What is an adequate retirement income?
The Pensions Policy Institute (PPI)

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**Our Vision:**
Better informed policies and decisions that improve later life outcomes

We believe that better information and understanding will help lead to a better policy framework and a better provision of retirement income for all.

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**Our Mission:**
To promote informed, evidence-based policies and decisions for financial provision in later life through independent research and analysis

We aim to be the authoritative voice on policy on pensions and the financial and economic provision in later life.

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By supporting the PPI you are aligning yourself with our vision to drive **better informed policies and decisions that improve later life outcomes** and strengthening your commitment to better outcomes for all.

As we look forward now to the next 20 years, we will continue to be the trusted source of information, analysis, and impartial feedback to those with an interest in later life issues. The scale and scope of policy change creates even more need for objective and evidence-based analysis. There is still much to do, and we look forward to meeting the challenge head on.

For further information on supporting the PPI please visit our website:

www.pensionspolicyinstitute.org.uk

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A Research Report by Nick Hurman, Chetan Jethwa, Tim Pike and Daniela Silcock

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The Pensions Policy Institute (PPI) and The Centre for Ageing Better have signed a Memorandum of Understanding and have agreed to work together with a shared focus on a society where everyone enjoys their later life.

Both organisations seek to create change in policy and practice, informed by evidence.

The two organisations bring different but complementary expertise to the collaboration. The PPI brings specialist knowledge, expertise and networks on pensions, financial planning and retirement income. The Centre for Ageing Better brings a broader, more holistic view of later life across their four core outcomes and Priority Goals.
What is an adequate retirement income?

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Executive Summary

This report explores the concept of retirement adequacy, how those approaching retirement might meet different adequacy targets, and how landscape changes may affect the way adequacy is viewed in the future. This summary covers the main points of the report and acts as the conclusion. This report concludes that a new consensus on adequacy is required, which takes into account both the need for a steady income and for capital to call on in retirement. This Government-led consensus will require buy in from employers, industry, unions and other key stakeholders in order to be successful.

A consensus on adequacy is required

The question of ‘what is an adequate income in retirement?’ is fundamental to both UK pensions policy and individuals’ own life savings. Without a target to aim for or a method to assess progress, people’s efforts to provide financially for retirement risk being undermined by the pressures of day-to-day needs and other demands on resources. This applies both at the individual level and at the national level of the UK economy.

At the heart of this question is the multi-dimensional view of adequacy. There are a number of actors - individuals, employers, the State and society more widely. Each has their own perspective on adequacy and has, at best, partial agency over retirement savings. In these circumstances, it is not surprising that the problem of defining and, ultimately, achieving adequacy is not within the gift of any one agent alone.

A settled consensus, such as that brokered by the Pensions Commission, driven and supported by Government, and involving key stakeholders such as industry, employers and unions, is likely to be required in order to generate agreement on what adequacy target sets the boundary of acceptability given the various economic, political and societal pressures discussed.

This new consensus on adequacy will need to blend the needs for both an income stream and access to liquid savings and assets, in order to ensure that people can navigate day-to-day needs and life changes in retirement, and address how any gap between the end of career and State Pension age will and can be financed.
What is an adequate retirement income?

Ultimately, it comes down to mitigation through at least one of the following:

- Increasing the current rate of private pension contributions (either throughout working-life or at particular ages);
- Effecting longer working lives before retirement;
- Increasing the underpin of a higher State Pension for everybody; and
- Acceptance of a less affluent retirement than previous generations.

The UK is currently on course for a quarter of people approaching retirement being unlikely to receive even a minimum income and nearly a half failing to meet a personally acceptable level of income in retirement. Fewer than one in 10 can expect to live a comfortable life in retirement.

Of the 11 million people in the UK between the age of 50 and State Pension age:

- Around 3 million will not receive a minimum income
- Around 5 million will not receive a personally acceptable income
- Around 10 million will not receive a comfortable income

Those earning at median levels or below, women, people from BAME (Black, Asian, Minority Ethnic) groups, carers, disabled people and the self-employed are more likely to be in the groups not meeting adequacy levels throughout retirement.

Those approaching retirement with lower levels of Defined Benefit (DB) pension entitlement may also struggle to achieve adequate retirement incomes. This group is set to expand in future with the decline of DB provision in private sector workplaces, and will affect Generation X and younger Generations more than those reaching retirement in 2021.

The successful implementation of automatic enrolment, the new State Pension and the Pension Protection Fund shows what has been achieved this century and, in turn, has started to re-write a more positive narrative around pensions. The task of developing a new consensus around adequacy is certainly formidable, but not inconceivable. It needs to be based on a reasoned and shared understanding around ‘what is an adequate income in retirement?’ Such a consensus is likely to be a necessary and pressing pre-condition to forming a lasting commitment to the policies required to deliver adequacy for the majority of older people in a COVID-19 impacted world.

Adequacy is about more than just the needs of the individual

Adequacy of retirement income is inherently subjective and how it is defined is determined by who makes the assessment. People require security, independence and choice in order to feel that they are achieving adequacy, and that judgement is made individually on factors that include more than just income. Furthermore, these factors change during retirement as individuals’ needs change. Therefore, making judgements about retirement income adequacy in general is highly problematic.

Individuals, employers, the State and society all make judgements about adequacy and have distinct viewpoints that drive different approaches:

- Individuals tend to take a view based on their ability to maintain living standards in their household from working-life through into retirement.
- Employers can be segmented between those who see pensions as a valuable part of their employee proposition and those who regard pensions as just a cost of employment.
- The State is required to provide a safety net to ensure against deprivation but is also interested in ensuring individuals are enabled to meet their own income needs in retirement and that the pensions system does this sustainably, in order to avoid people needing to fall back on means-tested benefits.
- Society more broadly needs to be comfortable with the level of fairness and equality allowed by the pensions system, whilst ensuring the system remains sustainable and creates a fair reward for work.

Retirement adequacy is therefore a multi-faceted concept.
There is a need to strike a balance between use of an income stream and reserve capital in retirement

Traditionally, the focus of pensions saving has been on providing an income stream rather than assets (such as housing) or reserve capital. Taking an income stream approach helps to mitigate some unhelpful behavioural effects, such as the temptation to spend on immediate rather than longer-term needs.

Though an income stream approach (adequacy targets set around receiving a specific level of income in retirement) is more helpful for assessing adequacy and preventing over or under spending, a capital approach (adequacy targets set around ensuring people reach retirement with a certain level of reserve liquid savings) may help people to meet needs which change significantly during retirement. Relying solely on an income stream in retirement limits the ability to deal with personal financial shocks. However, given the opportunity many pensioners attempt to preserve their capital, leading to lower standards of living than necessary.

Adequacy can be measured via a fixed income or proportional target approach

There are two traditional approaches to assessing adequacy which stem from these different perspectives:

• The fixed income target – which has its origins in the state underpin and avoidance of deprivation, but has developed into ‘basket of goods’ approaches (the cost of a basket of goods and services required to meet a certain level of need or lifestyle standard). This method is used by the Joseph Rowntree Foundation (JRF) in their Minimum Income Standard (MIS) and by the Pensions and Lifetime Savings Association (PLSA) to produce their ‘Moderate’ and ‘Comfortable’ Standards. Fixed income (basket of goods) approaches produce living standard targets in terms of fixed incomes required to achieve these levels, regardless of working-life income levels.

• The proportional income target – which focusses on assessing subjective individual comfort. It has its origins in the view of the engaged employer and is embedded in the design of final salary pension arrangements. The Pensions Commission used this approach to make its adequacy assessments. These produced targets in the form of ‘replacement rates’ - the proportion by which retirement income replaces that immediately before retirement. A target replacement rate is one which allows people to replicate working-life living standards in retirement.

Substantial pension funds are required to meet the fixed income PLSA Moderate and Comfortable targets in addition to the State Pension. An individual living in a single household outside London would require a pension pot of £47,000 to secure a retirement income equal to the JRF MIS after housing costs (AHC), but would require pots of £440,000 and £966,000 to secure the PLSA Moderate and Comfortable targets respectively. This last figure rises to £1,100,00 inside London (Figure EX.1).
Figure EX.1

The PLSA Moderate and Comfortable Targets require private pension funds of £440,000 – £1,100,000 for a single person household

The relationship between annual retirement income and the private pension wealth required, in addition to State Pension, to achieve the level of retirement income for an individual in a single household (2021 earnings terms)

A dual person household would require combined household funds of £480,000 to secure the ‘Moderate’ and £1,380,000 to secure the ‘Comfortable’ PLSA Living Standard Targets if living outside London and £1,475,000 to secure the ‘Comfortable’ Target if living in Outer London.

To achieve working-life income replacement rates (proportional income targets), which allow people to replicate working-life living standards in retirement, even those at the lower quartile of earnings of £15,700 per annum will require private pension wealth of £57,000, while those at median income of £24,900 per annum will require £278,000 to meet the their target replacement rate (in addition to State Pension income and excluding use of the 25% tax-free lump sum). For those on higher earnings, the lower replacement rates required by the formula means that the upper quartile earner on £37,500 per annum requires a fund of £461,000, and the 90th percentile earner at £54,000 per annum a fund of £797,000 (Figure EX.2). The right-hand axis (and purple line) represents the target working-life replacement rate. The left-hand axis shows the amount of wealth required to achieve this target.

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1 PPI Modelling
2 More details of the Pensions Commission formulation are provided in Chapter 2
Figure EX.2

Median earners on £24,900pa will require savings of £278,000 to achieve their Pensions Commission replacement rate

Required private pension wealth to achieve a total target retirement income using Pensions Commission benchmark replacement rates (2021 earnings terms)

A significant proportion of people do not achieve adequacy if DB entitlement is excluded from the equation

If Defined Benefit (DB) assets are excluded from the assessments, then the proportion missing the target using State and private pension income (excluding their 25% tax-free lump sum) increases. For the JRF MIS (AHC) it increases from 26% to 40% and for the PLSA ‘Moderate’ from 67% to 91% and PLSA ‘Comfortable’ from 91% to 98%. The increase for the Pensions Commission replacement rate is from 44% to 65%. While this underscores the importance of DB pension entitlement for current pensioners, and some potential concerns for future generations who will reach retirement with lower levels of DB entitlement, future pensioners will also receive more income from Defined Contribution (DC) pensions as a result of automatic enrolment, which may make up some of the DB gap.

Those from underpensioned groups are likely to experience more difficulty achieving adequacy targets

People from underpensioned groups (women, people from BAME (Black, Asian, Minority Ethnic) groups, carers, disabled people and the self-employed) are more likely to work in low paid jobs, work part time or flexibly, be self-employed or unemployed. As a result, underpensioned people will generally find it more difficult to save into a workplace pension, other types of savings and/or to buy a house. People from these underpensioned groups may therefore find it particularly difficult to achieve basket of goods adequacy levels. They are likely to find it easier to achieve working-life replacement rate targets, however these will only reflect a low working-life income and may result in poor standards of living both during working-life and retirement.
Underpensioned people are likely to be fairly dependent on the level of income provided by the State through the State Pension and State benefits and will be sensitive to changes to these. People in these groups will also benefit the most from private pension policies designed to include those on low earnings or in self-employment, particularly if they involve employer contributions to schemes or Government credits without high mandatory minimum contributions from employees.

Those on median and lower earnings will struggle to achieve adequacy targets above the minimum throughout retirement

Median earners (aged 55 in 2021), retiring at age 67 and taking their DC pension savings (but not using their 25% tax-free lump sum for retirement income) will only be able to maintain a “Comfortable” Living Standard until age 70, a “Moderate” Living Standard until age 75, and working-life replacement rate until age 78, before running out of DC savings. Those earning lower, (at the 30th percentile) will not be able to maintain adequacy targets above the JRF MIS for more than a few years in retirement, (two, six and four years less respectively than the median earner).

State Pension income and DB savings are sufficient to allow them to maintain a minimum level of adequacy throughout retirement. Future generations who will have lower average levels of DB entitlement might find it harder to meet the minimum targets throughout retirement.

There is a need to review how landscape changes affect the relevance of adequacy measures

Current understanding of adequacy is framed by the history of the UK State and private pensions systems and the consensus forged following the Pensions Commission report in 2004. The key policies that set the course of pension reform for the first two decades of the 21st century were:

1. the reform of the State Pension into a more generous single-tier, flat-rate new State Pension (nSP) but with later access with State Pension age (SPA) for both men and women moving up to age 66 and age 67, and
2. the introduction of automatic enrolment into workplace pension schemes at a minimum contribution level of 8%.

In more than 15 years since the Pensions Commission report, there have been significant changes to the pensions landscape, as set out in Figure EX.3 – some instigated directly by pensions reform but many not. The overall impact of 21st century trends so far could be characterised more as redistributive of, rather than absolute growth in, pension provision.
### Changes to the pensions landscape

<table>
<thead>
<tr>
<th>Previous landscape</th>
<th>What is changing?</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State Pension</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Pension age: 60 women, 65 men</td>
<td>State Pension age 66 for both, rising to 67 by 2028</td>
<td>More saving or longer working required to generate retirement income</td>
</tr>
<tr>
<td>State Pension at lower level. Many with incomplete contribution records</td>
<td>Higher State Pension and Pension Credit. More qualify for full new State Pension</td>
<td>State Pension supports more lower paid workers. Adequacy shortfalls now more likely for median earners</td>
</tr>
<tr>
<td><strong>Private Pension</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Majority of private and public sector pension savers in DB schemes</td>
<td>Move to UC saving (supported by automatic enrolment)</td>
<td>Similar contributions reaching 10m more workers - resulting in redistribution of pension wealth</td>
</tr>
<tr>
<td>DB contributions of 15% to 22%</td>
<td>Contributions of around 8% under automatic enrolment</td>
<td>Default workplace contributions reduce by around a half</td>
</tr>
<tr>
<td>Default is guaranteed income from DB or purchased annuity</td>
<td>Default is cash withdrawal</td>
<td>State Pension carries more of the “load” to maintain adequacy. Private pensions provide less to retirement, Loss of death in service and survivor benefits but gain of inheritance potential</td>
</tr>
<tr>
<td>DB pensions designed to support household units</td>
<td>DC pensions designed as individual arrangements</td>
<td></td>
</tr>
<tr>
<td><strong>Both</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income for many of 66% of working life income from a combination of private and State Pension</td>
<td>Target of 45–48% from State Pension and default DC contributions</td>
<td>Additional voluntary savings required to fill gap</td>
</tr>
<tr>
<td><strong>Consistent increases in salaries and standard of living</strong></td>
<td>Static income growth following banking crisis, impact of pandemic, likely higher levels of unemployment in future</td>
<td>Slipping standards of living despite full employment. Sharp rise in unemployment now predicted</td>
</tr>
<tr>
<td>Home ownership for majority, low levels of debt in retirement</td>
<td>Increase in renters, increase in intergenerational support, third of people taking debt into retirement</td>
<td>Higher demands on retirement income and immediate (less discretionary) calls on tax-free lump sum</td>
</tr>
<tr>
<td><strong>Other savings &amp; assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of private pension savers increasing alongside gradual rises in contribution levels. Likelihood of fewer gaps in contribution histories.</td>
<td>Temporary reduction in contributions, potential long term wage scarring and increases in unemployment and ill-health</td>
<td>Long-term impact is uncertain, potential for reduced accrual of pension entitlement and saving and earlier calls on private pension saving</td>
</tr>
</tbody>
</table>

Figure EX.3: an overview of recent changes to the pensions landscape
Two key issues that arise from these changes are:

• The continuing gap between the default level of automatically enrolled contributions and the level required to achieve the Pensions Commission’s definition of adequacy, and
• The fundamental change in the use of pensions assets consequent to the introduction of the pension flexibilities in 2014.

These points combine with the underlying change to a DC pensions architecture (which creates individual pension pots with more risks for individuals to manage) and the overall pressure on living standards since the banking crisis, and now with COVID-19. These changes also mean that people will not receive the same level of guaranteed income stream in retirement in future, as fewer people will be receiving the majority of retirement income from a combination of DB and State Pension entitlement. These changes reflect both changes in income types and in the use of income, which mean that an adequacy approach which focusses on developing both an income stream and reserve capital will better meet the needs of future pensioners.

**People are experiencing increasing additional demands on retirement income**

A number of social and policy changes are increasing the demands made on assets originally saved to provide a retirement income. These include:

• A widening gap for some between leaving work and receiving the State Pension,
• Paying for rent in retirement as fewer expect to retire as owner-occupiers,
• Paying off debts carried into retirement, and
• Supporting other family members with regular financial payments, housing deposits and loans.

**Marked differences in outcomes are predicted dependent on how ‘adequate income’ is defined**

Analysis of pensions held by those aged 50-65 was projected forward to assess their ability to sustain adequacy (using State and private pension income, excluding 25% tax-free lump sums), after allowing for housing costs, under fixed and proportional income targets. The modelling does not include ongoing debt or inheritance, which will be a factor for some households. Using a range of fixed income targets:

• A quarter of people (around 3 million people) risk not reaching the JRF MIS
• Single-person households are around four times more likely to be below the JRF MIS
• Low-income households are twice as likely to risk inadequacy under the JRF MIS, and
• Only a third can expect a ‘Moderate’ retirement and a one in ten ‘Comfortable’ under the PLSA definitions.

