



Evolving retirement outcomes

PENSIONS POLICY INSTITUTE

PPI

This report has been sponsored by



Department
for Work &
Pensions



The Pensions
Regulator



A Research Report by Lauren Wilkinson, Daniela Silcock, Tim Pike
and Chetan Jethwa

Published by the Pensions Policy Institute

© July 2018

ISBN 978-1-906284-68-8

www.pensionspolicyinstitute.org.uk

Evolving retirement outcomes

Executive Summary	1
Introduction.....	6
Chapter one: What risks do people face when planning for retirement?	7
Chapter two: How can individuals achieve positive retirement outcomes within the existing landscape?	12
Chapter three: Can people access the right advice and guidance?	34
Chapter four: How might the market evolve to better meet the needs of retirees?	44
Appendix One:	51
Acknowledgements and Contact Details.....	55
References	57

Executive Summary

The introduction of pension freedoms has allowed people greater flexibility in accessing their DC pension savings. This has the potential to allow people to use their savings in a way that could better suit their needs and preferences. However, it has also introduced new challenges, complexity and risk. This report explores the range of outcomes that people can achieve with existing products and the scope there may be for innovation to better meet the needs of retirees over the next ten to fifteen years.

- Decisions about how to access retirement savings are complex and require people to make trade-offs between a number of factors, in particular security and flexibility.
- People could see their retirement income, as well as their likelihood of exhausting their pot and their ability to leave bequests vary considerably based on the decisions they make at and during retirement.
- Despite the complexity of these decisions, take-up of advice and guidance remains relatively low.
- Innovations in technology may reduce barriers to accessing advice and guidance.
- Policies aimed at increasing engagement in the lead up to retirement could help people to make more informed choices and potentially achieve better retirement outcomes.

- Product innovation may also help people to achieve retirement outcomes that better suit their needs and preferences. However, people are able to achieve positive outcomes with the range of products already available, for example by using a combination of products.
- Guided pathways may be a remedy for low levels of engagement or for those for whom high levels of engagement and financial capability are not practicable.

Innovation has been somewhat limited since the introduction of pension freedoms

The Government hoped that the introduction of Freedom and Choice would encourage innovation in the market, however this has not been observed to a great extent so far. There are a number of reasons for this:

- It takes time for new products to be developed. Innovation may be occurring but we are yet to see the output because of the time needed for development.
- There is a perceived lack of competition in the retirement income market. This means that without significant consumer pressure, there is limited motivation to innovate in consumer interests.

- Innovation in terms of new products may not be necessary. Instead existing products could be used more effectively in order to meet the needs of retirees.

Innovation has the potential to improve the retirement process, helping people to make better decisions and achieve more positive outcomes. However, product innovation may not necessarily be the best or only way to help people to achieve better outcomes, as engaged and informed individuals are able to achieve positive outcomes using the existing products. Instead, innovation should be viewed as part of a portfolio of measures aimed at improving retirement outcomes.

People make a trade-off between security and flexibility when choosing how to access pension savings

For many people, the primary purpose of saving in a pension fund will be to provide themselves with an income in retirement. However, some people place a high value on having flexibility regarding:

- When they access their pension savings (before and during retirement),
- How much income they are allowed to withdraw,
- Whether they are able to continue to grow their savings during retirement, and
- Whether they are able to leave any remaining savings as inheritance after their death.

Generally, the more flexibility a pension savings access method allows, the more the individual is exposed to income related risks during their retirement. Over the next ten to fifteen years, people will reach retirement with higher levels of DC savings and lower levels of DB entitlement. This trend will strengthen the significance of the security/flexibility trade-off and the impact that decisions have on retirement outcomes.

Given the uncertainty surrounding longevity and the challenge this poses for people trying to make their savings last throughout retirement, purchasing some form of income security, for example an annuity, is generally the best way of preventing a pot from being exhausted, though market innovations over the next ten to fifteen years could build more security into existing products. The use of hybrid products,

which allow people to combine flexibility with security may grow in popularity as people reach retirement with higher levels of DC savings.

People could also achieve security and flexibility by using a combination of existing products. In many cases people will have other savings and assets, either in the form of other DC pots, non-pension savings, or in some cases secure income from other sources such as DB entitlement. These can be used to fund consumption in retirement. For those who have other forms of secure income, this can reduce the risk of poor retirement outcomes as a result of decisions about accessing savings.

Retirement outcomes will vary considerably based on the decisions that people make

A quarter (28%) of those reaching retirement in the next ten to fifteen years will have moderate to high levels of DC savings and low or no DB entitlement. The decisions they make could see their private pension income vary by as much as 72% based on the scenarios modelled in this report. Based on these decisions, the probability that they will run out of private pension savings could vary by around 70%, and the number of years that they are likely to spend in retirement without any private savings if they do run out could increase by around 15 years.¹

Decisions about accessing DC pensions are considered the most challenging of pension and retirement decisions and other major financial decisions from across the life course

Decisions about how to access pension savings in order to fund retirement are particularly complex since the introduction of pension freedoms. Many individuals struggle to understand financial fundamentals such as tax, probabilities and inflation risks or how investments and retirement income products work. Individuals also often struggle to understand charges, risks and value for money.

Many people have not given much consideration to how they will access their pension savings in order to fund their retirement. Even among people who have already accessed their DC pot, understanding

1. Assumes that individuals withdraw between 3.5% and 10% per year, as illustrated for Scott in Charts 1 and 4. Incomes could vary more drastically if higher withdrawal rates are applied.

of the decisions they have made is relatively low. As the average level of DC savings among those reaching retirement increases, the impact of decisions made about access will grow in significance alongside the potential for harm if people make decisions which have a negative impact on their financial wellbeing. Therefore, the need for support through advice and guidance will grow over the next ten to fifteen years and beyond.

Using advice when making decisions about how to access pension savings has the potential to improve retirement outcomes

People who choose to access financial advice, either from an independent financial adviser or their former employer, report that it helped them to consider their retirement more holistically than they would otherwise have done. Those who had regular contact with a financial adviser said this encouraged them to adjust their plans to accommodate changing circumstances or priorities. Guidance can encourage people to consider their options, make decisions or seek further advice.

However, take-up of paid-for financial advice remains relatively low. The overall number of people who have spoken to a financial adviser about their finances is low but increasing, with a 25% increase over the last two years. However, with just 10% of people accessing financial advice and 32% of those entering drawdown not using an adviser, the level of access to advice has been described as ‘worryingly low’.

An important focus for policy will be removing the barriers to accessing advice and guidance so that future retirees are not disadvantaged

While free guidance is offered, not all those who would benefit from it take it up due to structural and behavioural barriers. The cost of accessing advice also acts as a barrier to using paid Financial Advisers, particularly for those with smaller pension pots. FAMR² recommended that because automatic enrolment is offered through employers, the workplace should also be the home of financial

advice and guidance. If advice or guidance was offered in the workplace, engagement could increase in the future, particularly if it was offered at no cost to the employee as part of their benefits package. However, it is unclear whether many employers would be willing to cover the cost of this.

Innovations in technology and automation may help to make advice and guidance more accessible and effective over the next ten to fifteen years

Two thirds (69%) of advisers believe that robo-advice could help to close the advice gap.³ Although only a third of pension savers say they would prefer online tools to speaking to a financial adviser, over half (53%) say they would use a free online retirement planning tool to help get information about what to do with their pension pots.⁴ Interest in online advice is higher among younger age groups, which may mean that the preference for robo-advice grows as younger cohorts approach retirement. Robo-advice could be an important feature of the future advice and guidance landscape.

There may be an opportunity for hybrid advice services which combine an element of automation online with face-to-face interaction.

Default retirement pathways have the potential to improve retirement outcomes for some, but would be challenging to design and implement

In April 2018 the Work and Pensions Committee published the final report of its inquiry into pension freedoms. The report recommended that the Government take forward FCA proposals to introduce default decumulation pathways, which would require drawdown providers to offer a ‘default solution that is targeted at their core customer group’. These default solutions would be subject to the same 0.75% charge cap as automatic enrolment schemes and would also come under the remit of Independent Governance Committees. It was recommended that these protections should be in place by April 2019.⁵ The Pensions and Lifetime Savings Association (PLSA) also supports these proposals.

2. Financial Advice Market Review (2017)

3. Prudential (2017)

4. The People’s Pension (2016)

5. Work and Pensions Committee (5 April 2018) *Pension freedoms: Ninth report of session 2017-19*

Because a retirement ‘default’ differs significantly from an accumulation default such as automatic enrolment, it may be that a different name would be more appropriate. The term ‘default’ suggests that the majority of people will use this option, which is not necessarily the intended aim. It may be that these should rather be described as guided pathways or blueprints.

The key features required of default retirement pathways are:

- Simplicity
- Value for money
- Freedom to opt out
- Clear choice architecture

Work is ongoing within the pensions landscape on the best way to design and implement default pathways. Default pathways could help to protect people from experiencing particularly poor retirement outcomes as a result of making sub-optimal decisions in the future.

While default pathways may not be able to produce the optimal outcome for all retirees, they could serve a purpose in protecting individuals from the worst outcomes, in particular running out of money during retirement and relying solely on state provision.

There are some concerns that default pathways do not tackle the real issue, low levels of engagement. A retirement landscape in which all are engaged and informed may be the ideal, but with many retirees inactive and less well-informed, defaults have the potential to offer improved outcomes for some people. It is not yet clear how substantial the role of default pathways will be over the next ten to fifteen years or how they might affect consumer outcomes.

In June 2018, the Government responded to the Work and Pensions Select Committee’s recommendations, rejecting the call for default pathways, on the basis that:

- Measures to require individuals to be placed into particular products would be inconsistent with the freedom and choice reforms which have deliberately moved away from the idea of defaulting people into a single product.
- There is insufficient evidence to suggest that a common default pathway would be suitable for the majority of people reaching retirement now and in the immediate future, particularly considering:
 - People reaching retirement with DC savings now and in the next ten to fifteen years are likely to have other retirement savings and entitlement to take into account when making decisions, while pension providers have a limited view of individuals’ financial position.
 - Needs and preferences differ significantly in retirement, so a default pathway may not be appropriate for a group of retirees, even if they have a similar level of savings.⁶

Providers may still develop some form of guided pathway which people can choose to enter in order to achieve better outcomes than they would be able to on their own if they are not particularly engaged or informed.

6. House of Commons (2018)

As future cohorts approach retirement, there will be an increase in the number of people reaching retirement with low or no DB entitlement and moderate to high levels of DC savings. As the size of DC pots increase, there may be more reason and incentive to innovate in the retirement market. There will be an increasing number of people reaching retirement at risk of making sub-optimal decisions that could have a significant negative impact on their retirement outcomes.

Product innovation may increase organically as people have more to invest in products as may the accessibility of advice and guidance and the effectiveness of default pathways.

Innovations in communications and support could increase levels of engagement prior to retirement and improve retirement outcomes

The FCA has suggested that better communications, support and guidance could help to increase people's levels of engagement before they come to access their pension savings. This could take the form of 'wake up' packs from age 50, including a one page 'headline' document.⁷ Improving engagement could help people to make retirement income decisions that better suit their needs and preferences. However, for some individuals the level of engagement and financial capability required to make positive choices may not be practicable. In these cases, some form of guided pathway has the potential to improve their retirement outcomes.

7. FCA (2018a)

Introduction

Since the introduction of Freedom and Choice in April 2015 people have had greater flexibility when they come to access their Defined Contribution pension savings. However, Freedom and Choice has also introduced new challenges, complexity and risk. There are concerns about people making sub-optimal decisions and potentially experiencing poorer outcomes in retirement, for example, running out of pension savings and relying solely on the State for income.

Following on from [The evolving retirement landscape](#), which explored the way that retirement income decisions, savings and assets have evolved in recent years, this, the second report in this series, looks to the future. It explores the potential outcomes that may be achieved through different retirement

income decisions, and the changes that may need to occur within the industry and wider pensions landscape in order to ensure that these outcomes are positive for as many people as possible.

Chapter one explores the risks and complexity associated with accessing retirement savings and how they might develop in the future.

Chapter two looks at the range of outcomes that people can achieve using existing products.

Chapter three discusses advice and guidance, the extent to which it is accessible, and what future innovations may improve access.

Chapter four explores product innovation, the scope for future innovation and the extent to which this may be able to improve retirement outcomes.

Chapter one: What risks do people face when planning for retirement?

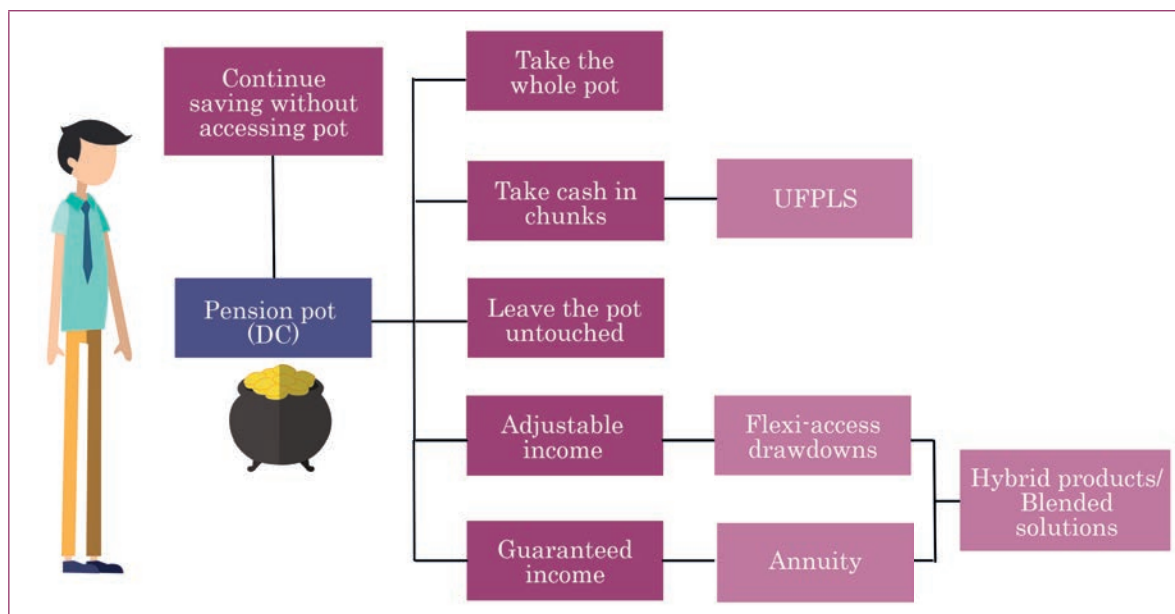
This chapter explores the risks and complexity associated with accessing retirement savings and how they might develop in the future.

In April 2015, the Government introduced Freedom and Choice, which allows people greater flexibility in accessing their pension savings. Although the freedoms have introduced the opportunity for people to fund their retirement in a way that better suits their needs and preferences, people are also at

greater risk of making sub-optimal decisions that could have a negative impact on their retirement outcomes. This risk will grow in future as more people reach retirement with Defined Contribution (DC) savings and low or no Defined Benefit (DB) entitlement.

Box 1 details the choices which face those who reach age 55 with DC savings, or who transfer DB entitlement into a DC scheme.

Box 1: Choices facing those over age 55 with Defined Contribution savings⁸



There are three main methods of accessing income in retirement, each associated with different levels of risk and flexibility

There are three main methods by which individuals can access their private pension savings:⁹

- **Securing a lifetime income** – securing a guaranteed lifetime income, for example through an annuity or from Occupational Pension payments.
- **Flexible withdrawals** – withdrawing income at set or varying levels (without a lifetime guarantee) often with the option to continue to potentially grow the capital fund, for example through income drawdown, or directly from the pension savings pot (uncrystallised fund pension lump sums).
- **Withdrawing pension savings as a lump sum** – withdrawing the entire pension pot as a lump sum to either spend or re-invest.

Each method of accessing private pension savings poses some risk to an individual’s retirement income (Table 1). The main income-related risks that are associated with accessing private pension savings are:

- **Longevity risk** – the risk that individuals could run out of money before their death.

- **Inflation risk** – the risk that one’s income may lose value relative to the price of goods and services.
- **Investment risk (of capital loss)** – the risk that market fluctuations or poor investment strategies will deplete a fund’s capital.
- **Risk of missing out on investment growth** – the risk that a fund will be under-exposed to equities and miss out on investment growth, as a result of investment strategy.
- **Mortality drag** – the risk (incurred when one defers purchasing an annuity) of an invested pension fund yielding less investment return than required to make up for missing out on the cross-subsidies contained in an annuity pool.
- **Risk of forgoing consumption** – the risk that individuals might underspend due to worries over running out of money.
- **Time-of-purchase risk** – the risk, especially relevant to lifetime annuities, that one is locked into a product with poor returns because rates are unfavourable at the time of purchase. This risk could also apply to income drawdown, if an income drawdown product is purchased at a time of poor market performance.
- **Irrevocable decision risk** – The risk of making a purchase decision that is irrevocable (for example, purchasing a lifetime annuity) which does not turn out to best meet income

8. UFPLS: Uncrystallised Funds Pension Lump Sum. This is when people withdraw directly from their pension fund. 25% of each withdrawal is tax-free, with the remainder taxed at marginal rate.

9. Antolin (2008)

needs or cannot meet needs that change (for example, when health problems develop) because of illiquidity.

- **Counterparty risk** – the risk that the provider defaults on their promise to the individual due to the behaviour of a third party.
- **Insolvency risk** – the risk that the provider of a pension fund or pension income (through an annuity or income from Occupational Pension payments) becomes insolvent. People in this situation are generally eligible to receive some compensation from the Financial Services Compensation Scheme or the Pension Protection Fund.

The above list is not exhaustive. Accessing private pension savings can carry many other risks for individuals including:

- The risk of changes in need or personal circumstances
- The risk of not recouping the initial purchase price of a retirement income product due to an early death.

Nevertheless it should be recognised that for many people a key retirement income related risk is **the risk of having insufficient income in retirement to have an adequate standard of living** as a result of not saving or not saving enough. As DB provision is waning in the private sector, this risk is increased for many employees over the next few decades who might find it difficult to match DB level contributions in their DC schemes. The average level of contributions (employer and employee combined) to DB schemes was around 23% in 2016, while average DC contributions were 4.2%.¹⁰ The automatic enrolment minimum contribution level increased to 5% of band earnings in April 2018, and will increase to 8% in April 2019.

Not all risks are equally serious

Some risks are more serious than others. Risks related to losing some or all of the pension fund before death could result in an individual experiencing more financial hardship than risks which relate to missing out on growth, or inflation related increases.

