The future of retirement

A consultation on investing for NEST's members in a new regulatory landscape

Contents

Foreword

Since its formation, NEST, and its predecessor PADA, has been committed to designing a high quality pension scheme for our members. This has been based on research and evidence, both of the characteristics of our current and future members, and of best practice in the UK and around the world.

With the abolition of compulsory annuitisation in the Budget of 2014, the government has given the industry a once in a generation chance to start with a blank sheet of paper and really figure out, from the ground up, how to make Defined Contribution (DC) savings work in retirement. This provides a genuine opportunity to improve retirement outcomes. This consultation is aimed at gathering the evidence required to understand and design the retirement solutions that our members want and need.

The old binary debate between annuities and drawdown is no longer relevant. Instead we have an opportunity to look at how elements of each might be used to create more flexible solutions, fit for the majority of savers. The solutions we as an industry develop over the next few years could affect the lives of millions of people in old age. We absolutely cannot afford to fail consumers. Leaving their retirements to chance is not an option.

Automatic enrolment is already proving to be a great success for UK workers, with far lower levels of opt-outs than predicted. Frequent consumer research suggests that employees are pleased to be saving for their retirement, often for the first time. The power of inertia has worked very well in getting people to start saving. The next challenge for all involved in automatic enrolment is making sure this success translates into better outcomes in retirement. Individuals will need to be empowered to make good decisions about how they use their retirement savings, and given the right kind of help if they find these decisions daunting.

Our members represent the new majority of savers who will rely on their workplace DC savings more than any previous generation. This 'DC dependent' generation must get the most out of those pots. This is a question that industry experts in the US, Australia and other countries are grappling with as well - it's not something we can solve alone.

That's why we're calling on people from the pensions industry, insurers, financial advisers, as well as consumer and employer groups, here and abroad, to join this conversation. We want them to test the evidence we've found and help design solutions that truly meet savers' needs.

We hope this consultation will start a debate about what members really need from retirement solutions and how we as an industry can meet those needs. NEST already represents over 1.7 million members, which by the end of staging is likely to be significantly larger. We therefore have a pressing need to understand the core drivers of what our members want and need. We've put forward some compelling evidence in this consultation document. We don't believe that the pensions industry or NEST has all the answers yet, so we're looking to work collaboratively to develop solutions that put the needs of millions of savers first.

We hope you find this document both interesting and thought provoking and we look forward to the debate.

Mark Fawcett
Chief investment officer

Executive summary

This consultation paper seeks to gather views on the effect of the new legislative landscape on how NEST members will want to access their savings towards the end of their working lives.

We are consulting now on the alternatives available to members because:

- We need to understand relatively quickly what the likely options are for those members who are retiring up to ten years from now in order to calibrate how their money should be invested in the latter years of the accumulation phase.
- We need to understand how and what to communicate to members about their retirement options and the decisions they need to make in the decade prior to taking their money out of the scheme.
- Many of our members approaching retirement will have built up savings in other pension vehicles. They may wish to consolidate their NEST pots with other savings – particularly once the restrictions on transfers into and out of NEST are lifted in 2017.
- We need to provide employers and their advisers with a clear vision of how NEST intends to invest at the end of a member's savings career and the options NEST members will have when it comes to accessing money from the scheme.

Chapter one

Member characteristics, work patterns, and needs

- Defined contribution (DC) pensions are currently not the primary source of income in retirement for many people. Data suggests that within 20 years, with the rapid decline of defined benefit (DB) pensions, DC will be a much more significant component of a retiree's retirement portfolio. What this group decide to do when they come to access their pots will have much more significance for their retirement wealth than is the case now.
- A more dynamic scenario in which work and pensions operate hand in hand is increasingly replacing the traditional retirement model. People are retiring later and more people are drawing a pension while still working. The widely assumed definition of retirement as a complete exit from the labour market is now out of step with many people's experience.
- We need to look at pension wealth as one part of a bigger picture in order to understand financial preparedness. We also need to examine non-pension wealth matters, as part of a package of retirement resources. This has implications for how we approach financial guidance and planning, as well as how we convey pension outcomes.
- Spending patterns in retirement for recent retirees appear to be largely the same as before they retired, with two key exceptions. First, housing costs go down and leisure spending increases as a proportion of household expenditure. Second, care costs appear to become significant only in later life.

Chapter two

How do people expect to access their pension savings?

- What people say they want is not just guided by what would make economic sense for their circumstances. Cognitive and emotional biases also have significant roles in forming preferences.
- People have a strong desire for a consistent retirement income. They say they value retirement income products that keep pace with inflation and protect them against outliving their retirement assets.
- Lump sums are also attractive and important. Most future retirees in research groups say they'll take a lump sum in excess of their tax-free allowance.
- In many respects, people want to have it all. They want a guaranteed and consistent income punctuated by 'bonus' style lump sums from time to time. Many savers are unlikely to have enough savings to meet this demand.
- There is appetite for what in the past may have been described as drawdown products. However, most people also want to protect a portion of their savings to be used as a guaranteed income for life at a later date.
- What people say they want isn't always borne out in the decisions they make. The annuity choices made by recent retirees suggest that people don't choose what they had said was important to them.
- It is impossible to predict with any degree of certainty what people coming to access their savings will do in the future landscape by simply looking at behaviour to date. Research asking people what they'll do in light of the new changes is better at revealing preferences than behaviour.

Chapter three

Objectives and risks

- When making decisions members are likely to be very diverse in terms of their willingness to engage with their savings and their abilities to navigate the different options available to them.
- We suggest there are eight broad objectives and risks trustees should be considering – growth, flexibility, conversion risk, market timing risk, investment risk, longevity risk, clarity and cost.
- DC pension saving may be required to fulfil more functions for retirees in the future than has been the case to date.