But using the Pensions Commission’s proportional targets:

• Only around a half of people can expect to maintain a personally acceptable level of income in retirement, and
• The challenge of maintaining acceptable incomes is greatest for the highest paid, with 77% of those in the top quintile missing the target, in contrast with only 3% of the bottom income quintile.

This analysis demonstrates clearly that the question of retirement income adequacy is multi-dimensional.

**COVID-19 may have financial and behavioural consequences for adequacy as a result of wage scarring**

A number of subgroups are at particular risk as a result of COVID-19 impacts.

Modelling of the range of outcomes in the Office for Budget Responsibility (OBR) projections suggests that the potential of the impact of COVID-19 on pensions adequacy is noticeable but limited. The proportion of people aged 50-65 predicted to miss the JRF MIS (AHC) target decreases by 1% in both the ‘upside’ and ‘downside’ COVID-19 scenarios (because the triple lock increases pensioner income relative to earnings under these scenarios, and target levels decrease with earnings). The stabilising effect of the State Pension’s ‘triple lock’ is exhibited in these projections (Figure EX.4)
Figure EX.4

Potential COVID-19 impact on pensions adequacy is noticeable but limited

Proportion of households aged 50 to SPa in 2016/18 on target to meet adequacy targets at projected SPa by economic scenario, GB

Evidence of the behavioural impacts of COVID-19 is still emerging, but it is reasonable to think that new opportunities might arise to address public attitudes to retirement savings. It is also currently expected that, in addition to the loss of life in the short-term, the pandemic may have a negative effect on health and life expectancy in the longer-term.

People from underpensioned groups will be disadvantaged differently as a result of the impact of COVID-19 on employment and job prospects. Underpensioned groups are more likely to experience labour market inequalities and so be affected by the short working, furlough and redundancies during the pandemic, as many work in the industries most impacted by the public health restrictions such as retail, hospitality and tourism, or are in low paid, part-time or irregular employment. Particular groups who are at risk include:

- Women
- People from some BAME groups
- Disabled people
- Carers
- The self-employed

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4 PPI Modelling; the analysis incorporates the 3% scarring of the economy forming the central assumption of the Office for Budget Responsibility (OBR) projections in November 2020

5 Wilkinson, L. et. al. (PPI) (2020)
Older people who lose their jobs as a result of COVID-19 may struggle to return to the labour market

The age group with the highest redundancy rate as a result of COVID-19 is those aged 50 years and over, with 12.8 thousand people being made redundant, up from 4.4 thousand at the same time in the previous year (November 2020 to January 2021).6

Redundancies and job losses arising from COVID-19 could have a particularly negative impact on the future earnings and pension savings levels of older people. Those who lose their jobs over age 50 are less likely to return to work than those at younger ages, and may therefore experience a long period of unemployment, meaning that their break in pension contributions may be longer than the period associated with COVID-19, but extend even up to SPa. Not only will contributions be more difficult for unemployed people over age 50, but they may also need to access their private pension savings early in order to support themselves, if unemployment continues. This further reduces the potential retirement income that they will be able to use to top up State Pension income to an adequate level. As a result, those over age 50 who lose their jobs due to COVID-19 are likely to have more trouble meeting adequacy targets in retirement than those at younger ages in similar circumstances who are likely to find it easier to return to work.

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6 ONS (2021)
Introduction

A conception of the amount of income that individuals need in order to afford an adequate standard of living in retirement should be at the heart of all pension policy decisions. This conception is essential knowledge for discussions and decisions about planning for retirement and using income in retirement.

Our 21st century view of what is adequate needs to be informed by understanding:

- What the concept of adequacy means in today’s world,
- Whose responsibility it is to provide adequacy, and
- How adequate income levels can be attained and maintained as needs change through retirement.

This investigation is especially necessary in the light of policy and market changes affecting working and saving lives, and the State and private pensions system.

This research project examines the issues underlying debates around adequacy and the fundamental questions of what adequacy is, how it should be defined and who is responsible for providing it.

Chapter One examines the question of the definition of adequacy in relation to retirement income and highlights the many issues that are raised and different viewpoints that can be taken, making assessment complex and multi-faceted.

Chapter Two examines the current issues around adequacy of incomes in retirement and investigates how the changing structure of and demands on retirement savings may require a re-evaluation of the current pensions settlement.

Chapter Three looks at how people of different characteristics could meet a variety of adequacy targets.

Chapter Four looks at the scale of potential impacts on adequacy following the COVID-19 pandemic.
Chapter One: What is ‘an adequate income’ in retirement?

This chapter examines the question of the definition of adequacy in relation to retirement income, and highlights the many issues that are raised and different viewpoints that can be taken, making assessment complex and multi-faceted.

What is ‘adequate’?

**Adequacy is inherently subjective**

Adequate is a relative, not an absolute term. In common usage it means “enough or satisfactory for a particular purpose”.

There is no single answer as to what constitutes an adequate income as it depends on the comparator (the purpose) and the measure (the test of satisfaction). This is inherently subjective as the choice of comparator and measure vary depending on who makes that assessment. The challenge for policy is to establish a consensus as to an approach to defining adequacy that is sufficiently flexible, equitable and robust to be practicable and durable.

What can be deemed adequate by an individual will be driven by their expectations of retirement, which will be determined both by their experiences of life so far and also by the changes that they expect to flow from retirement. The level of expectation could range from:

- avoidance of deprivation or maintenance of dignity,
- comfort and active participation in society,
- happiness and wellbeing

Assessing Adequacy

There are two traditional approaches to assessing adequacy which stem from very different perspectives:

- **The fixed income target** – which has its origins in the state underpin and avoidance of deprivation, but has developed into objective ‘basket of goods’ approaches, which price a basket of goods and services required for a particular living standard and translate these into an annual required income.
- **The proportional income target** – which focusses on assessing subjective individual comfort and has its origins in the view of the engaged employer. Replacement rates, the ratio of incomes after and before retirement, are a widely used method. These focus on the proportion of working-life income required to replicate working-life income in retirement.

Cambridge Dictionary
There are two main “basket of goods” approaches in the UK

This section sets out the Joseph Rowntree Foundation’s (JRF) Minimum Income Standard (MIS) and the Pensions Lifetime Savings Association’s (PLSA) Living Standard Targets which calculate the cost of a “basket of goods and services” for a particular group, and then use this cost amount as an adequacy target.

The JRF MIS assesses the incomes that modern households require in order to afford a minimum standard of living, based on a basket of goods

Since 2008, the JRF has calculated the retirement income that different households require to reach a minimally acceptable standard of living in the UK, based on the price of a basket of goods and services that are required to meet this minimum need.

The MIS study results in a suite of weekly budget totals to attain a minimum standard, those for retirees in 2020 are £206 pw for a single pensioner and £318 pw for a pensioner couple, excluding rent for those in urban areas outside London. The MIS figures are updated to reflect changes in prices but also periodically re-based to reflect changes in society’s views of acceptable living standards. While MIS levels are not dependent on an individual’s working-life earnings, they are still linked to society’s changing living standards over time. And in this sense, they are relative measures over the medium and long-term.

Pensioners have seen their likelihood of living below the MIS increase from one in eight (12.3%) in 2008/09 to nearly one in five in 2018/19 (18.2%), but in the same period, the level of MIS relative to median income (after housing costs) has risen from 59% to 69% for single pensioners and 53% to 63% for couple pensioners.

The PLSA Income Targets

The PLSA has taken this ‘basket of goods’ approach to establish how ‘higher’ living standards should be defined, which research participants described as ‘Moderate’ and ‘Comfortable’. They built up a detailed picture of the goods and services needed for these living standards and what these standards should deliver beyond just meeting basic needs (as defined by the MIS). (Figure 1.1 & 1.2).

Figure 1.1: Definitions of PLSA’s Moderate and Comfortable living standards

<table>
<thead>
<tr>
<th>Moderate</th>
<th>Comfortable</th>
</tr>
</thead>
<tbody>
<tr>
<td>“able to access a range of opportunities and choices, having a sense of security and the option to do some of the things that you would like to do”</td>
<td>“having a broad range of opportunities and choices, peace of mind and the flexibility to do a lot of the things that you would like to do”</td>
</tr>
</tbody>
</table>

---

8 It is based on a regular research cycle over 4 years, using techniques such as deliberative focus groups, to establish and update agreed needs to meet material requirements and to participate in society.

9 The latest report completed fieldwork immediately prior to first COVID-19 lockdown and so does not consider how behaviour and attitudes have been changed by lockdown and its economic consequences, but it does consider issues such as how technological change has affected the entry level package of services required to enable digital inclusion and the need for families to be mobile.

10 Davis et. al. (2020)
11 Davis et. al. (2020)
12 PLSA (2019)
13 PPI Modelling
What is an adequate retirement income?

As aspirational targets, the Living Standards are designed for use by the individual or couple as a starting point to trigger personal financial planning and to think in a detailed way about the type of living standard they aspire to. The PLSA suggests the standards are used alongside annual benefits statements to assess the standard of retirement that might be expected from the funds accumulating. The assessment of which standard will be adequate is necessarily personal and probably framed by pre-retirement living standards and life experiences. However, the objective approach and deliberative methodology used to define these baskets may be useful to help individuals to visualise, in more concrete terms, what their retirement income will actually buy them and whether the resulting standard from their expected retirement income will be adequate for them in reality.

Replacement rates are a part of the framework of the current system

Replacement rates seek to define a personalised target by setting a retirement income as a proportion of individual’s income immediately prior to the point of retirement, generally around two thirds of working-life income.

UK origins of this approach can be traced back to Civil Service pension arrangements which then formed the framework for UK Occupational Pension Tax law and associated reliefs. Through this, the replacement rate concept was propagated across UK occupational Defined Benefit (DB) schemes during the 20th century.

The final salary scheme embeds the concept of a guaranteed replacement rate in the scheme design. DB pension benefits are expressed as 1/60th, 1/80th or other fraction of final salary for each year of accruing service. A typical 60ths scheme would result in a pension after 40 years’ service, alongside the State Pension, of two thirds final salary (a 67% replacement rate) the Inland Revenue maximum limit.

Another typical part of the DB design is the ability to commute part of the benefit to a cash sum. The current rules allow this to be taken free of income tax up to 25%. The DB design allows for the replacement rate to be achieved largely through a guaranteed income but supplemented by an optional cash endowment. The full promise is delivered if no cash sum is taken. The Inland Revenue limits effectively set a state limit to adequacy under DB schemes at a replacement rate of 67%.

An underlying logic in the design can be seen as to maintain a standard of living after the costs of working-life have been subtracted, housing costs have been reduced as mortgages are paid off, and income tax paid is reduced as a lower retirement income incurs less tax at the higher rate.

The Pensions Commission used an earnings replacement approach as their basis for assessing adequacy. In their first report, they concluded that having considered evidence from international comparisons, time trends in replacement rates, analysis of expenditure patterns in retirement and actual replacement rates at the time, there could be no clear definition of pension adequacy.

Figure 1.2:\(^{14}\) Annual retirement income required to meet PLSA living standards

<table>
<thead>
<tr>
<th>Breed (UK)</th>
<th>One person</th>
<th>Couple</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate (London/South East)</td>
<td>£24,100</td>
<td>£33,300</td>
</tr>
<tr>
<td>Comfortable (UK)</td>
<td>£33,000</td>
<td>£47,500</td>
</tr>
<tr>
<td>Comfortable (London/South East)</td>
<td>£36,300</td>
<td>£49,300</td>
</tr>
</tbody>
</table>

\(^{14}\) PPI Modelling

\(^{15}\) Gilling-Smith, G.D. (1967); In 1958, the UK Government Actuary estimated that 49% of the schemes which they examined were on a final salary basis

\(^{16}\) The Pensions Commission (2004)
Who assesses adequacy and how to do they make their assessment?

A key question is who is assessing adequacy and what method do they use? The next section of this chapter investigates adequacy from the perspective of:

- Individuals
- The State
- Employers
- Society

Adequacy assessments are highly individual

Individuals make their own assessment of retirement happiness, based partly on their expectations of retirement income. Actual retirement income is primarily determined by the degree people are able to save at the expense of consumption while working. This reflects the economic reality that saving is deferred consumption.

Under today’s system, where most people are saving into Defined Contribution (DC) schemes, it is unlikely for many that a sense of adequacy in retirement will be achieved. That is unless the individual (possibly with their life partner) has the understanding of the need for and scale of pension contributions required, the income and favourable life circumstances, and the will and financial discipline to make additional voluntary pension contributions above the current automatic enrolment minimum of 8% in total (including their employer’s contribution) to their workplace pension scheme.

Target replacement rates reflect the personalised nature of adequacy assessments

Individual assessments are subjective but are framed by people’s working-life living standards, weighted towards those immediately prior to retirement. This provides a behavioural basis for replacement rate targets. This target is inherently personal as the measurement is relative to one's own income rather than an average for the population or demographic. Making a personal adequacy assessment is a difficult task because, for example, people over-value consumption now over that in the future and generally underestimate expected lifespans by six to eight years.

Behavioural economics mean that many people struggle to make optimal assessments of adequacy

Understanding of how people assess their own financial needs in retirement should be set in the context of people’s wider framing of retirement as generally optimistic. Despite being rationally aware of the challenges which they are likely to experience at some point in their retirement (such as declining health and mobility), most people are reluctant to think about or discuss them. There is a high degree of consistency observed in optimistic aspirations for retirement, with relatively little sense of people having tailored these visions to their own personal circumstances. Individuals with clear detailed personal plans for retirement are more exceptional and it appears only these individuals exhibit a higher degree of engagement with financial decision making.

Applying adequacy assessments within the current DC system adds complexity which is difficult for most people to navigate

DC adds a further overlay of challenge as calculations and assumptions need to be made to project a rate of contribution into a fund value at retirement and then into a sustainable rate of income in retirement. Making informed decisions about accessing DC savings is considered the most difficult lifetime financial decision. The factors considered necessary to make informed decisions about DC savings involve knowledge about the economy and market risks, numerical skills and knowledge about the potential impact of unknown factors, which the majority of the UK population do not have.
Many providers have made efforts to improve the impact and relevance of annual statements, in order to help scheme members to engage, and also signpost savers to tools to assist personalised targeting and what-if analysis. However, industry feedback is that, like the statements, the new tools get relatively low rates of engaged use. In the search of a rule of thumb to simplify the challenge, most savers would settle on the contribution rate being mandated.22

Some savers also use informal guidance and support services, for example the Money and Pensions Service and Pensions Wise, or paid for financial providers. However, many make decisions without support. As a result, many people struggle to make pensions and savings decisions which offer them the best chance of both achieving their aspirations for retirement and protecting themselves against future risk.23

Even if a saver navigates the savings process, the retirement experience may not be as anticipated as it is influenced by aspects out of their control such as health, family and relationship circumstances, as well as wider economic impacts.

In future, the Pensions Dashboards, which will allow people to view all of their pension savings in a single place, may help more people to understand what their future retirement income trajectory might look like.

The State

It is important to the State that people achieve adequacy in retirement

The State is concerned with the question of adequacy. Society requires that it plays the role of safety net to prevent:

- Widespread destitution of those in retirement,
- Systemic claims on means-tested benefits, or
- Excess calls on social resources such as health and social services.

Its assessment of adequacy is intrinsic to the policies underlying the State Pension and Social Security systems.

The State sets adequacy for pensioners at around £9,110pa in 2020

For those without a full contribution record, the new State Pension (nSP) can be topped-up by claiming the means-tested benefit, Pension Credit. The combination of the nSP and Pension Credit deliver a safety net of around £175 pw (£9,110 pa) for an individual.24 This sets, de facto, the basic level of adequacy for pensioners as currently determined by the State. It is worth noting that 39% of those eligible for Pension Credit do not claim it (2020).25

18% of pensioners have incomes below the poverty line

The State also uses proportional targets to look at adequacy, setting a relative poverty line at 60% of current median UK household income. In 2017/18, 22% of UK households had an income below this line, after housing costs, and 18% (around 2.2m) of pensioners lived in households below this poverty line, after housing costs.26 While means-tested benefits are intended to ensure that pensioners do not live in poverty, many still do as a result of not claiming benefits or having high housing costs, not fully covered by Housing Benefit.

The value of the JRF’s MIS is outstripping the growth in median incomes

The JRF MIS study also calculates the level of the MIS against median income, after housing costs. The figures for 2018/19, the latest available, shows the MIS for a single pensioner at 69% and a pensioner couple at 63% of median income. Both these figures are above the 60% relative poverty line for the first time and have increased by 10 percentage points in the 10-year period since 2008/9.27 This suggests that the MIS...
is rising significantly faster than salaries and so risks outstripping the uprating of the nSP via the ‘triple lock’ in the future.

**The State also sets upper limits to adequacy**

The State has implicitly taken a view on the point at which a pension becomes more than adequate. For both DC and DB pensions, it sets limits beyond which the tax favoured status of pensions is reduced or withdrawn. In this way, the State is saying that benefits in excess are more than adequate and hence do not warrant the full package of incentives from the taxpayer to encourage the individual (and employer) to save for retirement.