Therefore, if an individual uses an access method which protects against **longevity risk** and the **investment risk of capital loss**, but exposes them to other risks, then this individual may have a lower risk of income loss than an individual using a method which exposes them to **longevity risk** and/or **investment risk of capital loss** (regardless of the other risks that they are protected against).

Using pension savings to secure an income, generally through a lifetime annuity or DB pension, is the only method which protects individuals against both **longevity risk** and the **investment risk of capital loss**.

People make a trade-off between security and flexibility when deciding how to access their DC pension savings

For many people, the primary purpose of saving in a pension fund will be to provide themselves with an income in retirement. However, some people place a high value on having flexibility regarding:

- When they access their pension savings (before and during retirement),
- How much income they are allowed to withdraw,
- Whether they are able to continue to grow their savings during retirement, and
- Whether they are able to leave any remaining savings as inheritance after their death.

The level of flexibility associated with a particular method of accessing pension savings can be measured by examining the extent to which the method allows people control over:

- **Level of withdrawal** – choice in the amount of money withdrawn
- **Growth** – potential to grow the capital
- **Bequest** – potential to leave money as inheritance

There is generally a trade-off between flexibility and risk, the more flexibility a method allows, the more the individual is generally exposed to income related risks during their retirement (Table 1).

10. ONS (2017)

Table 1: the three main methods of accessing private pension savings and the trade-off between level of risk and level of flexibility

Method	Risks exposed to	Risks protected against	Flexibilities
Secure income (e.g. annuities)	<p><i>Risk of missing out on investment growth</i> though some annuities are investment linked</p> <p><i>Time-of-purchase risk</i></p> <p><i>Irrevocable decision risk</i></p> <p><i>Inflation risk</i> – unless annuity is index linked</p>	<p><i>Longevity risk</i></p> <p><i>Investment risk (of capital loss)</i></p> <p><i>Mortality drag</i> – if purchased in time</p> <p><i>Risk of foregoing consumption</i></p>	<p><i>Level of withdrawal: low flexibility</i> – there will be a range of options at time of annuity purchase</p> <p><i>Growth: low flexibility</i> – unless it is an investment linked annuity</p> <p><i>Bequest: low flexibility</i> – guaranteed annuities provide some and joint life annuities can provide income to a dependent</p>
Scheduled withdrawals (e.g. drawdown)	<p><i>Longevity risk</i></p> <p><i>Investment risk (of capital loss)</i></p> <p><i>Risk of forgoing consumption</i></p>	<p>Partial protection from the following risks:</p> <p><i>Risk of missing out on investment growth</i></p> <p><i>Time-of-purchase risk</i></p> <p><i>Irrevocable decision risk</i></p> <p><i>Inflation risk</i></p>	<p><i>Level of withdrawal: Medium flexibility</i> – up to maximum withdrawal cap</p> <p><i>Growth: high flexibility</i> – to potentially grow fund</p> <p><i>Bequest: medium flexibility</i> – level of effective flexibility to leave as bequest dependent on tax treatment</p>
Withdrawing pension savings as a lump sum	<p><i>Longevity risk</i></p> <p><i>Risk of forgoing consumption</i></p> <p>The level of <i>inflation risk, risk of capital loss and risk of missing out on investment growth</i> will depend on whether lump sum is reinvested</p>	<p>Partial protection from the following risks:</p> <p><i>Risk of missing out on investment growth</i></p> <p><i>Time-of-purchase risk</i></p> <p><i>Irrevocable decision risk</i></p>	<p><i>Level of withdrawal: high flexibility</i></p> <p><i>Growth: high flexibility</i></p> <p><i>Bequest: high flexibility</i></p>

In future, people will reach retirement with higher levels of DC savings and lower levels of DB entitlement in future. This trend will strengthen the significance of the security/flexibility trade-off and the impact that decisions will have on retirement outcomes.

In many cases people will have other savings and assets, either in the form of other DC pots, non-pension savings, or in some cases secure income from other sources such as DB entitlement. These can be used to fund consumption in retirement. For those who have other forms of secure income, this can reduce the risk of poor retirement outcomes as a result of decisions about accessing savings.

Non-financial factors can also be important considerations when making decisions about how to access retirement savings

While financial experts are easily able to focus on the financial outcomes of decisions about accessing savings, individuals are less able to compartmentalise this aspect from other retirement considerations. Non-financial factors that could influence people's decisions about how to access retirement savings include:

- Household and family circumstances
- Health and overall wellbeing
- Expectations of retirement

Low levels of financial capability and behavioural biases may prevent people from making optimal choices

People often have imperfect knowledge and decision-making ability and do not always make choices that lead to optimal financial outcomes. While people can and do try to achieve the best possible outcomes, the decisions they make are often financially sub-optimal because many individuals lack the cognitive ability or financial capability, will-power and knowledge to make choices which will lead to the best outcomes.¹¹

Decisions about how to access pension savings in order to fund retirement are particularly complex since the introduction of the pension

freedoms. Many individuals struggle to understand financial fundamentals such as tax, probabilities and inflation risks or how investments and retirement income products work. Individuals often struggle to understand charges, risks and value for money. This is in part because of the perceived lack of clarity in product information, but also because many people have little exposure to these products during their working lives. Over the next few decades, people will reach retirement with higher levels of DC savings and the potential negative impact of poor decision-making will increase.

Cognitive decline over the course of retirement may also make it more difficult for people to make appropriate decisions about how to access their savings. While someone aged 67 accessing their savings for the first time may have the financial capability to manage their own investments and withdrawal rates, this may not be the case as they reach older ages, at which point it may make more sense to annuitise remaining funds.

In addition to low levels of financial capability, retirement income needs are difficult to predict. This is increasingly the case as the retirement period is extending due to increased longevity for those who do not work for longer. People who are retiring as early as age 55, or in some cases even younger, will find it particularly difficult to predict what their life might look like in the years to come, with many individuals now living into their eighties and beyond.¹²

While some decisions may not make objective financial sense, this does not mean that they are necessarily sub-optimal decisions for individuals. It is important to take a holistic view of retirement within which other more subjective aspects can be equally, if not more, important as a result of unique personal circumstances and priorities. Even in cases where these decisions may lead to sub-optimal financial outcomes, this is not to say that individuals will not make them because of the complexity associated with retirement income decisions. The scenarios explored in the rest of this report aim to reflect this.

11. PPI (2017)

12. MAS (2017)

Chapter two: How can individuals achieve positive retirement outcomes within the existing landscape?

This chapter uses the PPI Individual Model to consider the range of outcomes that current and future retirees could achieve using existing products, and explores how the trade-off between security and flexibility could impact the income of individuals now and in the future.

The hypothetical individuals and couple modelled in this chapter are intended to illustrate some of the issues people reaching retirement now and in the future are likely to face and to illustrate the potential impact

of different decisions. The modelling outputs should be viewed as an illustration of a range of potential scenarios in which current and future retirees might find themselves, and not a projection of actual future outcomes. The analysis is intended to provide insight about the impact that certain decisions could have on retirement outcomes, rather than providing a firm prediction. In reality, outcomes will also be effected by other things not explored in this chapter, including policy changes, economics and household changes.

Box 2

Modelling assumptions¹³

The following modelling is based on the assumption that:

- The pension system modelled is as currently legislated. The triple lock is assumed to be maintained.
- Individuals are assumed to be members of a Defined Contribution (DC) occupational pension scheme.
- Investment returns are generated using the PPI's economic scenario generator, which uses volatility derived from historical data and central rates of median equity return, gilt return, earnings growth and Consumer Price Index (CPI) growth. These are derived from the Office for Budget Responsibility projected figures.
- Debt is assumed to grow at the same rate as investment returns from government bonds.
- Care should be taken when interpreting the modelling results used in this chapter. 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.

The case studies discussed in this chapter aim to illustrate the complexity of decisions at and during retirement. These decisions are particularly complex because of:

- Competing needs and preferences
- Uncertainty around life expectancy
- Varying consumption patterns throughout retirement

The outcomes that the individuals may be able to achieve are considered both in terms of adequacy and the risk of running out of private savings before death.

Uncertainty surrounding life expectancy can make retirement decisions difficult

People cannot predict how long they will live when making decisions about how to access their savings. This makes it difficult for them to know which means of access, and/or withdrawal rate, will best suit their needs throughout retirement.

The analysis within this chapter considers only average life expectancies and does not take into account individual circumstances or variations in life expectancy. Even when looking at average life expectancies there are variations, for example between men and women, and between the constituent regions of the UK (Table 2).

Within regions there are also differences in average life expectancy that can impact the level of income that can be sustainably drawn from a DC pot. For example, women living in Camden (currently aged 65) have the longest life expectancies and can expect to live to age 89 and five months. Whereas those with the shortest life expectancies, men living in Glasgow, can expect to live to age 80 and two months on average. This means that women living in Camden will on average have to spread their retirement funds over an extra nine years and three months.¹⁴

13. See Modelling Appendix for full details of the PPI models used.

14. AEGON (2018) [Life expectancy figures taken from: ONS Life Expectancy at age 65 by sex, UK, 2014-16]

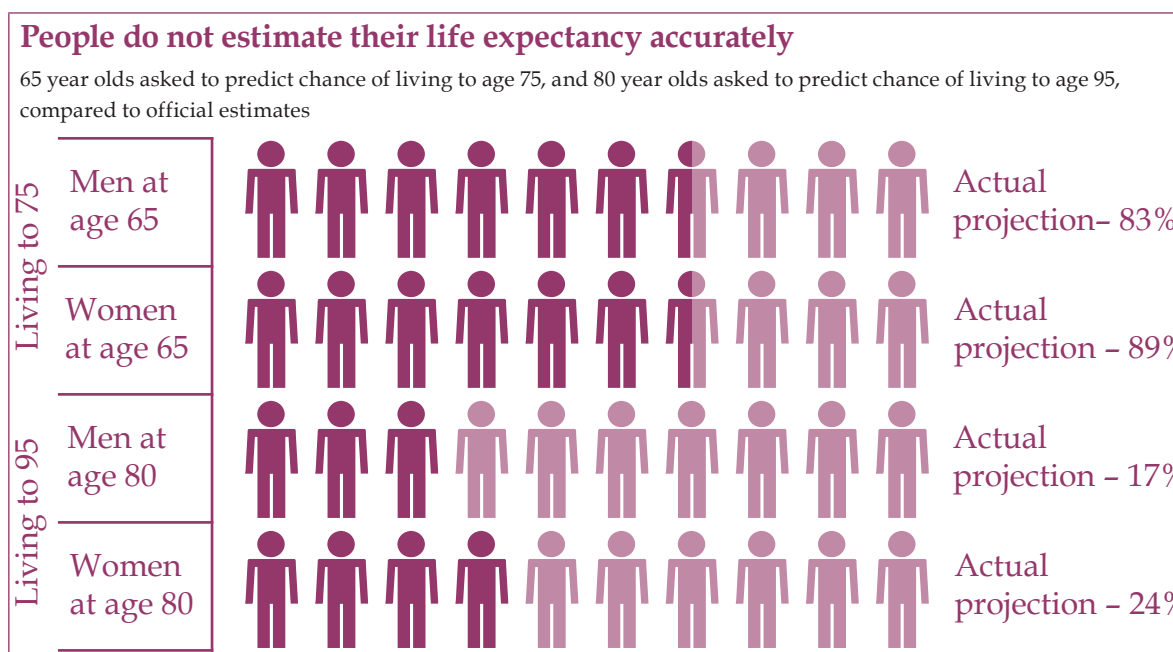
Table 2: Average life expectancy and sustainable yearly drawdown rate by region (individuals aged 65 years old in 2018)¹⁵

Region	Gender	Average life expectancy at age 65	Maximum income for £100,000 retirement fund
England	Male	83 years 10 months	£7,035
	Female	86 years 10 months	£6,490
Wales	Male	83 years 2 months	£7,220
	Female	85 years 7 months	£6,600
Scotland	Male	82 years 5 months	£7,445
	Female	84 years 8 months	£6,820
Northern Ireland	Male	83 years 4 months	£7,170
	Female	85 years 7 months	£6,600

Although the gap between expectations and reality of life expectancy is narrowing, on average people entering retirement are still underestimating how long they will live. Compared to official estimates, people in their 50s and 60s underestimate their chances of survival to age 75 by around 20% and to 85 by between 5% and 10%. For example, men born in the 1940s who were interviewed at age 65 reported a 65% chance of making it to age 75, whereas the official estimate was 83%. For women in this cohort self-estimates were

65% and official estimates 89%. However, as people reach older ages they generally become more optimistic about surviving to older ages. For example, men born in the 1930s who were interviewed at age 80 reported a 32% chance of making it to age 95, whereas the official estimate was 17%; women reported a 37% chance, compared to a 24% official estimate (Box 3).¹⁶ Healthy life expectancy also impacts retirement decisions and outcomes by impacting spending patterns in retirement.

Box 3: Estimating life expectancy¹⁷



Given the uncertainty surrounding longevity and the challenge this poses for people trying to make their savings last throughout retirement,

purchasing some form of income security, for example an annuity, is the best way of preventing a pot from being exhausted.

15. AEGON (2018)
 16. IFS (2018a)
 17. IFS (2018a)

Varying consumption patterns throughout retirement may also make it difficult to make decisions about income

When making decisions about how to spread consumption throughout retirement, the way that circumstances and needs can change are an important consideration. People may require more or less income at different points during retirement to support their changing needs.

A ‘u-shaped’ consumption pattern has often been theorised for retirement, with three distinct phases:¹⁸

- The **active period** immediately following retirement when most people are still in relatively good health and have more free time for leisure activities than they did during working life.
- The **transitional phase** when people generally begin to be less active and spend less as a result.
- The **passive phase** when health has generally declined considerably and people may need to pay care costs in order to take care of their needs.

While for some people the u-shaped curve will be a reality, on average consumption falls progressively during the course of retirement for most people. A household headed by someone aged 80 and over spends, on average, 43% less than a household headed by a 50 year old. While a declining consumption pattern over the course of retirement is accurate for the majority, there is no single consumption pattern that applies to all. The way that needs change during retirement will have a direct impact on consumption trends. As those reaching retirement over the next ten to fifteen years are likely to have longer retirements on average, due to increases in life expectancy and changes in household trends, needs may fluctuate more and consumption patterns may become more varied in future.¹⁹

Given an average declining pattern of consumption, it may make sense for many individuals to focus on flexibility of income in the early years of retirement, before securing a basic level of guaranteed income in later years to protect against running out of savings, though this path may not be appropriate for those who will require greater levels of flexibility throughout retirement.

As people reach retirement with longer life expectancies and the potential for more flexible income needs a variety of access methods will be appropriate.

Non-pension savings and assets, as well as combined household finances, are also important considerations when deciding how to fund retirement

- Most people currently aged between 50 and State Pension age (SPa) own a house, and of those less than half have a mortgage.
- They have varying levels of non-pension savings, which are generally positively correlated with their level of DC savings, and to a lesser extent their level of DB entitlement. For example, half (51%) of those with high levels of DC savings and considerable DB entitlement have non-pension savings of more than £155,000 (in the top quintile for their age group), compared to one in five (19%) of those with low levels of DC savings and no DB entitlement. More than a quarter (28%) of the latter group have less than £1,000 in non-pension savings, compared to 8% of the former.
- The average level of non-mortgage debt for people currently aged between 50 and SPa is £8,000.²⁰

18. Aegon/Retiready

19. ILC (2015)

20. PPI (2018)

Most people currently approaching retirement have a spouse or partner who may also have pension savings. This can impact the decisions that they make about how to access their own savings. For example, someone whose spouse has considerable levels of DB entitlement

may feel that their own DC savings are less important as they already have an adequate income on a household level. They do, however, need to consider how their income will be affected if they outlive their spouse.

Box 4

How much is enough?

There is a lack of consensus regarding how adequacy should be measured and several different options are currently on the table. For the purposes of illustration, this report uses a hybrid measure of two different approaches to calculating adequacy, which suggests that people might need an income of around £15,000 per year in order to achieve a comfortable standard of living in retirement. This figure is used as a proxy measure to allow illustration and comparison and will not necessarily allow people to replicate working life living standards in retirement.²¹

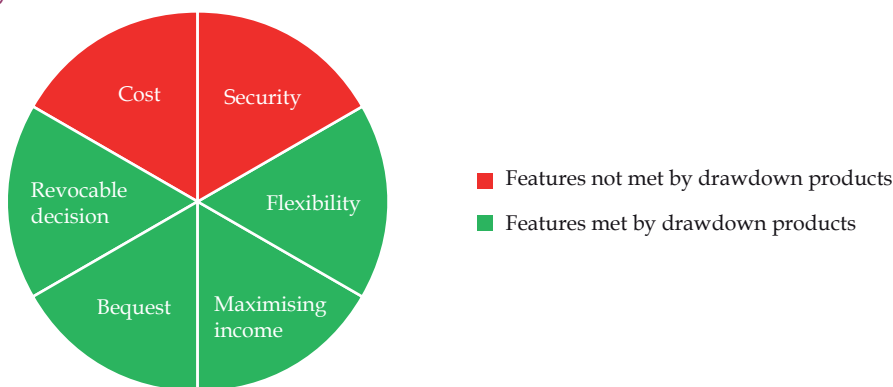
Drawdown products provide a greater level of flexibility, but expose individuals to the risk of running out of private pension savings part-way through retirement

Drawdown is a way for individuals to achieve greater control of their savings, in particular in

regards to setting levels of retirement income and varying this in order to accommodate specific circumstances that may arise. It also enables greater flexibility when leaving bequests, which will be further discussed later in this chapter (Chart 1).