Chapter four

Engaging members with their retirement options

- On average, people start planning their retirement at age 57. This is several years after the time when most DC schemes will have started de-risking.
- People generally don't decide how they'll take their pension pot until the time comes to actually do it.
- From a member's point of view there are a number of good reasons to leave decisions on taking their retirement pot until close to the event. These reasons include pot size, knowable financial circumstances, certainty of pot size and likely income becoming clearer closer to retirement.
- Despite general low levels of trust reported in pensions and financial services, evidence shows that people trust their own pension provider more than consumer groups and other sources to give them information on what they can do with their retirement pot.
- Theories of consumer behaviour suggest that providing information, framing choices and delivering advice and guidance appropriately are all important in shaping outcomes.
- The problem for members when planning for retirement is not bad heuristics but the lack of any frame of reference when making retirement planning decisions. Members lack relevant experience and the confidence to make decisions.
- Making good financial decisions as individuals get into their mid-fifties is likely to become increasingly problematic. By the time people get into their eighties, approximately half of the population suffer from a significant cognitive impairment, which makes them much less capable of making important financial choices.

Chapter five

Supporting members who are less engaged

- Inertia dominates members' behaviour both in accumulation and at retirement.
- It is possible for inertia to be 'disrupted' and for members to take action, but not enough is known about the conditions under which this occurs and what impact the new freedoms might have on retirement planning.
- The issues around inertia disruption raise questions about how members can get the best possible outcome from their new freedoms in the new regime in the run up to and throughout retirement.

Chapter six

Securing a retirement income through annuitisation

- The income that people can achieve through annuitisation at the point of retirement has long been in decline as interest rates have fallen and longevity has increased.
- There may still be a major role for annuities in peoples' retirement plans, but they might achieve improved outcomes by annuitising later or annuitising differently.
- Understanding where this value-for-money tipping points occurs will help DC schemes better design their glide paths into retirement.
- Fixed-term annuities or a phased approach to building up annuity income may reduce the one-off conversion risk that has characterised annuitisation to date.
- Conceptually, deferred annuities could have a role to play in hedging longevity risk, but costs of capital could limit insurance companies' ability to offer good value for money in this space.

Chapter seven

Investing through retirement - balancing growth and protection

- From an investment perspective, income drawdown can be delivered in a variety of ways to meet a range of objectives.
- When using income drawdown, the saver carries all of the investment and longevity risk, so these products need to be carefully calibrated.
- With income drawdown the timing of withdrawals and the sequence of investment returns can have major consequences for outcomes.
- Managing downside risk in income drawdown is critical.
- Various approaches to managing drawdown portfolios, such as asset allocation, lifestyling, asset-liability matching, volatility management and risk hedging, present risks and opportunities in meeting retirees' needs.
- Innovations in structured products, such as variable or investment-linked annuities, may help bridge the gap between traditional drawdown and traditional annuitisation.

Chapter eight

Sharing risk between members

- Risk sharing is a familiar feature in pension design globally but elements of it have fallen out of favour in the UK. The financial services industry may consider revisiting these products in order to meet consumer desire for more certain outcomes.
- Collective defined contribution (CDC) schemes cover a spectrum of approaches that can be delivered in a variety of ways and have many different features.
- Governance challenges around the need to treat different cohorts equitably may be the biggest driver of asset allocation for risk sharing schemes operating in different countries.
- Evaluating CDC against DC involves a complex trade-off between risk, return, transparency, governance and trust. Above all it demands trading off between the risk appetites of scheme members and trustees.

Consultation questions

1. How will the trend for changing retirement patterns and provision affect what:

   a. members need, and

   b. employers want, from DC schemes in the future?

2. How will the trends identified in this chapter evolve and what does this mean for DC design?

3. What conclusions should be drawn from the evidence presented on spending, housing wealth and debt for the needs of future NEST members in retirement? What other data on consumption and wealth should we be taking into account?

4. Given the heterogeneity of likely spending patterns in retirement, is it possible to reflect these in the design of retirement solutions?

5. Taking into account current retirement decisions, what people say they want and what the evidence says about behavioural biases, how are savers likely to act under the new freedoms?

6. What member behavioural risks do providers need to manage?

7. Are there other risks and objectives to be taken into account for DC savers approaching and in retirement?

8. What works in terms of communicating and getting DC savers to engage with decision making in the approach to retirement? How can we help members make good choices before and during retirement?

9. How can we help mitigate the risks associated with cognitive decline as people get older?

10. What is the role of default strategies in the new regime and the run up to and throughout retirement?

11. Should we consider having more than one default strategy for different types of member, and which variables can be reasonably used to differentiate member needs in the event of no member engagement?

12. Based on the member evidence presented should the default target retirement age remain the same as state pension age? If not what are the alternatives?

13. Based on the evidence presented, should purchasing annuity income be part of retirement planning for DC savers? If so - on average - what age should this purchase happen?

14. Would iterative purchase, phased annuitisation, or fixed-term annuities be a better way for DC savers to secure incomes?
15. Should deferred annuities be included in the toolkit for DC retirement solutions?
16. Are there other ways of helping members hedge longevity risk?
17. Does investing through retirement, as an alternative to immediate annuitisation, have a significant role to play in meeting the retirement needs of DC savers?
18. If you were designing a default drawdown strategy for NEST members, how would you do it?

    We believe such approaches will require innovation and are therefore interested in solutions that address the following issues:

    - governance – including setting pay-out rules
    - asset allocation and risk management
    - flexibility for members
    - incorporation of insurance for market and longevity risk.
19. Should NEST consider some form of risk sharing as part of a solution for NEST members in retirement? If yes, what sort and why?
20. Would there be benefits in combining a risk sharing approach and pure DC, and if so, what would these be?