Pension tax reforms in 2006 introduced a Lifetime Allowance (LTA) that limits the pension fund that an individual can accrue with full tax incentives. Funds accrued above this limit are subject to an additional tax charge of 25% when accessed. When introduced in 2006, the LTA was set at £1.5m and rose to £1.8m in 2011/12. It was then reduced in steps to £1m in 2016/17 and indexed to price inflation. The current allowance of £1,073,100 would typically purchase a guaranteed fixed income of around £55,000 at age 67 or an indexed guaranteed income of approximately £36,700 if the whole fund were used to purchase a single life annuity. The limit also applies to DB pensions and uses a 20 times equivalence calculation to convert the pension benefit into a fund. Thus, a DB income of just over £53,500 would breach the LTA.

The Office for Budget Responsibility (OBR) notes that in recent years the Government has made a number of significant changes to the tax treatment of private pensions and savings and concludes that, in doing so, it has generally shifted incentives in a way that makes pensions savings less attractive, particularly for high earners.

**Employers**

**Engaged employers play a role in determining adequacy levels**

The employer is a key player in the pensions system and their behaviour will affect adequacy levels, even if the employer is motivated more by attracting and retaining the right kind of employee. Employers segment into those who engage with pensions as a valuable part of their remuneration package and those who see it more just as a cost of employment.

Engaged employers assess whether the pension benefits are an economic, affordable, risk-tolerable and tax-efficient means of securing the following benefits:

- Attracting new talent,
- Incentivising retention, and
- Facilitating retirement willingly at the end of careers.

The engaged employer’s assessment is potentially aligned with that of the individual. It is in the employer’s interests to ensure that the individual understands the value of their pension savings and is reassured as to the security and adequacy of the arrangements that they are receiving.

The value of the employer in the pensions system should not be overlooked; in 2017, 83% of employees with a workplace pension value these as part of their benefits package, second in importance only to their holiday allowance, and 54% of employees said they would increase their own contributions if their employers did. However, the majority of employers (57%) do not believe their pension makes a difference to recruitment or retention, although large employers are around twice as likely as smaller ones to assess the impact as positive on recruitment (55% v 27%) and retention (63% v 28%).

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28 The tax charge is 55% if taken as a lump sum
29 PPI Modelling
30 Johal et. al. (2016)
31 TPP (2017)
32 TPP (2017)
Society needs to be comfortable with the level of fairness and equality allowed by the pension system in order for the system to remain sustainable.

For a pensions system to be sustainable, society more generally has to be broadly comfortable with the levels of fairness and equality resulting. There needs to be acceptable answers to social questions such as:

- Are older people given the opportunity to participate in society?
- Are older people on low incomes given sufficient support?
- Is the social settlement arrived at sustainable?

In economic terms, there needs to be a societal consensus that adequacy in both working-life and retirement is important. This consensus is likely to be led by Government, including key social influencers, particularly the media.

Individuals, the State, employers and society all play a role in determining adequacy.

Adequacy is therefore a multi-faceted concept in pensions with perspectives invested in both individual and broader outcomes.

- For the individual and, indirectly, for the engaged employer:
  - It relates to the personal standard of living in retirement, relative to their experience at working ages.
- For the State and wider society:
  - It relates to whether the system delivers fair and equal societal living standards in retirement.

Evaluation of both perspectives places a value judgement upon the provision of retirement income, striking a balance between affordability over time and across society.

The importance of income adequacy

Traditionally the focus of assessing adequacy has been on an income stream rather than assets (such as housing) or reserve capital.

There are a number of good reasons to take an income stream approach to adequacy. An income stream from a DB pension, annuity or State Pension is a direct substitute for a salary. It provides certainty around day-to-day budgeting for households working with the grain of their lifetime financial capabilities.

Taking an income stream approach helps to mitigate some unhelpful behavioural effects. On the one hand, it addresses the bias to spend now rather than later by commuting capital sums to a steady income flow. This is a consequence of people’s bias to hyperbolic discounting, where it is instinctive to value immediate benefits more highly than benefits further into the future.

On the other hand, it presents a risk that those taking income directly from a pension fund or a drawdown account (rather than in the form of an annuity) only draw down the interest, in order to preserve the original amount because of a fear of running out of funds in later life. If the capital (original fund) is not also drawn down progressively, then it may deny retirees a much higher standard of living that could be afforded and leave significant capital unused at end of life.

Many pensioners attempt to preserve their capital, if given the opportunity, leading to lower standards of living than necessary.

For retirees drawing down between 2002/03 and 2014/15, draw down rates are relatively slow, generally leaving more capital in the account than is necessary. The slow rates are as a result of people wishing to preserve capital in case of financial shocks. While this approach may result in people experiencing a lower standard of living than necessary, for some it does reduce psychological stress about potentially running out of money and may, therefore, have an emotional value that is worth...
the value of the forgone living standard. Some of those who do not experience financial shocks may also be happy to leave the remainder as an inheritance. However, income streams from a DB pension or an annuity mean that people need to be less worried about running down their capital and are likely to experience a higher standard of living using the same initial savings amount.

Those with higher incomes are more likely to draw down in larger proportional amounts, while those on the lowest incomes are more likely to preserve capital and experience a lower standard of living.\(^{34}\)

**The private pension system previously resulted in most people receiving retirement income as a steady stream, but now DC savers are less likely to receive a steady income in retirement**

DB pensions address the potential for over or under spending by providing a primary income benefit for life. DC has traditionally also done so by the default purchase of an annuity, exchanging the capital for a fixed (or escalating) income stream that is guaranteed to continue for life. The advent of the pension flexibilities in 2015 however has largely decoupled this link for DC with the removal of the default requirement to purchase an annuity.

**Drawdown offers access to a retirement income, but is subject to fewer guarantees than a DB pension or an annuity**

Historically annuities have been the primary means of taking money from DC savings. While escalating and inflation-linked options are available, the overwhelming majority of annuities purchased pay exactly the same amount year after year (83% of annuities purchased from ABI members in 2018 were non-escalating).\(^{35}\) Level annuities offer a higher starting payment, but these payments will decrease in value over the lifetime of the annuitant in real terms. More recently, drawdown and lump sum withdrawals have become the most popular mode of pension access. Drawdown and lump sum withdrawals do not contain the guarantees built into an annuity.

Within drawdown arrangements (and un-accessed pension funds), the remaining funds continue to be invested in investment arrangements typically designed to provide real returns for the member, above inflation, with some associated asset volatility.\(^{36}\) This mechanism offers a reasonable expectation that the fund’s purchasing power will be protected over the medium term, though it may be subject to short-term fluctuations (such as in the case of the early days of the COVID-19 pandemic). Pensioners may mitigate this investment risk by retaining part of their funds as a buffer against such fluctuations. This would necessitate reducing their pension withdrawals and cutting their current consumption.

People reduced fund withdrawals when stock markets were volatile during the first lockdown (March to May 2020), but withdrawals increased markedly when the first lockdown finished (June 2020). Total withdrawals across 2020 were still running at between 5% and 25% below 2019 levels,\(^{37}\) which tends to support the view that people are conservative and choose to forego current income in the face of market volatility. It is too soon to assess to what extent these shortfalls will be made up by larger withdrawals in future, less volatile, markets.

**Though an income approach is more helpful for assessing adequacy and preventing over or under spending, a combination of an income and capital approach may help people to meet needs which change during retirement**

Whilst a fixed income helps to manage day-to-day budgeting, the needs for income vary in and through retirement. What may be an adequate income in settled retirement may not be sufficient when people are setting up lifestyle changes entering retirement or trying out new experiences with the new freedom of time and absence of working responsibilities.

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\(^{34}\) FCA (2020)

\(^{35}\) FCA (2020)

\(^{36}\) From February 2021, the FCA requires suitable default ‘investment pathways’ to be designed and offered to those accessing pensions

\(^{37}\) ABI (2020a)
The New Zealand Commission for Financial Capability suggests that retirement should be thought of in three stages, that it labels ‘Discovery’ (65-74), ‘Endeavour’ (75-84) and ‘Reflection’ (85+):

- In the early stage, lifestyle drives spending as you have the time to pursue things you have promised you would do ‘someday’.
- In the middle stage, spending slows as you also slow down and settle into more of a daily routine and consolidate as energy levels are changing.
- In the late stage, for many the costs of living drops dramatically as you spend more time at home often focusing on managing health and well-being. But for some, failing health dictates the need for an environment with care at hand and spending goes up to fund this support, often rapidly depleting remaining financial resources.38

In the UK, spending generally decreases over time for cohorts in a way which reflects the above analysis, and is likely to reflect the pattern for future pensioners (Figure 1.3)

Figure 1.339

Spending generally decreases over time during retirement
Average UK expenditure by age, year and cohort (2021 earnings terms)

38 https://cffc.govt.nz/building-wealthy-lives/ageing-well/
39 PPI analysis of spending using UK LCP survey data – more details are available in the Modelling Appendix
Over time there are some changes in the composition of expenditure as recreation and other expenditure tends to reduce with age, food remaining largely stable and health costs rise (Figure 1.4).

Figure 1.4

Household expenditure decreases by age, particularly by recreation

Average expenditure components within single and two-person households in 2018-19, UK

<table>
<thead>
<tr>
<th></th>
<th>65-69</th>
<th>70-74</th>
<th>75-79</th>
<th>80+</th>
<th>65-69</th>
<th>70-74</th>
<th>75-79</th>
<th>80+</th>
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<tr>
<td><strong>Single household</strong></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food, drink and tobacco</td>
<td>£119.63</td>
<td>£119.63</td>
<td>£119.63</td>
<td>£119.63</td>
<td>£86.47</td>
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<td>£23.24</td>
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<td>£95.82</td>
<td>£95.82</td>
<td>£95.82</td>
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</tr>
<tr>
<td>Recreation</td>
<td>£1.24</td>
<td>£1.24</td>
<td>£1.24</td>
<td>£1.24</td>
<td>£1.69</td>
<td>£1.69</td>
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<td>Health</td>
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<td>£95.82</td>
<td>£95.82</td>
<td>£18.83</td>
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<tr>
<td><strong>Two-person household</strong></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food, drink and tobacco</td>
<td>£145.67</td>
<td>£145.67</td>
<td>£145.67</td>
<td>£145.67</td>
<td>£218.83</td>
<td>£218.83</td>
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<tr>
<td>Housing</td>
<td>£23.24</td>
<td>£23.24</td>
<td>£23.24</td>
<td>£23.24</td>
<td>£66.59</td>
<td>£66.59</td>
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<tr>
<td>Recreation</td>
<td>£1.69</td>
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<td>£1.69</td>
<td>£1.69</td>
<td>£4.49</td>
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<tr>
<td>Other</td>
<td>£4.49</td>
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<td>£48.28</td>
<td>£48.28</td>
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<td>£48.28</td>
</tr>
</tbody>
</table>

Relying solely on an income stream in retirement limits the ability to deal with personal financial shocks

As in working-life, there remains a need for a ‘rainy day’ fund to provide reserve capital to pay for replacement of large goods (e.g., boilers, washing machines) and other expenditure such as major home repairs and refurbishments. In addition, funds may be required to deal with unforeseen changes in family circumstances (such as a divorce or death of a partner) and, as noted above, health costs (such as elective surgeries and care costs). Unexpectedly large calls on capital may be increasing as nearly 16 million adults in the UK have no home insurance cover and little or no savings.41 Reserves of capital are required, in addition to an adequate income, or additional income is needed to establish and maintain buffer savings. If these sources are not available, then money has to be borrowed and income is subsequently reduced by the costs of servicing this debt.

While both median consumption and expenditure decreases when settled in retirement, the ratio saved increases (Figure 1.5). This suggests that retirees become more cautious as their resources are diminished and are trading current living standards off against security.

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40 PPI analysis of spending using UK LCP survey data; Other includes clothing, footwear, furnishing, transport, communication, education, restaurants and hotels, misc. goods and services

41 Hurman, N. Wells, J. (2017)
Both median consumption and expenditure decreases when settled in retirement

Median income and median consumption across different age groups, 2018/19, UK

<table>
<thead>
<tr>
<th>Age bands</th>
<th>Median consumption</th>
<th>Median gross income</th>
</tr>
</thead>
<tbody>
<tr>
<td>65-69</td>
<td>£10,545</td>
<td>£11,741</td>
</tr>
<tr>
<td>70-74</td>
<td>£15,059</td>
<td>£15,611</td>
</tr>
<tr>
<td>75-79</td>
<td>£12,434</td>
<td>£15,008</td>
</tr>
<tr>
<td>80+</td>
<td>£10,693</td>
<td>£14,680</td>
</tr>
</tbody>
</table>

Meeting income targets defined by consumption levels will typically require saving during working-life. An income based solely upon State benefits needs to be supplemented even to attain Minimum Income Standards

The nSP will just cover the JRF MIS (AHC) requirement outside of London for a couple household but beyond this, additional income will be required from private pensions or other savings (Figure 1.6).

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42 PPI analysis of spending using UK LCP survey data
Figure 1.6

The full new State Pension just covers the JRF MIS for households outside London

The annual retirement income required under the JRF MIS (AHC) and the Moderate and Comfortable PLSA Retirement Living Standards for households outside London

<table>
<thead>
<tr>
<th>Minimum income standard</th>
<th>Moderate (PLSA)</th>
<th>Comfortable (PLSA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single person</td>
<td>£9,339</td>
<td>£9,339</td>
</tr>
<tr>
<td>Couple</td>
<td>£9,339</td>
<td>£18,678</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

The funds required for an individual in a single household to meet the PLSA's Moderate and Comfortable adequacy targets are substantial. Under the PLSA income standards, an individual who is in a single household, living outside London, would require around £20,700 a year for a Moderate retirement (excluding the 25% tax-free lump sum). This equates to £440,000 of pension wealth by retirement. The figures for Comfortable retirement in Outer London are around £37,300 per year of income equating to £1,100,000 of pension wealth at retirement (Figure 1.7). These pension wealth figures assume no lump sum has been taken at retirement.

This tends to suggest that ‘Comfortable’ is a pretty high bar and that even ‘Moderate’ represents a challenging standard in a DC world. People’s expectations for retirement are likely to be increasingly difficult to meet without increases to contributions, longer working, and/or changes to the State Pension and benefits system.

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43 PPI Modelling and PLSA Hitting the Target Living Standards
What is an adequate retirement income?

Figure 1.7
The PLSA Moderate and Comfortable Targets require private pension funds of £440,000 – £1,100,000 for a single person household

The relationship between annual retirement income and the private pension wealth required, in addition to State Pension, to achieve the level of retirement income for an individual in a single household (2021 earnings terms)

If the household is comprised of a couple, then the combined pension wealth required for the household to meet the ‘Moderate’ and ‘Comfortable’ targets are larger at £480,000 and £1,475,000 (Figure 1.8). However, these figures are only by about a tenth more for ‘Moderate’ and just over a third more at £1,500,000 for ‘Comfortable’ when compared to the figure required for an individual in a one-person household. This relatively small proportional increment is the result of two key factors:

- The two-person household receives twice the income via the State Pension and
- The targets for a two-person household are broadly only about one and half times that for a single-person household.
The PLSA Moderate and Comfortable Targets require combined private pension funds of £480,000 – £1,475,000 for a two-person household

The relationship between annual retirement income and the private pension wealth required, in addition to State Pension, to achieve the level of retirement income for an individual in a two-person household (2021 earnings terms)

Households at retirement are mostly comprised of two people

The focus on adequacy tends currently to be on individuals, as the system has moved to individual pension provision with nSP and DC schemes both providing individual pension rights. This focus provides more security for individuals, in particular women, as personal provision remains in place regardless of changes in family and household structures.

However, at State Pension age (Spa) almost 75% of households comprise two individuals (Figure 1.9). In practice, most people benefit from sharing living costs and living standards at retirement in a household. The savings that arise are demonstrated through the JRF MIS and PLSA Living Standards where the weekly budgets for a retired couple are only around 50% more than for a single pensioner.

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45 PPI Modelling and PLSA Hitting the Target Living Standards
46 www.retirementlivingstandards.org.uk
Almost 75% of households are couples at age 65

Household composition dependent on family type, across different age groups, UK, 2017

This changes through retirement, and single households increase until, by age 85, they have become the most prevalent household size. Nearly 75% of these single households are widowed. In addition to their own pension rights, they may also receive survivor benefits from DB pensions (or less likely from their partner’s annuities). Also, under the pension flexibilities, they will increasingly be able to access any remaining funds from their partner’s DC funds following their death, where those funds have not been annuitised or fully drawn down.

This changing balance of household composition presents another challenge for adequacy and policy. To attain the same living standard, a pensioner who is half a couple will need only 75% of the retirement income of a pensioner living alone due to the advantages of shared household finances.