Chart 1

Drawdown products provide a greater level of flexibility, but this comes at the cost of security



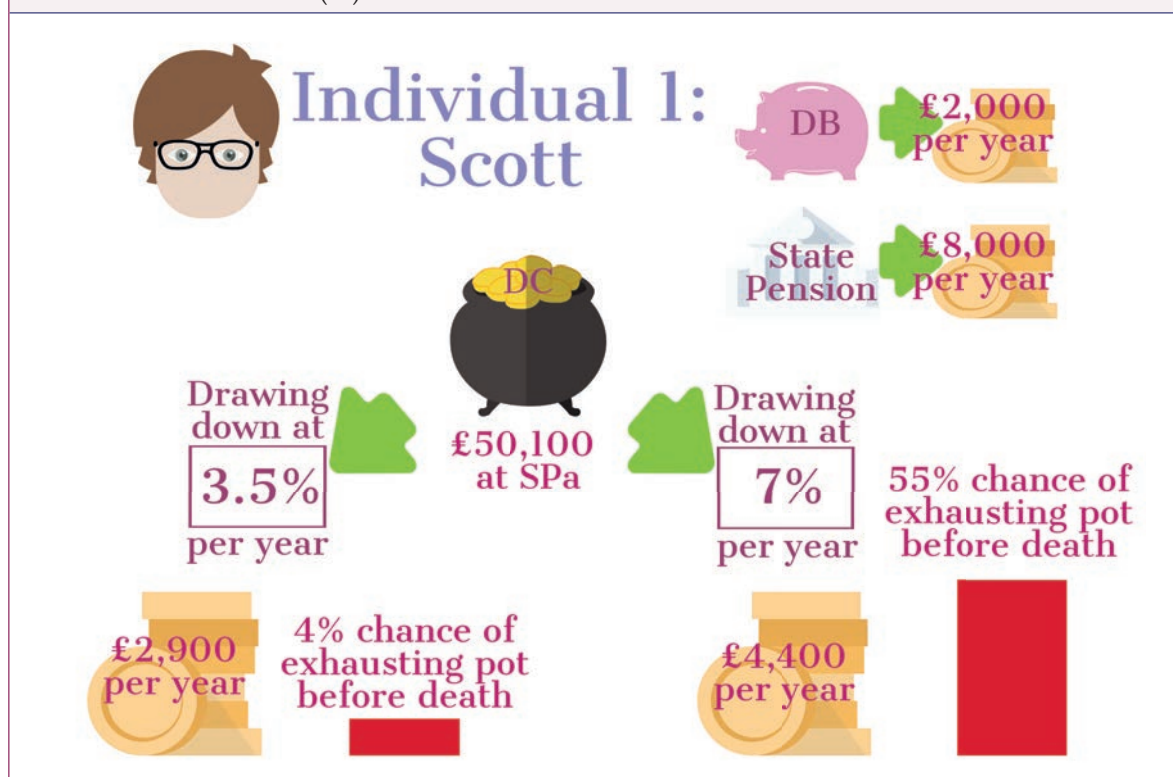
While drawdown products enable individuals greater levels of flexibility, they also expose them to greater risks, specifically longevity risk and investment risk which increase the risk of individuals running out of money. On the other side of this, individuals face the risk

of foregoing consumption if they underspend due to worries about running out of money. However, people may review their withdrawal rate periodically and receive warnings from their provider if their fund falls below a certain level.

21. PLSA (2017)

Individual 1: Scott

- Scott has moderate levels of DC savings, with a DC pot of £50,100 at SPa (2030).
- He also has some DB entitlement of £2,000 per year (uprated by RPI).
- Scott retires at his SPa (67) in 2030.



Scott's pension savings portfolio is typical of around a quarter (28%) of those with pension savings who will be reaching retirement in the next ten to fifteen years, and the choices he faces as to access will be representative of the choices facing a quarter or more of pension savers during this time period. Among people currently aged between 50 and SPa with similar combinations of pension savings to Scott:

- 83% own their own home, 44% of whom own outright without a mortgage
- 28% are in the top quintile for non-pension savings (more than £155,000)
- 25% are in the lowest quintile for non-pension savings (less than £1,000)
- The average level of non-mortgage debt among this group is £8,600²²

Pension savings and entitlements should not be viewed in isolation of other aspects of individuals' financial standing, such as non-pension savings and property which can be used alongside pension savings in order to fund retirement, and debt which can impact the amount of income they have to live on.

Converting DC savings into an annuity provides a guaranteed income for life, however it also reduces the control and flexibility that an individual has in funding their retirement

If Scott chooses to purchase an annuity with his entire pot at SPa, he could achieve an income of around £13,700 per year (2018 earnings terms) (including around £8,000 from State Pension and £2,000 DB income), £1,300 per year short of hitting the adequacy target.²³ Annuitising would, however, provide Scott with the security of a steady income for life, with low risk of running out of money or experiencing a fall in income in later life.

As Scott purchased a level annuity, which is not uprated, this means that the £57 per week he receives from his annuity at SPa will be worth the equivalent of £38 in 2018 earnings terms by the time he is age 75.²⁴

22. PPI (2018)

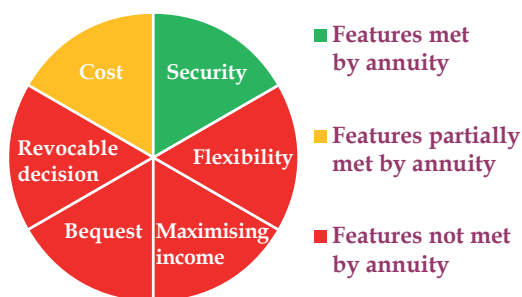
23. PPI Individual Model

24. PPI Individual Model

However, the security provided by an annuity comes at the cost of flexibility (Chart 2). Scott would be unable to adjust his pension income in a given year in order to accommodate unforeseen circumstances that may arise. He would also be unable to leave a bequest, which is an important consideration for many, unless his annuity or DB pension include some form of bequest or survivor pension. However, for some people security may be their top priority, making annuitisation a more attractive option.

Chart 2

Annuities provide the guarantee of an income for life, but this comes at the cost of flexibility



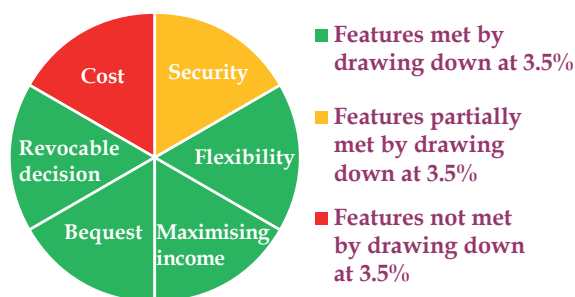
A greater level of flexibility can be achieved by entering into drawdown (Chart 3). However, individuals who choose to enter drawdown face the challenge of identifying a sustainable withdrawal rate which will not run out during retirement (Chart 4), but one that will also, depending on the overall level of their savings, help them to achieve an adequate standard of living in retirement, though drawdown providers and financial advisors generally provide guidance or advice on suitable withdrawal rates for an individual's circumstances.

Scott has DB entitlement of £2,000 per year, as well as an income of £8,000 from the State Pension. In order to bridge the gap between his secure income from these sources, and an adequacy target of £15,000, he would have to withdraw around £5,000 from a drawdown account each year. This would provide him with an overall income of £300 per week (Chart 4). However, in order to achieve this level of income he would have to withdraw around 10% of his savings each year, which is unlikely to be sustainable over the rest of his life. Drawing down at this rate, he has a 73% chance of

In reality, Scott would most likely choose to take a 25% tax-free lump sum from his pension pot before purchasing an annuity. He could use this to provide for flexible income and/or inheritance, or he may choose to spend the lump sum soon after withdrawing it. Taking a lump sum would significantly reduce the amount of money he would be able to spend on an annuity and therefore reduce his income in retirement.

Chart 3

Drawing down at a sustainable rate (3.5%) allows people to access flexibility while also having some level of security



running out of DC savings during retirement, at which point his income would drop to around £200 per week.²⁵

In order to achieve both adequacy and sustainability, Scott would need to have saved much more during the accumulation phase.

Without accumulating sufficient levels of pension savings during working life people will be unable to achieve both adequacy and sustainability.

In order to be able to withdraw £5,000 each year in order to bridge the gap between his income from State Pension and DB entitlement, while being relatively certain that he will not exhaust his pot, Scott would need to have saved around £143,000, nearly three times the actual size of his DC pot.²⁶

25. PPI Individual Model

26. PPI Individual Model

Chart 4²⁷

Individuals need to balance higher levels of income against the risk of running out of money

Scott's weekly income and likelihood of running out of DC savings by varying withdrawal rates

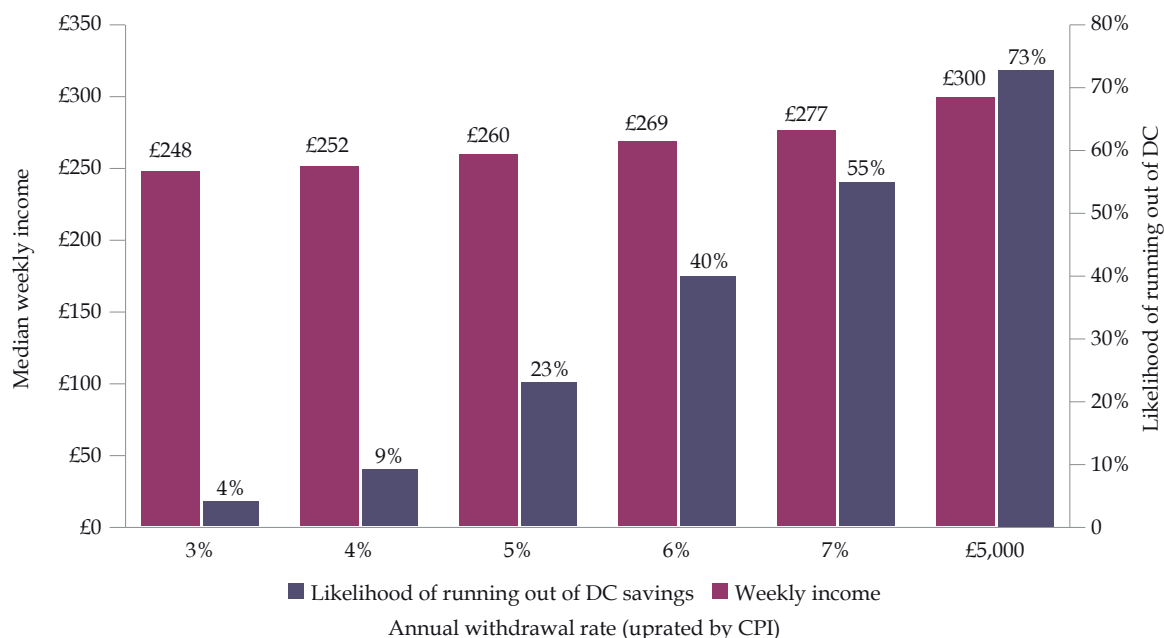


Table 3: Illustration of Scott's withdrawals uprated by CPI (nominal amount, not in earnings terms)²⁹

Year	Fund size	Withdrawal	CPI	Payments
2030	£67,000	3.5%	1.0%	£2,344
2031	£71,300	3.3%	1.0%	£2,382
2032	£69,900	4.5%	1.0%	£2,430

If Scott draws down 3.5% of his fund (calculated at time of SPa), with the amount of withdrawal uprated each year by CPI (Table 3), he will have an income of £248 per week when combined with State Pension. Drawing down at 7%, he would have an income of £277 per week, but also a much higher probability of running out of money during retirement. Drawing down at 7% he could run out of money around 9 years before his death. Scott has some DB entitlement, and therefore even if he exhausts his DC savings, he will not be entirely reliant upon the State Pension. He would, however, experience a significant drop in income and standard of living.²⁸

The higher an individual's withdrawal amount, the more quickly an individual runs out of money (Chart 4). Those withdrawing at:

- 3.5% (uprated by CPI) have a 4% chance of running out of savings before their death.
- 4% (uprated by CPI) have a 9% chance of running out of savings before their death.
- 5% (uprated by CPI) have a 23% chance of running out of savings before their death.
- 6% (uprated by CPI) have a 40% chance of running out of savings before their death.
- 7% (uprated by CPI) have a 55% chance of running out of savings before their death.³⁰

27. PPI Individual Model

28. PPI Individual Model

29. PPI Individual Model

30. PPI Individual Model

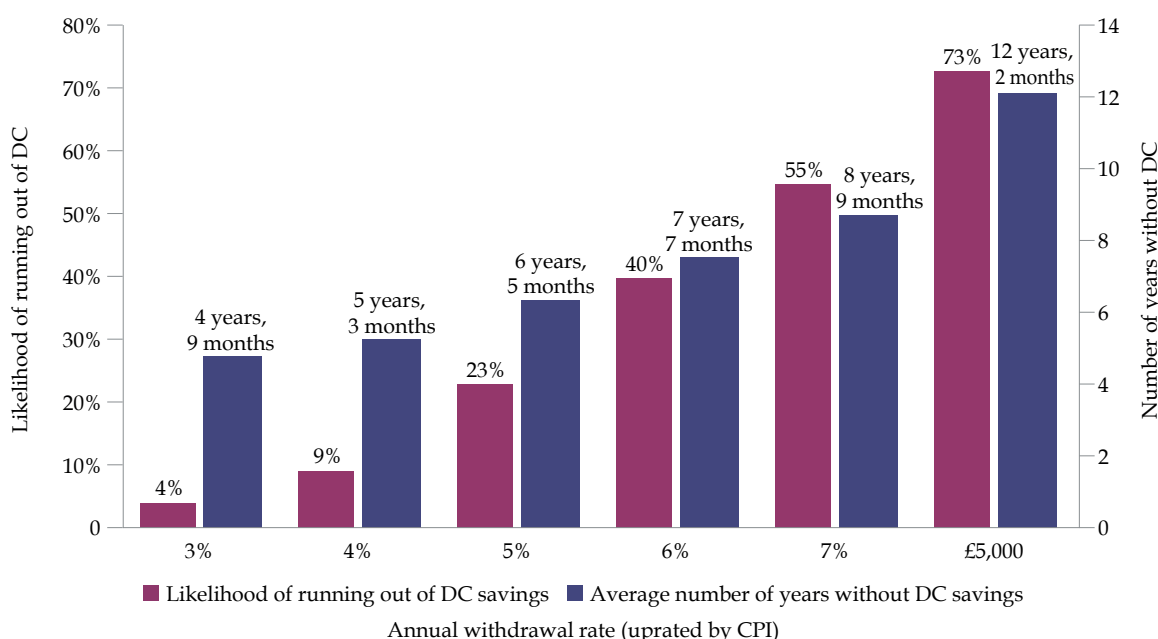
Higher drawdown rates not only increase the likelihood of running out of DC savings, but also the number of years that will likely be spent without DC savings. A person drawing down at 3.5% (uprated by CPI) has a 4% chance of exhausting their pot, compared to a 55% chance for someone drawing down at 7%. If the person drawing down at 3.5% is unfortunate

enough to run out of money they will spend an average of 4 years, 9 months without any private pension savings, while the person drawing down at 7% will spend an average of 8 years, 9 months entirely reliant on the State Pension and benefits and other savings and assets if their DC pot is exhausted (Chart 5).

Chart 5³¹

Withdrawing at a higher rate increases the likelihood that individuals will spend longer without any remaining savings

Likelihood of running out of DC savings and average life expectancy at time of DC pot expiry (for those whose pot runs out) by withdrawal rate



Some people may have a higher risk tolerance due to personal circumstance or preferences. Some people may be willing to take on more risk of running out of money in order to achieve a higher income, particularly those who may have a shortened life expectancy and so are less likely than average to run out of money. However, drawing down at a lower level such as 3.5% enables higher withdrawals in certain years to pay for large expenses, while still maintaining a relatively low risk of exhausting savings.

Furthermore, the flexible nature of drawdown means that people do not have to be passive throughout retirement and can actively review their chosen withdrawal rates. For example, if an individual has chosen to take relatively high withdrawals in the early years of retirement,

they may choose to reduce withdrawals in later years, either as a response to poorer than anticipated investment returns or as consumption gradually declines with age.

Scott has moderate levels of DC savings (£50,100 at SPa) and some DB entitlement (£2,000 per year). Only 2% of people currently approaching retirement (aged between 50 and SPa) have this particular combination and level of savings. However, around a quarter (28%) of people reaching SPa in the next ten to fifteen years will have DC savings of a similar level to Scott (above the median of £24,400), and either no or low DB entitlement (less than £7,000 per year). This means that around a quarter of people reaching retirement in the next ten to fifteen years will face these same decisions and could experience similar outcomes.³²

31. PPI Individual Model

32. PPI (2018)

As pension saving continues to shift away from DB to DC, more people will reach retirement with these combinations of savings and facing these same decisions. Nominal incomes will be dependent on individual savings levels, however finding a balance between adequacy of income, flexibility and security will be an important consideration for all those with moderate to high levels of DC savings.

A quarter (28%) of those reaching retirement in the next ten to fifteen years will face decisions that could see their private pension income vary by as much as 72% based on the scenarios modelled in this chapter. Based on these decisions, the probability that they will run out of private pension savings could vary by around 70%, and the number of years that they are likely to spend in retirement without any private savings if they do run out could increase by around 15 years.³³

Two in five people who will reach retirement with pension savings in the next ten to fifteen years have low levels of DC savings (below the median of £24,400), with around a quarter also having no DB entitlement.

People with lower levels of savings may find it more difficult to restrict themselves to lower withdrawal levels that will protect them from running out of money, because they have lower overall levels of income to support themselves.

This could mean that they are more likely to withdraw at higher levels, and as a result more likely to run out of private pension savings and spend longer entirely reliant on income from the State Pension.³⁴

A combination of products may be used to access both flexibility and income security

People who want to access both flexibility and income security may be able to do so by using a combination of products, for example drawdown and an annuity. Drawdown products do not expose people to irrevocable decision risk as they can purchase a guaranteed income product such as an annuity with the remainder of their pot at any time.

Drawing down at 3.5%, Scott can be confident that, barring a market crash, he will most likely have a pot remaining at age 75 to purchase an annuity than if he withdrew at a higher rate. With his remaining pot he would be able to purchase an income of around £56, giving him a total income of £263 per week when combined with his income from State Pension and DB entitlement. However, if he draws down at a rate of £5,000 per year from SPa until age 75, he has almost a 1 in 5 chance (17%) of running out of funds before he reaches age 75 and therefore being unable to annuitise. If he does have funds remaining at age 75 to purchase an annuity they will be much lower than if he had drawn down at a more sustainable rate. Drawing down at a rate of £5,000 per year between SPa and age 75, Scott would likely have around £14,300 of his funds remaining at age 75.³⁵

A deferred annuity, which allows people to purchase an income to start at a later date, can be useful in ensuring that DC savings do not run out before an annuity is purchased. However, individual health may also decline between the time of purchasing an annuity and income payments beginning, which could mean a lower level of income than if the annuity had been purchased later, for example, via an impaired-life annuity. A reduction in income may be acceptable if it ensures against running out of private pension income altogether.

People who are drawing down at a sustainable level, even as high as 7%, will be very unlikely to run out of money before annuitising at

33. Assumes that individuals withdraw between 3.5% and 10% per year, as illustrated for Scott in Charts 1 and 4. Incomes could vary more drastically if higher withdrawal rates are applied.