Introduction

In the 2014 Budget, the Chancellor of the Exchequer announced changes to the ways that savers in pension schemes could use their retirement pots. The Pension Schemes Bill also sets out additional options for occupational pensions to share risks. These changes provide a different regulatory framework for DC pension schemes.

This consultation paper seeks to gather views on the effect of this new framework on managing the retirement pots of NEST members and how automatically enrolled members will want to access their pots towards the end of their working lives.

Why is NEST consulting?

We believe the best way for NEST to develop our approach in the light of significant regulatory change is through our own primary research, reviewing research conducted by other organisations and from the views and expertise of our colleagues in the industry. In support of this, we're keen to learn more from the experiences and insights from:

- the pensions, investment and insurance industry
- regulators
- employers and their advisers
- consumer groups
- academics
- international peers.

Through the publication of this consultation paper we are looking to develop:

- a deeper understanding of the needs and aspirations of NEST's current and future membership
- more effective ways of engaging with members about their retirement options
- a broader understanding of available approaches to investment and accessing savings in the current market
- an idea of how the market is likely to develop and innovate in response to consumer demand.

Prior to automatic enrolment, the way DC pension pots were managed and the types of products offered to those taking their money out tended to be based on the needs of those on somewhat higher incomes than the working population as a whole.

We believe there's considerable scope for the development of new ideas and approaches that take into account the new mass market of savers and the changes to the rules around accessing savings. We believe there is a real opportunity for providers to offer high quality, good value products for the millions of new automatic enrolment savers.

The scope of this paper

This paper's main purpose is to help NEST carry out a deep assessment of the expected needs and aspirations of current and future members. Understanding their needs will help us assess the different investment and annuity options available to them.

The paper has been structured in two parts:

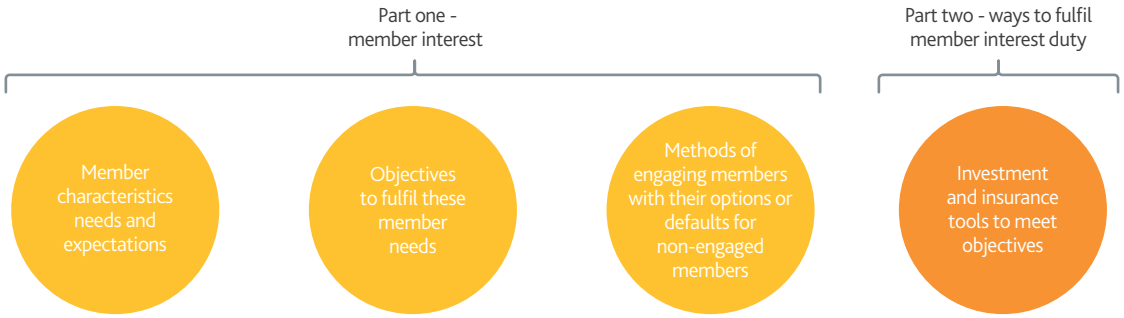
Part one explores the member evidence base. This will allow the Trustee to define member characteristics, wants and needs and consider how to translate them into clear objectives for assessing retirement solutions.

Part two explores the available investment and insurance-based tools available to meet these objectives.

What this paper does not cover is the delivery of different retirement options. At this early stage, we want to deepen our understanding of when and how members will want to use their pension savings and what are the most efficient ways to convert their accumulated savings into incomes in retirement. Questions of delivery will be addressed in our response next year to submissions to this consultation.

In the process of writing this paper it has proved difficult at times to disentangle the concept of wealth and well-being in later life and the role that pension saving plays. We are conscious that NEST, like any pension scheme, can only contribute so much to outcomes in retirement. Numerous factors outside the influence of a pension scheme may affect decision making and well-being for members.

An example of this is set out in chapter one where we touch on the cost of long-term care. The effect of care costs could have a significant impact on retirement plans for some. However, we've found it difficult to see how the design of a pension plan can realistically be expected to meet these challenges. We'd be interested in hearing views that suggest pension plan design rather than just providing information or guidance should deal with anything that isn't specifically about generating an income in retirement or a cash lump sum.



What we'd like from responses

This paper covers a breadth of topics so we expect respondents will choose to focus on those areas closest to their specific expertise and experience. To support focused responses we have included a variety of evidence on key areas, including member characteristics and the current state of the market for retirement products. In response to the evidence and consultation questions posed we are ideally seeking to gather:

- alternative interpretations of the evidence on member characteristics and attitudes
- suggestions of additional or contradictory member evidence
- what the member evidence means for the setting of objectives and the managing of risks
- examples of best practice when it comes to engaging with members
- views on ways to meet the needs of members who are less likely to engage
- comment on how the annuity market is likely to develop
- views on different approaches for investing for a regular income for those who do not wish to purchase an annuity
- views on the benefits of sharing risk between members.

About NEST

NEST is a defined contribution (DC) pension scheme that UK employers can use to meet the new workplace pension duties set out in the Pensions Act 2008. NEST is designed to be an easy-to-use, low-charge scheme. It has a public service obligation to accept employers of any size that want to use it to comply with their new duties.

NEST Corporation is the Trustee body that runs NEST. It's made up of a Chair and up to 14 additional Trustee Members. The Trustee Members set NEST's strategic direction and objectives. Their duties are the fiduciary duties of any trustee. They include acting in the best interests of the members whose money it holds in trust, and to abide by the regulatory framework the scheme exists within.

At the time of publication NEST is working with over 10,000 employers and has more than 1.7 million members. A key aim of the scheme is to provide members the benefits of a good value, quality occupational pension scheme, whoever their employer and however much they save.

In responding to this consultation we're particularly interested in comment and evidence that recognises the importance of keeping charges low for our members.

