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The income and asset profiles of cohorts born in 1960 and 1975 and the likely adequacy of accumulated resources in supporting these cohorts in retirement

Future of an ageing population: evidence review

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The income and asset profiles of cohorts born in 1960 and 1975 and the likely adequacy of accumulated resources in supporting these cohorts in retirement

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Executive summary

Demographic shifts and changing economic circumstances shape the lifetime income and asset profiles of cohorts. Policy changes have affected the incentives for individuals to accumulate assets, the value of these assets in retirement, and how individuals can access personal pension funds. This review examines evidence on the economic fortunes of cohorts that reach 65 in 2025 and 2040 (1960 and 1975 birth cohorts) and the likely adequacy of their retirement income.

The 1960 and 1975 cohorts both entered the labour market during periods of high unemployment and evidence suggests that this will have left differential wage scars. A greater share of the 1975 cohort participated in higher education and by the time graduates entered the labour market, unemployment was considerably lower than for those who entered at the end of compulsory schooling. House price booms are likely to have had a negative impact on the chances of the 1975 cohort becoming homeowners as property prices put owner-occupation out of reach for many. Real wage falls following the 2008 recession wiped out earlier relative gains. Their average wages are now no higher in real terms than cohorts born a decade earlier at the same age.

Falling real wages and increases in unemployment have led to falls in real incomes and it looks as though these cohorts will be worse off in real terms than previous generations. Some experts are suggesting that weak productivity and falling/stagnant real wages may be here for some time. Home ownership has been delayed among younger cohorts and may remain permanently lower. Household savings are down and rental costs are rising. However, a significant proportion of the 1975 cohort is expecting to receive an inheritance and this may increase home ownership or investments.

Life expectancy rates have increased but so too have state pension ages, particularly for women. Women in both cohorts are more likely to have been employed throughout their working lives and to work for longer than their predecessors.

Both cohorts have experienced a lifetime of pension reforms. These include the introduction of a second-tier State Earnings Related Pension Scheme (SERPS), subsequently replaced by a less generous State Second Pension (although more generous for lower-paid workers), which is now on the verge of being superseded by the single-tier State Pension. Stakeholder pensions and then auto-enrolment into workplace pensions have added to the pension landscape. Occupational pensions have changed from being predominantly defined benefit (final salary) to defined contribution in the private sector and increasingly so in the public sector, reducing generosity for many. There have also been radical changes in the way private pension savings can be accessed. Annuitisation is no longer compulsory and individuals can choose how much and how often they drawdown from their pension pots.

Evidence on the likely adequacy of retirement income suggests that for many, state provision is unlikely to be enough to maintain standards of living in retirement even though fewer retirees should be reliant on means-tested transfers. Estimates also suggest that minimum contribution rates for workplace pensions along with state provision will still fall short of providing an adequate income in retirement for some.

The 2007/08 financial crisis and recession has taken its toll on the financial circumstances of these two cohorts. Falling wages and household incomes have occurred over the critical wealth

accumulation stage of the life cycle. The signs are that younger cohorts have fared even worse. Whether or not they make up lost ground before they complete their retirement saving is dependent on macroeconomic conditions and productivity growth but also they may be able to bridge the shortfall through intergenerational transfers. Their parent's generation benefitted from increasing private wealth holdings (and many appear to have over-saved), but there remains uncertainty around how much of their wealth will be required to cover social care needs.

I. Introduction

This review examines the evidence on what is currently known about the likely adequacy of financial resources available to support the retirement of two cohorts who reach 65 in 2025 and 2040 (1960 and 1975 birth cohorts). In particular it examines income and asset profiles and the role that wealth transfers are likely to play. It explores the main factors and drivers of change affecting these profiles, such as the impact of changes in employment over the life course, housing, pension reform and savings behaviour.

In the assessment of adequacy of income in retirement it is noted at the outset that there are a number of different definitions, with no definitive or 'correct' measure (Crawford and O'Dea, 2012). One method estimates replacement rates required to maintain consumption close to working life levels during retirement. An alternative approach is to assess whether or not retirement income is adequate in terms of meeting a minimum income standard, for example if it is sufficient to ensure that income is above the level of means-tested assistance in retirement or above a defined poverty threshold. Finally, a third form of adequacy assessment can be applied which is benchmarked by average standards of living enjoyed by the working age population.

This review will draw on evidence that is based on any one of these definitions of adequacy, with a number of assessments combining more than one. The first is likely to be closest to what people seek to achieve, based on an extensive literature on the desire of individuals to smooth life cycle income (Browning and Crossley, 2001). The second is important for assessing minimum levels of absolute adequacy. The third is a relative measure and difficult to forecast for future retiring cohorts (depending on retirement income, working age living standards and indexation policy).

The last comprehensive review of UK pensions examining the likely adequacy of the income of future cohorts in retirement and setting out a number of recommendations for pension reform was conducted by the Pensions Commission (PC). The PC recommended using observed gross actual replacement rates as 'benchmarks' (Pensions Commission, 2004, 2005) to assess adequacy. These replacement rates are typically less than 100%, reflecting the lower cost of living in retirement (see examples of cost savings given in Crawford and O'Dea, 2014) and lower taxes. The PC estimated that someone on average earnings who saved 10% of gross income during working life should be able to maintain consumption at 100% with a gross replacement rate of 77% (Pensions Commission, 2004).

A further issue affecting any assessment of adequacy is that there is no consensus on which assets should be used to calculate potential retirement income (see Crawford and O'Dea, 2012). Many suggest that housing equity held in an individual's home should not be included due to evidence that this asset is rarely liquidated to provide pension income and is typically used to fund bequests, although others have found evidence of downsizing in the years leading up to retirement (Banks *et al.*, 2010), suggesting that a share of housing wealth can be liquidated.

Assessing the adequacy of savings for retirement for cohorts due to retire 10 and 25 years from now is hampered by the fact retirement saving is currently incomplete. They are also not near enough to retirement to be able to assess what level of income they would be aiming to replace; typically measured just prior to retirement (age 50 to state pension age), or on the basis of average lifetime earnings (Redwood *et al.*, 2013).

The Evidence Review builds up a picture of factors shaping the income and asset profiles of the cohorts, reviews evidence on the likely adequacy of these resources in retirement and the key factors that contribute to uncertainty in these assessments.

2. Demographic change and retirement

How long people live directly affects how much they need to save to achieve an adequate income in retirement, and during the lifetime of both cohorts typical life expectancy has increased. Cohort-based estimates are calculated using age-specific mortality rates that allow for known or projected changes in mortality in later years – this method is considered to be the most reliable. The latest Office for National Statistics (ONS) cohort-based estimates show that women in the 1960 and 1975 birth cohorts are expected to live, on average, 2.6/2.5 years longer than men (Table 1). Life expectancy for the 1975 cohort is 1.7 (1.6) years longer on average for men (women) than for the 1960 cohort. This means that the 1975 cohort should plan to save more than the 1960 cohort assuming that the additional years are spent in retirement, or plan to extend their working lives – likewise for women.

There remains uncertainty with these projections and along with the principal projections, high and low projections are also published demonstrating the large plausible range with greater uncertainty for the younger cohort.

Table 1: Cohort-based estimates of average life expectancy at age 65 – years (ONS principal, high and low projections)

65 in year	Projections	Men	Women
2025	Principal	22.8	25.4
	High	25.5	28.1
	Low	20.6	23.2
2040	Principal	24.5	27.0
	High	29.5	32.0
	Low	20.7	23.2

Source: Historic and Projected Mortality Data from the Period and Cohort Life Tables, 2012-based, UK (revised), 1981–2062 (Office for National Statistics, 2014a).

Period life expectancy estimates are based on the average number of years a person would live if he/she experienced the age-specific mortality rates measured at a point in time, throughout his/her life. It makes no allowance for any future actual or projected changes in mortality and tends to underestimate life expectancy. However, using period-based life expectancy figures it is possible to obtain estimates for different socio-economic groups which reveal strong social gradients in life expectancy, highlighting the fact that there is systematic variation in life expectancy, a factor that also needs to be considered when it comes to pension planning.

A consequence of increasing life expectancy is that the UK population has been ageing for some time, with the population aged 85 and over being the fastest growing age group (Falkingham *et al.*, 2010). Another striking feature has been the increase in older people living alone in private households; in the early 2000s it was estimated that half of men and two-thirds

of women aged 85 and over were living alone (Falkingham *et al.*, 2010). The increasing incidence of disability with age suggests that without significant medical advances, a larger share of the population will be living with high support needs and those living alone will not have access to co-residential informal care. While the proportion of healthy life expectancy in retirement appears to be relatively stable, longer life expectancy means that on average individuals should expect to live for a greater number of years in ill health. Depending on the future generosity of disability-related benefits for older people, and the extent to which individuals are expected to privately fund social care needs, these demographic changes will impact on the financial needs of older people.

The second factor affecting the number of years over which individuals need to secure an adequate retirement income is the age at which they retire. Retirement has increasingly become a much more gradual process, with an increase in extended working both in employment and in self-employment.

One factor that affects people's retirement decision is the age at which they can draw a pension income, particularly the state pension age (SPA) (Benito and Bunn, 2011). Legislative changes (Pension Acts 1995, 2011, 2014) have put in place steps to align the SPA between men and women and to increase the SPA beyond age 65. For men and women born in 1960 their SPA will be somewhere between 66 and 67 years, depending on the month in which they were born.