34. PPI (2018)

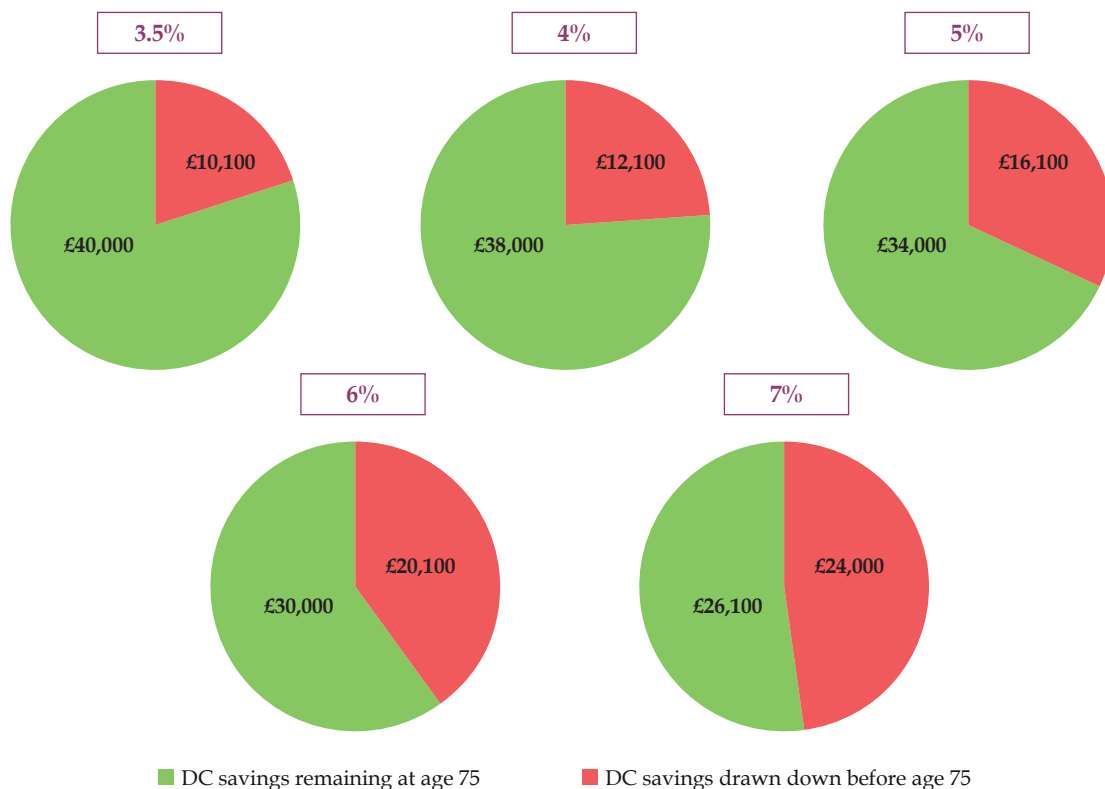
35. PPI Individual Model

age 75. Although, drawing down at a higher level, as opposed to 3.5% for example, will reduce the amount of pot left to annuitise (Chart 6) and therefore secure a lower level of income for the remainder of retirement.

Provided this still yields a basic minimum level of income, a drop in income at this stage in retirement may not always lead to substantial deprivation as consumption is likely to have begun to decline on average.

Chart 6³⁶

Drawing down at a higher rate in the early years of retirement diminishes the amount that is left to annuitise at 75



People could also combine products from the outset of retirement, for example by annuitising half of their pot at SPa and moving the other half into drawdown, before annuitising the remaining drawdown fund at age 75:

- If Scott annuitised 50% of his pot at SPa, he would have a secure income of £50 per week (not including State Pension or DB entitlement).
- He would also have a drawdown pot worth £25,000.
- If he draws down at 3.5% between SPa and age 75, he would have around £20,000 left in his pot at age 75.

- This could purchase him an annuity worth an additional £14 per week.³⁷
- When combined with his other sources of income, including State Pension, DB entitlement and his first annuity (purchased at SPa), he would have a total income of £256 per week. This is lower than the level of income Scott would have achieved by drawing down at 3.5% of his whole pot between SPa and age 75 and then annuitising his remaining pot (£263) (Chart 7).³⁸

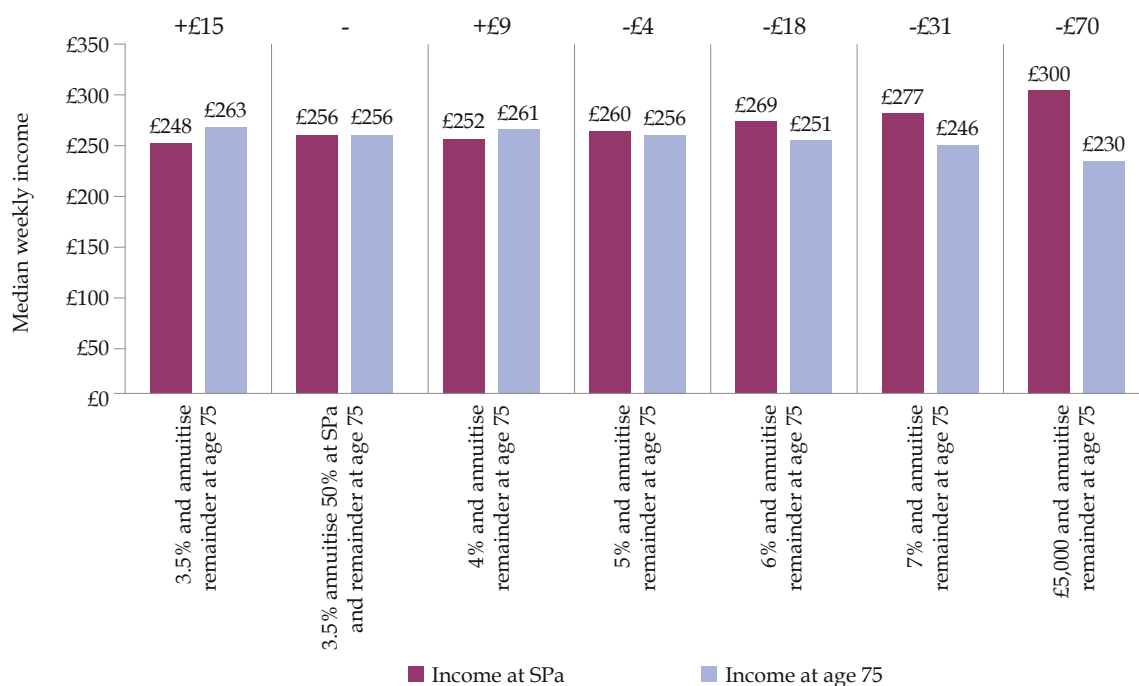
36. PPI Individual Model

37. This is not an increase in total income because Scott is no longer withdrawing additional income from a drawdown account, having now annuitised all of his DC savings.

38. PPI Individual Model

Chart 7³⁹

Scott may see an increase or decrease in his income when he annuitises at age 75, depending on the rate at which he has been drawing down



Those with DB entitlement are protected from the risk of running out of money, but they may wish to transfer into DC in order to access greater levels of flexibility, though the proportion of people reaching retirement with DB entitlement is declining

Individuals with DB entitlement do not face the same risk of running out of money during retirement as those with DC savings, though they do suffer insolvency risk, mitigated by a pension of at least 90% of their entitlement through the Pension Protection Fund (PPF). However, those with DB entitlement do not have control over the level of income they receive from year to year or the bequests they are able to leave though DB pensions generally involve a survivor pension for dependents.

The pension freedoms increased the flexibility with which DC savers are able to access their pension pot. While an annuity provides an income similar, in practice, to a DB entitlement,

drawdown gives individuals more flexibility and control. As a result, the number of people choosing to transfer their DB savings out into a DC account has increased. 90% of DB schemes have seen a rise in transfer value requests from members during the last 18 months, with around 40% seeing a significant increase.⁴⁰ DB transfers peaked in 2017 at around 100,000, but the number dropped for the first time since the introduction of pension freedoms in the first quarter of 2018, reducing by 34% from 32,500 to 21,500.⁴¹ It is likely that over the next ten to fifteen years, the proportion of people transferring DB entitlement into DC schemes will grow.

For some people, transferring their DB entitlement into DC savings may better suit their needs due to:

- **Greater levels of flexibility** in determining when and how they take their pension.
- **A larger tax-free lump sum** because '25% tax-free lump sums' taken from DB schemes can in some cases cost people more than 25% of their yearly entitlement.

39. PPI Individual Model

40. Fintech Times (2018)

41. Telegraph (2018)

- **The ability to leave bequests** rather than just a set widow/widower’s benefit that is common for DB schemes.
- **Personal health** which may mean they are not going to live long enough to experience the longevity insurance benefit of DB and would be better to transfer into DC in order to achieve a higher level of income for a shorter period.
- **Insolvency risk** which, while mitigated by the PPF, could see individuals who have not yet reached retirement experiencing a 10% reduction in income and lower annual increases.⁴²

However, there is still a need to ensure that those transferring are supported during their decision-making process to make sure that they are aware of the implications of transferring. This need is especially relevant for those reaching retirement over the next ten to fifteen years, a third of whom (29%) have considerable levels of DB entitlement and either low or no DC savings.

Though public sector employees will continue reaching retirement with DB entitlement during the next few decades and beyond (barring policy change) they are not permitted to transfer entitlement and are therefore not subject to either the risks or flexibilities associated with this decision.

Hypothetical Individual “Robert” illustrates the implications of transferring DB entitlement into a DC scheme.

Individual 2: Robert

- Robert has considerable DB entitlement of £10,000 per year, which will increase to around £13,000 if he remains in the scheme until SPa.
- He has no DC savings, but his DB income combined with the State Pension would see him surpass adequacy targets of £15,000.
- If Robert chooses to transfer his DB entitlement into DC savings at age 55 (2018), he will have a DC pot worth around £235,000, nearly ten times the median amount of DC savings for people currently aged between 50 and SPa (£24,400).

Individual 2: Robert

Robert can now access his savings more flexibly to meet fluctuations in need, as well as leaving bequests

DB £10,000 per year Or transfer into DC £235,000

Scenario	Annual Income	Chance of exhausting pot before death
Drawing down at same rate as DB	£10,000 per year	12%
Increasing income by 10%	£11,000 per year	16%
Varying income to meet needs	£6,700	12%

42. Your Money (2018)

If Robert were to draw down at the same rate as the DB entitlement which he has given up, he has a 12% chance of running out of savings during the course of retirement. However, this means he has an almost 9 in 10 chance of his pot outlasting him, which would enable him to leave bequests.⁴³

While bequests are an important consideration for some people, accessing income flexibly will also be a factor for many of those who decide to transfer out of DB. If Robert draws down at £11,000 per year, accessing an income that is 10% higher than his DB entitlement, his risk of running out of money during retirement would increase to around 16%.⁴⁴

Flexibility does not, however, simply mean taking a higher level of income but also the ability to spread income most effectively across the retirement period as needs change. This may mean taking higher levels of income in some years in order to accommodate large unforeseen circumstances, for example home renovations or replacing a vehicle. Robert could choose to smooth his consumption while still having the flexibility to withdraw more in some years by taking an average of £10,000 per year (the same as his transferred DB entitlement) over the course of retirement, but taking £20,000 in some years, followed by £6,700 in the following three years. Using this withdrawal strategy, he would have roughly the same chance (12%) of running out of money as if he withdrew £10,000 every year, but he has much more flexibility to meet evolving needs as they arise.⁴⁵

Nearly a third (29%) of people with pension savings who are currently aged between 50 and 59 have more than £7,000 in DB entitlement and either no or low DC savings. This means that around a third of those who reach retirement with pension savings in the next ten to fifteen years will face the same decisions and risks as Robert.⁴⁶

As millennials approach retirement, there will be an increase in the number of people reaching retirement with low or no DB entitlement and moderate to high levels of DC savings

In the future, fewer people will reach retirement with DB entitlement and this will make it harder for them to achieve target replacement rates. Less than 10% of today's retirees reach retirement with only DC savings and no DB entitlement. By 2060, the number of people reaching retirement with only DC savings could be as high as 50%.⁴⁷

Automatic enrolment may lead to improved outcomes for future retirees through higher levels of saving. Automatic enrolment has seen pension participation among those aged between 22 and 29 years old double, from 36% in 2011/12 to 72% in 2015/16.⁴⁸ Because millennials generally entered the workforce during the initial implementation of automatic enrolment, they may be the first cohort to spend their entire working life contributing into pension schemes into which they were automatically enrolled.

43. PPI Individual Model

44. PPI Individual Model

45. PPI Individual Model

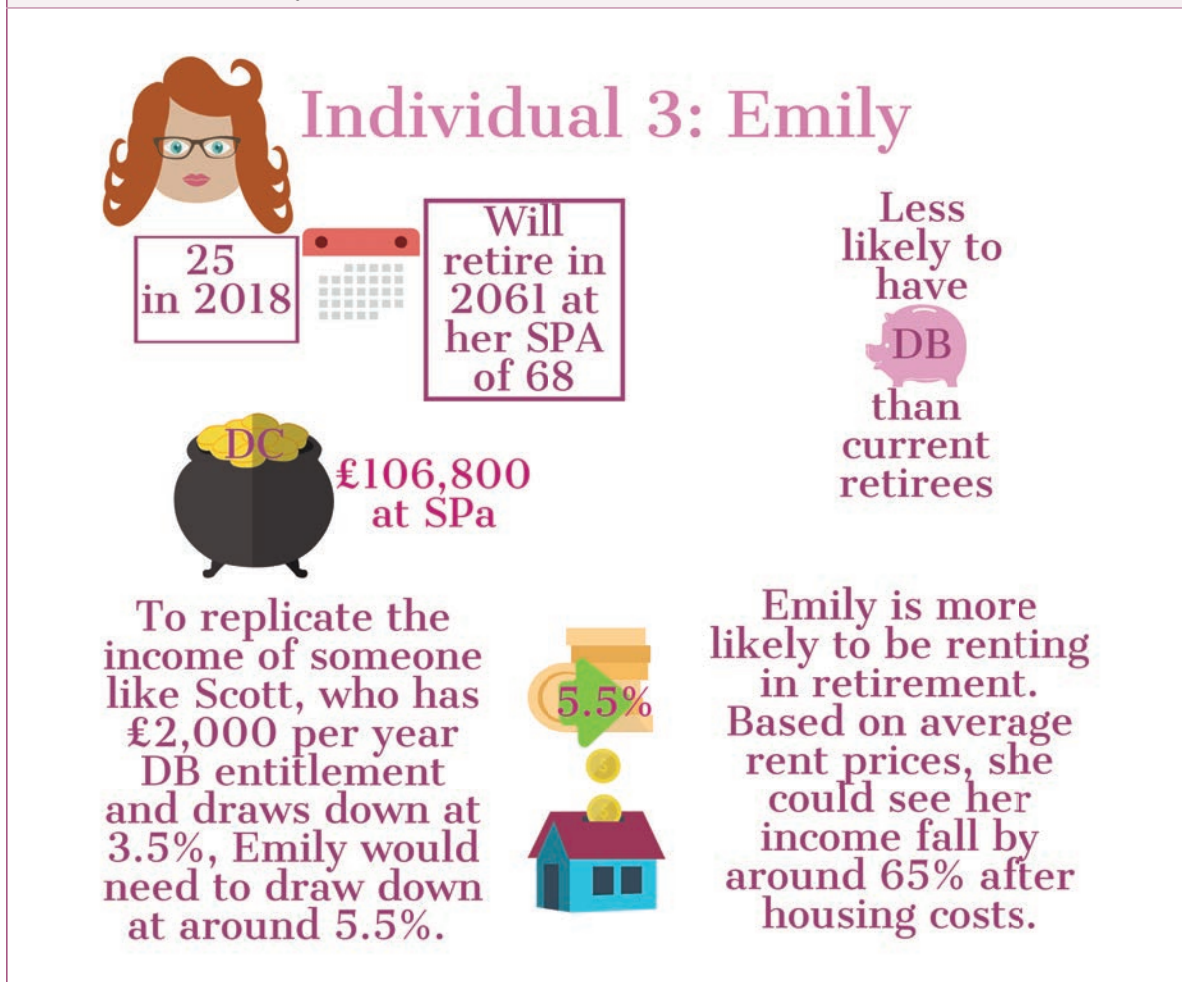
46. PPI (2018)

47. DWP (2015)

48. DWP (2017)

Individual 3: Emily

- Emily is age 25 in 2018.
- At age 57 (the age at which she will be able to access her pension savings) she has a DC pot worth £95,000 as a result of being automatically enrolled for most of her working life. If she does not access her savings and continues to accumulate until SPa, she will have a DC pot worth £106,800.
- She does not have any DB entitlement.



While millennials are likely to have higher levels of DC savings because of automatic enrolment, they are unlikely to have any DB entitlement (unless they work in the public sector where DB provision remains prevalent) and so will be entirely reliant on their DC savings (and other savings and assets) to bridge the gap between income from State Pension and adequacy targets. This means they will be more vulnerable to the risk of running out of money and relying solely on state provision if they make sub-optimal decisions.

If Emily wanted to replicate the retirement outcomes achieved by Scott who draws down at 3.5% (uprated by CPI) and also has £2,000 income from DB each year, she would have to draw down at around 5.5%. This would provide her with an income of £274 per week (including income from State Pension). However, it would also increase her likelihood of running out of savings from 7% to 41%⁴⁹, and if she does run out of money she is likely to spend on average around three extra years without it compared to withdrawing at 3.5%.⁵⁰

49. Emily's likelihood of exhausting her DC pot is higher in this scenario than if she simply withdrew 5.5% of the value of her fund at SPa because the additional £2,000 remains constant irrespective of how her pot size changes in the years immediately prior to SPa, i.e. the value of her pot may vary.

50. PPI Individual Model

Because Emily has a larger DC pot, she could achieve an income that is only slightly lower than Scott's by drawing down at 3.5% without the additional £2,000. If Emily draws down at 3.5% (uprated by CPI) she could achieve an income of £240 per week (including income from State Pension), which would mean an annual income of around £12,500.⁵¹ Although this is £2,500 less than the £15,000 adequacy target used in this report, Emily could still be able to have a somewhat adequate standard of living in retirement as this is a relatively high basic level of adequacy, or she could achieve this level by withdrawing at a higher but still relatively sustainable rate, around 4%-5%.

If younger cohorts are able to save steadily throughout their working lives and achieve DC savings levels similar or higher than Emily's, this suggests that they could achieve both adequacy and security, drawing down at a sustainable level that is unlikely to exhaust their pot, while also enjoying relatively high levels of income.

Housing costs will increase the level of income required by some future retirees

While levels of home ownership are high among people approaching retirement in the next ten to fifteen years, it is likely that many future retirees will have less housing security. Among people currently aged between 50 and SPa around 90% own their own home, with nearly two thirds owning it outright (i.e. without a mortgage). However, since the year 2000, home ownership has been in decline overall and for all age groups except those aged over 65.⁵²

The average age of individuals buying their first home has gradually increased, from 23 in the 1960s to 30 in 2016, with only 26% of current 20 to 39 year olds projected to become homeowners by 2025.⁵³ If this trend continues, there are likely to be more people reaching retirement either renting or still paying off their mortgage. This will increase their living costs and therefore the amount of income they will require to achieve an acceptable standard of living in retirement.