An individual heading towards retirement who is single or becomes unexpectedly single through divorce will need to save (or acquire through divorce) a greater amount to meet the same standard of living in retirement. Individuals living in single person households thus face a greater challenge to save for retirement as they must meet a higher target. Single households may face further challenges particularly with health needs in later life, as they will generally have a lower income to fall back on and will not be able to rely on a partner for care, though other family members may provide this.

Pensioner households moving from couples to singles during retirement (typically associated with widowhood) emphasise the need for survivor benefits to be in place in a DC world. Where assets or income are split across a couple, there is a risk of loss of income and living standards for the survivor. Typically, survivor benefits are not secured with retirement annuities purchased from DC pensions. These are often not purchased on a joint life basis and will cease to provide income on the death of the purchaser.

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47 English Longitudinal Study of Ageing (ELSA) Wave 8
48 English Longitudinal Study of Ageing (ELSA) Wave 8
It is anticipated that annuities may find a new market amongst those in middle retirement seeking to secure a guaranteed income around age 75-80 and onward, having previously used income drawdown to finance more active early retirements. Future pensioners may benefit from a policy that encourages or defaults annuity purchases onto a joint life basis to secure benefits for a surviving partner in a couple.

## Conclusions

- Adequacy is inherently subjective and goes beyond just income levels, but target replacement rates tend to reflect the individual’s view of adequacy as maintaining living standards into retirement.
- Many people struggle to make optimal assessments of adequacy and are hampered by behavioural biases.
- The DC system adds further complexity which is difficult to navigate.
- It is also important to the State that people achieve adequacy in retirement and the State maintains minimum adequacy through the State Pension and benefits system, monitors poverty levels and also sets upper adequacy limits through the tax system.
- Engaged employers play role in setting expectations of adequacy levels through their occupational schemes.
- Society also needs to be comfortable with the level of fairness and equality in the pensions system.
- The traditional focus of financial adequacy has been on income rather than assets, but DC savers have more flexibility at the expense of fewer guarantees.
- Though an income approach is more helpful for assessing adequacy and preventing over or under spending, a capital approach may help people to meet needs which change during retirement.
- Adequacy needs to consider households, not just individuals.
Chapter Two: The need for a new approach

This chapter examines the current issues around adequacy of incomes in retirement and investigates how the changing structure of and demands on retirement savings may require a re-evaluation of the current pensions settlement.

This chapter explores:

- The history of the current pensions adequacy settlement
- The sufficiency of current contribution levels
- Living standard replacement rates
- How demands on retirement income are changing

There has long been a tension between individual adequacy and affordability to the State

The question of quantifying retirement income adequacy was first addressed by Victorian social reformers, Booth and Rowntree

In 1888, Charles Booth set out to map the poverty level in Tower Hamlets, which he set at nine shillings, four pence a week. Sebohbm Rowntree made similar findings in his study in York in 1901. Both used methods to assess the minimum income necessary for a moderate level of ‘physical efficiency’.

These studies were instrumental in creating effective political pressure to introduce the first UK State Pension in 1909, albeit at five shillings a week, a level significantly below the poverty line. Even so, the Lloyd George government was required to impose what was considered, at the time, an unprecedented peacetime tax burden to finance these provisions.

The tension between objective need and economic affordability has thus been intrinsic to State Pensions from inception, and the need to present an objectively demonstrated minimum standard remains a precondition to politically effective lobbying

Rowntree’s budgetary approach became a de-facto standard for local poverty standards studies for the first half of the 20th century, prior to the introduction of the welfare state, and the concept continues to this day in the Joseph Rowntree Foundation (JRF) Minimum Income Standard (MIS) study.

The current landscape for adequacy has been shaped by the Pensions Commission, but many things have changed since their 2004 report

In 2004, the Pensions Commission (who had been tasked by the Government to develop policies for tackling the adequacy and sustainability of the future State and private pension systems) secured a political consensus around reform of the UK State and Private Pensions system. The quality of the analysis and the practicality of solutions they proposed is evidenced by the durability of the settlement reached between the Government, business, the trade unions and special interest groups, and would not have been so successful had it not been founded on this political consensus.

49 Thurley, D (2008)
50 Glennensterr, H et al (2004); While Booth used local assessors to establish this based on research and experience guided by school fee remission used by the London School Board, Rowntree used actual food budgets derived from the minimum rations recommended by the Local Government Board for workhouses. To this was added the cost of housing, clothing, light and fuel.
51 Thurley, D (2008)
52 Davis, A. et. al. (2020)
Since then, many of the Commission’s recommendations have been taken forwardmost, notably the reform of the State Pension system and the implementation of automatic enrolment. In addition to the policies proposed by the Pensions Commission, the pensions landscape has changed in many other ways, for example:

- The material raising of personal tax thresholds,
- Reform and unification of many social security benefits into Universal Credit, and
- Liberalisation of access to pension savings flowing from the “Freedom and Choice” legislation.

These changes are set against a backdrop of static income growth for many workers during the years of austerity, the reduction in home ownership in younger working age groups, increases in life expectancy and healthy life expectancy, and the increase of inter-generational financial support within families.53

Changes in pension provision are having a dramatic impact on the landscape

Another key change is that by the end of 2019, the UK passed the point at which Defined Contribution (DC) exceeded Defined Benefit (DB) pensions in terms of:

- Total Membership - 22.4 million (DC) vs 18.3 million (DB) and
- Employee Contributions – nearly two thirds are to DC schemes.54

However, DB schemes still dominate in terms of benefits provided with three quarters of the £16.3 billion paid as retirement income in Q4 2019 being from private sector DB or hybrid schemes.55 The creation of the Pension Protection Fund (PPF) in 2005 importantly introduced security to these DB benefits, underpinning the employer’s promise.56

Automatic enrolment has brought many more people into pension saving

The automatic enrolment policy implemented following the Pensions Commission recommendations have resulted in an increase in workplace scheme membership of 10 million by 2019, with 85% of private sector workers now participating in schemes compared with under 50% in 2012.57

Particular groups benefiting from automatic enrolment include young adults (aged 22-29), where participation has increased from 24% to 84%, and among some people in BAME (Black, Asian, Minority Ethnic) groups, with participation of Pakistani and Bangladeshi workers rising from 36% to 60%, for example. However, people in these ethnic groups are less likely to be eligible for automatic enrolment than the average for UK workers, because of differences in labour market behaviour.58

While contribution rates have been increased under the legislation so that they are now 8% of band earnings59 (3% from employers and 5% from employees), this is far less than half of that typical in final salary schemes at 20-25%+ of full pensionable salary (15-20% from employers and 7%+ from employees) (Figure 2.1 and 2.2).

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54 ONS (2019a)
55 ONS (2019a)
56 See The Pension Protection Fund - The Pensions Advisory Service for more details
57 TPR (2019)
58 Collinson, P (2019)
59 Band earnings reduce the amount of salary that is pensionable to that earned between £6,240 and £50,000 per annum (for tax year 2020/21).
What is an adequate retirement income?

The 8% of band earnings contribution level was a compromise between employer groups concerned about the impact of compulsory contributions on small businesses, and employee groups who said a 3% employer contribution was insufficient.62

The Pensions Commission provided a rationale for setting contributions at this level in their second report, calculating that in addition to a reformed State Pension, private pension contributions of 8% of band earnings would be sufficient to provide the median earner retiring in 2053 with 45-48% of their earnings as a retirement income, but recommending that employees be enabled to make additional contributions to reach a maximum of 16% contributions throughout their working-life. This would enable people to reach a 60-66% replacement rate, generally considered sufficient to allow people on median income to replicate working-life living standards in retirement.63

The Pensions Commission used replacement rate targets of 80% of gross earnings for lowest earners, declining to 67% for median earners and to 50% for top earners (Figure 2.3).

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**Figure 2.1**: Employees with workplace pensions: by banded rate of employer contribution and pension type, UK, 201960

<table>
<thead>
<tr>
<th>Rate of Employer Contribution</th>
<th>Defined Benefit</th>
<th>Trust-based Defined Contribution (includes master trusts)</th>
<th>Group personal and group stakeholder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>0.9%</td>
<td>1.6%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Greater than 0 and under 2%</td>
<td>0.9%</td>
<td>8.8%</td>
<td>4.3%</td>
</tr>
<tr>
<td>2% to under 4%</td>
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<td>48.6%</td>
<td>37.9%</td>
</tr>
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<td>1.6%</td>
<td>6.2%</td>
<td>7.3%</td>
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<td>10% to under 12%</td>
<td>1.9%</td>
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<td>4.4%</td>
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<td>12% to under 15%</td>
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<td>32.3%</td>
<td>2.8%</td>
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<tr>
<td>20% and over</td>
<td>29.4%</td>
<td>1.5%</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

**Figure 2.2**: Employees with workplace pensions: by banded rate of employee contribution and pension type, UK, 201961

<table>
<thead>
<tr>
<th>Rate of Employee Contribution</th>
<th>Defined Benefit</th>
<th>Trust-based Defined Contribution (includes master trusts)</th>
<th>Group personal and group stakeholder</th>
</tr>
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<td>26.3%</td>
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<td>5% to under 6%</td>
<td>27.9%</td>
<td>12.8%</td>
<td>13.9%</td>
</tr>
<tr>
<td>6% to under 7%</td>
<td>12.1%</td>
<td>3.2%</td>
<td>3.8%</td>
</tr>
<tr>
<td>7% and over</td>
<td>46.7%</td>
<td>3.2%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

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60 ONS (2020a)
61 ONS (2020a)
Using their replacement rate formulation, the Pensions Commission estimated in 2004 that at least 75% of DC savers would have contribution rates below their adequacy level and that around 9 million people may be under-saving. Today, around 5 million people currently approaching retirement are unlikely to meet their target replacement rate. The significant minority in DB schemes would enjoy more than adequate pensions. They concluded that the level of pension accrual was both deficient in total and increasingly unequal, and that a combination of automatically enrolling people at 8% into DC schemes and encouraging additional contributions was necessary.

Under an assumption of full entitlement to the new State Pension (nSP) and a lifetime of minimum required automatic enrolment contribution rates, anyone earning over £12,700 will require additional savings beyond the default 8% of band earnings to reach their target replacement rate which will allow them to replicate working-life living standards in retirement.

For those on median earnings in 2020 of £24,900, the total contribution rate needs to be about 20%, a further 12% above the minimum required under automatic enrolment of 8%, which would yield a fund of around £113,000 by SPa. State Pension reform has helped to close the savings gap, but, except for those on very low incomes, the savings gap is likely to be substantial (Figure 2.4).
What is an adequate retirement income?

Figure 2.48

Those earning more than £12,700 will require additional contributions to meet their target replacement rate

Total contribution rate required to meet the Pensions Commission replacement rates adequacy levels

Concerns continue that the current levels of contributions will not be sufficient to provide an adequate income in retirement

Since the introduction of automatic enrolment, contributions to DC schemes have clustered at minimum levels. Lord Turner (Chair of the Pensions Commission) continues to advocate encouraging people to set aside more than the 8% salary already mandated and has supported the concept of automatic escalation of contributions to around 15%, though higher contribution levels raise questions of affordability for those on lower incomes.

The Department for Work and Pensions (DWP) review of automatic enrolment in 2017 recommended that pensions contributions be calculated from the first pound earned rather than from the lower earnings limit (£6,230 in 2020/21) with an ambition to introduce this in the mid-2020s, in order to allow the automatic enrolment policy several more years to bed in first. The DWP estimated this would increase the pension pot of the lowest earners by over 80 per cent and that of the median earner by over 40 per cent.

Recent Resolution Foundation work has proposed the construction of an employer-facing ‘Living Pension’ benchmark to ensure workers can achieve the JRF MIS. Their calculations find that, on average, workers would need to save £3,000 per year to meet this target and that for a full-time Living Wage earner, that would be £1,500 more than the current automatic enrolment requirement and equivalent to an additional 8% contribution rate.

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68 PPI Modelling
69 ONS (2018)
70 State Street Global Advisors (2016)
71 DWP (2017)
72 Finch D, Pacitti, C (2021)
Over 90% of all current DC savers may be at risk of saving insufficiently to replicate working-life living standards in retirement

Around 90% of all current DC savers may be at high risk of not achieving their replacement rates, given the current very low levels of contribution and the lack of any evidence to suggest that the majority of savers will voluntarily increase them above automatic enrolment levels. For older savers to achieve an adequate income in retirement they will almost certainly need to work longer and, where they have it, use other forms of wealth, such as property wealth, in order to achieve the Pensions Commission’s target replacement rate. Other methods of increasing contribution levels have been discussed, such as raising the minimum required contribution under automatic enrolment, or introducing auto-escalation, by which members of schemes commit ahead of time to a future rise in contributions alongside pay rises. If these types of policies are introduced, people will find it easier to meet adequacy targets without having to work longer or choosing to contribute more.

People in specific groups are at greater risk of experiencing working-life inequalities and associated difficulties achieving adequacy:

- Women, in particular divorced women, and women who have been single mothers at some point during the accumulation phase
- People from BAME groups,
- Disabled people,
- Carers
- The self-employed.

On average, people from some BAME groups and carers have retirement incomes that are just under three quarters of that of the wider population, while other underpensioned groups are at risk of experiencing even lower retirement incomes (Figure 2.6).

Figure 2.6

Underpensioned groups have lower private pension income than the UK average

Private pension incomes as a proportion of population average by underpensioned group, aged 65+, 2018

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74 PPI Modelling; Wilkinson, L. et. al. (PPI) (2020)
People from underpensioned groups are more likely to work in low paid jobs, work part time or flexibly, be self-employed or unemployed. Underpensioned people will generally find it more difficult, as a result, to save into a workplace pension, other types of savings and to buy a house. As a result, people from these groups may find it particularly difficult to achieve basket of goods adequacy levels. They are likely to find it easier to achieve working-life replacement rate targets, however, these will only reflect a low working-life income and may result in poor standards of living both during working-life and retirement.

Underpensioned people are likely to be fairly dependent on the level of income provided by the State Pension and State benefits and will be sensitive to changes to these. People in these groups will also benefit the most from private pension policies designed to include those on low earnings, or in self-employment, particularly if they involve employer contributions to schemes and/or Government credits, without high mandatory minimum contributions from employees. The next section looks briefly at each of these groups in turn.

**Women are more likely to be underpensioned**

Many of the inequalities which contribute to women’s membership of the underpensioned arise from gendered divisions of labour related to caring for children, family members and the home. Women tend to bear the majority of responsibility for caring in the home and have historically had lower employment rates than men. Women in general have lower than average employment rates, while divorced women’s employment rates are even lower: in 2018, 71% of women were employed and 70% of divorced women were employed, compared to 75% of men. Women who have experienced single motherhood or divorce during working-life are more likely to exhibit labour market and housing inequalities, which increase their risk of low retirement incomes.75

Women are twice as likely to be in low-paying occupations, defined as occupations in which median hourly pay is in the bottom quartile of hourly pay for the wider population. Lower pay reduces the level of contributions people can make and reduces the level of affordability, as a larger proportion of income will be required for everyday living costs.

Of 13.4 million employed women in the UK, around 3 million (23%) do not meet the qualifying criteria for automatic enrolment, compared to 12% of male workers. 1.9 million women earn below the earnings threshold of £10,000, meaning 77% of workers do not meet the qualifying criteria because they earn below the threshold are women. This is partly due to women being more likely to work in low-skilled (and low-paid) jobs than men, and partly due to women being more likely to work part time.76

**People from some BAME groups are in more danger of being underpensioned**

People from BAME groups have lower levels of employment in comparison to the population average, although the impact varies substantially between different ethnic groups. For example, Indians have an employment rate of 74%, just 1% lower than the population average of 75%. Pakistanis and Bangladeshis have a much lower employment rate of just 57%. While some ethnic groups (Indian and Chinese) have a higher average income than the general population, other ethnic groups (Bangladeshi, Pakistani, Black African/Caribbean), who are at greater risk of being underpensioned, have lower average incomes during working-life and in retirement. These differences are related to lower overall levels of employment, higher levels of part time, flexible or self-employment and job segregation (into lower-paid sectors).77

**People from some BAME groups have lower automatic enrolment eligibility rates**

Some BAME groups are less likely to be eligible for automatic enrolment. In 2019, 23% of White workers were ineligible, compared to 29% of Black African/Caribbean workers, 32% of Pakistani workers and 33% of Bangladeshi workers. Lower rates of eligibility for automatic enrolment among Bangladeshis and Pakistanis workers are associated with people from these groups, particularly women, being more likely than others to work part time or in low-paid jobs. For example, 31% of Bangladeshi employees work part time, compared to an overall average of 22%.