How the reforms affect our current approach

Under the existing pensions and tax regime we've assumed that most members of NEST would use 75 per cent of their retirement pot to buy an annuity and take the remaining 25 per cent as a tax-free cash lump sum. We've been investing the retirement pots of members approaching retirement in line with this assumption. For members who have recently joined the scheme and are close to their scheme pension age, we've assumed that they'll take their relatively small retirement pots as cash. The changes announced in the 2014 Budget have caused us to reassess whether these assumptions are suitable in a new world of greater freedom and flexibility.

You can find out more about our current investment approach in the publication **Looking after members' money**, available on our website.

The immediate impact of the reforms is on the new ways our members will be able to access their money from age 55. This will affect how we manage members' money during the consolidation phase before they are expected to take their money out.

NEST members who are approaching retirement in the next few years will have small pots saved with NEST. For many the best option will be to take these small pots as cash. However the purpose of consulting at this point about alternatives to members just accessing their pots as cash is fourfold:

- We need to understand relatively quickly what the likely options are for those members who are retiring in the coming years in order to calibrate how their money should be invested in the Consolidation phase.
- We need to understand how and what to communicate to members about their retirement options and the decisions they need to make over the 10 years prior to taking their money out of the scheme.
- Many of our members approaching retirement over the next five years will have built up savings in other pension vehicles and they may wish to consolidate their NEST pots with other savings – particularly once the restrictions on transfers into and out of NEST are lifted in 2017.
- We need to provide employers and their advisers a clear vision of how NEST intends to invest at the end of a member's savings career and the options members will have when it comes to accessing money from the scheme.

Broadly speaking, members will have five main choices in the new regime. Many members may use a combination of these choices depending on their circumstances:

- take their pot as a cash lump sum, either all at once or through a series of relatively quick or irregular withdrawals
- transfer their pot to another scheme
- leave their pot invested within the scheme and draw from it at a later date
- purchase some form of annuity
- take a regular income by drawing down their savings over a period of time.

This paper focuses mainly on the third, fourth and fifth bullet points, although we discuss throughout the appeal of accessing some or all of a pot as cash, particularly where it's tax free. NEST is currently developing its systems in order to make taking cash lump sums more flexible. This will give our members more options if they either don't want to convert their savings into a regular income in one go, or have only a small pot due to a short saving career.

The reforms also introduce a guarantee of guidance to help individuals decide how to access their retirement savings. While it's proposed that this guidance will be provided by third parties, how NEST engages and communicates the greater freedoms and choice to our members in the years up to their scheme pension age is an important consideration for us. Chapters four and five of this paper explore ways to improve decision making, member engagement and what schemes should do for those members who don't engage.

How to respond

The consultation period covers 10 weeks from 24 November 2014. Please ensure your response reaches us by the closing date of 30 January 2015. Your response can be submitted by email to **nestresponses@nestcorporation.org.uk**

Confidentiality

The information you send to us may need to be passed to colleagues within NEST. It will also be published in full.

Under the *Freedom of Information Act 2000* all information contained in your response, including personal information, may be subject to publication or disclosure. By providing information for the purposes of this exercise it's understood that you have consented to its disclosure and publication. If this is not the case, you should limit any personal information which is provided or remove it completely.

If you want the information in your response to be kept confidential, you should explain why as part of your response. We cannot guarantee that it will be possible to do this. More information on the *Freedom of Information Act 2000* can be found on the Ministry of Justice website at **justice.gov.uk/information-access-rights**

Part one: Outlining the challenge and setting objectives

- Understanding members
- Identifying risks and objectives
- Helping members make the most of their savings and choices up to retirement

A note on terminology:

Throughout this consultation paper we describe different ways in which members move from an accumulation or savings phase to a consumption of their savings. Understanding when and how this happens, or is likely to happen in the future is the purpose of this consultation. The evidence we present in chapter one suggests that the concept of retirement as a period when paid work ceases completely is increasingly becoming less distinct as more people move to part-time work, or continue in full-time work while they start to draw a pension. Similarly the ways in which members convert their savings pots will become more diverse due to the greater freedoms and flexibility proposed in the 2014 Budget. For shorthand we refer to this shift from accumulation to decumulation throughout the document as **retirement** or **accessing pots**. We recognise that these terms are being stretched and must now encapsulate a range of behaviours and a variety of ways of converting savings into an income stream or lump sum.

Chapter one

Member characteristics, work patterns and needs

Chapter highlights

- Defined contribution (DC) pensions are currently not the primary source of income in retirement for many people. Data suggests that within 20 years, with the rapid decline of defined benefit (DB) pensions, DC will be a much more significant component of a retiree's retirement portfolio. What this group decides to do when they come to take their money out of their scheme will have a much greater effect on their retirement wealth than is the case now.
- A more dynamic scenario in which work and pensions operate hand in hand is increasingly replacing the traditional retirement model. People are retiring later and more people are drawing a pension while still working. The widely assumed definition of retirement as a complete exit from the labour market is now out of step with many people's experience.
- We need to look at pension wealth as one part of a bigger picture in order to understand financial preparedness. We also need to examine non-pension wealth matters as part of a package of retirement resources. This has implications for how we approach financial guidance and planning as well as how we convey pension outcomes.
- Spending patterns in retirement for recent retirees appear to be largely the same as before they retired, with two key exceptions. First, housing costs go down and leisure spending increases as a proportion of household expenditure. Second, care costs appear to become significant only in later life.

This chapter outlines what we know about the retirement market of today and looks at how this might change and why. It should be noted upfront that looking solely at the data that describes today's market is an unreliable guide to the market of the future. It isn't just the legislative changes announced in the 2014 Budget that will alter future retirement habits.

The market of the future will be different because it will reflect a much more diverse group taken in by automatic enrolment and emerging patterns of wealth accumulation and social trends.

