol. 113, pp. 603–40.

Bottazzi, R., Crossley, T. and Wakefield, M. (2012), 'Late starters or excluded generations? A cohort analysis of catch up in home ownership in England', Institute for Fiscal Studies (IFS), Working Paper no. W12/10 (<http://www.ifs.org.uk/publications/6170>).

Bozio, A., Crawford, R. and Tetlow, G. (2010), 'The history of state pensions in the UK: 1948 to 2010', Institute for Fiscal Studies (IFS), Briefing Note no. BN105 (<http://www.ifs.org.uk/bns/bn105.pdf>).

Brewer, M., Browne, J., Hood, A., Joyce, R. and Sibieta, L. (2013), 'The short- and medium-term impacts of the recession on the UK income distribution', *Fiscal Studies*, vol. 34, pp. 179–201.

Brewer, M., Costa Dias, M. and Shaw, J. (2012), 'Lifetime inequality and redistribution', Institute for Fiscal Studies (IFS), Working Paper no. W12/23 (<http://www.ifs.org.uk/wps/wp1223.pdf>).

Brewer, M. and O'Dea, C. (2012), 'Measuring living standards using income and consumption: evidence from the UK', Institute for Fiscal Studies (IFS), Working Paper no. W12/12 (<http://www.ifs.org.uk/publications/6276>).

Browne, J., Hood, A. and Johnson, P. (2013), 'Options for cutting spending on social security', in C. Emmerson, P. Johnson and H. Miller (eds), *The IFS Green Budget: February 2013*, London: Institute for Fiscal Studies (http://www.ifs.org.uk/budgets/gb2013/GB2013_Ch8.pdf).

- Campbell, J. and Cocco, J. (2007), 'How do house prices affect consumption? Evidence from micro data', *Journal of Monetary Economics*, vol. 54, pp. 591–621.
- Crawford, R., Emmerson, C. and Tetlow, G. (2010), 'Occupational pension value in the public and private sectors', Institute for Fiscal Studies (IFS), Working Paper no. W10/03 (<http://www.ifs.org.uk/publications/4804>).
- Crawford, R., Keynes, S. and Tetlow, G. (2013), *A Single-Tier Pension: What Does It Really Mean?*, Report no. R82, London: Institute for Fiscal Studies (<http://www.ifs.org.uk/publications/6796>).
- Cribb, J., Hood, A., Joyce, R. and Phillips, D. (2013), *Living Standards, Poverty and Inequality in the UK: 2013*, Report no. R81, London: Institute for Fiscal Studies (<http://www.ifs.org.uk/publications/6759>).
- Department for Work and Pensions (2013), 'Pensions and growth: a call for evidence' (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221423/pensions-and-growth-call-for-evidence.pdf).
- Disney, R. and Emmerson, C. (2005), 'Public pension reform in the United Kingdom: what effect on the financial well-being of current and future pensioners?', *Fiscal Studies*, vol. 26, pp. 55–81.
- Disney, R., Emmerson, C. and Wakefield, M. (2008), 'Pension provision and retirement saving: lessons from the United Kingdom', *Canadian Public Policy*, vol. 34, pp. 155–76 (<http://www.ifs.org.uk/publications/4443>).
- Joyce, R. and Phillips, D. (2013), 'Tax and welfare reforms planned for 2013–14', in C. Emmerson, P. Johnson and H. Miller (eds), *The IFS Green Budget: February 2013*, London: Institute for Fiscal Studies (http://www.ifs.org.uk/budgets/gb2013/GB2013_Ch7.pdf).
- Office for Budget Responsibility (2013), *Fiscal Sustainability Report: July 2013* (<http://budgetresponsibility.org.uk/fiscal-sustainability-report-july-2013>).
- Office for National Statistics (2013a), 'Occupational Pension Schemes Survey, 2012', Statistical Bulletin (http://www.ons.gov.uk/ons/dcp171778_328287.pdf).
- Office for National Statistics (2013b), 'Inheritance in Great Britain, 2008/10' (http://www.ons.gov.uk/ons/dcp171776_333036.pdf).
- Pessoa, J. P. and Van Reenen, J. (2012), *Decoupling of Wage Growth and Productivity Growth? Myth and Reality*, London: Resolution Foundation (<http://www.resolutionfoundation.org/publications/decoupling-wage-growth-and-productivity-growth-myt>).
- Rowlingson, K. and McKay, S. (2005), *Attitudes to Inheritance in Britain*, York: Joseph Rowntree Foundation (<http://www.jrf.org.uk/sites/files/jrf/1861347707.pdf>).

Scholz, J. K., Seshadri, A. and Khitatrackun, S. (2006), 'Are Americans saving optimally for retirement?', *Journal of Political Economy*, vol. 114, pp. 607–43.

van de Ven, J. (2011), 'Expenditure and disposable income trends of UK households: evidence from micro-data', *National Institute Economic Review*, no. 218, pp. 43–57.