It has been estimated that people who rent in retirement will need to accumulate around 70% more in DC savings (£445,000 rather than £260,000) or around 50% more for social renters (£385,000).⁵⁴ The average cost of rent in England between April 2017 and March 2018 was £675 per month.⁵⁵ If rental costs were to remain constant in relation to earnings, Emily could see her income fall to £365 per month (in 2018 earnings terms) after housing costs if she is still renting during retirement. Based on current trends, rental costs are likely to grow throughout Emily's working life before she reaches retirement, which means that she could experience a larger impact on her income. Rent prices also differ between regions, so the extent to which Emily's income would be impacted could vary based on where she lives in the UK. For example, in the region with the highest rent prices, London, the average is £1,400, meaning that Emily would likely be unable to afford to live in London. For those who have not saved consistently throughout their working lives with smaller DC pots, the impact of renting in retirement could be even greater, and they may struggle to afford rent even in regions where it is lower on average. It is difficult to predict the proportion of millennials who will still be renting when they reach retirement, however it could be as high as a third, compared to around 10% of people currently aged between 50 and SPa, depending on inheritance patterns.⁵⁶ Some people who find themselves renting during retirement will be able to access support through Housing Benefit. Emily, however, would not be entitled to this as she has savings greater than £16,000.

Property constitutes the largest component of wealth held by those currently aged 50 and over, with the median level of equivalised housing wealth among owners £150,000. Based on current trends, more than a third of those who own their own home at age 50 will have moved house by age 70, and over half by age 90. While for the most part these moves are not reported to be motivated by financial need, downsizing could provide a significant source of wealth to help fund retirement alongside pension savings. The median amount released

51. PPI Individual Model

52. Resolution Foundation (2017)

53. Halifax (2017); PWC (2015)

54. Royal London (2018)

55. Valuation Office Agency (2018)

56. Resolution Foundation (2018)

by those aged 50 to 59 who chose to downsize between 2002-03 and 2014-15 was around £4,000, while those aged over 60 released a median of £49,000.⁵⁷

When people aged over 55 were asked if they would like to continue to live in their current home as they grow older, 61% strongly agreed. However, when asked the same question but using the word 'property' instead of 'home', this figure dropped to 48%.⁵⁸ Because people tend to have an emotional attachment to their home, property wealth cannot necessarily be considered as a means of funding retirement in the same way that more liquid wealth is.

Downsizing appears to be becoming a less popular option. Between 2016 and 2017 the number of people saying they are likely to sell their property and move to a smaller one when they retire reduced from 26% to 20%.⁵⁹ The reason for this is unclear, although it could

perhaps be linked to increased use of equity release products (which will be discussed in chapter four). However, self-reporting of plans to downsize may not reflect the number of people who actually do downsize in the future.

Debt can also be an important consideration when deciding when and how to access retirement savings

While around half (44%) of people who accessed their pension pot in the first year of pension freedoms did so because they were retiring, almost one in eight (12%) accessed their savings in order to pay off debt (including mortgage and non-mortgage debt).⁶⁰ Decisions about whether to access a pension pot prior to retirement in order to pay off debts can be complex and require an understanding of interest rates, investment returns and tax rules in order to make an optimal decision.

57. IFS (2018b)

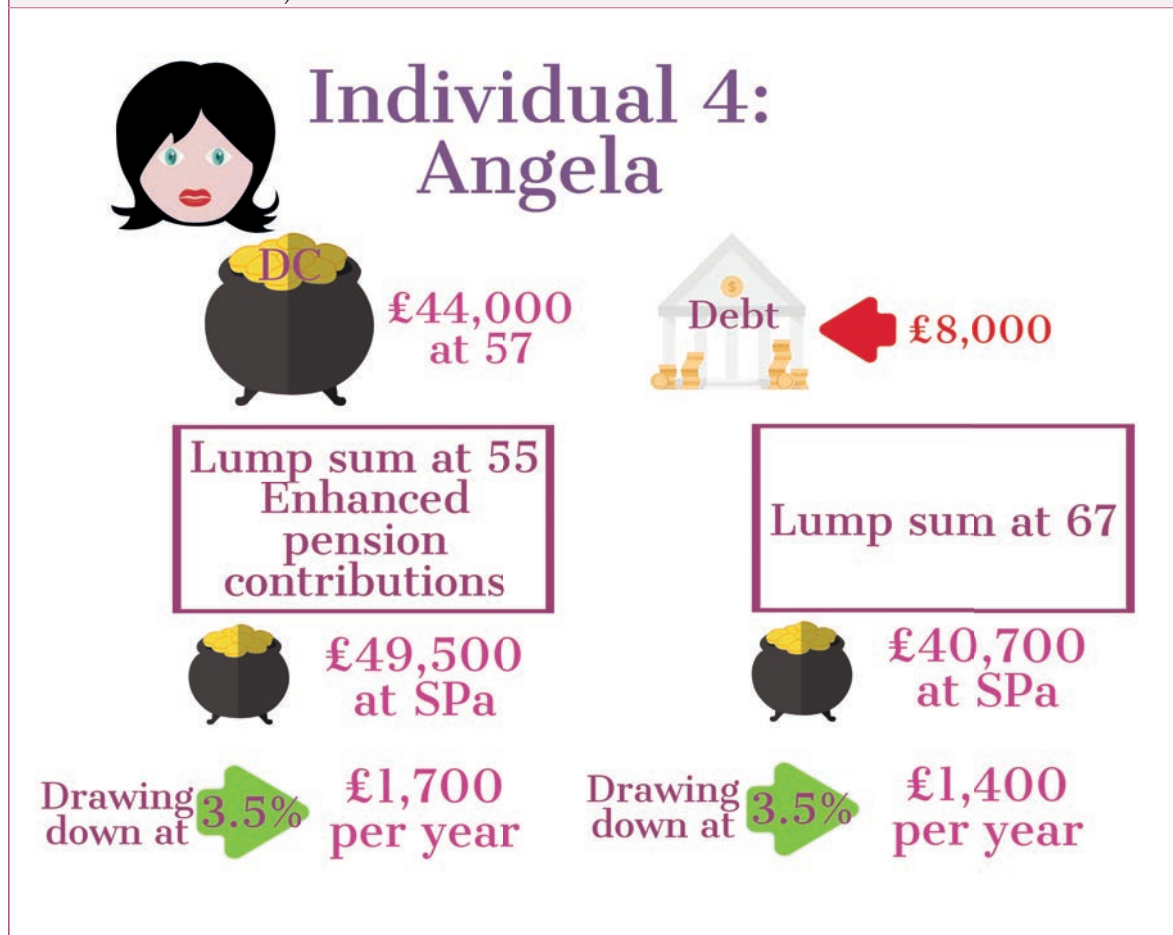
58. Retirement Advantage (2017)

59. Retirement Advantage (2018)

60. Citizens Advice (2016)

Individual 4: Angela

- Angela is age 55 in 2018.
- She has moderate levels of DC savings, with a pot worth £44,000.
- She has no DB entitlement.
- Angela has £8,000 of debt (the average amount of non-mortgage debt for people currently aged between 50 and SPa).



Under the pension freedoms Angela can withdraw a 25% tax-free lump sum from her DC pot at age 55. If Angela withdraws the full 25% she would have £11,000, enough to pay off her debt and have some money left over. This would, however, deplete the value of her pension pot. Angela could mitigate this by contributing the money that she would have spent paying the interest on her debt between

age 55 and SPa to her pension pot. This would provide her with a pot worth around £49,500 at SPa. If, however, Angela takes a 25% tax-free lump sum at SPa in order to pay off her £8,000 debt, she will have a pot size of around £40,700 and won't accumulate any more pension savings afterwards to mitigate this withdrawal. Drawing down at 3.5% this could mean that she has an income of around £300 less each year.⁶¹

61. PPI Individual Model

Couples may need to consider additional factors when making decisions about retirement income

When making decisions about how to access savings and convert them into an income that will last throughout retirement, couples may need to consider additional factors, such as:

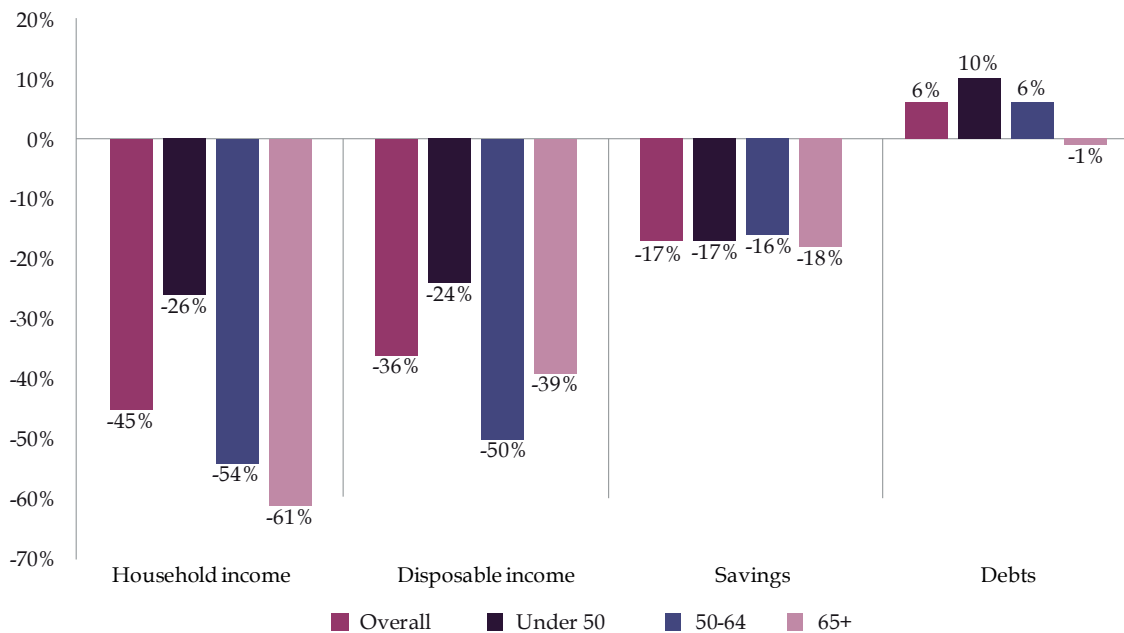
- The way that their savings and entitlement interact with one another; and
- The impact that the death of one partner may have on the income of the other.

Bereavement can have a significant impact on household income. More than half (58%) of people report lower levels of household income or disposable income following a bereavement, and a third (35%) say their savings are lower than before. Those aged over 65 are most likely to experience a decline in their overall income as a result of bereavement (Chart 8).

Chart 8⁶²

People aged over 65 are most likely to experience a significant reduction in overall income as a result of a bereavement

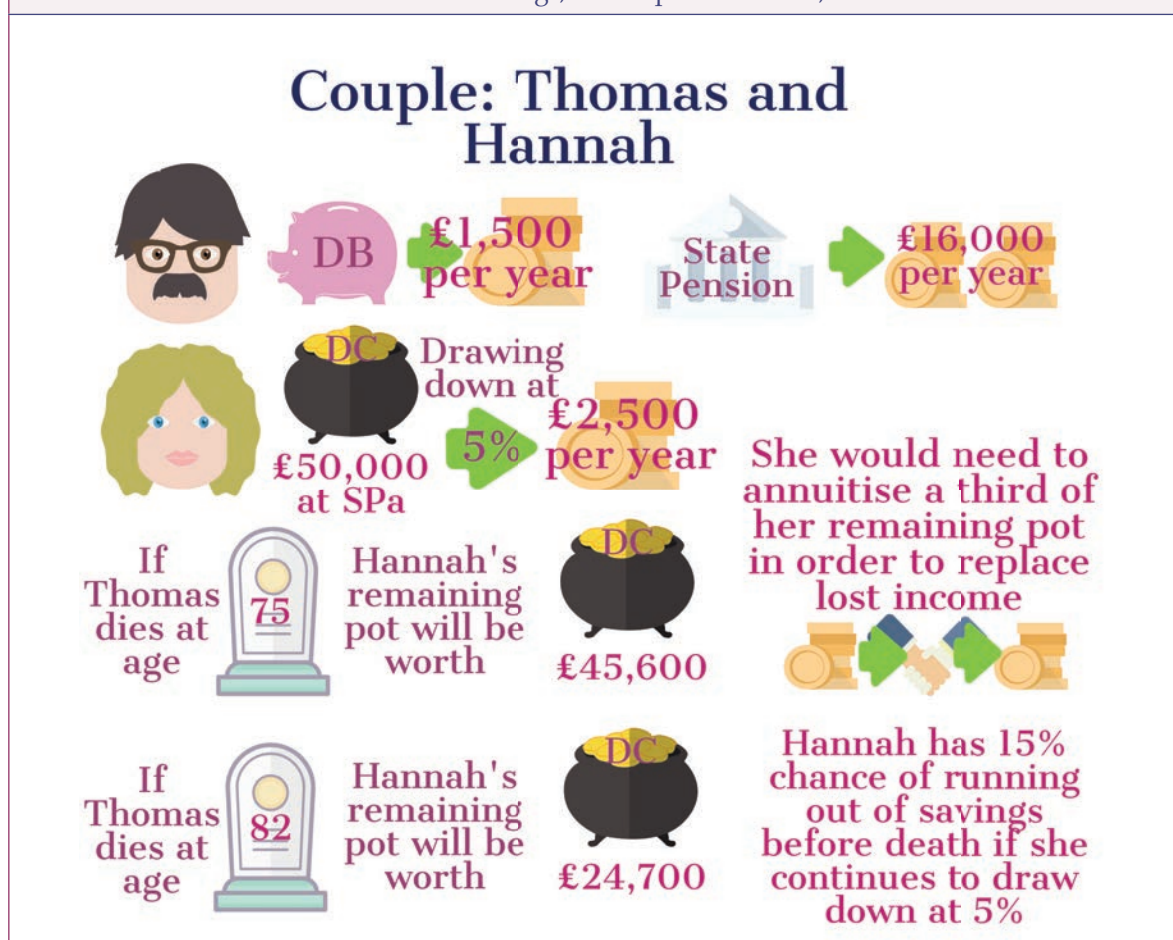
Net financial impacts of bereavement by age



62. Royal London & Dying Matters (2016)

Couple: Thomas and Hannah

- Thomas has DB entitlement of £1,500 per year.
- Hannah has moderate levels of DC savings, with a pot worth £50,000 at SPa.



Thomas and Hannah have a secure income of £17,500 (their income from the State Pension and his DB entitlement). If Hannah draws down at 5% from her DC pot to boost their income, they will have a total income of £400 per week. Hannah draws down at a higher level (than the baseline of withdrawal rate of 3.5%) in order to meet the needs of both herself and Thomas.⁶³

Thomas and Hannah also need to consider how their finances will change if one of them dies. If Hannah dies before Thomas, he can inherit her remaining DC pot and continue to receive income from his DB entitlement. The only loss of income Thomas would experience is the loss of Hannah's State Pension entitlement. However, if Thomas dies first, Hannah will lose half of Thomas' DB income (as well as his income from the State Pension), leaving

her £750 worse off each year. While overall consumption will drop if Thomas dies, Hannah may still have to cover many of the same costs, for example if she remains living in their family home rather than downsizing.

If Thomas died at age 72, Hannah would have £45,600 of her DC pot remaining. In order to replace the income that she has lost, she would need to annuitise a third (33%) of her remaining pot. This would leave her with a pot worth £30,700 which could accommodate any flexible spending and provide for a bequest upon her death.⁶⁴

If Thomas died at age 85, Hannah's remaining DC pot would be worth around £24,700. She has a 15% chance of outliving her pot if she continues to draw down at 5%.⁶⁵

63. PPI Individual Model

64. PPI Individual Model

65. PPI Individual Model

For many people, bequests are a key consideration when making decisions about how to access and spend retirement income

Many people, particularly those with children and grandchildren, consider bequests to be an important goal when planning for retirement (Chart 9). Some older people may even under-consume

in order to leave behind larger bequests. On average people think they have a 70% chance of leaving a bequest worth at least £50,000.⁶⁶ For those drawing down at a sustainable rate, the likelihood of leaving a bequest is relatively high (Chart 10). However, if housing wealth is not taken into account this is unlikely to be as much as £50,000.

Chart 9

For some people, leaving a bequest is a highly important consideration when deciding how to access retirement savings

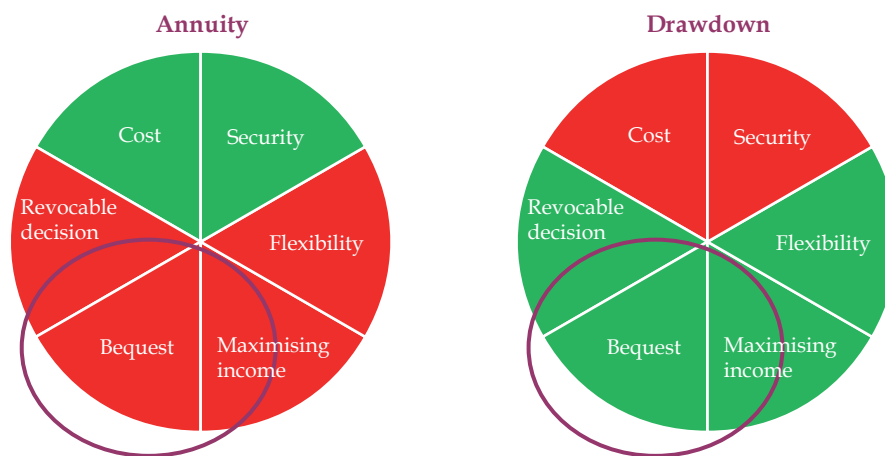
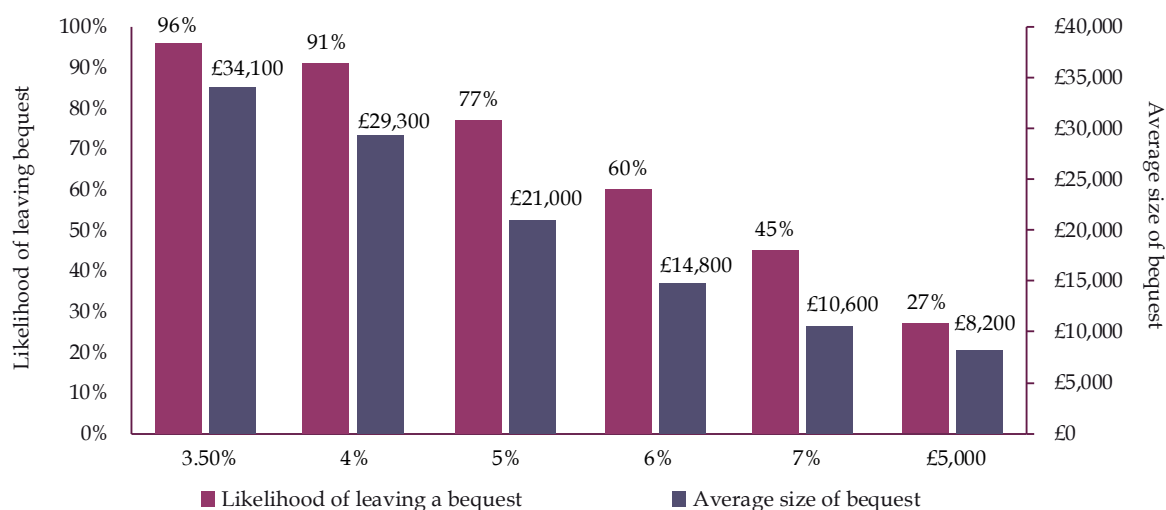


Chart 10⁶⁷

Lower withdrawal rates increase not only the likelihood of leaving a bequest, but also the size of the bequest

Scott's likelihood of leaving and size of bequest by withdrawal rate



66. ILC (2015)

67. PPI Individual Model

Property makes up a significant proportion of many bequests. In the UK the average property value is £242,286 (as of January 2018).⁶⁸ Because Emily is less likely to own her own home in retirement, any bequest she leaves is likely to be from her DC

savings. Drawing down at 3.5%, she has a 93% chance of leaving a bequest (this is a slightly lower chance than Scott as Emily is female and therefore has a longer life expectancy), which would likely be worth around £67,500.⁶⁹

68. HM Land Registry (2018)

69. PPI Individual Model

Chapter three: Can people access the right advice and guidance?