75 PPI Modelling
76 PPI analysis
77 Wilkinson, L. et. al. (PPI) (2020)
There are significant variations by gender among ethnic groups. Women, particularly those from Pakistani and Bangladeshi groups, are more likely to work part-time than men, because they bear the majority of responsibility for caring for children and other family members. This means that many women experience greater risk of lower retirement incomes, as a result of being both female and a member of a minority group.\(^7\)

**Disabled people and carers are more likely to be underpensioned**

Due to low levels of employment, disabled people and carers are far more likely to be underpensioned than those without disabilities or caring responsibilities. Disabled people have much lower employment rates, at around 50%, than the population average of 75%. Disabled people are also more likely to work in lower-skilled jobs compared to non-disabled people. One third (31%) are in semi-routine or routine occupations compared with only a quarter (25%) of non-disabled people, while 34% of disabled people are in managerial or professional roles, compared with 43% of non-disabled people. Periods spent working part-time can lead to low levels of, or gaps in, pension contributions, which can have a significant negative impact on incomes in later life, particularly where periods of part-time work are lengthy. A third (32%) of disabled workers are in part-time employment, compared to 22% of the total population of workers. As with non-disabled workers, disabled men are less likely than women to be working part-time, with almost half (45%) of disabled women in employment working part-time. As a result of differences in labour market behaviour, disabled people have much lower private pension savings, with private pension incomes on average at around 66% lower than the population average.\(^8\)

Those who provide care for a disabled friend or family member also experience differences in labour market behaviour and much lower pension outcomes than non-carers. Carers have an employment rate of around 48%, compared to the population average of 75% (2018). Among female carers, employment rates are even lower, with only 42% in paid employment. In 2015-16, an estimated 345,000 unpaid carers aged between 16 and 64 in England left employment to provide care, and 62% of carers who leave the workforce as a result of caring responsibilities are women. Among female carers who are in paid employment, half (48%) are working part-time, compared to just over a third (36%) of women in general.\(^9\)

In 2018, carers had, on average, private pension incomes around 29% lower than the average for the UK. Low private pension income among carers arises from the time constraints associated with care resulting in barriers to full-time employment.\(^10\)

The self-employed are more likely to be underpensioned

On average, people who are full-time self-employed earn almost a third (29%) less than the population average. Self-employed workers take on a much greater level of individual risk than employed workers. While pay growth of employees can be linked to performance, regular earnings are guaranteed (although those on zero-hour contracts experience fluctuations in available hours and as a result have varying levels of pay from month to month). The income of the self-employed is directly linked to the performance of the business, which can mean low or even no wages at times, particularly when the business is starting up. Self-employed individuals are therefore more exposed to volatility and fluctuations in their income. Income volatility (55%) and late payment (22%) are viewed as two of the main challenges self-employed individuals on low incomes face.

Unlike employees, the self-employed group has seen a continuous decline in pension participation from 27% in 2008/09. In 2020, 15% of self-employed workers, and just 13% of self-employed women, participate in a pension scheme, compared to over half of employees and three quarters of those eligible for automatic enrolment. Low participation rates remain a problem even among those closest to retirement. Less than a quarter (23%) of self-employed 60-64-year olds are members of a pension scheme.\(^11\)

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78 Wilkinson, L. et al. (PPI) (2020)
79 Wilkinson, L. et al. (PPI) (2020)
80 Wilkinson, L. et al. (PPI) (2020)
81 Wilkinson, L. et al. (PPI) (2020)
82 Wilkinson, L. et al. (PPI) (2020)
For some in the self-employed groups, lower than average incomes, as well as the need for financial liquidity, make it difficult to save consistently into a pension. Lower levels of pension participation among the self-employed may be partially explained by the rise in part-time working and the reduction in median income across the self-employed group.\(^8\)

Low levels of pension participation among the self-employed are not limited to those on low incomes. Among the highest paid self-employed workers, pension participation rates are around one in five (19%). However, within this higher paid group, the self-employed are likely to have higher levels of non-pension wealth and assets with which they may fund their later life. On average, the self-employed have similar levels of wealth and assets compared to workers, but it is generally in a more liquid vehicle so that they can draw on it as and when it is needed to support their business. 50% of the self-employed save into an instant access savings account and 37% into a cash ISA, with 17% and 18% respectively saying they do so for retirement specifically.\(^4\)

Due to a lack of employer-provided pensions, the self-employed have lower private pension incomes, around 4% less than the average, with the majority of private pension income coming from times in employment.

Demands on retirement income are changing

Pension scheme members bear more risks than they used to

A fundamental consequence of the move from DB to DC pensions is the transfer of risk from the employer to scheme member. In DC schemes the member bears the investment, inflation and longevity risk.\(^5\) These build on the fundamental risk of not saving enough to achieve an adequate standard of living in retirement by:

- removing the structure of retirement benefits being directly linked to salary and hence a guarantee of replacement rate at the point of retirement,
- introducing additional uncertainty as to how much needs to be saved to insure against changes in the economic environment, and
- leaving the individual to bear the financial risk of living longer than budgeted for (longevity risk).

The pension flexibilities have led to more risk being borne by members at and during retirement

Before the enactment of the pension flexibilities in April 2015, members were restricted in how they could access their DC pension pots. At retirement, after a tax-free cash withdrawal allowance of up to 25%, the remaining part of any pension savings had to be taken as a regular payment for life, typically using an annuity. Only those who met eligibility criteria of having a guaranteed pension income of at least £20,000 per year could opt for a drawdown product.

The pension flexibilities enabled consumers to access their DC pension pots from the age of 55 and use the funds for a wider range of options, including cash withdrawal (in a single or series of multiple withdrawals\(^6\)), retirement income products (annuity or drawdown), or a combination of these.

There has been a dramatic reduction in the purchase of annuities to a level of around 70,000 per annum (at a total purchase value around £4.4bn) from the peak of 466,000 purchases in 2009. Conversely, the use of Income Drawdown has grown from around 20,000 new contracts annually prior to the pension flexibilities, to 116,000 new contracts in 2019, worth around £9.3bn.\(^7\)

However, even more people are taking full cash lump sum withdrawals than buying annuities or drawdown products. In 2019, around 252,000 people took full cash lump sum withdrawals and a further 222,000 took a partial cash withdrawal.\(^8\) While most smaller DC pension pots were mostly fully withdrawn, larger pension pots were mainly accessed via drawdown. 75% of pots over £100,000 that were accessed in 2018/19 went into drawdown, but were not fully withdrawn (85% of those with value over £250,000) (Figure 2.7).

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83 Wilkinson, L. et. al. (PPI) (2020)
84 Wilkinson, L. et. al. (PPI) (2020)
85 Wilkinson, L. et. al. (PPI) (2020)
86 A series of withdrawals can be made using multiple uncrystallised funds pension lump sums (UFPLS)
87 ABI Stats; The drawdown statistics are for purchase contracts from insurers. Drawdown is also available directly from some trust-based schemes. This would be in addition.
88 Wilkinson, L. (PPI) (2020)
What is an adequate retirement income?

Figure 2.7

Withdrawals from larger pots tend to be for smaller proportions

Regular withdrawal rates from drawdown pots by pot size 2019/20

Changes to the State Pension system have helped those at or beyond SPa to mitigate, to some degree, their DC risk. The introduction of the new State Pension (nSP) has resulted in those with full contribution records after April 2016 receiving £175.20pw in 2020/21 for a single person, compared with £134.25pw under the old basic State Pension (bSP), a rise of about 30% (though many who accrued entitlement under the previous system will receive a top up from the additional State Pension).89 The value of the pension is protected by the ‘triple lock’ guarantee that increases the basic and new State Pensions by greatest of:

- Average earnings
- Prices, as measured by the Consumer Prices Index (CPI), or
- 2.5%.90

SPa rises have increased either the length of time people need to work or the amount they need to save into a private pension

Women’s SPa has risen by five years to equalise with men at age 65 in the period 2010 to 2018. SPa for everyone reached age 66 during 2020 and is legislated to rise to age 67 between April 2026 and April 2028. This increases the period during which people need to continue to work or otherwise draw down pensions or other savings to maintain their standard of living until SPa.

89 Although you may also receive an Additional State Pension if you built up rights under the former State Earnings-Related Pension Scheme (SERPS) or its successor, the State Second Pension (S2P).

90 Additional State Pension is increased in line with rises to CPI.
The cumulative effect of the above changes has been lower incomes for some of those just below and in retirement

The effect of these changes has significantly increased the state support to pensioners, particularly those with low incomes. However, it creates the risk of an increasing gap between the cessation (or reduction in) paid work and the point at which State Pension can be claimed. Many people in the UK are unable to work up until SPa:

- Around a third of people who are economically inactive in the five years before Spa, and had previously had manual occupations, say sickness or disability is their reason for not being at work (2016),
- Nearly 440,000 people in the UK who are within five years of SPa are too ill or disabled to work (2016), and
- In August 2020, around 1.1 million people aged 50+ in Great Britain received Employment and Support Allowance (ESA), a benefit for people who are unable to work due to illness or disability, with almost half (423,000) of these people aged between 60 and 66.

Carers are particularly affected by rises to SPa:

- 24% of women and 17% of men aged 50–64 provide unpaid care for a family member or friend (2016),
- As little as five hours caring per week has a significant effect on the prospects of staying in work (2016),
- In 2009–10 an estimated 315,000 unpaid carers aged 16–64 in England had left employment to provide care (2016), and
- In August 2020, 364,000 carers aged 50–65 in Great Britain received Carer’s Allowance, with 122,000 aged between 60 and 64.

Private pensions are often needed to support those both below and above SPa

In addition to topping up the State Pension to achieve the targeted replacement rate under the current pensions settlement, workplace pensions are now increasingly required to bridge a gap in income as earnings decrease or end prior to SPa. This particularly applies to those who are unable to work through illness or disability, those who need to become carers and those who are unemployed and cannot find a new job. People in underpensioned groups are more likely to be represented among those struggling to cope financially up until higher pension ages.

Those who leave the labour market prior to SPa will have less adequate incomes

Those leaving the workplace prior to SPa are likely to struggle more to meet adequacy targets both prior to retirement and in retirement. Carers and those losing their job and unable to find new work may be particularly affected, alongside those generally from underpensioned groups who are less likely to be employed. DC savings (excluding the 25% tax-free lump sum) are sufficient to top up State and DB pensions above the 70% replacement rate required for a median earner with average savings and entitlement (aged 55 in 2021) when retiring at 67. However, leaving the labour market four years earlier exhausts the DC pot and leaves the residual income below the target rate throughout retirement (Figure 2.8). The DC fund buys only about two years of replacement income on its own. This projection underlines the continuing importance of both DB entitlement for those approaching retirement and the importance of timing when and how to take benefits.

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91 A system of means-tested benefits, Pension Credit, exists as a safety net for those who do not have a full contributory record for their State Pension. Pension Credit can top up their state pension, currently to £173.75 (2019/20) for a single person, once they reach SPa.
92 West, S. (2016)
93 West, S. (2016)
94 DWP Stat-Xplore, accessed 26/03/21
95 West, S. (2016)
96 West, S. (2016)
97 West, S. (2016)
98 DWP Stat-Xplore, accessed 26/03/21
99 The analysis assumes that DB rights are available at age 65.
Leaving the labour market early makes it harder to achieve adequacy levels

How long a median earner’s DC savings last if spent at level required to meet Pensions Commission Replacement Rate under different assumptions of labour market exit, 2021

The pandemic may accelerate this need to access savings early as employment rates drop and the industrial economy restructures. It may also have an impact on morbidity and the need for caring as those who have contracted COVID-19 suffer continuing chronic health conditions or ‘long COVID’.

The pension flexibilities equip DC pensions to perform this latter task better, as DC funds can now be accessed more flexibly. However, there is a risk people may withdraw early at the expense of living standards later in retirement. This adds further to the complexity of the question of how much a DC pension member needs to save for an adequate retirement.

Home ownership decreases mean that pensioners will spend more on rent in the future

Almost three-quarters (74%) of people aged 65 and over in England in 2017 owned their home outright. Younger people are less likely to own their own home than in the past and more likely to be renting instead. Half of people in their mid-30s to mid-40s had a mortgage in 2017, compared with two-thirds 20 years earlier, while people in their mid-30s to mid-40s are three times more likely to rent than 20 years ago. A third of this age group were renting from a private landlord in 2017, compared with fewer than one in 10 in 1997. If this trend persists into their older ages, then in the future older people will be more likely to be living in the private rental sector than today.

Not only is income changing, but the way people spend is also changing

In addition to the increasing complexity of assessing how much to save in a DC pension and how best to access the pot, there are also significant changes to the demands made on income at and in retirement.

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100 PPI Modelling
101 ONS (2020c)
The need to pay rent in retirement is the most significant indicator for a reduction in disposable income and corresponding reduction in standards of living. The risk is further compounded, because those renting in retirement who have saved into a private pension may lose eligibility for Housing Benefit.102

**Increases in household indebtedness are decreasing the affordability of saving and leading to a higher likelihood of people reaching retirement with debt**

Household debt levels are growing. The average debt-to-income ratio has risen from 115% in the decade 1998-2008 to 135% in the decade 2008-2018.103 More than one in three are now retiring with unpaid debts, averaging around £17,500, with 8% owing more than £20,000. 14% of those retiring with debt still have a mortgage.104 Those who reach retirement with debt will have less disposable income available in order to achieve a suitable standard of living, or will use some of their pension or other savings to pay down debt rather than sustain their income in retirement. People in underpensioned groups are particularly likely to reach retirement with debt and with no housing wealth.

**More pensioners are supporting family members than they used to**

Intergenerational transfers are increasing. A third (34%) of those who are planning to retire in 2020 continue to support their families financially with regular payments amounting to over £3,700 per year, representing almost a fifth (18%) of the average retirement income. 15% of potential retirees say they have already helped to fund a deposit or put money towards the purchase of a property and 13% pay for university fees or associated living costs.105

**COVID-19 is likely to exacerbate existing inequalities**

Further long-term effects are likely to result from the economic impact of the COVID-19 pandemic. Even before the 2021 lockdown, the UK economy was predicted to suffer ‘scarring’ leaving it permanently 3% smaller, a reduction of £1,400 for every adult in Britain.106 This may result in reductions in the amounts saved into pensions, reduced real rates of return on funds invested and higher taxes, along with extra calls on retirement incomes, for example to service or support family members in need. The impact of COVID-19 is discussed further in Chapter 4.

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102 Silcock, D. *et. al* (PPI) (2019)
103 Silcock, D. *et. al* (PPI) (2019)
104 Key Retirement Solutions (2020a)
105 Key Retirement Solutions (2020b)
106 Bell, T. *et. al*. (2020)
Conclusions

Adequacy has become both a more complex and more important question

- The way the current pension system supports adequacy was designed almost 20 years ago.
- The intervening period has seen earnings static for many since the banking crisis. The COVID-19 pandemic will only add to this.
- Automatic enrolment has delivered far wider coverage of workplace pensions, but with much lower average contributions.
- The groups of underpensioned workers are growing and those around average incomes are likely to join them as entitlement to DB benefits fall away.
- The gap between current contributions and those predicted to achieve adequacy is not being filled by voluntary contributions or longer working lives. Additional contributions of around 12% are required for median savers above the default rate.
- Those coming up to retirement are facing increased pressure on spending and far more complex choices when accessing their benefits.
- With many more risks to an adequate income in retirement, increasing numbers of pensions savers appear ill-equipped to engage with the challenge of achieving an adequate income in retirement.
- The overall impact of the trends so far in the 21st century could be characterised more as redistributive of, rather than absolute growth in, pension provision.
Chapter Three: Who can achieve adequacy?

This chapter looks at how people of different characteristics could meet adequacy targets.

As discussed above, there are two traditional approaches to assessing adequacy which stem from very different perspectives:

- **The fixed income target** – which has its origins in the State underpin and avoidance of deprivation, but has developed into objective ‘basket of goods’ approaches.
- **The proportional income target** – which focuses on assessing subjective individual comfort and has its origins in the view of the engaged employer.

### How many of those approaching retirement will not achieve adequate incomes at State Pension age (SPa)?

The following analysis projects how many of those approaching retirement, aged 50-65, might achieve adequacy at SPa under the different adequacy targets discussed. This is a cohort of around 11.2 million people in 7.6 million households. The projection is based on the Office for Budget Responsibility’s (OBR) November 2020 economic assumptions, reflecting their central view of the impact of the COVID-19 pandemic creating a 3% scarring of the economy going forward.

The analysis includes consideration of pension assets, both Defined Benefit (DB) and Defined Contribution (DC), other financial assets, and net housing wealth under three different scenarios.

1. **State and private pension income, excluding 25% tax-free lump sum** – in which DC pension savings, after deducting the tax-free lump sum of 25%, are used to purchase a guaranteed inflation-linked income similar to that from a DB scheme. This scenario matches the way in which most people use their tax-free pension lump sum for other purposes rather than directly to provide a retirement income, but also ensures that they use their remaining funds for a sustainable retirement income.

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107 Using data from the Wealth and Assets (WAS) Survey
109 Debt and rent are not considered explicitly in the analysis, but after housing cost measures are used so that rent is taken into account as part of consumption
110 Average DC/DB combined pension wealth for those aged 65 and over was £67,400 in 2018. For those with just DC (trust-based) pensions, the average was £53,000, with an average of £12,200 for those with the lowest 25% of DC wealth and £220,800 for those in the wealthiest 25% for DC wealth. – Wealth and Assets Survey, 2018
2. **Additional Capital, including 25% tax-free lump sum** – where, in addition to State and private pension income assets, the pension tax-free lump sum and all other non-pensions savings are used, such as ISAs. This shows what level of income can be achieved if all pensions wealth and other savings and investments are directed to retirement income.\(^{112}\)

3. **Housing equity** – where in addition to the Additional Capital assets, one-third of net housing wealth is included. This estimates what might be achieved if housing wealth is used to generate further retirement income by releasing all housing wealth at retirement through a lifetime mortgage at a notional loan-to-value ratio of 33%.