Applying the formula outlined in the 2013 Autumn Statement, a cohort should expect to spend approximately one-third of their life drawing a state pension, and based on current projections, the SPA should rise to 68 by the mid-2030s, and 69 by the late 2040s. It is most likely that the 1975 cohort will reach SPA at age 68.

Other important demographic changes affecting these cohorts, particularly women, are increases in lone parent families, lower fertility rates, later age of family formation and the dual caring burden borne mostly by women caring for children *and* elderly parents. The review considers these changes in the next section, which examines changes in labour force participation and employment.

3. Education, employment and earnings

Education, employment and earnings shape an individual's lifetime earnings and income and their ability to accumulate assets. These are factors that vary between and within cohorts. The next two sections examine the economic timelines of the cohorts and the final section looks at general trends.

3.1 The 1960 cohort

The 1960 cohort grew up in a period of buoyant GDP growth until they reached age 13 and the first of the 1970s oil price shocks preceded a recession (figures in Appendix A). There was a period of improved growth from age 16 until age 20, when the economy was again in recession. A long period of economic growth followed (age 21–31), until the early 1990s recession. This was followed by a long and stable period of economic growth until they were aged 48 and the 2007/08 financial crisis caused a deep recession. Faltering growth returned as they approached 50.

This meant that the 1960 cohort entered the labour market at age 16, just prior to a deep recession and high levels of unemployment, which remained high (around 12% at age 21 and no doubt even higher for this age group); unemployment fell to 6.5% at age 30 but then increased again, reaching a peak of around 11% when they were aged 32/33. Unemployment gradually fell over the next 9 years and as this cohort gained work experience their unemployment rates were around 2% lower than average rates. When unemployment rates increased again in 2008 (cohort aged 48), their unemployment rates were lower than the population average and they appear to have benefitted from the fact that this recession seems not to have had a strong negative impact on older workers' unemployment and inactivity rates, in contrast to earlier recessions.

For those in work, average real wages grew steadily with age, faltering slightly as a result of the early 1990s recession in their early 30s, but then continued rising until the 2008 recession, which was marked by large and sustained falls in average real wages.

The 1960 cohort experienced a period of rapidly increasing income and earnings inequality and falling earnings mobility while they were in their 20s, and since then earnings inequality has remained high (McKnight, 2000; Dickens and McKnight, 2008; McKnight and Tsang, 2014).

Staying-on rates at age 16 and 17 had started to increase in the 1960s but from a very low base. Compulsory school-leaving age increased from 15 to 16 in 1972 and by the time the 1960 cohort finished compulsory education in 1976 it was still the case that the majority left at age 16 (Bolton, 2012). Only a small minority went on to higher education – around 14% of the 1960 cohort (Dearing, 1997).

3.2 The 1975 cohort

The first 5 years of the 1975 cohort's life was through the rather turbulent period of the second half of the 1970s (figures in Appendix B). This was a period of fluctuating GDP growth until the early 1980s recession, and then a period of fairly strong growth between the ages of 10 and 15, prior to the early 1990s recession. Growth returned when they were aged 17 and a long period of economic growth followed, through to the age of 33 and the start of the 2008 recession.

Faltering growth returned for a couple of years with what appears to be somewhat more stable growth from age 38.

School leavers from the 1975 cohort entered the labour market during the early 1990s recession, with very high prevailing rates of youth unemployment (18–20% among 16–17 year olds, much higher than the 10–11% average rate). The unemployment rate among young adults (18–24 years) declined but remained relative high. With a long period of economic growth and more established careers the cohort experienced lower average unemployment rates (4–5%) through to their early 30s. Unemployment rates did increase for this age cohort during the 2008 recession but were generally lower than average.

Average real hourly wage rates increased strongly from their late 20s through to the onset of the 2008 recession; average real hourly wages were considerably higher than for a cohort born 10 years earlier at the same age. However, real average wages continued to fall after the 2008 recession (growth resumed in 2014 but this was largely due to falling inflation rates), wiping out any of the gains that this cohort had made (Figure 1). Falls in average real wages would have been even greater if compositional factors had been taken into account as low-skilled and lower-paid workers were most likely to have lost their jobs during the recession (Office for National Statistics, 2014b). Gregg *et al.* (2014) suggest that the recent falls in real wages may represent a longer-term structural change.

Post-16 school staying-on rates continued their upward trend and the majority of the 1975 cohort stayed on at school at age 16 and 17 (Bolton, 2012). The cohort turned 18 in 1993, just a year after the abolition of the binary divide between polytechnics and universities, and close to 30% of this cohort participated in higher education (Great Britain; Dearing, 1997). Those that attended higher education entered the labour market during a period of much lower average unemployment than their peers who left education before the age of 21.

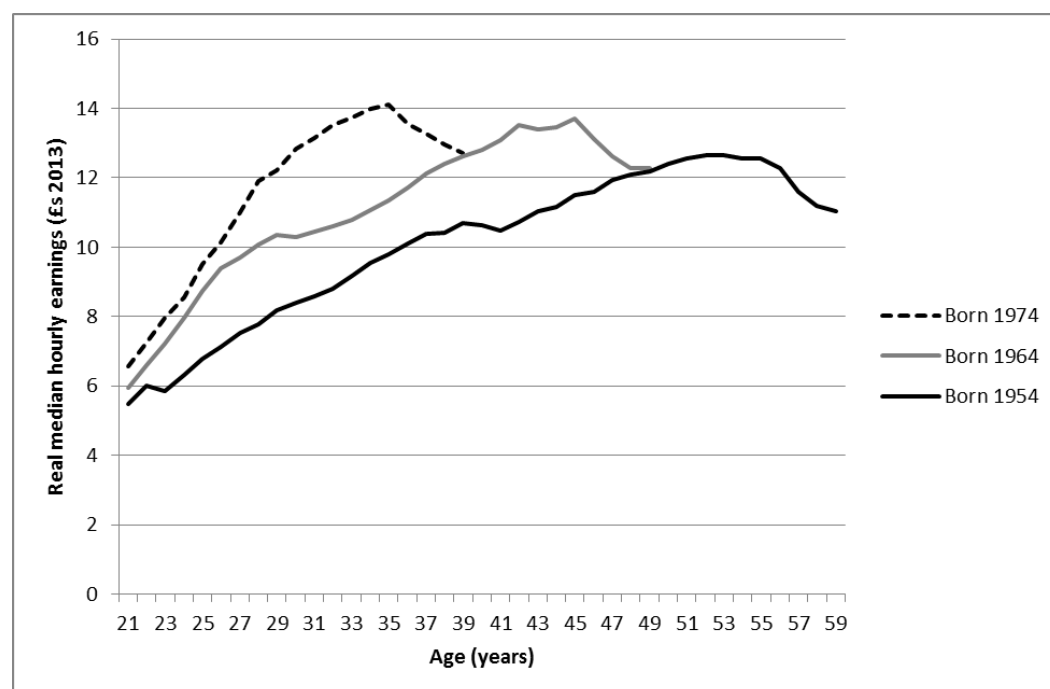


Figure 1: Real hourly wage lifetime profile from age 21 for cohorts born in 1954, 1964 and 1974

Source: New Earnings Survey/Annual Survey of Hours and Earnings Panel Dataset 2013 (Office for National Statistics, 2014b).

3.3 Wider trends

Trends in labour force participation rates in the UK have diverged for men and women over the past 40 years, with participation rates increasing by over 10% for women and falling by over 10% for men (16 years and older) (Benito and Bunn, 2011; Office for National Statistics, 2013). A range of factors have contributed to these trends. For women, delayed family formation, lower fertility rates, increases in education, access to childcare, anti-discrimination legislation, in-work benefits, welfare-to-work reforms, increases in the SPA and changes to social mores have more than offset the effects of population ageing. For men, the effect of population ageing, increases in work-limiting disability and increases in higher education participation rates have all contributed to falling labour force participation rates.

Participation rates have been increasing for successive cohorts of women, particularly between their late 20s and their late 30s (Benito and Bunn, 2011), where previously participation rates declined markedly during years of child-rearing. Greater participation increases individual lifetime earnings and the ability of these women to accumulate assets to fund retirement income but, depending on the measure of adequacy, also increases the level of replacement income that needs to be achieved.

One factor that will help towards individuals meeting their desired replacement income in retirement is extended working. Extended working contributes earned income to the household for longer, increases potential years of pension accumulation and can reduce the number of years over which pension income is relied upon. Increases in the SPA will have this effect but also decisions made by individuals to work for longer than the SPA or to choose not to drawdown on private pensions from the lowest age before incurring high tax rates (increasing from 55 to 57 in 2028). Trends over the last decade or so preceding the recession show increases in extended working (Banks and Tetlow, 2008; Office for National Statistics, 2009), which varies by socio-economic status, education, marital status, household circumstances and caring commitments; extended working is more common among the higher qualified, those in higher status occupations and those who were still paying a mortgage, but lower among those with caring responsibilities (Office for National Statistics, 2009).

Both cohorts entered the labour market during periods of high youth unemployment. Economists have identified a scarring effect on individuals' future employment prospects, earnings capabilities and pension rights (Gregg and Tominey, 2005, find 13–21% wage scars) with some evidence that negative effects are felt across the whole cohort entering the labour market during periods of high unemployment, not just those who experience unemployment (Kahn, 2010).

Work-limiting disability rates among the working age population have increased over the past 40 years and while the cause of this increase remains disputed, a larger share of cohorts retiring in the future will have spent part of their working lives with a work-limiting disability or long-standing illness. For this group, evidence shows that employment and participation rates are lower, low pay is more prevalent and income poverty rates are higher (Jones, 2008; Department for Work and Pensions, 2013a). Recent research has shown that there is a large and distinct disability–wealth gap which increases with the length of disability spells (McKnight, 2014). For this group of people, pension assets are particularly low and they are likely to be reliant on means-tested support in retirement.