This chapter explores the types of advice and guidance that are currently available, the extent to which people are accessing this, and the potential barriers to access. It also discusses potential innovations that may improve guidance and advice.

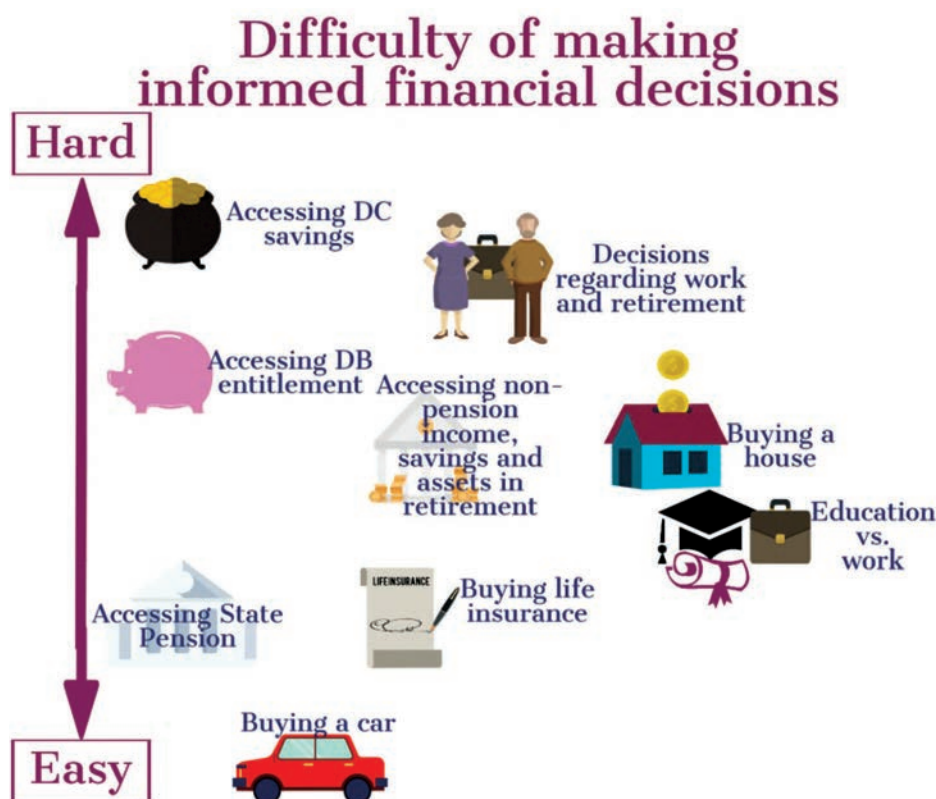
Decisions about accessing DC pensions are considered the most challenging of pension and retirement decisions and other major financial decisions from across the life course

Prior to the introduction of pension freedoms, the PPI conducted a workshop with experts on the behaviour and psychology of pensions and retirement decisions.

The workshop participants ranked decisions related to pensions and retirement, and other major financial decisions from across the life course by the difficulty of making an informed decision on each.

The workshop's considered opinion was that making informed decisions about accessing DC savings was the most difficult of both working life and retirement financial decisions (Chart 11). The factors considered necessary to make informed decisions about DC savings involve knowledge of the economy and market risks, numerical skills and knowledge about the potential impact of unknown factors. Making an informed decision regarding work and retirement were ranked as second most difficult as these all involved a high degree of uncertainty.⁷⁰

70. For more information see PPI (2014) *Transitions to Retirement: How complex are the decisions that pension savers need to make at retirement?*

Chart 11⁷¹

Advice and guidance have become increasingly important as the complexity of retirement income decisions has increased

As the introduction of pension freedoms has increased the complexity and risk associated with decisions about how to access pension savings, advice and guidance are now as important at and during retirement as during working life. A consumer survey of individuals aged 50 and over found that over half (53%) would want support from an expert when

making decisions about how to access their retirement savings, compared to a quarter (26%) who would want support when purchasing a house.⁷² Another survey found that three in five (62%) expect to take expert help when making a decision about how to access their DC pension savings.⁷³

Over the next ten to fifteen years, the need for appropriate and accessible advice and guidance will grow with the proportion of those reaching retirement with significant levels of DC savings and low or no DB savings.

71. Rankings agreed by working group of experts including representatives from: Age UK, CAB, CHASM, Fidelity, Ignition House, King's College, TPAS, Which.

72. Citizens Advice (2015a)

73. Citizens Advice (2015a)

Box 5: The difference between advice and guidance

Guidance	Advice		
	Independent advice	Restricted advice	Simplified advice
Guidance services can give information about options available and can help individuals to understand the implications of those options, for example tax implications. However, guidance services won't recommend any products or tell individuals what to do with their money.	Independent advice takes a holistic view of an individual's financial situation in order to recommend products which will be able to meet their needs and objectives. Independent advisers will consider products from all firms across the market, and have to give unbiased and unrestricted advice.	A restricted adviser can only recommend certain products, product providers, or both. For example, the adviser may work with on product provider and only offer products that company offers. The adviser must clearly explain the nature of the restriction.	A streamlined advice process which aims to address straightforward needs of consumers. It is a limited form of advice which focuses on one or more specific needs and does not involve analysis of the individual's circumstances that are not directly relevant to those needs.

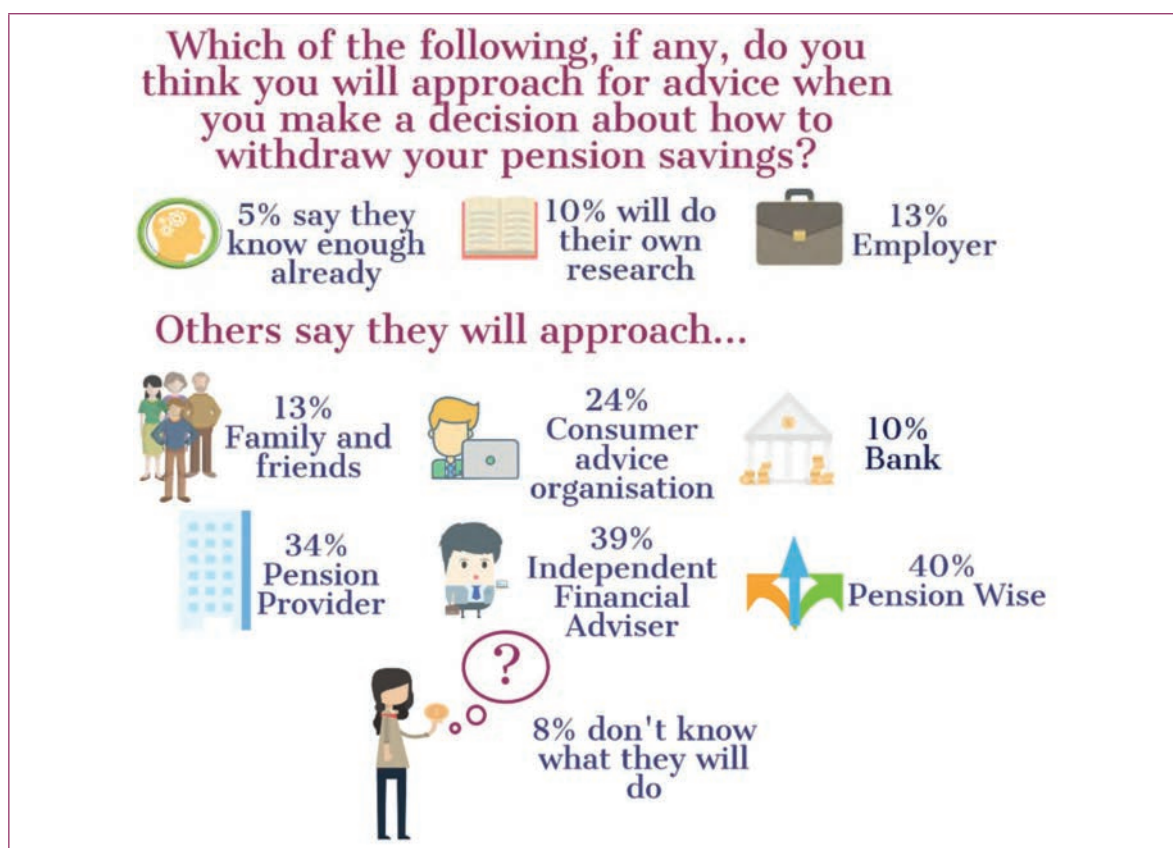
A range of guidance and advice services is currently available to UK DC savers

The Financial Guidance and Claims Act 2018 will lead to the creation of a single financial guidance body which aims to make it easier for people to access information and guidance to help them make effective financial decisions.⁷⁴ The single financial guidance body is likely to represent a significant aspect of the advice and guidance landscape for those reaching retirement over the next ten to fifteen years who are unable or unwilling to pay for advice or receive support elsewhere. This prospect places a significant onus on the single financial body

to ensure that people are best supported to make decisions which will not result in negative financial outcomes.

While individuals may choose to access regulated financial advice, a range of free guidance services is also available to individuals. As well as guidance from employers, pension providers and government departments, this includes Pensions Wise, a government-backed service that was introduced as a result of the introduction of the pension freedoms, and The Pensions Advisory Service (TPAS).

74. HM Treasury & DWP (2017)

Box 6⁷⁵

Understanding and engagement with pensions is low, even among people who have already made decisions about how to access their retirement savings

Many people have not given much consideration to how they will access their pension savings in order to fund their retirement. Even among people who have already accessed their DC pot, understanding of the decisions they have made is relatively low. A quarter (25%) of people who have accessed a DC pension pot in the last two years report that they have purchased a retirement income product or taken a cash lump sum but are not sure how this works.⁷⁶ Self-reporting of decisions about accessing DC pension savings differ from market data on the way that people have actually accessed their pots. For example, less than 20% of people in the FCA's Financial Lives Survey report that they have fully withdrawn their pot, when in reality more than half of pots accessed have been fully

withdrawn. Similarly, the proportion of people reporting that they have purchased an annuity is more than double that observed in market data.⁷⁷ This suggests that some people are making decisions without fully understanding them and could therefore benefit from accessing either guidance, advice or both.⁷⁸

There is also some confusion about the changes that have been brought about by the introduction of pension freedoms. While 1 in 5 (20%) understand that they could end up paying more tax under the new freedoms and a quarter (24%) are concerned about paying more tax than they might need to, almost as many (17%) believe they can take all of their pension fund tax-free as cash.⁷⁹ Further support and education may be needed for those approaching retirement over the next ten to fifteen years and beyond, to ensure that individuals do not make decisions without understanding the full tax implications.

75. Citizens Advice (2015b)

76. FCA (2018b)

77. FCA (2018b)

78. For more information see the first report in this series PPI (2018) *The evolving retirement landscape*

79. AKG (2018)

Pension providers are required to give individuals appropriate risk warnings when they access their pension savings. However, in their current form, the risk warnings may not be fit for purpose for some customers. For example, the risk warnings may have little influence on customers who are seeking to take their tax-free lump sum if they have already made up their minds before speaking with their provider.

There remains a gap in advice and guidance provision

As the Pension Wise service does not advise individuals on how to use their pension savings, individuals who use the service may still face complex decisions, although they may be better informed about the available options. While the Pension Wise service is highly regarded and therefore potentially very valuable, the volume of customers using the service is low relative to the population approaching retirement with DC savings. In the 2017 interim report of the FCA's Retirement Outcomes Review, it was estimated that around 10% of people who had accessed their DC savings had a Pension Wise appointment. In the final report of the Review, this figure was amended to 20% to reflect the fact that many people have multiple pension pots but would only have a single Pension Wise appointment. Furthermore, people may also be accessing the information available on the Pension Wise website, which has received over 7 million visits since its launch.⁸⁰ The FCA's consumer survey asked consumers whether they had sought guidance in making their investment decisions, and if so from what source. It found that consumers sought guidance from a range of sources and that 46% received guidance from Pension Wise.

Take-up of paid-for financial advice remains relatively low. The overall number of people who have spoken to a financial adviser about their finances is low but increasing, with a 25% increase over the last two years. However, with just 10% of people accessing financial advice and 32% of those entering drawdown not using

an adviser, the level of access to advice has been described as 'worryingly low'.⁸¹ 77% of advisers say that they are spending more time and resources on retirement advice since the introduction of pension freedoms, but with more than a quarter (28%) of people saying that they have never used a financial adviser and do not plan to in the future, it appears that the advice gap remains significant.⁸²

Although buying a house is considered to be less complex than decisions about how to access DC savings (Chart 11), among those who have sought advice from a professional adviser, 45% have sought help with mortgages, compared to around a third (36%) who have talked to a professional financial adviser about pension savings.⁸³

Specific areas where there may be an advice gap include:

- Holistic guidance that looks at someone's personal finances in the round;
- Problem debt and pension assets;
- People with small sums of money in pensions, savings and investments; and
- People with complex circumstances, for example a combination of DB entitlement and DC savings.⁸⁴

Tackling the advice gap will need to be a significant focus for policy-makers who wish to prevent those reaching retirement with DC savings over the next few decades from making sub-optimal financial decisions.

People generally prefer face-to-face advice, but almost half would not be willing to pay for it

3 in 5 (59%) people prefer face-to-face advice rather than online (33%) or over the phone (13%).⁸⁵ However, almost half (45%) would not be willing to pay for financial advice (Chart 12). One way of tackling the advice gap in future will be to find ways of providing real or simulated face-to-face advice and ensuring that services are on offer which are free or not prohibitively costly.

80. FCA (2018a)

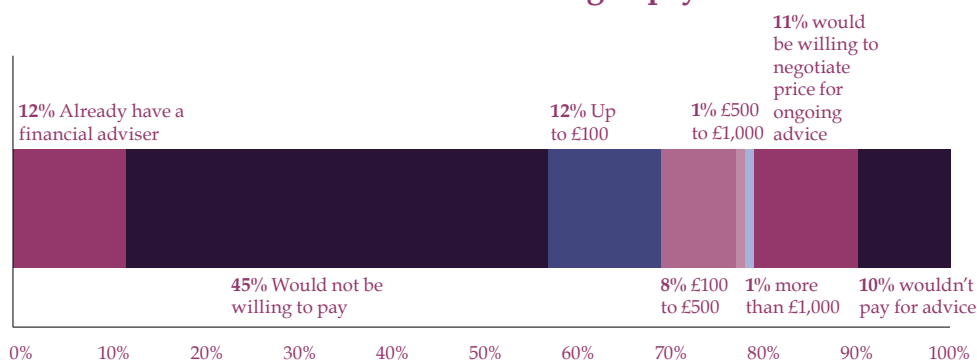
81. Pensions Age (2018)

82. AKG (2018); The People's Pension (2016)

83. The People's Pension (2016)

84. MAS (2017)

85. The People's Pension (2016)

Chart 12⁸⁶**Almost half of individuals would not be willing to pay for advice****There may be both financial and non-financial barriers to accessing advice**

Despite the fact that complexity has increased since the introduction of pension freedoms due to increased choices and the need to make ongoing rather than one-off decisions, levels of advice take-up are still low. While free guidance is offered, the cost of accessing advice may act as a barrier, particularly for those with smaller pension pots. Distrust of financial advisers and a feeling that they will not provide value for money may also be a barrier for some individuals.⁸⁷ 45% of people say that they would trust TPAS to give them guidance or advice

about their retirement options, compared to a quarter (27%) who would trust a financial adviser/planner.⁸⁸ The technical terminology used by financial advisers may also act as a barrier to some older people as they find it hard to relate financial concepts and terms to their own lives.⁸⁹

More than a quarter (27%) of people who had not received advice in the 12 months to June 2017 thought that financial advice is only suitable for people with a large amount to invest. However, around half (49%) disagreed with this statement.⁹⁰

86. AKG (2018)

87. Age UK (2018)

88. AKG (2018)

89. Age UK (2018)

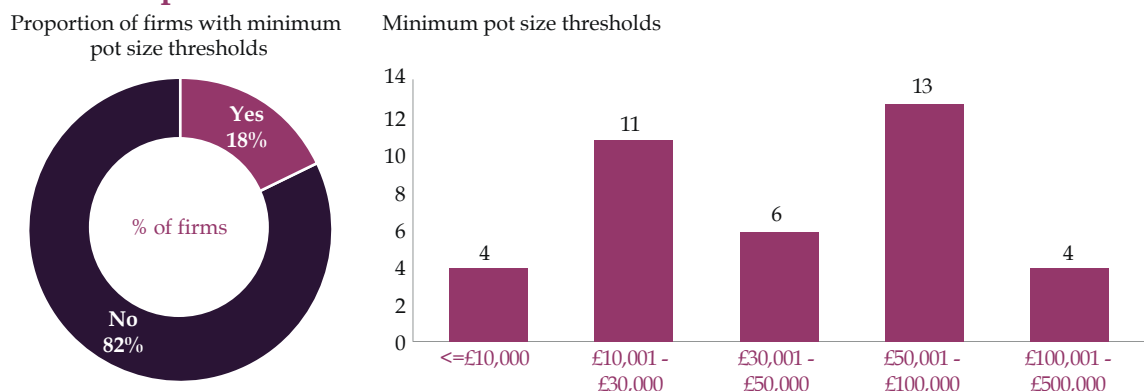
90. FCA (2017b)

This view appears to be more prevalent among financial advisers. In a survey of around 200 advisers, seeking to understand what they consider to be the minimum pot size at which financial advice on drawdown becomes viable, the average response was around £100,000, while 17% thought pot size should exceed £150,000 in order to be viable.⁹¹ Nearly one in five (18%) advice firms operate under minimum pot size thresholds, with the majority between £10,000 and £100,000 (Chart 13). A quarter (27%)

of advisers have increased their minimum pot size threshold since the introduction of pension freedoms, while only 9% have lowered their threshold, making it more difficult for those with smaller pots to access paid for financial advice (although seeking this sort of advice in the first place is less likely for those with smaller pots).⁹² However, two in five (38%) advisers say that they would direct individuals they cannot help due to insufficient pot size to Pension Wise and/or TPAS.⁹³

Chart 13⁹⁴

Minimum pot size thresholds for retirement income advice



Minimum pot thresholds may be a contributing reason why people with larger DC pots are more likely to access advice services, with 50% of those who do access advice having pots of at least £50,000 (Chart 14). Individuals with smaller pots may feel that they cannot afford the cost of advice or that it is not worth it as they may feel that the decisions they make are unlikely to have a significant impact on their retirement outcomes. However, while small pots are unlikely to provide a substantial level of income through retirement, they could make a significant difference for someone on a relatively low income. The need for optimal decision making for people with small pots will grow over the next ten to fifteen years as more people start to reach retirement with small pots accumulated through automatic enrolment.