This analysis shows the extent to which adequacy targets are likely to be met by this age cohort, after allowing for housing costs, and how much this depends on how much of their wealth and assets they commit directly to generating their retirement income.\(^{113}\)

### Headline results

Using State and private pension income (excluding the 25% tax-free lump sum), around 27% of people aged 50 to 65 could miss the Joseph Rowntree Foundation’s (JRF) Minimum Income Standard (MIS) and 91% could miss the Pension and Lifetime Savings Association’s (PLSA) “Comfortable” Living Standard (Figure 3.1). Just under half (45%) could miss the Pensions Commission’s replacement rate target. Those in underpensioned groups are likely to find it more difficult than those with average levels of income, savings and entitlement to achieve adequacy targets.

### Figure 3.1

**Using State and private pension income, nearly three in four people aged 50 to 65 could reach the Minimum Income Standard and around one in ten could reach the PLSA’s “Comfortable” Living Standard**

Proportion of UK population aged 50 to 65 in 2016/18 who are on track to reach retirement adequacy targets using different sources of income, GB

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112 The analysis does not include debt or inheritance

113 Details of all the methodologies used in the projections are included in the Modelling Appendix to this report

114 PPI Modelling
Society’s view of adequacy using fixed income targets

A quarter of people risk not reaching the JRF MIS
Under the State and private pension income assumption, just over a quarter of people (27% or just over 3 million people) approaching retirement risk having State and private pension incomes below the JRF MIS (not including their 25% tax-free lump sum). If people choose to use all their financial assets, including their tax-free lump sum, this reduces to 23% and to 19% if they use all their housing equity.

On average, those people with inadequate incomes are about £2,500 per annum short of their target, a significant amount. Put another way, if they drew down their pension at a rate that meets the JRF MIS after housing costs (AHC), they would use up their funds in around three years.

This suggests some stark choices face a significant minority of people at retirement. Their risk of having less than a minimum income could be reduced by about a third, but only by devoting all of their financial resources, including their home equity, to their retirement income. This would cut across any desire to provide financial support to their family, have a buffer against unexpected costs such as care, or to leave a bequest.

Individuals in single person households are around four times more likely to be below the JRF MIS, and higher again for single women
Around half (51%) of people in single-person households risk failing the JRF MIS (AHC) target on State and private pension income (excluding the 25% tax-free lump sum) whereas the risk for those in a two-person household is just 13%. For single-person households, the risk of failing the target is 45% for men, but around a quarter higher, at 57%, for women.

Looking at the data from a household perspective, overall, around a third of households (33%) risk missing the JRF MIS.

More than two-thirds of renters risk missing the JRF MIS
70% of renters risk being below the minimum standard using State and private pension income compared to only 12% of owner-occupiers. While this reflects the underlying correlation of home ownership and wealth, the costs of rent will also bear down more on those on lower incomes, where housing costs are a larger proportion of their expenditure. This point is reinforced by the findings that the risk of missing the JRF MIS (AHC) for renters in London rises to 87%. People from some BAME groups are particularly likely to rent in retirement. 24% of White people aged 50 to 69 rent, which is similar to the proportion of Asian people (26%). But 56% of black people in that age group are renting and are therefore more likely to struggle to meet adequacy targets as a result of this disparity.

Londoners are more likely to miss the JRF MIS
Figure 3.2 shows regional variations around the average attainment of the JRF MIS (AHC). This shows that 39% of those in London are likely to miss the JRF MIS (AHC), 12% points higher than the 27% national average, using the State and private pension income measure. Those in the South-East (20%), South-West (22%), East Midlands (22%) and Wales (22%) are least likely. This reflects the specific problems of high living costs in London reflected in the MIS which has higher London targets against a background of inequalities in the distribution of wealth nationally.

115 That is who are single at the point of data capture in the Wealth and Assets Survey. We have not modelled changes in household composition.
London households are less likely to meet the JRF Minimum Income Standard than those in other households

Proportion of population aged 50 to SPa in 2016/18 on track to reach JRF MIS (AHC) by region, GB relative to the GB average (73%)

![Figure 3.2](image)

Low-income households are twice as likely to risk inadequacy

Despite the redistributive effect of the State Pension, 50% of low earning people aged 50 to 64 risk missing the JRF MIS (AHC) target on the State and private pension income measure compared to 25% of middle earners and only 9% of high earners.

The long-term sick and disabled are also twice as likely to risk inadequacy

The long-term sick are less likely to be able to work and will generally have to spend a higher proportion of their income on care needs. Low household incomes resulting in a lack of opportunity to make private pension saving means long-term sick people are far more likely to have a low income in retirement. 62% of people risk missing the JRF MIS (AHC) compared to the average of 27% where they live in a household where the household reference person (HRP) is recorded as long-term sick or disabled.

Only a third can expect a ‘Moderate’ retirement and a one in ten ‘Comfortable’

The PLSA’s basket of goods measures show the extent to which people can aspire to higher retirement living standards beyond just meeting basic needs (as defined by the MIS). These were created using the same approach as the JRF MIS and are a societal aspirational view:

- 33% of people can expect to reach the PLSA Moderate target and 9% the PLSA Comfortable target on the State and private pension income measure, excluding the 25% tax-free lump sum.
- If all financial resources and housing equity is used to generate retirement income, then around half (49%) could expect to reach the PLSA ‘Moderate’ target and one in five (21%) the PLSA ‘Comfortable’ target.
This would suggest that these targets are surprisingly stretching, given the labels that the research participants gave them. The ‘Comfortable’ target is only attainable by the richest homeowners and ‘Moderate’ is still only attainable for those in the top third of incomes.

**The individual’s view of adequacy**

**The individual’s perspective using replacement rates**

This analysis uses the Pensions Commission sliding scale of target replacement rates set out earlier, with the median earner targeting 67% of their pre-retirement income in retirement in order to replicate working-life living standards in retirement.

This is a relative and more individualised measure, assessing the degree to which people have deferred sufficient income to smooth lifetime incomes through into retirement. While replacement rates are influenced by incomes (as it is easier to save on higher incomes and higher incomes are associated with better occupational pension provision), they also reflect more directly the degree to which the individual or household prioritises retirement saving.

Replacement rates look less at what society deems acceptable than whether the individual experiences an unacceptable drop in income in retirement.

**Just over half of people can expect to maintain a personally acceptable level of income at SPa**

55% of the 11 million people aged between 50 and SPa are on target to meet the Pensions Commission’s target replacement rate from SPa using State and private pension income, excluding their 25% tax-free cash lump sum. This rises to around two thirds (65%) if all financial assets, including the 25% tax-free lump sum, are used to generate retirement income, and to nearly three quarters (72%) if housing equity is used. This demonstrates the challenge facing people at retirement as to how to deploy their financial resources and the consequences for their ongoing retirement income.

This also suggests around 5 million people in the 50-65 age group are under-saving for their retirement under this measure.
**Those on the lowest income are most likely to have adequate replacement rates**

There is a strong inverse relationship between income and the proportion missing adequacy targets when looking at replacement rates (Figure 3.3).

**Figure 3.3**

**Nearly all of those in the lowest income quintile are likely to meet the Pensions Commission replacement rate during retirement using State and private pension income**

Proportion of people in different income quintiles who are on track to achieve their Pensions Commission replacement rate during retirement, 2016/18, GB

Only 3% of the bottom income quintile risk missing the replacement rate target on State and private pension income, in contrast with 77% of those in the top quintile. However, many of those in the higher quintiles can meet the target if they choose to deploy more of their other retirement income resources. For those in the top quintile, over half meet the target if they use other financial and housing equity assets. Those in the lower quintiles may also be achieving adequate target replacement rates, but still have inadequate incomes in absolute terms, meaning that they are only able to replicate a sub-par living standard from working-life.

A couple of factors are in play here. The first is that, despite the ratcheting down of replacement rates in the Pensions Commission design to 50% for those on high incomes, the target incomes are very substantial in cash terms. This is reinforced by the statistics that mean the gap between State and private pension income and the target replacement rate for those failing the target in the bottom quintile is £1,830 per annum, but is £20,570 per annum for the top quintile. The second is that, for those on low incomes, the State Pension, which is a fixed sum and so not income related, is generating the majority of the income. So those on the lowest incomes may be experiencing replacement rates near or even in excess of 100 yet still have inadequate income to meet their needs, for example as defined by the JRF MIS, as we have seen earlier.

A linked finding is that owner occupiers are more than one and half times more likely to miss their replacement rate than renters, with 49% of owner occupiers at risk on State and private pension income (excluding the 25% tax-free lump sum) compared with 31% of renters. This might be expected with owner-occupation being correlated with higher incomes.

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118 PPI Modelling
Single median earners are unlikely to be able to maintain adequacy targets above the minimum for long in retirement, using average DB/DC savings and State Pension.

Median earners, retiring at age 67 and taking their DC pension savings (but not using their 25% tax-free lump sum for retirement income), will only be able to maintain the PLSA Comfortable Living Standard until age 70, the PLSA Moderate Standard until age 75, and their target replacement rate until age 78, before running out of DC savings. State Pension income and DB savings are sufficient to allow them to maintain the JRF MIS throughout retirement (Figure 3.4). Future generations who will have lower average levels of DB entitlement might find it harder to meet the JRF MIS target throughout retirement.

Figure 3.4

A median earner, with median pensions savings and entitlements would struggle to meet adequacy targets above the minimum

Length of time that DC pension can support adequacy targets, alongside State Pension, assuming that 25% tax free lump sum is not used for retirement income.

Single median earners using their 25% tax-free cash lump sum could meet adequacy targets for a further six years

Figure 3.5 assumes that the median earner takes their 25% tax-free lump sum and does not put it towards retirement income. If the 25% tax-free lump sum (from DB and DC pensions) is used to generate a retirement income at the same level paid through an annuity, then a single median earner could meet the PLSA Moderate target or their target replacement rate for a further six years.

119 PPI Modelling
A median earner could meet adequacy targets for 6 years longer if they use their 25% lump sum for retirement income

Sustainability of DB/DC income and State Pensions under different adequacy targets with and without a 25% tax free lump sum being taken

Lower earners will struggle to meet adequacy targets in retirement for more than a few years

Lower earners, (earning at the 30th percentile and with the typical amount of DB/DC savings and entitlement for those earning at the 30th percentile) retiring at age 67 and taking their DC pension savings (but not using their 25% tax-free lump sum for retirement income), will not be able to maintain adequacy targets above the JRF MIS for more than a few years in retirement:

- Until age 68 for the PLSA Comfortable Living Standard,
- Until age 69 for the PLSA Moderate Standard
- Until age 74 for their Pensions Commission replacement rate

This is two, six and four years less than the median earner (Figure 3.6).

Lower earners, therefore, are generally unlikely to have much opportunity of experiencing higher than minimum living standards.

120 PPI Modelling
A low earner, would struggle to meet adequacy targets above the minimum for more than a few years in retirement

Length of time that DB/DC pension State Pension can support adequacy targets, alongside State Pension, assuming that 25% tax free lump sum is not used for retirement income, for a 30th percentile earner

![Graph showing the length of time that DB/DC pension State Pension can support adequacy targets along with State Pension.](image)

**Geographical differences are less marked for replacement rate adequacy**

The proportion of people failing the replacement rate test on State and private pension income ranges only by 11% by region. The highest risk is in the West Midlands and South East with 49% and the lowest is on the North East at 38%. London is not a marked outlier as it is under the JRF MIS (AHC), lying at the higher risk end with 45% of people at risk.

**One common feature across targets is the importance of DB assets**

Looking across the analysis of both fixed income and proportional income targets, one critical common feature is the continuing importance of DB assets in the adequacy assessment of the age 50-65 cohort, shown in Figure 3.7.
What is an adequate retirement income?

Figure 3.7 Figure 3.7: Percentage of people missing adequacy depending on pension asset type (State and private pension basis)

<table>
<thead>
<tr>
<th>Target</th>
<th>All pension assets</th>
<th>Excluding DB assets</th>
<th>Excluding DC assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRF MIS (AHC)</td>
<td>27%</td>
<td>40%</td>
<td>32%</td>
</tr>
<tr>
<td>PLSA Moderate</td>
<td>67%</td>
<td>91%</td>
<td>72%</td>
</tr>
<tr>
<td>PLSA Comfortable</td>
<td>91%</td>
<td>98%</td>
<td>93%</td>
</tr>
<tr>
<td>Pensions Commission Replacement Rate</td>
<td>45%</td>
<td>65%</td>
<td>48%</td>
</tr>
</tbody>
</table>

- If DB assets are excluded from the assessments, then the proportion missing the target on a State and private pension basis increases significantly. For the JRF MIS (AHC) it increases from 27% to 40% and for the PLSA ‘Moderate’ from 67% to 91% and PLSA ‘Comfortable’ from 91% to 98%. Strikingly, the increase for the Pensions Commission replacement rate from 45% to 65%.
- If DC assets are excluded, then the increase in proportion is much less significant. For the JRF MIS (AHC) it increases from 27% to 32% and for the PLSA ‘Moderate’ from 67% to 72% and PLSA ‘Comfortable’ from 91% to 93%. The increase for the Pensions Commission replacement rate is from 45% to 48%.

Marked differences in outcomes are predicted dependent on how ‘adequate income’ is defined

This analysis of the age 50-65 cohort demonstrates clearly that the question of retirement income adequacy is multi-dimensional.

Looking through the societal lens of income standards and baskets of goods, the most challenged people are the poorest, with the least assets set aside at retirement. This is, in a sense, unsurprising given that the test is against a fixed income level and an additional £1,300 per annum is required above the level of State pension for an individual pensioner to reach the JRF MIS (AHC) level. This analysis also shows how sensitive adequacy is to factors such as household composition, tenure and geography.

The fixed basket of goods is thus a powerful tool to measure the extent to which the State broadly is meeting its obligations to maintain a basic standard of living for those in retirement.

Looking through the individual’s lens of replacement rates, the wealthy are now the most likely to fail the test, even though they achieve high living standards, while those at lowest income levels are able to achieve high replacement rates with the flat-rate State Pension, but fail the minimum income standards. This reflects the challenge of foregoing current expenditure for income in retirement particularly for those on low incomes.

It may also suggest that the Pensions Commission’s pragmatic calibration of replacement rates to (then) current rates reflected the generosity of DB schemes rather than the actual satisfactory requirement for pension incomes. The concept of replacement rates still makes sense as a target to test how individuals will fare in retirement, but it may be time to look again for new, empirical evidence as to which replacement rates help people to achieve their minimum desired standard of living.

A review of adequacy will be important not just for those approaching retirement, but for younger generations who are less likely to reach retirement with significant amounts of DB entitlement, more likely to be renting and more likely to be in debt. Adequacy may be particularly hard for some members of Generation X who will not have significant DB entitlement and will also not have benefitted from a full working-life under automatic enrolment.

122 PPI Modelling
123 Not taking into account debt pressures, which are not included in the model
124 Kubiak, P. (2020)
Conclusions

- Marked differences in outcomes are predicted depending on how we define ‘adequate income’.
- Using a range of fixed income targets:
  - A quarter of people risk not reaching the JRF MIS
  - Individuals in single-person households are around four times more likely to be below the JRF MIS
  - More than two-thirds of renters risk missing the JRF MIS
  - Londoners are more than 40% more likely to miss the JRF MIS
  - Low-income households are twice as likely to risk inadequacy under the JRF MIS
  - Only a third can expect a ‘Moderate’ retirement and a one in ten ‘Comfortable’ under the PLSA definitions
- But, using proportional targets:
  - Just over half of people can expect to maintain a personally acceptable level of income in retirement as defined by the Pensions Commission
  - The challenge of maintaining acceptable incomes is greatest for the highest paid, with 77% of those in the top quintile missing the target in contrast with only 3% of the bottom income quintile risk
  - Geographical and other differences are less marked
- One common feature across targets is the importance of DB assets in attaining adequacy.
- The analysis demonstrates clearly that the question of retirement income adequacy is multi-dimensional.
Chapter Four: How could COVID-19 have affected adequacy?

This chapter looks at the scale of potential impacts on adequacy following the COVID-19 pandemic.

COVID-19 may have financial and behavioural consequences for adequacy

The UK has undertaken three national lockdowns since March 2020, as a public health response to the COVID-19 pandemic. The focus of policy is currently on containing the public health emergency and rolling out the vaccination programme as quickly as possible. The short-term and medium-term economic impacts are still difficult to assess, as a number of unknown factors are still in play, such as the:

- continuing extent and severity of public health measures,
- speed and effectiveness of the vaccination programme,
- impact on the world economy of other countries’ health and economic policies - particularly in the US and Europe
- impact of the debt burden shouldered by the UK and other major economies to finance these policies.