The recent recession has been marked by substantial falls in productivity. Current estimates show a shortfall of around 15% below trend (Valero and Roland, 2015) and while age-specific

breakdowns are not available this is likely to have impacted on both cohorts. Although employment held up well over the recession, wages took a hit as productivity fell.

Relatively high rates of immigration over the past 15 years, particularly among prime age workers, have no doubt helped to keep the dependency ratio down as the UK-born population aged. What remains unknown is whether or not the recent influx of migrants will remain in the UK into retirement and whether there are any key differences in terms of their retirement income planning.

4.A Lifetime of pension reform

This section provides an overview of the main aspects of pension reform from a cohort perspective; it is not intended to be a comprehensive review of pension policy reform.

4.1 State pension reform

Both cohorts have been in a position to build up entitlement to the basic state pension since entering the labour market. A second-tier earnings-related pension called the State Earnings Related Pension Scheme (SERPS) was introduced when the 1960 cohort was aged 18 (1978). If they were working at this age (the majority were), then they would have had the opportunity to pay into SERPS for a maximum of 25 years (11 years for the 1975 cohort) until it was replaced by the State Second Pension (S2P) in 2002 (1960 age 43, 1975 age 27). Alternatively they could have chosen to contract out and pay into an occupational pension. In 2016 the basic state pension and S2P will be replaced by a flat-rate single-tier state pension (STP) and it will no longer be possible to contract out (for more information on STP, its likely impact and transitional arrangements see Crawford *et al.*, 2013; Department for Work and Pensions, 2013b; and the Pensions Policy Institute website, www.pensionspolicyinstitute.org.uk/publications/reports/ppi-single-tier-series-the-impact-of-the-governments-single-tier-state-pension-reform). To qualify for a full STP individuals need 35 years of National Insurance contributions (30 required for full basic state pension).

4.2 Private pension reform

Two major developments in private pensions that will impact on the resources accumulated by the cohorts and how they access these resources in retirement are the introduction of automatic enrolment into a workplace pension and the removal of the requirement to convert a private pension pot into a retirement income stream through the purchase of an annuity.

From 2012 employers have been required to automatically enrol their employees into a workplace pension (larger employers from October 2012, gradually rolling out to smaller employers, to be completed by February 2018).

All employees aged between 22 and the SPA, with earnings above a minimum threshold, are automatically enrolled, but employees have a right to opt out. Recent estimates suggest that around 9–10% of qualifying employees have opted out (Department for Work and Pensions, 2014). Higher rates of opt-out were found among women and workers approaching SPA.

Auto-enrolment will result in a larger share of cohort members contributing to a private pension who will benefit from the legal requirement that employers contribute a minimum of 3% of qualifying earnings (a band of earnings for which contributions are due), which together with employee contributions will result in a minimum 8% of band earnings being paid into a private pension.

Over recent years there has been a widespread move to replace defined benefit (DB) private pensions with defined contribution (DC) schemes. This has accompanied changes regarding annuitisation. While large DB occupational pension schemes do not need to use annuities to convert pension pots into income streams – they pool risks and pay pension liabilities to their members from their own resources – most other pension schemes convert pension funds into

reliable pension income through the purchase of lifetime annuities from insurance companies. Until recently there has been a requirement to annuitise these pension funds to qualify for favourable tax treatment; designed specifically to incentivise people to save for retirement (not to subsidise other purposes for savings: bequests, etc.). The most likely outcome is that there will be much greater variability in retirement income than there has been with annuitisation.

New rules from April 2015 allow members of DC schemes to take out a flexi-access drawdown arrangement – 25% of pension funds can be taken as an up-front tax-free lump sum from the age of 55 (57 for 1975 cohort). Any income taken at a later date or above the 25% initial lump sum will be taxed at the marginal rate of income tax. As an alternative, a new type of drawdown product has been introduced – the ‘uncrystallised funds pension lump sum’ – which allows DC scheme members 25% of any drawdown to be taken tax-free on condition that the up-front 25% tax-free lump sum was not taken. The new rules have removed any previously applied caps and any requirement to purchase an annuity.

It is far too early to tell how the two cohorts will choose to manage their pension funds, what products providers will offer to consumers, the extent to which the policy change will lead to tax-advantaged savings and the tax-free lump sum elements funding bequests.

5. Income, asset ownership, inflation and interest rates

A recent assessment of the economic circumstances of cohorts born between the 1940s and the 1970s (Hood and Joyce, 2013) provides rich information on the economic position of the two cohorts covered in this review. For cohorts born in the 1960s and 1970s, real median household income grew rapidly when they were in their 20s, and this meant they enjoyed considerably higher median levels of income than earlier cohorts. However, lack of growth in real household income among the working age population over the last decade reversed this advantage. Consequently the 1960s and 1970s cohorts have flatter, even declining, age-income profiles and by the end of the period (2011/12) have not gained in real terms relative to older cohorts and it looks unlikely that they will reach the same peak in average income as the 1950s cohort (Figure 2).

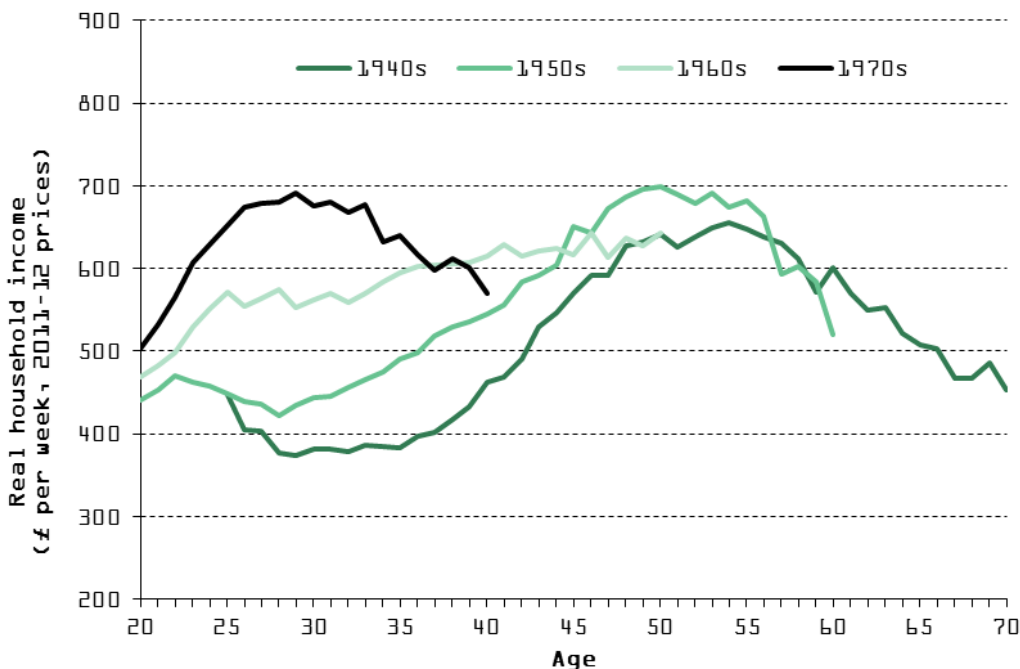


Figure 2: Real median household income by age and birth cohorts (Note: Incomes are measured before deducting housing costs)

Source: Hood and Joyce (2013; Figure 2.3a); calculations using Family Expenditure Survey, various years. Figure reproduced with the kind permission of the authors.

Unprecedented falls in real wages which started prior to the 2008 recession (Gregg *et al.*, 2014) and increases in unemployment, despite being lower than anticipated, have contributed to large falls in household income. Until productivity improves substantially it is unlikely that real wages/income will increase and it could be some time before incomes recover to pre-recession levels/trends.

Falling earnings and income occurred for younger cohorts during the critical wealth accumulation stage of the life cycle. This will impact on their ability to save for retirement unless they cut back on expenditure.

Earnings and income inequality increased dramatically over the 1980s and have remained high ever since (McKnight and Tsang, 2014). Both cohorts have spent the majority of their working lives in a higher inequality environment than earlier cohorts. This has meant that there is considerable variation in the economic resources available during their working lives and in terms of the resources that they are likely to have been able to secure for income in retirement. A detailed analysis of inequality by people's characteristics shows how different groups fare (Hills *et al.*, 2010).

Other economic factors that affect an individual's incentives and ability to save and accumulate assets include prevailing interest rates, inflation rates (cost of living), house prices and the stock market. The **1960 cohort** (figures in Appendix A) experienced very high rates of inflation associated with the 1970s oil price shocks when they were aged 16 (CPI 25%) and 20 (CPI 18%). Inflation then fell to around 5% as the cohort reached their mid-20s, rising again to around 8% in the early 1990s recession when they were in their early 30s, followed by a long period of low inflation, initially rising slightly during the recent recession before falling to around zero during spring 2015. Interest rates averaged around 6% when this cohort were children, increasing to 12% in their mid-teens and then fluctuated around this higher rate until they were 30, falling sharply to around 6% and then dramatically falling to 0.5%, where rates have remained since the 1960 cohort was aged 48/49.