Chapter structure

This chapter is organised into the following key sections:

- **The shift from DB to DC**
  - The implications of the shift from DB to DC and its effect on retirement strategies.
- **Retirement and labour market characteristics**
  - When will people retire? Will retirement be a discrete event or phased over a period? How long will they spend in retirement? How long will they be healthy and what implications does this have for spending in retirement and on extending working lives?
- **Income in retirement**
  - What sort of income do people have in retirement? Does it meet their needs and expectations? How important are replacement rates?
- **Spending in retirement**
  - How do people use their money in later life? How do people want to pass wealth on? How do theories on spending in retirement match the data on actual spending?

The shift from DB to DC and the changing retirement market

In 2004, the Pensions Commission pointed to the twin problem of increasing life expectancy and under-saving. Those who were going to be affected most by this combination of factors have yet to be seen in the retirement statistics as they are too young. People taking their DC pots now are far more likely than people 20 years from today to have other types of occupational and Additional State Pension to draw an income from.

Though pension membership prior to automatic enrolment was low, with only 36 per cent of people over 16 years of age contributing to a pension[1], past pension membership among older age groups was high. In 2010 –11, 83 per cent of men and 61 per cent of women aged 52 and over had at some point accrued rights to a private pension.[2] Pension membership has been in decline from the 1970s and in rapid decline during the 1990s, coinciding with the closure of almost all private sector defined benefit schemes to new members and the closure of many schemes to any future accrual.[3] The decline in occupational provision is being reversed by automatic enrolment.

[1] ONS 2014 Wealth and assets survey. See Wealth in Great Britain Wave 3, 2010-2012.

[2] Banks,J, Nazroo, J and Steptoe, A (eds) October 2012 The Dynamics of Ageing: Evidence from the English Longitudinal Study of Ageing 2002-10 (Wave 5).

[3] Turner, JA and Hughes, G (2008) Large Declines in Defined Benefit Plans are Not Inevitable: The experience of Canada, Ireland, the United Kingdom, and the United States.

Given the decline of DB together with automatic enrolment, DC pension participation is set to increase significantly and is likely to be the primary type of occupational pension available for the private sector. By 2018 between 12 and 13.5 million people could be saving in private sector DC workplace pension schemes.[4]

Alongside this shift in occupational provision will be the difference in accrued State Pension rights that younger cohorts will have. The new State Pension will be the primary or sole state provision in the future as these cohorts will not have had the opportunity to accrue additional State Pensions, such as State-Earnings Related Pensions (SERPS) and State Second Pension (S2P).

People in 20 years time will be using their DC pot as their main rather than supplementary source of income, unlike many people retiring now. This means they will have different needs and priorities and has significant implications for the appropriateness of approaches in light of the legislative changes. The imperative for change, therefore, isn't just April 2015 when the legislative changes embed, but in the years from now when DC and the new State Pension become the main sources of retirement income for the vast majority of people.

The dynamic relationship between work and retirement

In designing a DC pension scheme, defining an end-point – an assumed retirement date – is important. This retirement date is often ingrained in the scheme's rules. A myriad of scheme administration parameters, such as when a member receives specific communication and guidance from their scheme, and the design of the default investment journey are determined by retirement age. In this section we explore if, when and how people are likely to retire in the future.

Retirement and labour market participation

The traditional assumption is that people work until they retire, at which point they leave work altogether and start drawing a pension. The evidence shows that this assumption is becoming increasingly out of step with what people actually do.

People are stopping work later in life. Between 2004 and 2010, the average age at which people left work increased to 64.6 years for men from 63.8 years, and to 62.3 years for women from 61.2 years.[5] This trend hasn't been entirely determined by the State Pension age, which has been increasing. During this period, State Pension age was 65 for men and 60 for women. The trend to retire later therefore is affected by other factors.

[4] Pensions Policy Institute. How will automatic enrolment affect pension saving? July 2014

[5] ONS 2012 Pension Trends.

Box 1.1

Understanding the changes in the automatically enrolled population

In 2010 and ahead of automatic enrolment, NEST published analysis of its likely membership, referred to in previous NEST publications as the 'target group'. This analysis established that unpensioned people who met the eligibility criteria of the reforms had different characteristics to people who'd joined occupational schemes voluntarily. Crucially, even when factoring the impact that age might have on earnings, those without a pension before automatic enrolment earned less than pensioned people. Income is related to a number of other factors, including education level, occupation and financial confidence and was an important variable for NEST to reflect in the design of the scheme.

However, automatically enrolled members don't just represent a low earning minority group. The group affected by automatic enrolment closely resembles the general working age population. In contrast, pension scheme members prior to the reforms were the minority. As a group they were less ethnically diverse, more educated, held more senior positions and had median earnings of more than £10,000 above the median for the working age population in general.

In this chapter we highlight the evidence for socio-economic differences. However, given the characteristics of retirees to date, there is a lack of evidence on the experiences of median and lower earners in this stage of retirement planning. In particular, we don't know what good options will look like for working people who have decades of DC pension savings to draw on and for whom state support will replace a large part of their pre-retirement income.

For the very lowest earners, many of whom will not have been eligible for automatic enrolment for some or all of their working lives, replacement rates from the State Pension are high, and even higher than pre-retirement income in some cases.

It's plausible that those at the lower and higher ends of the pre-retirement income spectrum are in a better retirement income position from a replacement rate perspective than those in the middle deciles. The lowest earners can expect good replacement rates and potentially even experience no fall in income on retirement. Understanding interactions with means-tested benefits will be an important part of communication and guidance for these groups.

The highest earners, though potentially experiencing the sharpest falls in income at retirement, will likely have incomes that do not require an adjustment in their spending habits. They are also most likely to have significant other assets to draw on. The group that occupies the space between these two, which appears to be the majority, are likely to experience comparably worse replacement rates from the State Pension than those who earned less than them in work. At the same time they are more likely than those who earned comparably more than them in work to feel the effect of a fall in income.