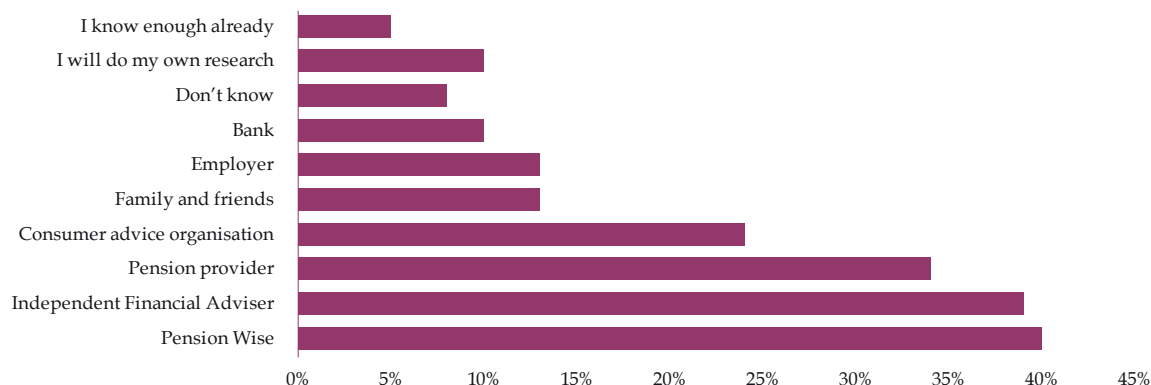
While small pots are unlikely to provide a substantial level of income through retirement, they could make a significant difference for someone on a relatively low income.

91. Platorum (2017)
 92. AKG (2018)
 93. AKG (2018)
 94. FCA (2016)

Chart 14⁹⁵

2 in 5 individuals aged 50+ say that they would use Pension Wise when making a decision about how to access their pension savings

'Which of the following, if any, do you think you will approach for advice when you make a decision about how to withdraw your pension savings?'



In some cases, financial professionals may find it difficult to give effective advice or guidance:

- Some people may have already made up their minds before contacting advisers.⁹⁶
- Financial professionals may be cautious if they are unsure of what they can and cannot say due to the distinction between advice and guidance.

Using advice when making decisions about how to access pension savings has the potential to improve retirement outcomes

People who choose to access financial advice, either from an independent financial adviser or their former employer, report that it helped

them to consider their retirement more holistically than they would otherwise have done. Those who had regular contact with a financial adviser said this encouraged them to adjust their plans to accommodate changing circumstances or priorities.⁹⁷ Guidance can encourage people to consider their options, make decisions or seek further advice (Chart 15). Among attendees of a WEALTH at Work workplace guidance seminar, 59% reconsidered their planned retirement date and three quarters (76%) accessed their pension portal.

95. FCA (2016)

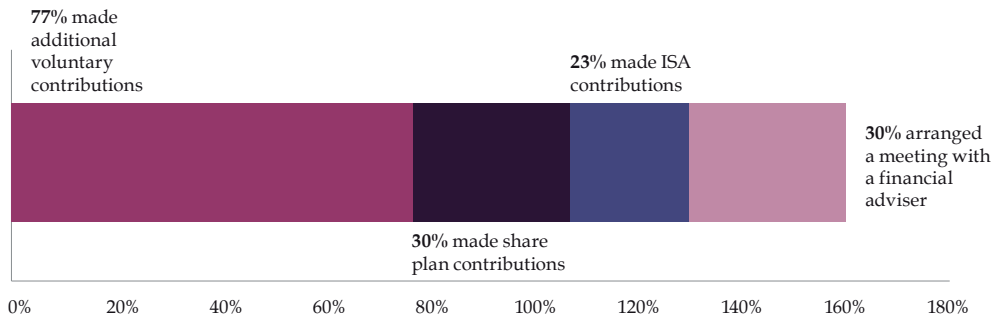
96. FCA (2018c)

97. Age UK (2018)

Chart 15⁹⁸

Guidance can encourage individuals to make decisions
A case study: decisions made by employees following WEALTH at Work
guidance seminars

61% of employees expressed that they had taken action since attending the seminar, of which:



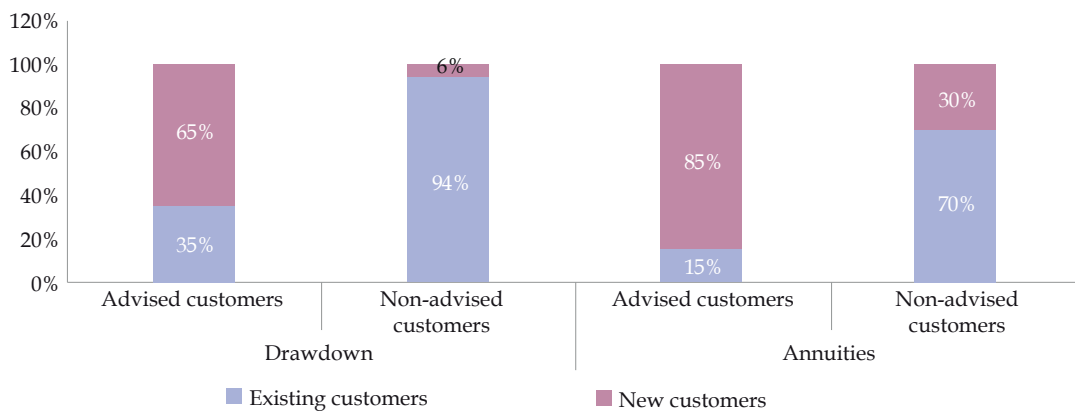
Those who take advice are also more likely to shop around to find the best deal. For example, among ABI members, 94% of non-advised sales have been to existing customers. People who

take advice are much more likely to move to a new provider, with 65% of advised sales to new customers (Chart 16).⁹⁹

Chart 16¹⁰⁰

People who do not take advice are less likely to shop around

Proportion of ABI members' sales to new and existing customers April 2015 – March 2017



98. WEALTH at Work

99. FCA (2017a)

100. ABI statistics

Innovations in technology and automation may help to make advice and guidance more accessible and effective

Two thirds (69%) of advisers believe that robo-advice could help to close the advice gap, increased from one in five (17%) in 2016.¹⁰¹ Although only a third of pension savers say they would prefer online tools to speaking to a financial adviser, over half (53%) say they would use a free online retirement planning tool to help get information about what to do with their pension pots. Women with a pension are more likely to say they would use such a tool (57%) than men with a pension (49%). Interest in online advice about retirement is also higher among younger age groups; it is the preferred means of advice for 38% of those aged 18-55 years compared to 23% for those aged 55 and above.¹⁰² This suggests that preference for online retirement advice may grow as younger cohorts approach retirement.

Two in five (41%) of advisers say they will launch robo solutions in the future. However, there are some concerns, in particular whether robo-advice will provide the most appropriate solutions for users (67% of advisers feel that robo-advice might not be the best for customers) and if it could lead to regulatory or compliance issues (76% of advisers believe it will). Around half of advisers (54%) think that robo-advice is only suitable for those with small funds.¹⁰³ However, as those with small funds are most likely to miss out on accessing advice because of financial barriers, this could help to bridge the advice gap. Robo-advice could be an important feature of the future advice and guidance landscape.

There may be an opportunity for hybrid advice services which combine an element of automation online with face-to-face interaction. For example, using data from face-to-face advice given to past customers being integrated into an automated system in order to warn non-advised customers if they might be about to make sub-optimal decisions.¹⁰⁴

If innovations in technology and automation could reduce the cost of accessing advice to the point that it costs the same as a non-advised service, then engagement with advice would likely increase and could lead to more positive decisions and retirement outcomes for those reaching retirement over the next ten to fifteen years.

There may also be unpredictable innovations in the advice and guidance market, as technological advancements that are not currently considered within the pensions industry could develop.

Offering advice and guidance in the workplace could be another way to reduce costs and increase engagement

FAMR¹⁰⁵ recommended that because automatic enrolment is offered through employers, the workplace should also be the home of financial advice and guidance. If advice or guidance was offered in the workplace, engagement could increase, particularly if it was offered at no cost to the employee as part of their benefits package, as opposed to having to search and pay for it themselves. However, it is unclear whether the majority of employers would be willing to cover the cost of this, and also whether face-to-face advice would realistically be implemented across workplaces given the limited involvement advisers have had with automatic enrolment.

101. Prudential (2017)

102. The People's Pension (2016)

103. Prudential (2017)

104. FT Adviser (2018)

105. Financial Advice Market Review (2017)

Chapter four: How might the market evolve to better meet the needs of retirees?

Innovation has the potential to improve the retirement process, helping people to make better decisions and achieve more positive outcomes. However, product innovation may not necessarily be the best or only way to help people to achieve

better outcomes, as engaged and informed individuals are able to achieve positive outcomes using the existing products. Instead, innovation should be viewed as part of a portfolio of measures aimed at improving saving outcomes.

Product innovation may not necessarily be the best or only way to help people to achieve better outcomes, as engaged and informed individuals are able to achieve positive outcomes using the existing products. Instead, innovation should be viewed as part of a portfolio of measures aimed at improving saving outcomes.

This chapter explores the innovation that has occurred so far since the freedoms were introduced, the scope there may be for future innovation and the extent to which this may be able to improve retirement outcomes. It also considers the extent to which a lack of engagement is the main barrier to improved retirement outcomes and how this could be remedied.

Innovation has been somewhat limited since the introduction of pension freedoms

Part of the Government's rationale behind introducing the freedoms was that competitive pressures would encourage innovation in the market, leading to the 'development of new products that better suit people's changing needs'.¹⁰⁶ There has been some innovation in the

106. HM Treasury (2014)

three years since the freedoms were introduced, in particular around developing tools to help people to better understand their options and tools that help them compare products and the implications of their decisions.¹⁰⁷ However, there is broad agreement that innovation has been limited over the past three years.¹⁰⁸

There are differing opinions about why innovation has been slow to occur

There are a number of reasons which have been suggested as to why innovation has been slow to occur:

- It takes time for new products to be developed and because of the quick introduction of the freedoms, the industry has not yet had time to implement innovative solutions. Innovation may be occurring but we are yet to see the output because of the time needed for development.
- There is a perceived lack of competition in the retirement income market. This means that without significant consumer pressure, there is limited pressure to innovate in consumer interests.
- Innovation in terms of new products may not be necessary. Instead existing products need to be used more effectively in order to meet the needs of retirees. The market could offer a simple range of products but function well if individuals understand them and freely shop around for the best deal. However, this may mean innovation in other areas such as guidance, advice and guided decumulation pathways.¹⁰⁹ This view is supported by over half of advisers, who feel that the level of innovation and response has been satisfactory since the introduction of the freedoms.¹¹⁰

Innovation may accelerate as DC pots increase in size

As the size of DC pots increase, largely as a result of the introduction of automatic enrolment and the decline of DB provision, there may be more reason and incentive to

innovate in the retirement market. As DC pot sizes grow, there will be an increasing number of people reaching retirement at risk of making sub-optimal decisions that could have a significant negative impact on their retirement outcomes. Innovation may increase organically as people have more to invest in products. However, while DC savings remain low for many people approaching retirement in the near future, there need to be appropriate solutions for those with smaller pots.

While DC savings remain low for many people approaching retirement in the near future, there need to be appropriate solutions for those with smaller pots.

Some form of combined product may help individuals to balance flexibility and longevity risk

Products that combine some of the flexibility of drawdown with the security of an annuity may help individuals to achieve more positive retirement outcomes. For example, products that offer a guaranteed investment return for a fixed period of time or index-linked annuities.

However, people can already access a combination of flexibility and security by using multiple products, such as drawdown followed by an annuity. Advisers state complexity as the main barrier to recommending more hybrid retirement products (Chart 17). Introducing more of these products without understanding exactly what they offer that the current products on the market do not would potentially further undermine simplicity.

107. FCA (2017a)

108. Work and Pensions Committee (2018)

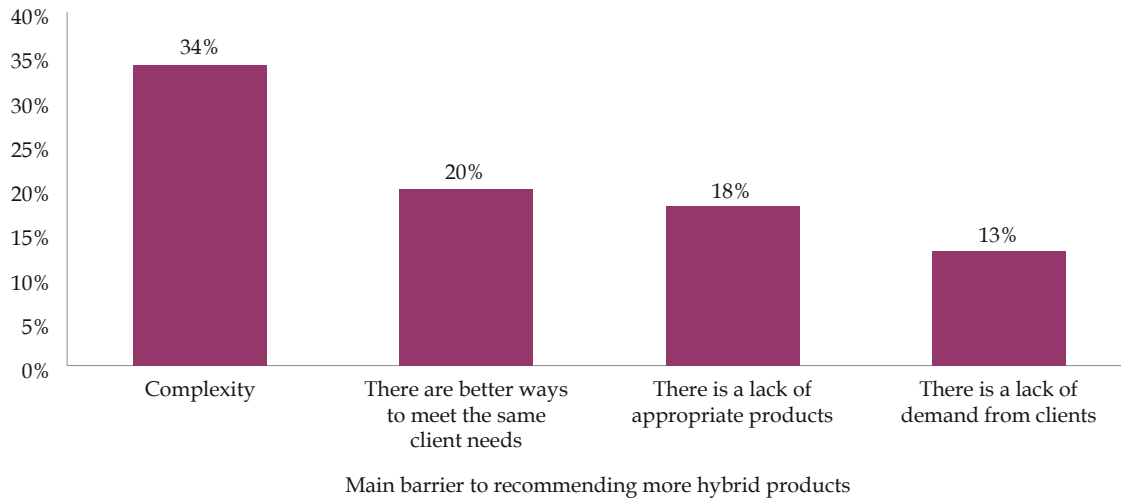
109. Money Marketing (2018); ABI (2017)

110. AKG (2018)

Chart 17¹¹¹

Advisers see complexity as the main barrier to recommending more hybrid products

A survey of 252 IFAs asked what is the main barrier to recommending more hybrid products in decumulation



The annuity market has experienced the greater decline as a result of the pension freedoms, however there has so far been little innovation

Prior to the introduction of the pension freedoms, annuities were the most commonly used retirement product. In 2013, 90% of people accessing DC savings purchased an annuity.¹¹² Between October 2015 and September 2017, annuities accounted for 13% of retirement product purchases.¹¹³

There have been a number of suggestions for reinvigorating the annuity market, including introducing:

- More flexible payments; or
- More flexible terms.

An example of an annuity offering more flexible payments would be a u-shaped annuity that provides a variable income to meet needs within the different phases of retirement. However, as discussed in Chapter One of this report, consumption in retirement generally declines steadily and so most people would not benefit from this type of innovation.

More flexible annuities could include the ability to change terms to accommodate changing circumstances (for example, a single-life annuity to a joint-life annuity because the annuitant has married). Another example of more flexible annuity terms could be a 'cooling-off' period, for example 12 months from the time of purchase. This would allow people to review and change what may have been a poorly informed decision. However, since the

111. Money Marketing & Bankhall (2018)

112. FCA (2017a)

113. FCA (2018b)

pension freedoms were introduced, entering drawdown at retirement effectively acts as a ‘cooling-off’ period, as people are no longer required to purchase an annuity in order to access their retirement savings. Entering drawdown with the intention of purchasing an annuity at a later date can protect people from the risk of making an irrevocable decision by purchasing an annuity under pressure that may not offer the best terms.

Since the pension freedoms were introduced, entering drawdown at retirement effectively acts as a ‘cooling-off’ period, as people are no longer required to purchase an annuity in order to access their retirement savings.

While annuity sales have declined since the freedoms were introduced, there is likely to continue to be a market as people continue to value security. Those who have entered drawdown in the last three years may still purchase an annuity with their remaining pot in the future as they reach older ages and wish to be insured against longevity risk.

Innovative solutions outside of the pensions industry may also help some people to better meet their needs in retirement

Housing wealth is a significant component of many people’s wealth. As discussed in Chapter Two, for many of today’s retirees their home may be worth more than their pension savings, but emotional attachment may discourage them from downsizing and accessing this money in order to fund retirement. One solution which is increasingly being offered is equity release. The most popular form of equity release is a lifetime mortgage, which involves taking out a mortgage to be repaid either when the person dies or moves into long-term care.¹¹⁴

Default retirement pathways have the potential to improve retirement outcomes for some, but would be challenging to design and implement

In April 2018 the Work and Pensions Committee published the final report of its inquiry into pension freedoms. The report recommended that the Government take forward the Financial Conduct Authority (FCA) proposals to introduce default decumulation pathways, which would require drawdown providers to offer a ‘default solution that is targeted at their core customer group’. These default solutions would be subject to the same 0.75% charge cap as automatic enrolment schemes and would also come under the remit of Independent Governance Committees (IGCs). It was recommended that these protections should be in place by April 2019.¹¹⁵ The Pensions and Lifetime Savings Association (PLSA) also supports these proposals.