Average house prices increased fairly dramatically when the 1960 cohort were expected to enter the housing market (age 26–30) and so too did the price–earnings ratio as house price increases outstripped increases in earnings. Those who bought early would have benefitted from this boom but those who hadn't found housing less affordable and with high interest rates, mortgage payments would have been relatively high. Average house prices fell in the early 1990s recession (1960 cohort early 30s) and for those members who had purchased a house, they would have benefitted from the housing boom of 2000–05 and as long as members of the cohort had bought before their mid-40s, even with the decline following the recent recession, their property should have gained in value, or at the very least maintained its value on average (depending on when and where they bought).

The early childhood of the **1975 cohort** (figures in Appendix B) was marked by high inflation rates before stabilising at around 5% from age 8, increasing over the early 1990s recession before a long period of low inflation through their 20s and into their early 30s. Inflation rates fluctuated over the recent recession although at much lower rates than in previous recessions (peaking at a little over 5%) before falling to zero in 2015.

Average real house prices were relatively low and steady, age 17–26, before increasing rapidly with the house price boom during 2000–05. Any of the cohort who had bought a house before the age of 26 would have benefitted from this boom in terms of increasing the value of their asset. This long and rapid rise would have made it difficult for those wanting to enter the housing market as the price–earnings ratio also increased as earnings failed to keep up with house prices. The 2008 recession saw house prices fall (1975 cohort in early 30s) but then stabilise at average values still above those prevailing at age 26. In the last couple of years house prices have started to pick up. Whether or not the 1975 cohort benefitted from this fluctuating housing market depends on when and where they bought their property. They should have benefitted from relatively low rates of interest available during their 20s and early 30s providing relatively cheap mortgages.

Home ownership is lower (possibly delayed) among younger cohorts (Figure 3) and may remain relatively low for future cohorts (Belfield *et al.*, 2014). A number of factors highlighted above are

likely to have contributed to this trend. In particular house price growth that outstripped earnings and income growth from age 25 made it difficult to enter the housing market. The credit squeeze following the 2007/08 financial crisis affected access to mortgage loans; employment insecurity and a slump in housing starts will all have played a part.

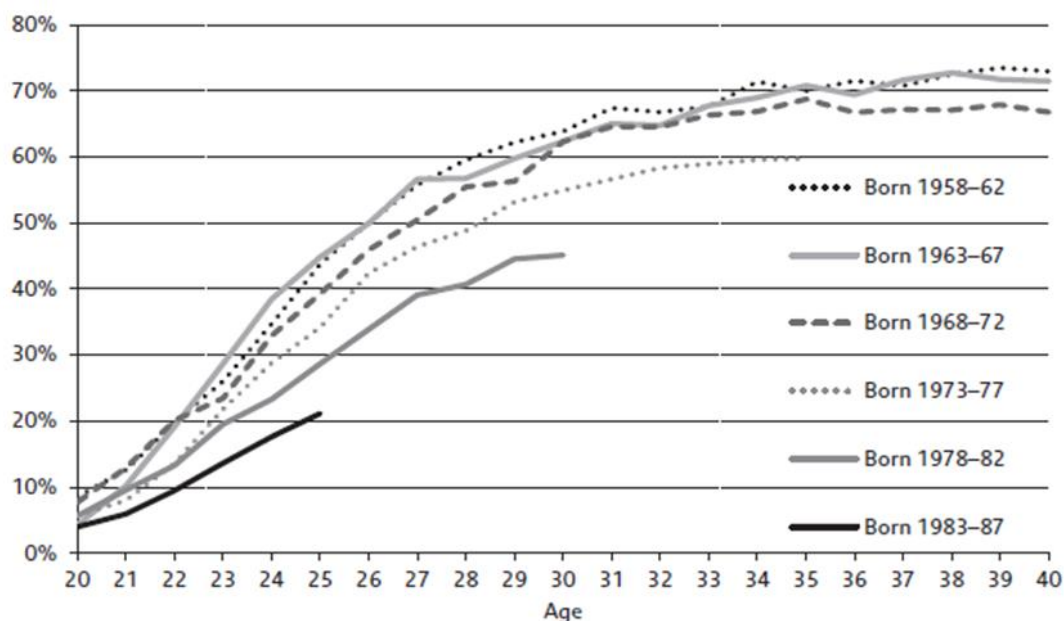


Figure 3: Home ownership rates by birth year and age

Source: Reproduced from Belfield *et al.*, 2014 (Figure 3.13); Family Expenditure Survey and Family Resources Survey (various years).

Lower rates of home ownership may not be problematic if individuals are saving in other ways, but Hood and Joyce (2013; Figure 2.7) show that savings rates estimated for younger cohorts were lower than older cohorts even during the period that the household incomes of younger cohorts were higher. Expenditure levels more than matched those for older cohorts; these younger cohorts were more likely to be running down their savings and building up debts. Part of the explanation could be high rental costs; over the 1970s and 1980s the share of income spent on housing costs was similar for renters and mortgagors but by 2012 private sector renters were spending twice as large a share (30% compared with less than 15%) (Belfield *et al.*, 2014; Figure 2.7). This could leave a higher share of future cohorts continuing to have to meet housing costs in retirement and where income is not sufficient they will require means-tested assistance.

Recent estimates of private wealth holdings show the wide variation in wealth holdings among groups of a similar age. Table 2a (for the 1975 cohort) and Table 2b (for the 1960 cohort) contain estimates of household wealth from the Wealth and Assets Survey (WAS) 2008/10 for various percentiles within the distribution of total household wealth and for different wealth components. The higher wealth for the older age group (Table 2b) reflects the typical life cycle pattern in wealth accumulation. However, the gap between the older and younger age groups also suggests that the younger cohort will be required to accumulate assets at a very high rate to close this gap; at the median the younger cohort would have to save or see their assets increase in value by over £14,000 per year (in 2012/13 median annual household income was around £23,000 (HBAI, 2014)).

Table 2a: Wealth estimates from the WAS 2008/10 for cohort aged 30–39 (for 1975 cohort)

Percentiles	Total wealth	Housing wealth	Homeowners' wealth	Net financial wealth	Physical wealth	Private pension wealth
10	13,645	0	0	-10,580	7,500	0
25	54,361	0	15,000	-2,010	16,500	0
50	165,391	50,000	65,999	2,400	32,000	6,360
75	333,510	120,000	135,000	20,210	51,750	49,182
90	615,952	224,999	243,840	70,485	78,500	121,721
99	1,553,838	620,000	620,000	370,893	166,000	461,174
Obs.	5,191	5,191	4,483	5,191	5,191	5,191

Source: Author's calculations from the WAS 2008/10.

Table 2b: Wealth estimates from the WAS 2008/10 for cohort aged 45–54 (for 1960 cohort)

Percentiles	Total wealth	Housing wealth	Homeowners' wealth	Net financial wealth	Physical wealth	Private pension wealth
10	29,700	0	0	-7,630	10,000	0
25	157,775	30,000	73,175	0	25,000	0
50	377,903	124,999	145,000	10,223	42,000	37,473
75	729,594	225,000	245,000	49,700	66,000	173,205
90	1,235,247	364,999	399,000	141,390	93,000	416,587
99	3,643,444	1,070,000	1,100,000	739,950	207,700	1,502,167
Obs.	6,364	6,364	5,689	6,364	6,364	6,364

Source: Author's calculations from the WAS 2008/10.

Changes to state pension entitlement mean that, on average, state pensions will replace a smaller proportion of lifetime earnings for the 1960s and particularly the 1970s cohorts than for earlier cohorts due to the lower generosity of S2P and STP relative to SERPS (more so for higher earners), but will be more generous for people with lower lifetime earnings. It is therefore anticipated that state pensions will have a more equalising effect for these younger cohorts, particularly the 1975 cohort who will have built up very little, if any, entitlement under SERPS. However, as this cohort has experienced much higher levels of inequality in earnings and

incomes than older cohorts, private pension provision could result in wide inequalities in retirement income particularly for those who have accrued rights under DB schemes. (Bozio *et al.*, 2013, show that those with higher lifetime incomes have higher savings rates.)

Membership rates in private pension schemes have changed little overall for cohorts born between the 1960s and 1970s (although this masked a decline among men and a rise among women). The introduction of auto-enrolment in workplace pensions is likely to increase membership rates, particularly as current analysis shows that opt-out rates have been low (around 9–10%) (Department for Work and Pensions, 2014).

Taken together, the information on wages, income and wealth suggest that younger cohorts are doing less well on average than previous cohorts. These cohorts have been exposed to higher levels of inequality in earnings and income than earlier cohorts. This has consequences for their current standard of living and their future retirement income.

6. Generational transfers

The economic circumstances of younger generations have been affected by falling wages, incomes and home ownership, leaving large gaps in net wealth holdings relative to older generations. Asset ownership has become more widespread, mainly through increases in owner-occupation over the second half of the 20th century, and a greater share of younger cohorts have received or expect to receive an *inter vivo* transfer or inheritance. The wealth 'shortfall' observed for younger generations could be met through bequests and inheritance.

Lower savings among younger cohorts may be entirely rational given expected inheritance, and if these are realised then it is entirely possible that home ownership rates will increase to match levels of older cohorts. For the time being this is unknown.