This chapter points to the changing composition of pension wealth. The key difference for the new retiree consumer base is not the differential in incomes, but a lack of diversity in retirement resources from which to draw pension incomes. As DB coverage declines, DC provision proliferates, levels of debt and home ownership change, and access to additional State Pension reduces, levels of uncertainty about pension income as people approach retirement looks set to increase. Arguably it's this that will differentiate the future population of retirees from those that have retired more recently.

The tendency to continue in work after starting to draw a private pension has also increased over time. In 2010–11, 47 per cent of men and 31 per cent of women aged 60–64 who were in receipt of an income from a private pension were still in work. This picture isn't unique to the year this data was gathered. Longitudinal evidence shows that there is a clear trend towards working while drawing a pension.[6]

Average hours of work are lower among those who are receiving a private pension income than among those who have accrued rights to a private pension but have not yet started drawing it. This suggests that retirement is increasingly becoming a journey rather than event. Those drawing a private pension are also more likely to be self-employed than those who have not accessed their pension yet. Combined with the picture on fewer working hours this points towards different work patterns, as well as a trend towards working later in life.[7]

Expectations about retirement age and phased retirement

The landscape is rapidly shifting and changes to the default retirement age – which is being phased out by the government – is only part of the explanation. Attitudes are changing too.

The evidence indicates that people are prepared to work in some capacity after reaching retirement age.[8] Pre-retirement income appears to shape attitudes here, to a degree. The readiness to work in some capacity beyond retirement age is observed across income bands. 45 per cent of those earning more than £40,000 plan to retire before 65 compared to 28 per cent of those earning less than £40,000.[9] Research that compares attitudes to flexible retirement of higher and basic rate taxpayers over the age of 50 similarly suggests a relationship between income and plans for a phased retirement. It also reveals that those with no plans to retire at all are more likely to be lower earners or basic rate taxpayers.[10]

There are a number of reasons for the apparent shift in attitudes towards working for longer. Some people simply want to keep working and dislike the idea of retirement. This is more the case amongst higher earners.[11] However the readiness to work for longer is also a response to retirement income shortfalls or a bid to improve retirement outcomes.[12] In the hypothetical scenario of a pension only paying 30 per cent of their salary, more than two-thirds expect they would continue working. In addition, it appears that messages about longevity are beginning to be heard across socio-economic groups. This raises questions for what 'retirement' will mean in practice to future older generations.

6 Banks,J, Nazroo, J and Steptoe, A (eds) October 2012 The Dynamics of Ageing: Evidence from the English Longitudinal Study of Ageing 2002-10 (Wave 5).

7 Banks,J, Nazroo, J and Steptoe, A (eds) October 2012 The Dynamics of Ageing: Evidence from the English Longitudinal Study of Ageing 2002-10 (Wave 5).

8 Aegon Retirement Survey 2014 UK

9 Movement Research. Pension Options research for DCIF. April 2014

10 NEST 2014 Unpublished research

11 NEST 2014 Unpublished research

12 Defined Contribution Investment Forum 2014. A New Age of Retirement: The end to traditional retirement and the need for new investment solutions to cater for pension accumulation and decumulation.

How long are people expecting to spend in retirement?

Life expectancy has increased substantially in the UK over the last three decades and continues to increase.[13] [14] The latest projections for the UK suggest males born in 2014 could expect to live 90.9 years on average and females 94.2 years. One in three can expect to celebrate their 100th birthday. Historically, people have underestimated how long they'll live and subsequently how long they'll be retired. A popular rule of thumb is to base our assumptions on how long our parents lived, despite the fact that people tend to live longer than their parents. However, individuals in recent surveys stated they expect to live until they're 83.[15] [16]

While the gap between perceptions and statistics is narrowing, the gap still exists. Comparing perceived life expectancies with official cohort life expectancies - that is, life expectancy projections that incorporate some improvements in life expectancy in the future - people appear to be somewhat pessimistic on average. Men aged 50–60 underestimate their life expectancy on average by around two years, and women by four years. In particular, too few people expect to live until very old age: only 9 per cent of men and 10 per cent of women aged 30– 60 expect to live until at least age 90, when in fact the official estimates are that 18 per cent of men and 29 per cent of women in this age group will do so.[17]

Of course the overall picture conceals the reality for many individuals. While the most common age at death in England and Wales in 2010 was 85 for men and 89 for women[18], many people live longer than this or die earlier. There are differences in life expectancy at the population level and these differences have particularly been linked to social deprivation. Men and women from the richest social class can on average expect to live more than seven years longer than those in the poorest social class.[19] The situation is most stark for those who have spent many years in unemployment - and therefore may not have pension pots - and who are most likely to experience the poorest health outcomes. However, population differences can't determine how long individuals will live. Genetic differences and random events mean that the average can only be a guide.

[13] ONS 2013. See Statistical bulletin: National Life Tables, 2009-2011.
[14] ONS 2013. See Statistical bulletin: Historic and Projected Mortality Data from the Period and Cohort Life Tables, 2012-based, UK, 1981-2062.
[15] Unpublished research for Just Retirement, 2014 Quantitative research undertaken by So Here's the Plan on behalf of Just Retirement Group, between 24 April and 2 May 2014 amongst 1,000 people aged 55+. Quotas were set on size of private pension pot, age, gender and geography. In addition, 20 in-depth interviews were undertaken.
[16] Crawford, R and Tetlow, G (2012) Expectations and experiences of retirement in Defined Contribution pensions: A study of older people in England
[17] Crawford, R and Tetlow, G (2012) Expectations and experiences of retirement in Defined Contribution pensions: A study of older people in England
[18] ONS 2012 Mortality in England and Wales, Average life span 2010.
[19] Department of Health. 2011. Mortality Monitoring Bulletin.