The key features that may need to be considered in the formulation of default retirement pathways are:

- Simplicity
- Value for money
- Freedom to opt out
- Clear choice architecture¹¹⁶

The need for freedom to opt out highlights one of the inherent challenges with implementing default retirement strategies. While inertia has been used effectively to get more people saving through automatic enrolment, it cannot be used in the same way for at-retirement decisions. This is because there are many more factors that can impact the decisions people make about retirement, for example retirement age or family circumstance. Automatic enrolment uses inertia to nudge people towards one goal which can provide better retirement outcomes regardless of individual preference: saving more for retirement. People’s needs in retirement are varied, and they must make at least one active decision – to begin the retirement process though some people are forced into retirement through redundancy or ill-health or the need to provide care.

114. Money Advice Service

115. Work and Pensions Committee (2018)

116. NEST (2014)

Because a retirement 'default' differs significantly from an accumulation default such as automatic enrolment, it may be that a different name would be more appropriate. The term 'default' suggests that the majority of people will use this option, which is not necessarily the intended aim. Other terms which may be more appropriate include:

- Guided pathway
- Safety net or backstop (although these have some negative connotations, they effectively capture the fact that this option would aim to protect people who do not or cannot engage from the worst retirement outcomes)
- Blueprint

Default drawdown pathways would likely be designed cautiously to limit the risk of individuals running out of money. In order to do this, withdrawal rates would have to be restricted and a cautious investment approach used. This would create a drawdown default that closely resembles an annuity but without a lifetime guarantee of income level.

Those with multiple pension pots (who constitute an increasing proportion of those approaching retirement) may also pose a challenge for designing default pathways.

If individuals are defaulted based on individual pots rather than the collective value of their pots, they may achieve less positive retirement outcomes than if they made a decision based on a holistic view of their total pension savings.

There are some concerns that default pathways do not tackle the real issue, low levels of engagement. However, tackling engagement is easier said than done and will take time to embed and may not be practicable for everyone. In the meantime, default pathways could help to protect people from experiencing particularly poor retirement outcomes as a result of making sub-optimal decisions. While default pathways

may not be able to produce the optimal outcome for all retirees, they could serve a purpose in protecting individuals from the worst outcomes, in particular running out of money during retirement and relying entirely on state provision.

A retirement landscape in which all are engaged and informed may be the ideal, but with many retirees inactive and less well-informed, defaults have the potential to offer improved outcomes for some people.

In June 2018, the Government responded to the Work and Pensions Select Committee's recommendations, rejecting the call for default pathways, on the basis that:

- Measures to require individuals to be placed into particular products would be inconsistent with the freedom and choice reforms which have deliberately moved away from the idea of defaulting people into a single product.
- There is insufficient evidence to suggest that a common default pathway would be suitable for the majority of people reaching retirement now and in the immediate future, particularly considering:
 - People reaching retirement with DC savings now and in the next ten to fifteen years are likely to have other retirement savings and entitlement to take into account when making decisions, while pension providers have a limited view of individuals' financial position.
 - Needs and preferences differ significantly in retirement, so a default pathway may not be appropriate for a group of retirees, even if they have a similar level of savings.¹¹⁷

Providers may still develop some form of guided pathway which people can choose to enter in order to achieve better outcomes than they would be able to on their own if they are not particularly engaged or informed (Box 7, 8 and 9).

117. House of Commons (2018)

Box 7¹¹⁸**Australia's Retirement Income Covenant and Comprehensive Income Products for Retirement**

The Australian government has identified that trustees would need to consider the following factors when designing a retirement income strategy in order to optimise retirement outcomes for members:

- Maximising income for life for members
- The potential life spans of members and the costs and benefits of managing longevity risk for members as a whole
- Managing risks that affect the stability of income, including inflation
- Providing members with access to capital
- Member needs and preferences for the above factors
- The costs and benefits to members of developing a CIPR in-house compared with offering a CIPR developed and managed by a third party or a combination of both in-house and a third party
- Expected member eligibility for the Age Pension (Australia's State Pension)
- Whether and how cognitive decline may affect outcomes

Box 8¹¹⁹**Phases of retirement**

NEST's retirement income blueprint suggested an approach which splits retirement into three phases:

- Phase one – typically mid-to-late 60s to mid 70s
- Phase two – mid 70s to mid 80s
- Phase 3 – mid 80s onwards

During phase one, 90% of the pot would be invested in an income-generating portfolio which would provide a steady income which increases each year to match inflation. The remaining 10% of the pot would be invested in low-risk highly liquid assets. During phase one this could be used for lump sums. A proportion of the drawdown fund would be incrementally allocated towards securing a guaranteed income at age 75.

During phase two, the money that has been set aside to secure a guaranteed income would enter a mortality pool which will pay out an income from age 85.

This approach would aim for there to be little difference between the income provided from the drawdown fund up until age 85 and the income paid out from the mortality pool from age 85.

Box 9

Pot approach

Legal & General are currently developing a default pathway in which the DC savings would be split into four pots:

- Drawdown
- Annuity
- A 'rainy day' fund from which lump sums could be taken
- An amount to be kept back for bequests.

118. Australian Government: The Treasury (2018)

119. NEST

Innovations in communications and support could increase levels of engagement prior to retirement

The FCA has suggested that better communications, support and guidance could help to increase people's levels of engagement before they come to access their pension savings. This could take the form of 'wake up' packs from age 50, including a one page 'headline' document.¹²⁰ Improving engagement could help people to make retirement income decisions that better suit their needs and preferences. However, for some individuals the level of engagement and financial capability required to make positive choices may not be practicable. In these cases, some form of guided pathway has the potential to improve their retirement outcomes.

People's retirement outcomes will vary considerably based on the decisions they make about accessing their savings. The risk of poor outcomes could be mitigated by increased engagement or guided pathways for those who are less engaged:

- Decisions about how to access retirement savings are complex and require people to make trade-offs between a number of factors, in particular security and flexibility.
- People could see their retirement income, as well as their likelihood of exhausting their pot and their ability to leave bequests vary considerably based on the decisions they make at and during retirement.

- Despite the complexity of these decisions, take-up of advice and guidance remains relatively low.
- Innovations in technology may reduce barriers to accessing advice and guidance.
- Policies aimed at increasing engagement in the lead up to retirement could help people to make more informed choices and potentially achieve better retirement outcomes.
- Product innovation may also help people to achieve retirement outcomes that better suit their needs and preferences. However, people are able to achieve positive outcomes with the range of products already available, for example by using a combination of products.
- Guided pathways may be a remedy for low levels of engagement or for those for whom high levels of engagement and financial capability are not practicable.

120. FCA (2018a)

Appendix one: modelling appendix

The areas of modelling performed in this report consider the projection of an individual using the PPI's Individual Model using a stochastic approach of economic assumptions. The economic scenarios are generated using the PPI's economic scenario generator. Both models are detailed below. All results are based in current (2018) earnings terms.

Key assumptions

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

The pensions system

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

Investment returns

The economic scenario generator uses volatility derived from historical data and central rates of:

- Median equity return: 7%
- Median gilt return: 4%
- Median earnings growth: 4.3%
- Median CPI growth: 2%

These are derived from the Office for Budget Responsibility projected figures.

Where volatility has been adjusted this is measured against the historical volatility of equity returns.

Debt

Debt has been assumed to grow with the gilt returns. Negative gilt returns will result in no growth in debt for that particular year. The gilt return for any particular year is based on historical data and central rates described above.

Other economic assumptions

Other economic assumptions are taken from the Office for Budget Responsibility's Economic and Fiscal Outlook (for short-term assumptions) and Fiscal Sustainability Report (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.

Monte Carlo simulation can be a powerful tool when trying to gain an understanding of the distribution of possible future outcomes. However, in common with other projection techniques, it is highly dependent on the assumptions made about the future. In this case, the choice of distribution and parameters of the underlying variables, the investment returns of equities, gilts and cash are important to the results.

The Individual Model

The Individual Model is the PPI's tool for modelling 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.

This model can be used in conjunction with economic stochastic scenarios derived from the PPI's economic scenario generator to produce stochastic output.

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 auto-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 and scenarios

The model is capable of running with either deterministic or stochastic economic assumptions.

The deterministic assumptions used are generally taken from the Office of Budget Responsibility (OBR) Economic and Fiscal Outlook (EFO) to ensure consistency. They cover both historical data and future projected values. Alternatively the model can be used in conjunction with the PPI's Economic Scenario Generator (ESG) to produce a distribution of outputs based upon potential future economic conditions.

Summary of modelling approach

The model projects the pension features of the individual, both in accumulation (pre-retirement) and decumulation (post-retirement) phases.

It projects the pre-retirement features of the individual through the accumulation of pension entitlement, both state benefits and occupational Defined Benefit schemes. This is done through the modelling of the career history of the individual, deriving pension contributions and entitlement from the projected earnings profile.

The entitlement to and the level of state benefits are projected such that from retirement, their contribution to the income of the individual can be calculated. Private pension income is modelled and assumes a decision about the behaviour of the individual at retirement. This allows for the chosen decumulation path of any accrued private pension wealth.

The Economic Scenario Generator

The PPI's Economic Scenario Generator (ESG) is used to produce randomly generated future economic scenarios based upon historical returns and an assumption of the median long-term rates of return. It was developed by the financial mathematics department at King's College London. It is used to test how the distribution of outcomes is influenced by the uncertainty of future economic assumptions.

Key results

The model generates projected future inflation rates, and earnings growth

- Inflation rates
 - Future CPI increases and earnings inflation rates.
- Investment returns
 - Returns are produced for the major asset classes of equity, cash and gilts.

This produces nominal returns which can be combined to produce investment returns for a more complex portfolio.

Application of output

The output of the ESG is a number of economic scenarios which are employed by the PPI's other models to analyse the distribution of impacts on a stochastic economic basis.

Key data sources

The specification of the model is based upon historical information to determine a base volatility and future assumptions to determine a median future return:

1. Historical returns

Historical yields and returns as well as inflation measures are used to determine the key attributes for the projected rates.

2. Future returns

Future returns are generally taken from the Office for Budget Responsibility (OBR) Economic and Fiscal Outlook (EFO) to ensure consistency with other assumptions used in the model for which the economic scenarios are being generated. Volatility can also be scaled against historical levels.

Summary of modelling approach

The six identified risk factors modelled are:

G	Nominal GDP
P	CPI
W	Average weekly earnings
Y ^l	Long-term yields
Y ^s	Money market yields
S	Stock returns

Using these variables, a six dimensional process, x_t is defined.

$$x_t = \begin{bmatrix} \ln G_t - \ln G_{t-12} \\ \ln(P_t - \ln P_{t-12} + 0.02) \\ \ln W_t - \ln W_{t-12} \\ \ln(e^{Y_t^l} - 1) \\ \ln(e^{Y_t^s} - 1) \\ \ln S_t \end{bmatrix}$$

Where t denotes time in months.

The development of the vector x_t is modelled by the first order stochastic difference equation:

$$\Delta x_t = Ax_{t-1} + a + \varepsilon_t$$

Where A is a 6 by 6 matrix, a is a six dimensional vector and ε_t are independent multivariate Gaussian random variables with zero mean. The matrix and the covariance matrix of ε_t were determined by calibrating against the historical data. The coefficients of a were then selected to match the long-term economic assumptions.

It follows that the values of x_t will have a multivariate normal distribution. Simulated investment returns will, however, be non-Gaussian partly because of the nonlinear transformations above. Moreover, the yields are nonlinearly related to bond investments.

The first component and third components of x_t give the annual growth rates of GDP and wages, respectively. The fourth and fifth components are transformed yields. The transformation applied ensures that the yields are always positive in simulations. Similarly the second component gives a transformed growth rate of CPI. In this case, the transformation applied ensures that inflation never drops below -2% in the simulations. This figure was selected to be twice the maximum rate of deflation ever found in the historical data.

Individual modelling

The case studies in the report were generated using the Individual Model from the PPI's modelling suite. The individual model was run 3,000 times for each case study using the output of 3,000 runs of the Economic Scenario Generator.

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.

Acknowledgements and Contact Details

The Pensions Policy Institute is grateful for input from many people in support of this paper, including:

John Adams	Tim Fassam	Jeremy Speechley
Danielle Baker	Mark Hewitson	Ric Tizard
Matt Burrell	Nadav Lavi	Vivek Roy
Lawrence Churchill	Maritha Lightbourne	Jonathan Watts-Lay
Chris Curry	Sarah Luheshi	Rob Yuille
Andrew Evans	Sara McLeish	

Editing decisions remained with the author who takes responsibility for any remaining errors or omissions.

The Pensions Policy Institute is an educational charity promoting the study of retirement income provision through research, analysis, discussion and publication. The PPI takes an independent view across the entire pensions system.

The PPI is funded by donations, grants and benefits-in-kind from a range of organisations, as well as being commissioned for research projects. To learn more about the PPI, see: www.pensionspolicyinstitute.org.uk

© Pensions Policy Institute, 2018

Contact: Chris Curry, Director
Telephone: 020 7848 3744

Email: info@pensionspolicyinstitute.org.uk

Pensions Policy Institute
King's College London
Virginia Woolf Building
1st Floor, 22 Kingsway
London WC2B 6LE

The PPI is grateful for the continuing support of its Supporting Members:

Platinum

Columbia Threadneedle Investments LV=	Just The Pensions Regulator
--	--------------------------------

Gold

AXA Investment Managers	Capita Employee Benefits
DWP	Hymans Robertson
Intelligent Pensions	Legal and General
MFS Investment Management	NEST
Scottish Widows/Lloyds	Standard Life Aberdeen plc
The People’s Pension	Xafinity

Long standing Silver

Age UK	Aon Hewitt
ABI	Aviva
Barnett Waddingham	BP Pension Trustees Ltd
CII/TPFS	Exxon Mobil
Law Debenture	MNOPF Trustees Ltd
PLSA	Prudential UK & Europe
RPMI	Royal London
Sacker and Partners	Schroders
Shell	USS

A full list of Supporting Members is on the PPI’s website.

References

- ABI (2017) *The new retirement market: Challenges and opportunities*
- Aegon/Retiready *Understanding changing income needs in retirement*
<https://retiready.co.uk/retirement-income-planner/support/insights-and-articles/insights/countdown-to-retirement/understand-changing-income-needs-in-retirement.html>
- Aegon (2018) *Gender and geography affect level of drawdown retirement income*
https://www.aegon.co.uk/news/gender_and_geographyaffectlevelofdrawdownretirementincome.html
- Age UK (2018) *Financial resilience during retirement: Who is well placed to cope with life events?*
- AKG (2018) *Pension freedoms 2018: Grasping the nettle: Working together to achieve better retirement outcomes*
- Antolin, P. (2008) *Policy Options for the Payout Phase: OECD Working Papers on Insurance and Private Pensions, No. 25*
- Australian Government: *The Treasury (2018) Retirement Income Covenant Position Paper: Stage one of the Retirement Income Framework*
- Citizens Advice (2015a) *Approaching Retirement*
- Citizens Advice (2015b) *The Affordable Advice Gap*
- Citizens Advice (2016) *Drawing a pension: a consumer perspective on the first year of pension freedoms*
- DWP (2015) *Pensioner income projections*
- DWP (2017) *Automatic enrolment review 2017*
- FCA (2016) *FCA survey of firms providing financial advice*
- FCA (2017a) *Retirement outcomes review interim report*
- FCA (2017b) *Financial Advice and Guidance: Quantitative research to inform the Financial Advice and Market Review (FAMR) Baseline*
- FCA (2018a) *Retirement Outcomes Review Final Report*
- FCA (2018b) *Data Bulletin 12*

- FCA (2018c) *Non-advised drawdown pension sales review: summary of findings*
- Fintech Times (2018) *Three years on: Demand for defined benefit TVAS eclipses Money Purchase*
- FT Adviser (2018) *LV to use advice data to caution non-advised clients*
- Halifax (2017) *First-time buyer review*
- HM Land Registry (2018) *UK House Price Index for January 2018*
- HM Treasury & DWP (2017) *Creating a single financial guidance body: response to the consultation*
- HM Treasury (2014) *Freedom and choice in pensions*
- House of Commons (2018) *Pension freedoms: Government response to Committee's Ninth Report*
- IFS (2018a) *Subjective expectations of survival and economic behaviour*
- IFS (2018b) *The use of wealth in retirement*
- ILC (2015) *Understanding retirement journeys: Expectations vs reality*
- Money Advice Service (2017) *Retirement evidence review*
- Money Advice Service *What is equity release?*
- <https://www.moneyadvice.service.org.uk/en/articles/equity-release>
- Money Marketing & Bankhall (2018) *Complexity holds back advice on hybrid decumulation products*
- Money Marketing (2018) *Advisers do not need new drawdown products to help clients*
- NEST (2014) *The future of retirement: A retirement income blueprint for NEST's members*
- ONS (2017) *Occupational Pension Schemes Survey: UK, 2016*
- Pensions Age (2018) *'Worryingly' low uptake of financial advice persists in retirement planning*
- The People's Pension (2016) *Public attitudes to financial advice*
- Platforum (2017) *UK Fund Distribution: Advice in Decumulation*
- PLSA (2017) *Hitting the target*
- PPI (2014) *Transitions to Retirement: How complex are the decisions that pension savers need to make at retirement?*
- PPI (2017) *Consumer engagement: barriers and biases*
- PPI (2018) *The evolving retirement landscape*
- Prudential (2017) *Adviser Barometer: Embracing opportunities in the adviser market*
- PWC (2015) *Outlook worsens for 'generation rent': Only one in four to be homeowners by 2025*
- Resolution Foundation (2017) *Homeownership in the UK*
- Resolution Foundation (2018) *Home improvements: Action to address the housing challenges faced by young people*
- Retirement Advantage (2017) *Home truths*
- Retirement Advantage (2018) *Home is where the wealth is*
- Royal London & Dying Matters (2016) *Losing a partner: the financial and practical consequences – Part 2*
- Royal London (2018) *Will we ever summit the pension mountain?*
- Telegraph (2018) *Is this the end of the great 'gold plated' pension cash-in?*
- <https://www.telegraph.co.uk/news/2018/05/31/end-great-gold-plated-pension-cash/>
- Valuation Office Agency (2018) *Private Rental Market Summary Statistics – April 2017 to March 2018*
- Work and Pensions Committee (2018) *Pension freedoms [Ninth report of session 2017-19]*
- Your Money (2018) *Five reasons to transfer your DB pension (and five not to)*

Crown copyright material is reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland.



Published by
PENSIONS POLICY INSTITUTE

PPI

www.pensionspolicyinstitute.org.uk
978-1-906284-68-8