There is now a growing literature on inheritance and its impact on the distribution of wealth. People living in already wealthier households are more likely to receive an inheritance and the absolute value of inheritances is greater than those received by people in less wealthy households (Karagiannaki, 2011a). In 2006–08 78% of the wealthiest third of the cohort born between 1972 and 1978, while only 45% of the least wealthy third, expect a future inheritance. The size of expected inheritances among already wealthier households is also greater (Hood and Joyce, 2014). However, the size of inheritances relative to existing wealth holdings is greater for lower wealth households and the consequence of this is that inheritance tends to be found to marginally reduce wealth inequality (Karagiannaki, 2011b). A recent study for the UK has shown that among the elderly population (aged 65–79 in 2012/13) more comprehensive measures of wealth, which include estimates of pension wealth (excluded in previous studies), show that inheritance does not reduce inequality and could widen inequality marginally (Crawford and Hood, 2015). This suggests that the inclusion of pension wealth changes the pre-inheritance distribution in such a way that the distribution of inheritances doesn't impact on inequality.

Absolute gaps in household wealth have increased over the last 20 years in the UK but relative wealth inequality has fallen due to increases in the value of housing wealth and demographic change (Bastagli and Hills, 2013; Cowell *et al.*, 2013). It is therefore not clear whether the absence of the redistributive effect of inheritance found in older cohorts will hold for younger cohorts – many of whom are yet to receive an inheritance.

Increasing life expectancy increases the possibility of the parents of members of these two cohorts living until cohort members have themselves entered retirement. A major factor likely to affect the value of future inheritances is how much parental wealth will be required to fund their own long-term care.

7. Evidence on the likely adequacy of retirement income

The first report of the PC concluded that if present trends continued many people would face ‘inadequate’ pensions in retirement, unless they had large non-pension assets or are intending to retire much later than current retirees (Pensions Commission, 2004). The PC estimated that at least 75% of all DC scheme members had contribution rates below the level likely to be required to provide adequate pensions (around 9 million people). In contrast, people with private sector DB schemes would enjoy more than adequate pensions and most public sector employees would be well provided for; future pension adequacy was becoming increasingly unequal.

Replacement rates vary across the lifetime income distribution and survey evidence finds that median desired replacement rates are higher among lower income people (Pensions Commission, 2004); this is consistent with actual replacement rates observed (see Table 3). The PC recommended benchmarking higher replacement rates for lower-earning individuals, reflecting the need for these individuals to replace a larger proportion of their pre-retirement income to meet a minimum acceptable standard of living in retirement. The recommended rates are therefore based on an assessment of adequacy that combines the desire to maintain a level of consumption achieved during working life with a minimum acceptable standard of living providing a floor.

Table 3: PC target replacement rates in 2013 earnings terms

Earnings	Target replacement rate	Target replacement income
Less than £12,200	80%	Less than £9,709
£12,200–£22,400	70%	£8,495–£15,647
£22,400–£32,000	67%	£14,978–£21,397
£32,000–£51,300	60%	£19,162–£30,659
Over £51,300	50%	Over £25,549

Source: DWP calculations based on Pensions Commission (2004) (Department for Work and Pensions, 2013c).

Two major reforms to pension policy were designed to address adequacy concerns and the financial sustainability of the existing system in the context of population ageing and falling dependency ratios. A number of recent studies have assessed the likely adequacy of retirement income under these reforms.

The Pensions Policy Institute (PPI) estimated that a workplace pension under auto-enrolment with a minimum contribution rate of 8% (3% from the employer) of qualifying earnings should provide an adequate pension for the majority, but this assessment is dependent on a number of key unknown variables (Redwood *et al.*, 2013). These are: whether or not the triple-lock will continue to apply to indexation, the level of investment returns (investment strategy and

administrative charges), inflation, what other investments people have, and the level of employers' contributions. This study also looked at the likely adequacy of the STP. The payment levels have not been set yet and there is scope to set the full entitlement level above the Guarantee Credit, ensuring that all those receiving the full amount would have incomes above minimum income standards, but for most it will be unlikely to be sufficient to replicate standards of living achieved during working life. In more than half the scenarios modelled, pension income was below the target replacement income and in a quarter, pension income was less than 75% of target replacement income. They estimate that individuals starting to save at age 22, who retire at SPA and follow a traditional lifestyle investment approach, who are lower earners, have a 63% probability of achieving target replacement income, compared to 49% for median earners and 40% for higher earners (this applies to cohorts retiring later than the 1960 and 1975 cohorts who will face transitional arrangements).

Contribution patterns (age of starting to save, career breaks, age of retirement) and rates were found to be critical in terms of the chance of achieving target replacement income, but so too was the indexation mechanism. For example, the total contribution required to reach a two-thirds chance of achieving the target replacement income ranges from 10% in a low charging scheme with triple-locked STP to 17% in a higher charging scheme, using a different investment approach and STP value earnings-linked.

This highlights the difficulty faced by savers in terms of deciding on contribution rates to achieve a target adequate income in retirement. An examination of current contribution rates leaves the authors to conclude that for many (particularly among median and above earners), contribution rates are too low. There is also concern that employers' average contributions could fall as costs rise due to the increase in the number of pension schemes that they will be contributing to after auto-enrolment.

One recent study provides a very different assessment of the adequacy and optimality of wealth among a cohort approaching retirement (Crawford and O'Dea, 2012). The study was limited to couple households with at least one man born between 1940 and 1949. The vast majority (over 90%) were found to have wealth levels far greater than necessary to maintain living standards in retirement, with a median over-save of more than £225,000 (approximately £7,000 per year). Deficits, where they occurred, were small and were generally found at the extremes of the lifetime earnings distribution. This finding holds even when housing wealth is excluded (75% have more than optimal levels).

A number of explanations have been put forward: generous DB schemes, SERPS, saving for bequests (although this still holds when housing wealth – most likely used for bequests – is excluded). In addition, when the authors looked at those with no DB pension entitlement they still found substantial over-saving. These findings relate to a cohort considerably older than the two cohorts focused on in this review and one that benefitted from generous DB pension schemes and considerable house price inflation. It is referenced here as it is the only study that finds widespread *over-saving* and relates to a generation who will potentially bequeath wealth to the two cohorts studied here (i.e. their parents).

Another source of evidence on adequacy that could help inform the likely position of the 1960 and 1975 cohorts are studies that have made cohort-based projections for pre- and post-retirement incomes. This type of analysis, which relies on structural and simulation models, is frequently conducted to assess the likely impact of policy changes and demographic change. One of the most recent exercises of this type that provides relevant information for these two cohorts was conducted by Hood and Joyce (2014). They examine the way in which the

introduction of STP will affect entitlement to state pensions both in the longer term but also over the transitional period. Means-tested support available during retirement is not included.

Their estimates demonstrate the reduced generosity of STP for higher earners who would previously have accrued entitlement to earnings-related second-tier state pensions, if they hadn't contracted out, and the greater generosity to lower earners and for parents with reduced employment records. We can compare their estimates (Table 4) to the target benchmark replacement rates put forward by the PC (Table 3). For all of the categories considered for men the state pension will fall short of meeting target replacement rates. The shortfall increases for median and higher earning men but reduces for low earning men. Median earning women in both cohorts who take time out to care for dependent children can also not expect to be able to replace their pre-retirement earnings solely via entitlement to a state pension, although the shortfall is lower for the 1975 cohort relative to the 1960 cohort due to the younger cohort's greater scope to build up full entitlement to the STP. Low earning women in both cohorts who take time out of work to care for dependent children are likely to reach their target replacement rates solely on the basis of their entitlement to state pensions.

Table 4: Estimates of state pension income replacement rates

	1960 cohort	1975 cohort
Male median earner works continuously to SPA	34%	31%
Male 20th percentile earner works continuously to SPA	41%	47%
Male 80th percentile earner works continuously to SPA	23%	18%
Female median earner with time out age 25–40 to care for children	40%	48%
Female 20th percentile earner with time out age 25–40 to care for children	75%	86%

Source: Estimates derived from information contained within Figure 3.5 based on STP entitlement and transitional arrangements (Hood and Joyce, 2013).

The main difficulty with making an accurate assessment of the likely adequacy of the two cohorts' income in retirement is that, as one recent assessment concluded, "Retirement income from private and state pensions is uncertain" (Redwood *et al.*, 2013). The high degree of uncertainty is affected by variable lifetime earnings and income, family instability, changes in asset prices and rates of return, changes in state pension provision and generosity, the indexation of state pensions in the future, and variation in life expectancy.

A complicating factor that is largely ignored in the majority of assessments is the future cost of social care. The amount that someone pays towards the cost of their own care and support is means-tested on the basis of assets and income, with different rules and thresholds applying to residential care and non-residential care across the UK. A complex and varied system of funding for social care exists, with social care funding the responsibility of local government.

The Care Act 2014 (England), which came into force on 1 April 2015, along with a range of supporting regulations and a single set of statutory guidance, aims to simplify and modernise

the existing complex system. From April 2016 new rules will come into force on paying for care based on recommendations made by the 2011 Dilnot Review, including increases in upper and lower capital limits and a lifetime cap on care costs.

In Scotland personal care in the community for people aged 65 and over has been free to those in need since 2002.

Despite simplification it remains very difficult, if not impossible, for individuals to factor in the likely costs of their care needs in retirement when making optimal decisions regarding financial planning for retirement (Hancock *et al.*, 2013). Recent projections for England show that unpaid care to older people with disabilities by their adult children is unlikely to keep pace with demand from 2017, with a projected shortfall of 160,000 care-givers by 2032 (Pickard, 2015).

Financial products are available such as immediate and deferred needs annuities and new products are likely to be developed that will help people plan and make provision for social care costs in retirement.