And while it is clear that the pandemic is having profound social and behavioural impacts, it is highly problematic to determine which are only immediate responses to the enforced lifestyle changes and which might prove to be longer-term attitudinal shifts, given that the UK is in the midst of a hiatus unprecedented in a generation.

COVID-19 may result in long-term economic scarring of around 3%

At a macro-economic level, this analysis is based on the economic assessments from the late Autumn of 2020 which pre-date both the 2021 UK lockdown and the approval and rollout of mass vaccination. The principal source for modelling is the Office for Budget...
Responsibility (OBR), but supported by those from other modellers gathered by HM Treasury. The OBR made a central forecast that there would be a 3% long-term reduction in GDP or ‘scarring’ of the economy, with an optimistic forecast of 0% and pessimistic one of a 6% reduction. The modelling presented in Chapter 3 is based on this central scenario.

A number of sub-groups are at additional risk due to the effect of COVID-19

Another key impact of the pandemic on the economy is the sharp rise in unemployment that is predicted to continue, reaching 7.2% in 2021 in the OBR central and 11% in their pessimistic projection. Job losses between January 2020 and January 2021 affected around 11% of those aged 55 and over.

People from “underpensioned” groups (those with lower-than-average pension savings, entitlement and income) will be disadvantaged differentially as a result of the impact of COVID-19 on employment and job prospects. Underpensioned groups are more likely to experience labour market inequalities and so be affected by short working, furlough and redundancies during the pandemic. This is because many work in the industries most impacted by the public health restrictions, such as retail, hospitality and tourism, or are in low-paid, part-time or irregular employment. Particular groups who are at risk include:

- Women
- People from some BAME groups
- Disabled people
- Carers
- The self-employed

Unexpected interruptions to employment may result in people making calls on short-term savings and rainy-day funds to lessen the financial shock, or using pension savings and housing equity. These are immediate impacts which are likely to be fully played out prior to retirement, however, the time taken to recoup financial resilience may have a knock-on effect upon returning to long-term, pension, saving.

The next section of this report discusses the impact on Women, BAME people, and carers, though there is limited evidence of the economic impact on these groups at this time.

Women are more likely to work in affected sectors and are more likely to need to take time out for care as a result of COVID-19

Prior to COVID-19, women were already twice as likely as men to be working in low paying occupations, such as health and social work, retail and education. Hospitality and retail are the two sectors which made the most redundancies as a result of COVID-19, which will have disproportionately affected women. In February 2021, women’s employment was down 0.6% from where it was in February 2020.

Women who do work are more likely to work part time than men, (36% of all working women work part time compared to 22% for the overall population) as a result of needing to provide care to children and family members. Closures in schools and day care facilities mean that many women are likely to be struggling to meet their caring responsibilities while also working, and could have a detrimental impact on employment. In January 2021, around 25% of working mothers were using annual leave in order to manage caring responsibilities, 18% had to reduce working hours in order to provide care, and 7% were taking unpaid leave in order to provide care. Any reduction in employment is likely to affect women’s ability to make pension contributions.

128 Cominetti, N. et al. (2021)
129 Wilkinson, L. et al. (PPI) (2020)
131 www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/employmentintheuk/april2021
132 Wilkinson, L. et al. (PPI) (2020)
133 TUC (2021)
Women are also more likely to have gone into debt as a result of COVID-19. Between January and December 2020, 60% of those who accessed debt advice through StepChange debt advice were women.\textsuperscript{134} Women are also less likely to be financially resilient (have savings to call on) than men. In February 2020, 23% of women had low financial resilience, compared to 18% of men.\textsuperscript{135}

**People from BAME groups have experienced a greater drop in earnings than White people as a result of COVID-19**

People from BAME groups are more likely to be impacted by COVID-19 for a variety of reasons. Firstly, they are three times as likely than the general population to contract COVID-19, and five times more likely to experience serious outcomes.\textsuperscript{136} These health factors can have correlative effects on work and income both in the short and long-term if people have to take a long time out of work, or are unable to perform to the same level in the future due to long-term health complications (e.g., long COVID).

Because of job type and a higher level of self-employment, some people from BAME groups have been disproportionately affected by COVID-19. People from BAME groups are more likely to have been furloughed, made redundant, or have had to cease trading as a self-employed worker. This is demonstrated by the overall losses in earnings resulting from COVID-19: by July 2020, the average earnings for people from BAME groups had dropped by 14\%, compared to a drop of 5.1\% for White people.\textsuperscript{137}

People from BAME groups are more likely to have had to draw on their savings as a result of COVID-19: 50\% of BAME adults have had to draw down on their savings to cover their day-to-day expenses, compared to 29\% of White adults.\textsuperscript{138} People from BAME groups are also more likely to have gone into debt as a result of COVID-19, with the proportion of over-indebted BAME adults growing from 22\% to 26\% between March and October 2021. Overall, 42\% of BAME adults have reported that their financial situation worsened as a result of COVID-19, compared to 36\% of White adults.\textsuperscript{139}

BAME women have been more adversely affected than BAME men and White women. In June 2020:

- 42\% of BAME women believed they would be in more debt as a result of COVID-19, compared to 37.1\% of White women, and 34.2\% of White men.
- 43\% of BAME women, said they would struggle to make ends meet over the next three months.
- 24\% of BAME mothers were struggling to feed their children.\textsuperscript{140}

**COVID-19 has significantly increased the number of people who provide care**

COVID-19 has increased the burden on carers by reducing the level of outside support available both to carers and the people for whom they provide care. It has also created the need for new carers to help those with health problems who could not travel or access services available outside lockdowns and other health-related restrictions on movements. This has dramatically increased the proportion of people in the UK providing care to a sick, disabled or older person not living with them, from 11\% in 2017/18 to 32\% by April 2020. The majority of carers, 60\%, were aged between 45 and 54 in 2020, though in 2017/18, those aged 55 to 64 were most likely to provide care at 20\%.\textsuperscript{141}

Increases to caring responsibilities are associated with being more likely to work part-time, not work at all and being ineligible for automatic enrolment.\textsuperscript{142} Therefore, COVID-19 is likely to have made it more difficult for some carers to maintain full-time or part-time work, and will have had a potentially detrimental effect on their ability to make pension contributions.

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\textsuperscript{134} StepChange (2020)
\textsuperscript{135} FCA (2021)
\textsuperscript{136} www.fca.org.uk/insight/covid-19-and-uk-bame-communities-economic-perspective
\textsuperscript{137} www.fca.org.uk/insight/covid-19-and-uk-bame-communities-economic-perspective
\textsuperscript{138} FCA (2021)
\textsuperscript{139} www.fca.org.uk/insight/ethnicity-personal-finances-and-coronavirus
\textsuperscript{140} Fawcett Society (2020)
\textsuperscript{141} ONS (2020b)
\textsuperscript{142} Wilkinson, L. et. al. (PPI) (2020)
Older people who lose their jobs as a result of COVID-19 may struggle to return to the labour market

The age group with the highest redundancy rate as a result of COVID-19 is those aged 50 years and over, with 12.8 thousand people being made redundant, up from 4.4 thousand at the same time in the previous year (November 2020 to January 2021).\(^\text{143}\)

Those who lose their jobs over age 50 are more likely to experience long-term unemployment, due to difficulty finding a new job, than those aged 25 to 49. In 2014, around one million people aged 50 to State Pension age (SPa), were not in work but reported that they would like to be. While evidence is patchy, there is indication that the main barriers to employment for those over age 50 include:

- employer attitudes,
- age discrimination,
- a mismatch between the health needs of older workers and the characteristics of available jobs, and
- low levels of training or reskilling available at older ages.\(^\text{144}\)

There is evidence that Government programmes designed to help people find work are less effective for those over age 50.\(^\text{145}\)

Redundancies and job losses arising from COVID-19 could have a particularly negative impact on the future earnings and pension savings levels of older people. Those who lose their jobs over age 50 are less likely to return to work than those at younger ages, and may therefore experience a long period of unemployment, meaning that their break in pension contributions may be longer than the period associated with COVID-19, but extend even up to SPa. Not only will contributions be more difficult for unemployed people over age 50, but they may also, if unemployment continues, need to access their private pension savings early in order to support themselves, further reducing the potential retirement income that they will be able to use to top up State Pension income to an adequate level. As a result, those over age 50 who lose their jobs due to COVID-19 are likely to have more trouble meeting adequacy targets in retirement than those at younger ages in similar circumstances, who are likely to find it easier to return to work.

A median earner who loses their job at age 55, and, as a result, misses out on over a decade of workplace pension saving could have private pension savings of around 34% less, £32,812 compared to a £50,393

A median earner who loses their job at age 55 and is unable to find a new job could have a 34% lower pension income by SPa, assuming that they do not access their savings early to support themselves. In reality, they may access some or all of their Defined Contribution (DC) savings to supplement their income if they are unable to find a job, resulting in even lower private pension savings at SPa. In comparison, someone who leaves their job at age 65 (without taking any early savings) or is furloughed between ages 55 and 57 (but receives 8% contributions of 80% of salary during furlough) could see their private pension savings at SPa reduced by 9% and 1% respectively (Figure 4.1).

143 ONS (2021)
144 Professor Parsons, Walsh (2019)
145 Professor Parsons, Walsh (2019)
Becoming unemployed at age 55, could reduce final pension savings by around 34%

Value of DC pension wealth (after lump sum is taken) at SPa under different retirement scenarios (2021 earnings terms)

<table>
<thead>
<tr>
<th>Scenario Description</th>
<th>Pension Wealth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being unemployed from age 55</td>
<td>£32,812</td>
</tr>
<tr>
<td>Leaving the workforce two years before SPa</td>
<td>£45,686</td>
</tr>
<tr>
<td>Being Furloughed for two years between age 55 and age 57</td>
<td>£49,687</td>
</tr>
<tr>
<td>Retiring at age SPa, age 68</td>
<td>£50,393</td>
</tr>
</tbody>
</table>

Potential of COVID-19 impact on pensions adequacy is noticeable but limited

It is worth balancing projections of investment loss from COVID-19 with the observation that funded pensions are very long-term arrangements and so are, to a significant degree, insensitive to short- and medium-term economic factors.

Adequacy is also fundamentally a relative measure, whether it is formulated as a comparison against an individual’s living standards prior to retirement or against a ‘basket of goods’ deemed necessary for a consumer to be able to purchase in retirement. If there is a long-term ‘scarring’ of the economy following the pandemic, then it will reduce the resources available to create retirement income but will also reduce the expectations of what is adequate. So ‘adequacy’ may still be as likely to be achieved in relative terms, albeit at a lower absolute level.

To assess the impact of how the COVID-19 pandemic and the associated economic shock and recovery have impacted pensions adequacy, the central analysis set out in Chapter Three, based upon the impact to date and expected recovery are benchmarked against an economic scenario where the COVID-19 pandemic did not occur. The model was further extended with two additional scenarios to reflect uncertainty in the economic recovery. These are derived from the ‘upside’ and ‘downside’ recovery scenarios laid out by the OBR in the November 2020 Economic and Fiscal Outlook to explore the uncertainty around the economic recovery from the COVID-19 pandemic.

COVID-19 will result in people relying more on the State Pension to achieve minimum adequacy targets

While the impact of the COVID-19 pandemic is to reduce the projected value (in pure pounds and pence) of average State and private pensions income for different people, the result is likely to be a rise the new State Pension

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146 PPI Modelling
147 Further details are contained in the Modelling Appendix
What is an adequate retirement income?

(nSP) in real (earnings) terms by around an additional 1.5% by 2037 (1% in the upside, 2% in the downside recovery scenarios). The result of this is that COVID-19 boosts the State Pension in relation to the income targets (while the triple lock remains) and more people will become on course to attain adequacy targets148 because target levels rise more slowly than the State Pension. This reduces the income gap between the target and the State Pension to be filled with either private pensions or other assets and income sources.

Pre-COVID-19, 73% of people aged 50 to SPa were on target to meet the JRF MIS. As a result of the impact of COVID-19 on State and private pension income, 1.6% fewer people will meet the income level associated with the target before the pandemic struck. However, the cost of baskets of goods are also projected to be lower as a result of the pandemic. The reduction in the amount of income needed to meet the target results in the proportion of people being able to meet the target increasing by 1.8%, resulting in 73% of households achieving this target post COVID-19. For the Pensions and Lifetime Savings Association (PLSA) Moderate and Comfortable targets and for Pensions Commission Replacement Rates, income decreases less than the decrease in target levels, resulting in more people meeting the targets (Figure 4.2).

This underscores the importance of the State Pension, and the triple lock, in helping people to achieve adequacy.

Figure 4.2149

The COVID-19 pandemic has not only lowered future projected incomes, but also income targets making them more attainable

Proportion of people aged 50 to SPa in 2016/18 on target to reach income targets at SPa, GB

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148 Assuming that they have not drawn out from their pensions to fill a cashflow gap arising from leaving the workforce early

149 PPI Modelling
There is a noticeable but limited impact on the adequacy targets, based upon how the economic recovery from COVID-19 evolves (Figure 4.3)

The downside scenario assumptions relate to a more drawn-out economic recovery from the effects of the COVID-19 pandemic. This involves longer-term scarring to the economy which has the effect of increasing the ‘triple lock premium’ (the extent to which the triple lock increases above any one of its components) over the medium term.

The upside scenario assumptions relate to a more rapid return to economic normality. This results in improved investment returns.

Both upside and downside scenarios result in slight reductions in the adequacy gap when compared to the central scenario. The increase in the numbers projected to meet adequacy in the downside is due to the operation of the pensions ‘triple lock’ mechanism, which guarantees rises in the State Pension above that of wages to a greater degree in the downside scenario than in either the central scenario or upside scenario. This reinforces the important role of the triple lock as a stabiliser in uncertain economic times. The upside scenario improves outcomes through the benefits of the improved economics, while the premium of the triple lock is reduced in the long-term. Those in the underpensioned groups, who are particularly likely to be significantly dependent on the State Pension in retirement, will be most likely to be protected by the triple lock during market shocks (Figure 4.3).

Figure 4.3

Potential COVID-19 impact on pensions adequacy is noticeable but limited

Proportion of households aged 50 to SPa in 2016/18 on target to meet adequacy targets at project SPa by economic scenario, GB
1% change in JRF MIS adequacy outcomes under COVID-19 upside and downside scenarios

The number of people missing the JRF MIS (AHC) target under the State and private income decreases by 1% in both the ‘downside’ scenario and ‘upside’ scenario. This one percentage point change translates to around 110,000 people in the cohort moving above the target. The average (mean) income gap per person failing the JRF MIS (AHC) adequacy test narrows by just over £30 per annum on the State and private pension income basis under both scenarios.

Minimal changes in the risk of missing PLSA ‘Moderate’ target

Turning to the PLSA targets, there is no material impact on the risk of missing the ‘Moderate’ and ‘Comfortable’ targets with just a 1% reduction for ‘Moderate’ on the downside scenario using State and private pensions income.

1% change in Pensions Commission replacement rate adequacy outcomes under COVID-19 ‘upside’ and ‘downside’ scenarios

The net effect of the recovery upon the proportion meeting a Pensions Commission replacement rate measure of adequacy is similar to that for the JRF MIS (AHC). This is a reflection upon how projected retirement income moves relative to income prior to retirement. Under both alternative economic recovery scenarios there is around a 1% reduction in the number of individuals missing the measure. The average reduction in gap is just under £70 per annum on State and private pensions income.

Evidence of the behavioural impacts of COVID-19 is still emerging

Evidence of behaviour change as relates to savings and pensions is limited so far to some interesting anecdotal evidence that might suggest some possible impacts and new or changing trends.

The 2020 lockdown experience may be a taster of what retirement could be like and this has prompted some important thoughts for those planning or entering retirement, for instance:

- A practical trial of what it might cost to live at home in settled, later retirement,
- A strong motivation to go and make the most of their early retirement years having missed out on travel and socialising over an extended period, and
- A desire to reduce their exposure to market volatility such as that experienced in 2020.150

Trend analysts are also tracking consumer behaviour changes and how these impact on longer-term tends for the ‘post-pandemic’ consumer. Some examples are:

- Digital upskilling – with the shift to video as a new channel for engagement, entertainment and service particularly marked. Better digital skills, especially among older generations, may mean that digital access may be wider. This could help with engagement with pensions savings and increase uptake of unclaimed benefits for example. However, older people who do not have sufficient digital skills to engage with online services may find that they experience greater exclusion. Older people are more likely to be non-internet users, with 24% of those aged 65 to 74 and 12% of those aged 55 to 64 having never used the internet, or not used it in three months, compared to 5% of those aged 45 to 54 and 1% of those under age 45.151 As services which support financial planning become more online based, some older people may find it harder to access support as, despite improvements driven by the dynamics of the pandemic, they are starting from a weaker position.
- A re-birth of collectivism – with the universality of COVID-19 impacts driving support for huge state interventions in society, the economy and businesses. This might trigger a fundamental shift in public support for the welfare state and the State’s role in retirement income provision. But it may also trigger a new period of austerity as public debt accumulated triggers a return to the political ‘tough choices’, with consequent cuts on public services and social benefits.
- A new seriousness – with the pandemic forcing consumers to consider what is really

150 Barrett, C. (2021)
151 ONS (2019b)
important to them, these are currently seen as very serious times. Priorities are now family, health and finances. Examples of seriousness driving long-term behaviour quoted include the largest drop in smokers for over a decade and the numbers of self-employed falling by around half a million since the beginning of 2020.\textsuperscript{152}

Whether any of these suggested trends play out to be significant behavioural changes is yet to be seen. But, given the turmoil, it is reasonable to think that new opportunities might arise to address public attitudes to retirement savings and to inform and prompt behaviours that can improve income adequacy in retirement. This may be a more fertile environment in which to attempt to embed initiatives such as the mid-life MOT and the Pensions Dashboards.