Number of healthy years in retirement

Longer retirements are not necessarily healthier retirements. Being more positive about working for longer doesn't necessarily mean it will be possible, and health clearly affects how long people can work. In 2008, the latest year for which figures are available, UK men at age 65 had 9.9 years of healthy life expectancy, while women had 11.5 years. Looking forward, both the number of people with at least one and the number of people with multiple long-term health conditions are rising.[20] Living longer could mean that more people spend longer periods of their retirement in poor health.[21]

There are strong socio-economic factors at work.[22] Unhealthy behaviours - like smoking, lack of exercise, unhealthy diet and high alcohol consumption - are declining in higher socio-economic groups, while people employed in unskilled manual work and without qualifications are likely to enjoy fewer years in good health. Consequently, while the ability to work in later life is generally improving, individuals with lower levels of education and lower levels of wealth are more likely to be excluded from working due to poor health.

The onset of relatively poor health doesn't necessarily correspond to a need for care. On average people are most likely to need care in their eighties, well after the point at which health begins to deteriorate. Only a few people find their health deteriorating very rapidly and need care sooner.

The effect of changing work patterns on employers

Work patterns are not just driven by employees but also by the attitudes and practices of employers. To date there appears to be little evidence of how employers see this shift away from the traditional model of retirement. We'd be interested in learning more about what employers think about how pension schemes are designed and how they affect employee behaviour and workforce planning.

Consultation question

1. How will the trend for changing retirement patterns and provision affect what:

a. members need, and

b. employers want, from DC schemes in the future?

[20] Buck, D, Frosini, F (2012) Clustering of unhealthy behaviours over time Implications for policyand practice. The Kings Fund.

[21] Banks,J, Nazroo, J and Steptoe, A (eds) October 2012 The Dynamics of Ageing: Evidence from the English Longitudinal Study of Ageing 2002-10 (Wave 5).

[22] Buck, D, Frosini, F (2012) Clustering of unhealthy behaviours over time Implications for policy and practice. The Kings Fund.

Financial circumstances in retirement

The financial experience of retired people is affected by several factors. Pension income, while clearly key, is only one of these. In the following sections we consider income sources and assets that, while they may not be used to deliver a regular income, nevertheless contribute to many retirees' quality of life. We also consider expenditure, including housing, day-to-day spending, unsecured debt and care.

Income in retirement

Given the prevalence of occupational schemes that delivered income entitlement rather than capital, recent retirees overall have enjoyed reasonable pre-retirement income replacement rates. Income after retirement has been around 70 to 75 per cent of pre-retirement family income on average.[23] This replacement rate does not vary greatly by sex, educational background or health, although it's higher among those on lower pre-retirement incomes. However, the data from which this replacement rate is derived includes income from employment. Retirement is defined here as having left full-time work and the sample includes older people who may be working part-time, or have a partner in work.

Sources of retirement income

There is evidence that shows strong reliance on other sources of income in retirement, aside from just private and occupational pensions, at the household level. This includes earnings but also features savings and other assets.

Proportion of income replaced by private pensions

Historical data shows that private pension income makes up a larger share of pensioners' incomes in 2008–09 than it did in 2002–03 right across the income distribution. Indeed, towards the bottom of the income distribution, the share of private pension income in total income has almost doubled since 2002–03, albeit from a low base. This change is likely to be the result of younger groups moving through the survey who have been exposed to changes in the pensions landscape that resulted in an increased emphasis on private pension provision.

DC pot size for recent retirees

The median wealth held in defined contribution (DC) schemes among older age groups shows small pots. Data collected between 2010-2012 shows that median DC wealth was £14,500 for 55 to 64 year olds and £18,200 for those over 65. In contrast, wealth held in DB pensions is substantially higher. Median wealth in DB schemes was £140,300 for 55 to 64 year olds and £99,900 for those over 65 years of age.[24]

[23] Banks,J, Nazroo, J and Steptoe, A (eds) October 2012 The Dynamics of Ageing: Evidence from the English Longitudinal Study of Ageing 2002-10 (Wave 5).

[24] ONS 2014 Wealth and assets survey. See Wealth in Great Britain Wave 3, 2010-2012.

There is anecdotal evidence that some recent retirees see their DC pots as an 'extra', rather than a primary income source.[25] This may have implications for the preferred strategy of retirees in this scenario given their new freedoms.

Non-private pension wealth in retirement

On average, unearned income post-retirement such as inheritance sums replaces 48.3 per cent of all pre-retirement income. This includes asset income and the State Pension. One potential additional source of income in retirement is inheritance. The combined total of all inheritances received over the period 2008-10 was estimated at £75 billion[26] based on around just 4 per cent of people receiving an inheritance of at least £1,000 in this timeframe.

The number and value of inheritances received may well change over time for a number of reasons. For example, living longer could mean that more wealth is used to cover the costs of retirement and old age, exhausting assets traditionally passed on to others. It's also possible that peak levels of inheritance will be reached after the death of the generation characterised by record housing wealth. And there's some evidence of a trend toward people giving what would have been inheritances during their lifetime. A choice to provide in this way will reduce the number of inheritances reported.

If fewer people inherit and the amounts inherited fall, this could affect the resources subsequent generations have in later life. Current evidence suggests that the main use of inheritance is to pay down mortgage debt or save.

While pension wealth is consumed through retirement for recent retirees, other forms of family wealth do not, on average, decline with age.[27] Understanding how total retirement wealth depletes over time, compared to steadier elements of retirement income such as occupational pensions or the State Pension, is important when considering what members may need from their options at retirement. It seems likely that how wealth degrades over time could vary between socio-economic groups in the future. Even taking account of any inheritance, median retired household wealth is just less than £12,500.

How might replacement rates change?