8. Which factors are most likely to drive change in the future?

In this Evidence Review a number of factors have been identified that are most likely to drive change in the future and contribute to the considerable degree of uncertainty in assessing the likely adequacy of retirement income for these cohorts. These are:

- The evolution of real wages. A return to real average growth rates across the wage and earnings distribution will be important for boosting household incomes and should feed into higher rates of saving over time. Before this can happen, sustained and strong productivity growth needs to return.
- The extent to which working lives actually lengthen, both on average but also by position in the lifetime income distribution, will affect pension savings and the number of years individuals are dependent on retirement income.
- House prices have remained relatively high over the recession, particularly in some parts of the UK. Coupled with low earnings growth this creates a high barrier for those seeking to enter the housing market. If private sector rental costs continue to rise then this will put pressure on the household budgets of renters, constraining their ability to save.
- Lower rates of home ownership have large consequences for retirement expenditure for those households who have to continue to pay rent during retirement. This could lead to higher levels of means-tested support in retirement to help meet housing costs.
- If the 1975 cohort receives the inheritances that it is anticipating then this may lead to an increase in home ownership and an increase in wealth holdings.
- With the end of compulsory annuitisation it is very difficult to predict what impact this will have on how individuals choose to consume their retirement savings. Individuals may over- or under-consume and both could impact on their well-being.
- Individuals may choose to drawdown on their pension pot to bequeath to their children. This could further increase inequality and reduce social mobility via a favourable tax regime.
- Indexation of state pensions. Scenario modelling shows that this is very important in terms of meeting adequacy levels.
- The success of auto-enrolment and workplace pensions. This will be determined by opt-out rates and employer contribution rates.
- Self-employment rates have increased dramatically but rates of saving are relatively low among the self-employed and private pension enrolment is lower than among employees.
- The costs of social care and who should bear them.

All of the evidence reviewed points to a high degree of uncertainty in the likely financial resources that these two cohorts will have accumulated when they reach retirement. Uncertainty in earnings, incomes, savings, housing assets, inheritance and the value of

pensions (including indexation) all contribute to the uncertainty of retirement income. The likely costs of social care contribute to the uncertainty in the level of resources required in retirement; ignored in estimated target replacement rates. High levels of earnings and income inequality are likely to feed through to inequalities in retirement income. How well individuals will manage drawdown from their pension pots is unknown, with a high potential for people to under- and over-consume.

This Evidence Review has highlighted considerable knowledge gaps in the assessment of the likely adequacy of accumulated resources which would support cohorts retiring in the not too distant future.

Appendix A: 1960 cohort charts

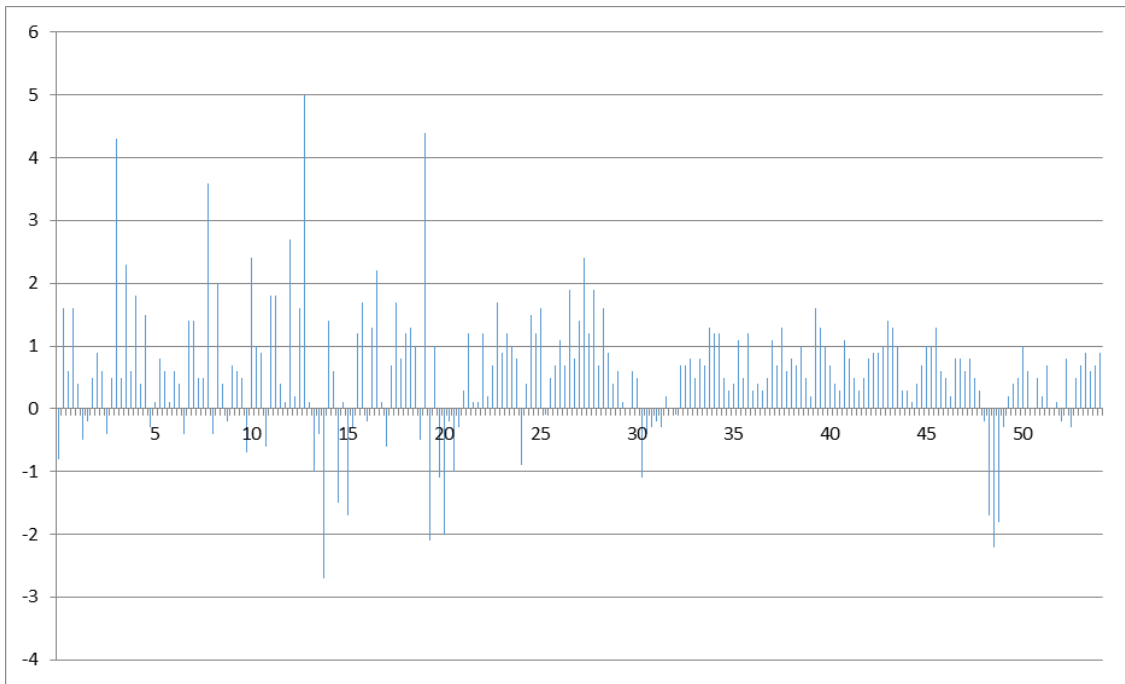


Figure A1: GDP growth rates – age of 1960 cohort

Source: Quarterly National Accounts.

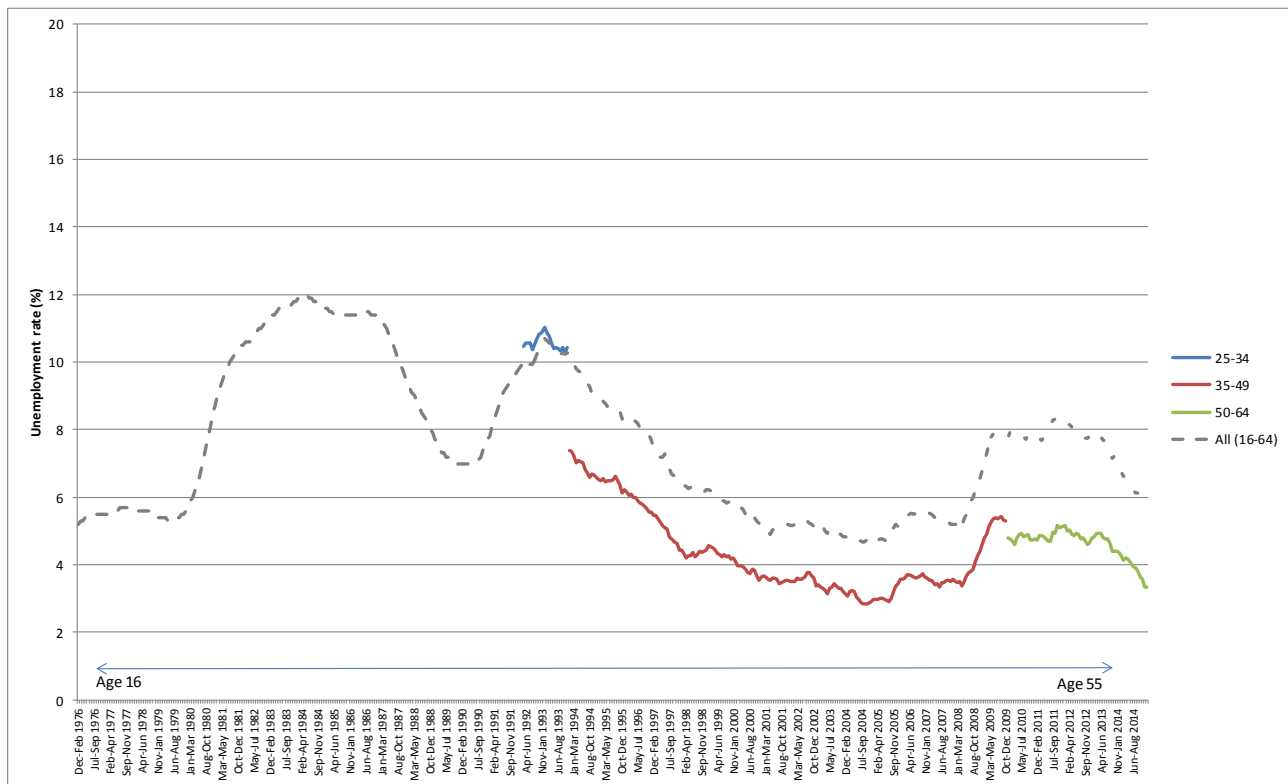


Figure A2: Prevailing unemployment rates and rates by synthetic age cohorts from age 16 – 1960 cohort

Source: ONS Unemployment by Age series.