\textbf{Pension withdrawals have fallen with the COVID-19 pandemic}

Evidence of behaviour change in pension withdrawals is interesting, but ultimately reinforces the point that long-term trends are very hard to predict. At the start of the pandemic, the pensions sector was concerned about mass withdrawals prompted by market volatility and labour market uncertainties.

However, the evidence is that the reverse happened and there were big falls in all types of withdrawals from insured DC pensions in the period of the first lockdown, but withdrawals rose sharply when this ended, and stock markets recovered. Despite this rebound in withdrawals, levels were still running below those in 2019, suggesting many pension savers were still holding off accessing their pension pots in the face of continued financial uncertainty.\textsuperscript{153} A similar pattern is seen in the value of flexible payments from all pensions recorded by HMRC.\textsuperscript{154}

\textbf{It is currently expected that, in addition to the loss of life in the short-term, the pandemic could have a negative effect on health and life expectancy in the longer-term}

COVID-19 is considered likely to become endemic, resulting in further loss of life in future winters. The long-term toll on the NHS of the pandemic is shown in the non-COVID-19 patient backlog that has risen to more than 4 million. The high projected level of unemployment is also expected to feed through in higher demands on health services.\textsuperscript{155}

Whilst there is a positive effect on future mortality rates following the very significant breakthroughs in vaccine development as a result of COVID-19, this could be small in comparison to other issues faced by the UK health system.

As a result, some actuaries are now projecting a seven-month reduction in the life expectancy of a typical 65-year-old. Reduced life expectancy would, perversely, reduce adequacy shortfalls, Initial calculations suggest that the liabilities of Defined Benefit (DB) schemes may have been reduced by between 1.5\% and 3.5\% due to this reduced life expectancy.\textsuperscript{156} People from BAME groups, who are disproportionately affected by the virus, may face higher than average levels of impact on life expectancy.\textsuperscript{157}

\begin{table}[h]
\centering
\begin{tabular}{|c|c|}
\hline
152 & Flatters, P. Willmott, M. (2020) \\
153 & ABI (2020b) \\
154 & HMRC (2021) \\
155 & McIvor, K. (2020) \\
156 & Cumbo, J. (2021) \\
\end{tabular}
\caption{Sources}
\end{table}
This effect may be offset if this reduced life expectancy is also accompanied by increased morbidity which would increase the numbers of unemployed and dependent on sickness benefits, and also costs of care and medical support in later life.

Conclusions

- COVID-19 may have financial and behavioural consequences for adequacy with long-term economic scarring of around 3% currently projected in our analysis.
- A number of subgroups are at particular additional risk of inadequacy following COVID-19.
- Potential of COVID-19 impact on pensions adequacy is noticeable but limited.
- Evidence of the behavioural impacts of COVID-19 is still emerging but it is reasonable to think that new opportunities might arise to address public attitudes to retirement savings.
- It is also currently expected that, in addition to the loss of life in the short-term, the pandemic could have a negative effect on health and life expectancy in the longer-term.
Appendix: Modelling Appendix

All financial amounts are reported in current (2021) earnings terms.

### Adequacy standards

#### PLSA Retirement Living Standards

The Retirement Living Standards produced by the Pensions and Lifetime Savings Association (PLSA) are based on the Minimum Income Standards (MIS) research supported by the Joseph Rowntree Foundation (JRF) and carried out by the Centre for Research in Social Policy (CRSP) at Loughborough University. It determines an annual target income under three different Retirement Living Standards (Minimum, Moderate and Comfortable) for those living in-London and outside London, and for single-person and couple households.

The Standards as shown below:

<table>
<thead>
<tr>
<th>PLSA Retirement Living Standards</th>
<th>Single households</th>
<th>Couple households</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outside London</td>
<td>London</td>
</tr>
<tr>
<td>Minimum</td>
<td>£10,500</td>
<td>£12,700</td>
</tr>
<tr>
<td>Moderate</td>
<td>£20,700</td>
<td>£24,700</td>
</tr>
<tr>
<td>Comfortable</td>
<td>£33,900</td>
<td>£37,300</td>
</tr>
</tbody>
</table>

Figures have been uprated using earnings inflation.

#### JRF Minimum Income Standards

The MIS is based on the public views on a minimum socially acceptable standard of living in the UK today. This was done by specifying a basket of goods and services required by a household. MIS thresholds were obtained using the minimum income calculator, which is based on the research conducted for the MIS. The table below shows the figures used in our modelling:

<table>
<thead>
<tr>
<th>Weekly Minimum Income Standards (2020)</th>
<th>Single household</th>
<th>Couple household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outer-London</td>
<td>£333.58</td>
<td>£660.70</td>
</tr>
<tr>
<td>The UK outside London</td>
<td>£283.92</td>
<td>£403.18</td>
</tr>
</tbody>
</table>

This approach includes housing costs within the standard. Figures have been uprated using earnings inflation.

### Pensions Commission target replacement rates

This measure looks at whether an individual can achieve a standard of living comparable to the standard of living the individual had before retirement. This approach was used by the Pensions Commission in 2005.

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158 Pensions and Lifetime Savings Association (2019), Developing Retirement Living Standards
160 https://www.minimumincome.org.uk, accessed 18th February 2021
The adequacy thresholds and respective replacement rates are shown below:\textsuperscript{161}

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; £9,500</td>
<td>&lt; £14,100</td>
<td>80%</td>
</tr>
<tr>
<td>£9,500 to £17,499</td>
<td>£14,100 to £25,999</td>
<td>70%</td>
</tr>
<tr>
<td>£17,500 to £24,999</td>
<td>£26,000 to £37,199</td>
<td>67%</td>
</tr>
<tr>
<td>£25,000 to £39,999</td>
<td>£37,200 to £59,599</td>
<td>60%</td>
</tr>
<tr>
<td>£40,000 or more</td>
<td>£59,600 or more</td>
<td>50%</td>
</tr>
</tbody>
</table>

Pre-retirement gross earning thresholds have been updated using earnings inflation.

**Data sources**

**English Longitudinal Study of Ageing**

Data from the English Longitudinal Study of Ageing (ELSA) was developed by researchers based at University College London, the Institute for Fiscal Studies and the National Centre for Social Research (NatCen) and are made available through the UK Data Authority (UKDA).

Data Collection Key: C = CAPI, S = Self Completion, U = Nurse

<table>
<thead>
<tr>
<th>Wave/Year</th>
<th>Data Collection Key</th>
<th>Sample</th>
<th>Refreshment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wave 1 (2002/3)</td>
<td>C</td>
<td>12,099</td>
<td></td>
</tr>
<tr>
<td>Wave 2 (2004/5)</td>
<td>C + U</td>
<td>9,432 + 7,666</td>
<td></td>
</tr>
<tr>
<td>Wave 3 (2006/7)</td>
<td>C</td>
<td>9,771</td>
<td>HSE 2001-4</td>
</tr>
<tr>
<td>Wave 5 (2010/11)</td>
<td>C</td>
<td>10,274</td>
<td></td>
</tr>
<tr>
<td>Wave 6 (2012/13)</td>
<td>C + U</td>
<td>10,601 + 8,054</td>
<td>HSE 2009-11</td>
</tr>
<tr>
<td>Wave 7 (2014/15)</td>
<td>C</td>
<td>9,666</td>
<td>HSE 2011-12</td>
</tr>
<tr>
<td>Wave 8 (2016/17)</td>
<td>C + U(50%)</td>
<td>8,445 + 3,525</td>
<td></td>
</tr>
<tr>
<td>Wave 9 (2018/19)</td>
<td>C + U(50%)</td>
<td></td>
<td>HSE 2013-15</td>
</tr>
</tbody>
</table>

HSE = Health Survey for England, CAPI = Computer Aided Personal Interviewing

Individual and household income for those approaching retirement was computed using this data from Wave 8.

Total income is the sum of: employment income, self-employment income, benefit income, State Pension income, private pension income, asset income and other income defined in the dataset. This was used to determine the differences in income between different individual characteristics.

Household income was split between household size and the working condition within each household i.e., whether all individuals within a household are working.

All figures are in current (2021) earnings terms.

**Living Costs and Food Survey**

Income and consumption figures have been calculated on an individual and household level.

Individual are defined to be “Retired/unoccupied and of minimum NI Pension age”. The proportion of income spent as expenditure has been computed using total personal expenditure and total personal gross income.

\textsuperscript{161} Pensions Commission (2005)
Retired households were selected for household income and consumption. This is defined as households where at least 75% of the total household is from pensioner income. This has been split by household size, the age band of the Household Reference Person (HRP), and the sex of the HRP. Figures have been weight using annual weights.

All figures are in current (2021) earnings terms.

**Wealth and Assets Survey**

The Wealth and Assets Survey is a longitudinal survey, run by the Office for National Statistics (ONS), which aims to address gaps identified in data about the economic well-being of households by gathering information on level of assets, savings and debt; saving for retirement; how wealth is distributed among households or individuals; and factors that affect financial planning.

The dataset was used for looking at the individuals who meet the adequacy targets.

**The PPI Individual Model**

The Individual Model is the PPI’s tool for modelling an illustrative individual’s income during retirement. It can model income for different individuals under current policy, or look at how an individual’s income would be affected by policy changes. This income includes benefits from the State Pension system and private pension arrangements, and can also include income from earnings and equity release. It is useful to see how changes in policy can affect individuals’ incomes in the future.

The PPI’s Individual Model calculates streams of retirement incomes for constructed individuals. The streams of income include State Pension, private pension and various state benefits in retirement. The individual model uses flexible policy parameters to define the pension landscape throughout the individual’s working-life and retirement. The individual is constructed by setting out the work history in terms of working patterns and salary level throughout their working-life, along with pension scheme membership details.

The median pension wealth (of all pension types) for those aged 55-64 has been used for the vignette with a "typical pension wealth".

This has been derived from Table 6.8 of the *Pension Wealth: Wealth in Great Britain* data tables produced by the Office of National Statistics (ONS). This data series uses data from the Wealth and Assets Survey (WAS).

All individuals were assumed to exhibit the same illustrative behaviour at retirement:

- Withdrawing 25% of their pension wealth as a tax-free lump sum at retirement.

Then either:

- Drawing an income from their remaining wealth, initially at a rate of 3.5% of their remaining pension wealth and increasing the amount in line with the Consumer Prices Index (CPI) until they have exhausted their pot.
- Drawing an income from their remaining wealth at the levels of consumption found in our analysis of the Living Costs and Food Survey.
- Drawing an income from their remaining wealth at adequacy levels found in the PLSA Retirement Living Standards.162

This gives an indicative income to quantify the impact of their private pension saving in accumulation.

**Key assumptions**

Except where explicitly stated in the report, the key assumptions used in the report are detailed below.

**The pensions system**

The pensions system modelled is as currently legislated. The triple lock is assumed to be maintained. Individuals are assumed to be either members of a Defined Contribution (DC) or Defined Benefit (DB) occupational pension scheme.

**Investment returns**

The investment returns have been set to 5.3% in line with the Office for Budget Responsibility’s (OBR) forecast of asset yields from the Economic and Fiscal Outlook (EFO). This assumes a 60:40 equity: bond investment ratio and the FTSE all share historical dividend yield is 3.7%.

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163 Office for Budget Responsibility (2020b)
Other economic assumptions
Other economic assumptions are taken from the OBR’s EFO\textsuperscript{164} (for short-term assumptions) and Fiscal Sustainability Report\textsuperscript{165} (for long-term assumptions).

Limitations of analysis
Care should be taken when interpreting the modelling results used in this report. In particular, individuals are not considered to change their behaviour in response to investment performance. For example, if investments are performing poorly, an individual may choose to decrease their withdrawal rate and vice versa.

Key results
The key output from the model is the built-up pension wealth and entitlement over the course of the individual’s work history and the post-retirement income that results from this. The post-retirement income is presented as projected cashflows from retirement over the future lifespan of the individual. These are annual cashflows which include the following key items:

- State Pension
  ➢ Reflects entitlement and the projected benefit level of State Pension components.
- Private pension
  ➢ Derived from the decumulation of the pension pot, allowing for tax-free cash lump sum and the chosen decumulation style (e.g., annuity or drawdown).
- Other State benefits
  ➢ Other benefits contributing to post-retirement income such as Pension Credit.
- Tax
  ➢ Tax payable on the post-retirement income, to understand the net income available to the individual.

These cashflows are calculated as nominal amounts and restated in current earnings terms.

Outcomes are expressed in current earnings terms for two reasons; it improves the comprehension of the results and reduces the liability of either overly optimistic or cautious economic assumptions.

Application of output
The model is best used to compare outcomes between different individuals, policy options, or other scenarios. The results are best used in conjunction with an appropriate counterfactual to illustrate the variables under test.

Key data sources
The specification of a model run is based upon three areas:

1. The individual
   The individual to be modelled is specified based upon an earnings and career profile. Saving behaviour for private pension accumulation is considered, as well as the behaviour at retirement.

   These are generally parameterised according to the project in question, designed to create vignettes to highlight representative individuals of the groups under investigation.

2. The policy options
   The policy option maps the pension framework in which the individual exists. It can accommodate the current system and alternatives derived through parameterisation. This allows flexing of the current system to consider potential policy options to assess their impact upon individuals under investigation.

   This area has the scope to consider the build-up of pensions in their framework, such as the automatic enrolment regulations for private pensions and the qualification for entitlement to State benefits.

   The framework in retirement allows for the tax treatment and decumulation options taken by the individual as well as other sources of State benefits which influence the post-retirement outcomes for individuals.

3. Economic assumptions
   The deterministic assumptions used in this analysis are taken from the OBR’s EFO to ensure consistency. They cover both historical data and future projected values.

\textsuperscript{164} Office for Budget Responsibility (2020b)
\textsuperscript{165} Office for Budget Responsibility (2020a)
Population projection of GB
To assess the proportion of GB households achieving adequacy measures projection modelling was undertaken on the Wealth and Assets Survey data, Round 6, covering interviews 2016/18.166

Population considered
Individuals within the dataset have been selected based upon their age:
• Over age 50 and below State Pension age (SPa) have been included in future pensioners projections
• Above SPa have been included in current pensioners.
Segmentation is based upon identifiers present in the dataset.
Results are weighted to the GB population based upon weightings calculated by ONS and included with the dataset.

Projection assumptions
Economic assumptions used in the projection are aligned with the assumptions use in the PPI Individual Model, outlined above. This includes future tax thresholds and benefit levels.

Additional assumptions include:
• Adequacy targets (where applicable) are assumed to increase in line with earnings.
• Adequacy is assessed at SPa
• Equivalisation has been applied to produce a household replacement rate consistent with the Pensions Commission report.

Future pension contributions:
• Pension contributions are assumed to be continued at current rates, subject to the floor of automatic enrolment minimums.
• Future DB pension accrual is only included where an individual is identified as a current member of an occupational DB scheme. Future accrual is assumed to be consistent with the benefit currently accrued.

State benefits:
• These are consistent with the Individual Model and are based upon current legislation.

Retirement behaviours
• Where an individual is currently accruing pension saving, they are assumed to continue accruing benefit until SPa

Other economic assumptions
• House values are assumed to increase in line with earnings

COVID-19 assumptions:
Economic assumptions are adjusted in line with the upside and downside scenarios outlined in the November 2020 EFO.167 Adjustments have been extended to include consistent impacts upon investment return and triple lock indexation.
The economic assumptions pre-COVID-19 are derived from the long-term determinants used by the OBR in the March 2020 EFO compiled before the UK entered lockdown for the first time.

Income levels
State and private pension income – in which DC pension savings, after deducting the tax-free lump sum of 25%, are used to purchase a guaranteed inflation-linked income similar to that from a DB scheme. This scenario matches the way in which most people use their tax-free pension lump sum for other purposes, rather than directly to provide a retirement income - but also ensures that they use their remaining funds for a sustainable retirement income.

Additional Capital – where, in addition to State and private pension income assets, the pension tax-free lump sum and all other non-pensions savings are used. This shows what level of income can be achieved if all pensions wealth and other savings and investments are directed to retirement income.

Housing equity – where, in addition to the Additional Capital assets, one-third of net housing wealth is included. This estimates what might be achieved if housing wealth is used to generate further retirement income by releasing all housing wealth at retirement through a lifetime mortgage at a notional loan-to-value ratio of 33%.

166 Office for National Statistics (2020b)
167 Office for Budget Responsibility (2020b)
168 Office for Budget Responsibility (2020c)
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