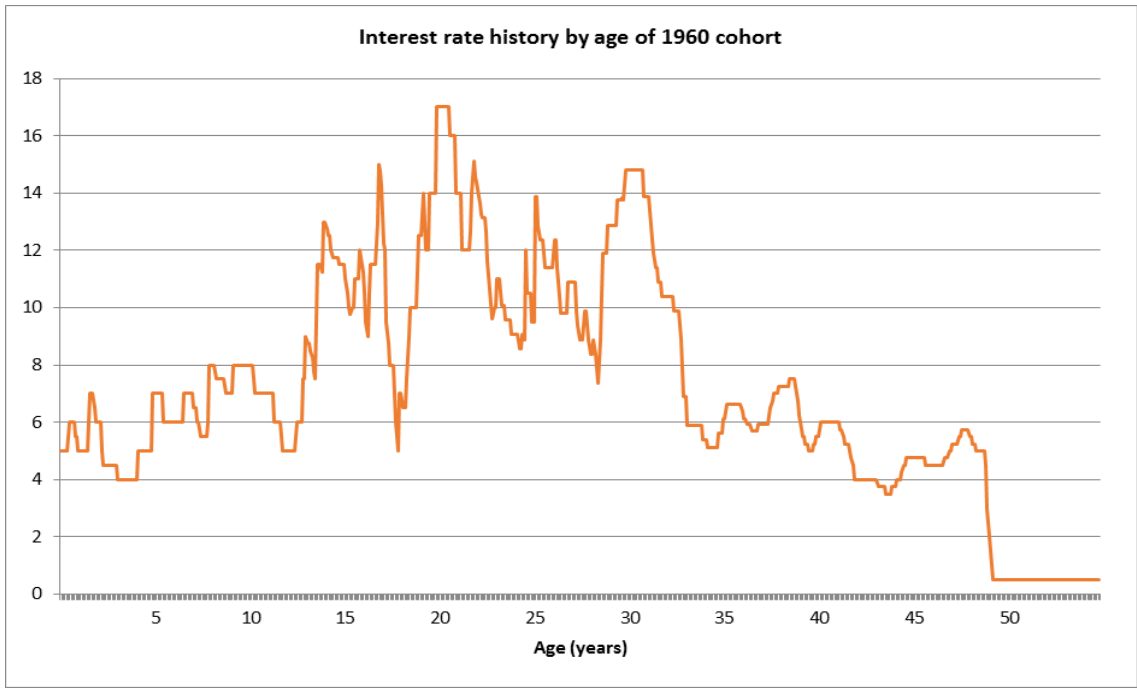


Figure A3: Interest rates history – age of 1960 cohort

Source: Bank of England historical series.

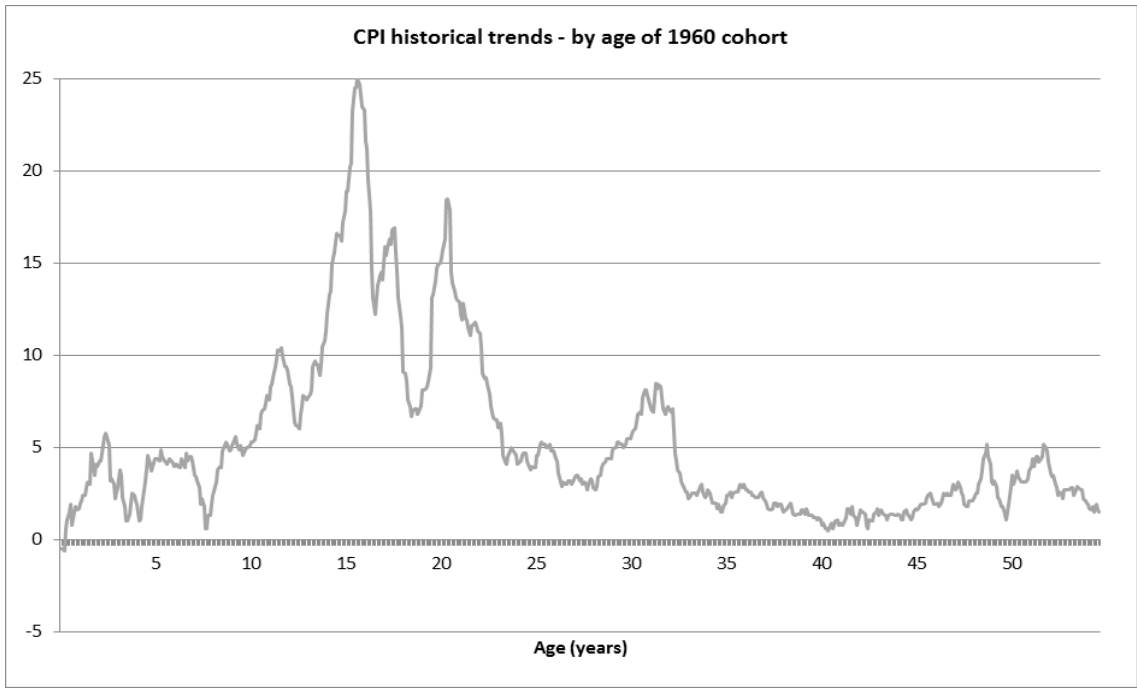


Figure A4: Historical inflation trends (CPI) – age of 1960 cohort

Source: ONS CPI back series.

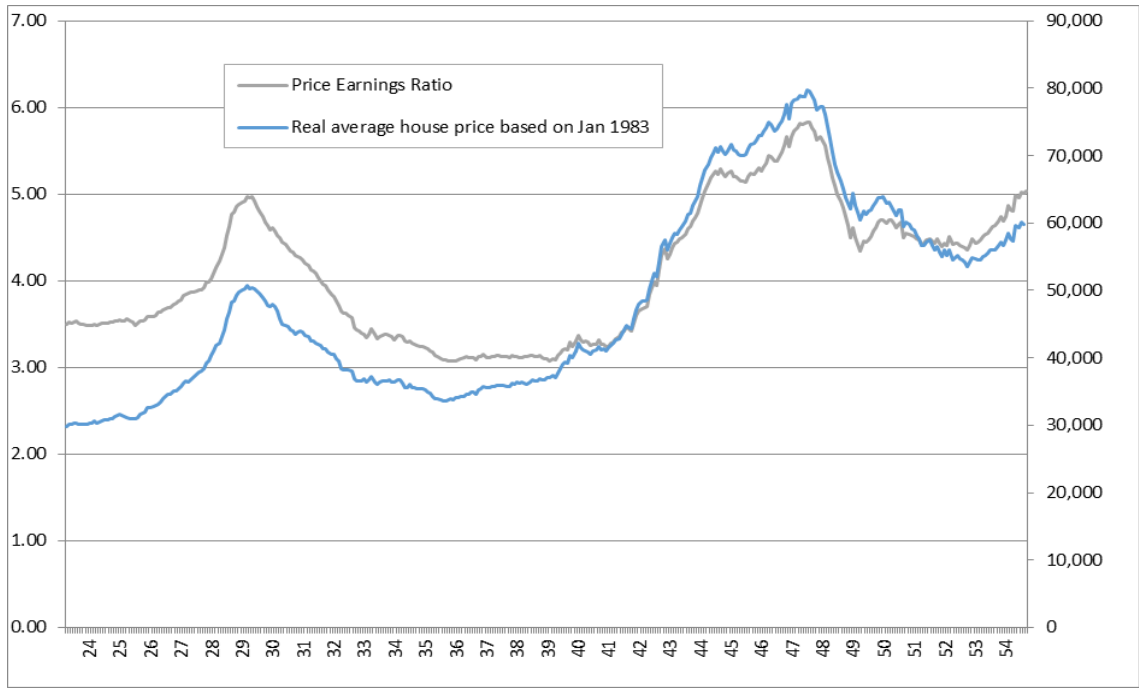


Figure A5: Historical house price and price earnings ratio – age of 1960 cohort

Source: Halifax House Price Index.

Appendix B: 1975 cohort charts

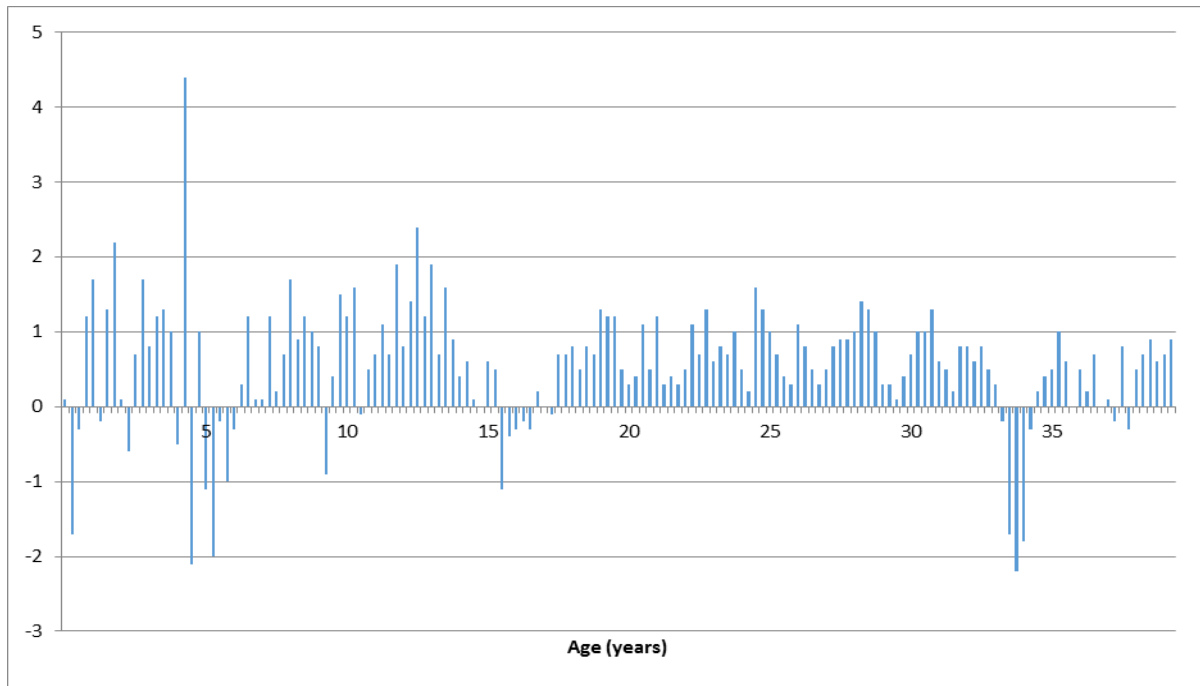


Figure B6: GDP growth rates – age of 1975 cohort

Source: Quarterly National Accounts.



Figure B7: Prevailing unemployment rates and rates by synthetic age cohorts from age 16 – age of 1975 cohort

Source: ONS Unemployment by Age series.

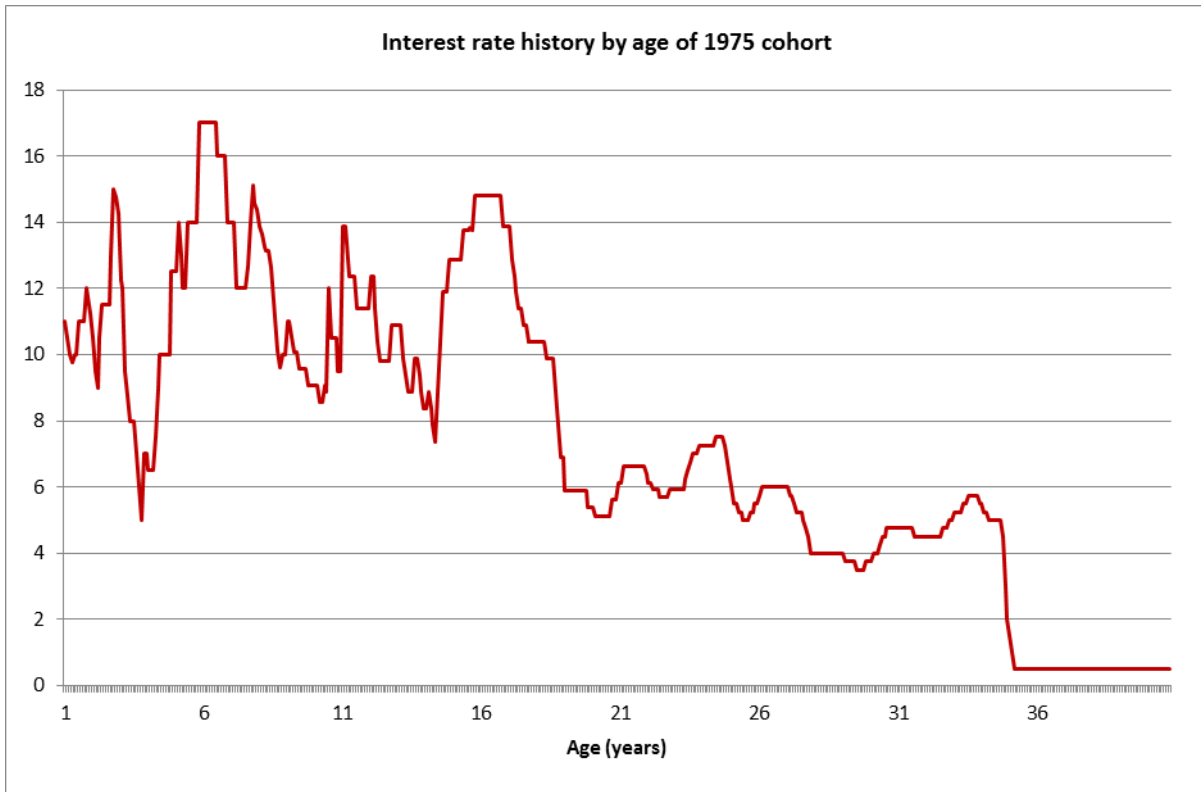


Figure B8: Interest rates history – age of 1975 cohort

Source: Bank of England historical series.

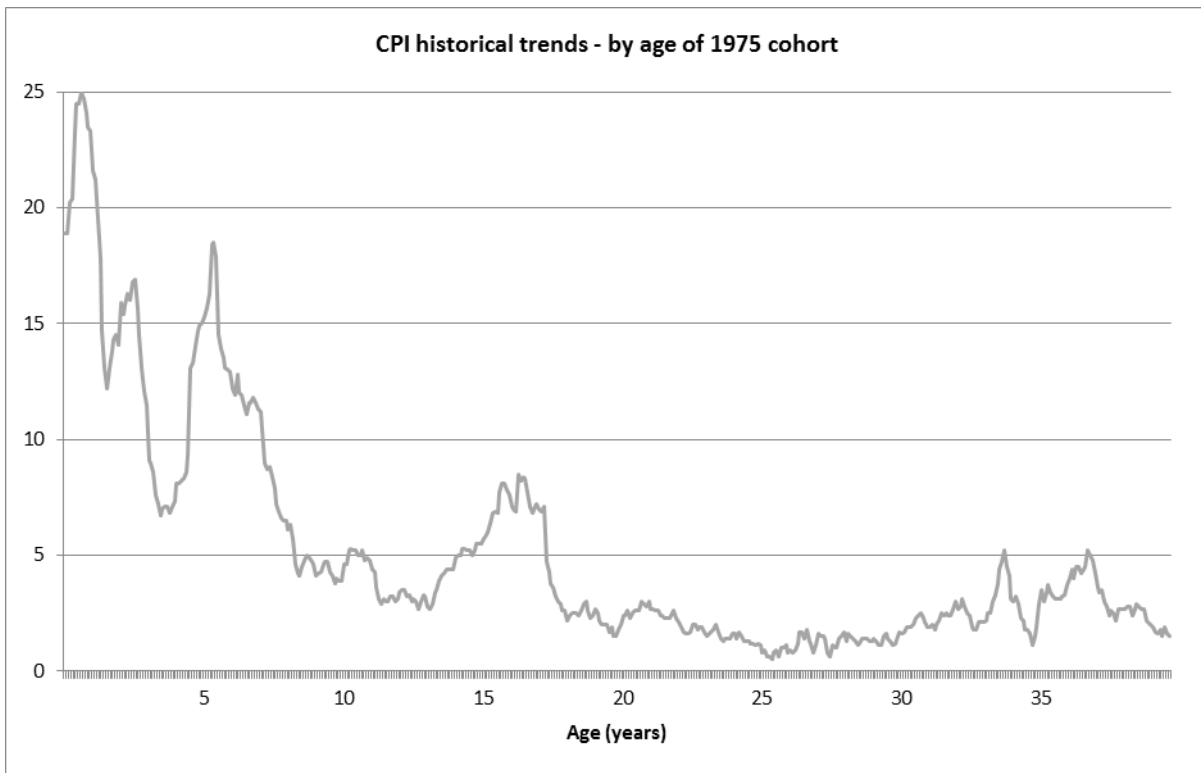


Figure B9: Historical inflation trends (CPI) – age of 1975 cohort

Source: ONS CPI back series.

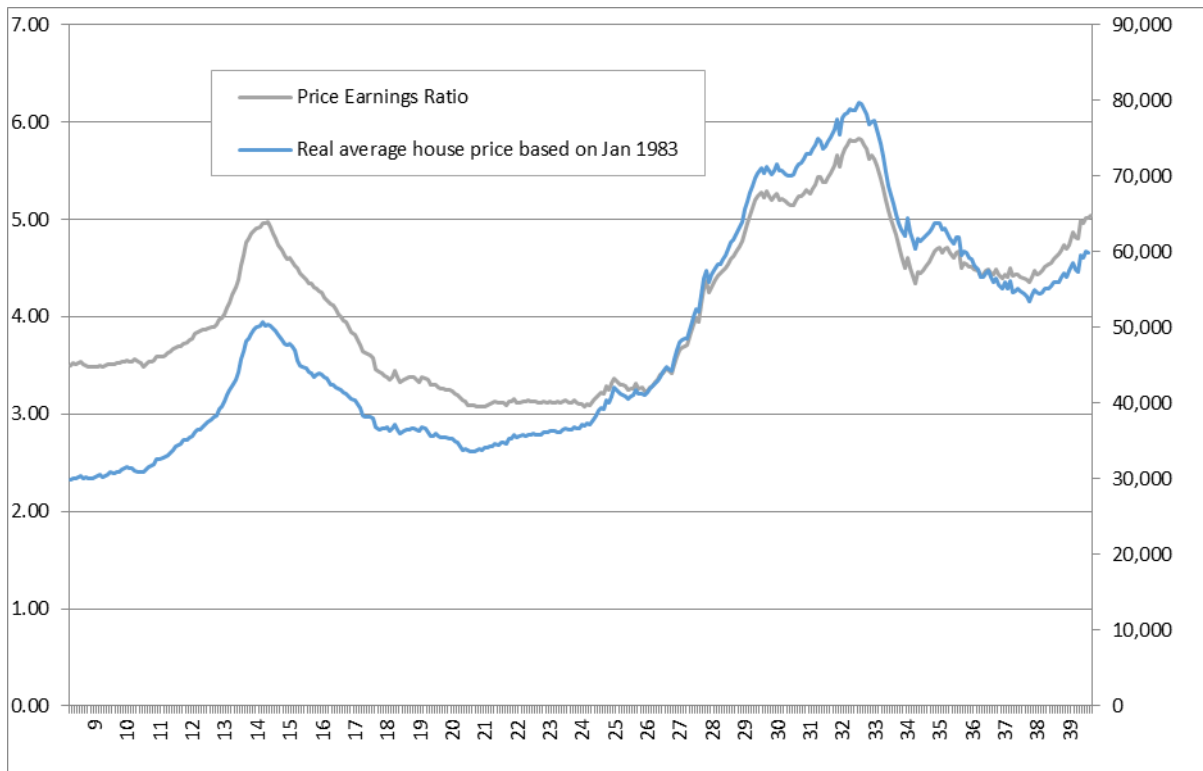


Figure B10: Historical standardised house price and price earnings ratio – age of 1975 cohort

Source: Halifax House Price Index.

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