Among those approaching retirement today, replacement rates from occupational and private pensions are high. This reflects the prevalence of defined benefit schemes and high levels of occupational pension participation, as well as the socio-economic profile of those who voluntarily participated in pensions before automatic enrolment.

[25] Which? Unpublished qualitative research on paying for care involving recent retirees. 2014

[26] ONS 2014 Wealth and assets survey. See Wealth in Great Britain Wave 3, 2010-2012.

[27] Banks,J, Nazroo, J and Steptoe, A (eds) October 2012 The Dynamics of Ageing: Evidence from the English Longitudinal Study of Ageing 2002-10 (Wave 5).

Automatic enrolment will bring 10 million extra people into pension saving. The new market of pension savers differs in a number of ways from those retiring today and more closely resembles the working age population in general. Automatic enrolment was largely targeted at working-age people not already contributing to a pension. They generally:

- had slightly lower earnings than the working population overall, including those working part-time, earning £19,800 compared to £21,500[28]
- were far more likely than those already in a pension to live in a low-earning household
- were much less likely than those already in a pension to be degree educated - 25 per cent compared with 43 per cent of pensioned workers - and to be in professional or managerial occupations - 36 per cent compared with 63 per cent of pensioned people[29]
- were more likely than those already in a pension to be from an ethnic minority.[30]

The impact of these changes is difficult to determine. State Pension reform will also play a significant and more predictable role in future replacement rates, alongside income derived from DC pensions.

Over time the evidence suggests that the typical balance between income entitlements and capital in individuals' retirement portfolios will shift. At the moment the high replacement rates seen in recently retired cohorts are underpinned by a combination of the State Pension, including SERPS and S2P entitlement and defined benefit provision. There are individuals with large DC portfolios but these are a minority – for most, where they have some form of DC pension this will be a minority of their retirement assets.

This situation will evolve such that large DB entitlements become much less common, especially among those who have spent their careers in the private sector. State Pension entitlement will tend to increase for women and carers and decrease for men. Where people have pension provision, this will be much more likely to be DC. There is likely to be much less gender inequality in terms of both State Pension rates and occupational pension assets.

As such, it appears we're moving from a situation in which, for many, DC is an important but small addition to a stock of accrued income entitlements to one in which DC is a much more important driver of retirement outcomes.

[28] ASHE 2011
[29] ASHE 2011
[30] FRS 2010-2011

The retirement design challenge, therefore, may be moving gradually from a situation in which taking lump sums might make sense to one in which people are much more likely to need to convert their pension pot into income and for that to work for them over a 20 year retirement. The evidence suggests that this conclusion carries across the bulk of the income distribution - likely the middle six deciles at minimum.

Consultation question

2. How will the trends identified in this chapter evolve, and what does this mean for DC design?

Does income in retirement meet needs?

This is a challenging area for research as few people plan their retirement. Many find it hard to imagine what they'll need. Not everyone has an expectation about their retirement income needs and many have actively avoided thinking about it, as noted in chapter two.

Most working-age people seem to share the received view of pension experts, that they should be saving more. When asked, many assume that they aren't saving enough to have the kind of lifestyle they will want.

Expectations of retirement income are also rising.[31] Recent research identified a significant gap between what people said they needed in order to have the lifestyle they want and how much they could actually expect to receive.[32]

This may not reflect the experience of people currently in retirement. Research with retirees who had earned between £10,000 and £40,000 in their last job showed that lifestyle in retirement was as many had expected and most people questioned considered themselves 'comfortable'.[33] Though some reported having to scale back spending, in the main they reported living as they had assumed. Again this overall relatively positive picture might in part be the result of multiple private pension sources, including DC, and reflect the particular financial context of recent retirees, not those in the future.

The evidence regarding what people say they need to live off in retirement and the perceptions of retired people present a mixed and somewhat contradictory picture. However, it is possible that people moderate their views of lifestyle in retirement once they reach it. Research indicates that consumers are unsure about whether their pension will be sufficient until they actually try to live off it. It may be that at this point, they decide that it just has to be enough.

[31] Prudential. Class of 2014. 7th survey of unique retirement research. 2014.
[32] Unpublished research. Just Retirement, 2014
[33] DWP Perceptions of income requirements in retirement. 2008

What happens to spending in retirement and how might it change in the future?

How individuals tend to spend their savings through their retirement will be a big factor in what they need from the vehicle or vehicles used to convert their savings into retirement income. The level and flexibility of the income it provides, the ability to take lump sums and the extent to which it needs to provide inflation protection are all key factors. The nature of a person's optimal approach in turn determines various aspects of what they need from their DC scheme up to the point of retirement.

Housing costs

Housing costs make up a significant proportion of spending in working life. There are wide regional variations but spending as a proportion of income is reportedly more than half for 1.6 million households.[34] What happens to these costs in retirement and what does trend data tell us about the future?

The percentage of owner-occupiers increases with age. The last census showed that 76 per cent of those aged 65-74 owned their own homes, the highest across all age groups.[35]

Looking at those who owned their homes outright, 88 per cent were aged 50 and over, reflecting the time it takes to pay off a mortgage.[36] Taken together this points to people in retirement generally having dramatically lower housing costs than younger people in work. However, a number of notable trends in home ownership might change this picture.

While the number of people who own their homes outright is at a record high, the number of people buying homes with a mortgage is falling. This coincides with marked growth in the private rental sector. The increase in private rentals is beginning to be seen in older age groups.[37]

[34] Resolution Foundation. Housing pinched Understanding which households spend the most on housing costs. August 2014

[35] Home ownership and renting in England and Wales – Detailed Characteristics, Part of 2011 Census, Detailed Characteristics on Housing for Local Authorities in England and Wales Release. Released: 28 June 2013

[36] Department for Communities and Local Government Housing Statistics. April 2014.

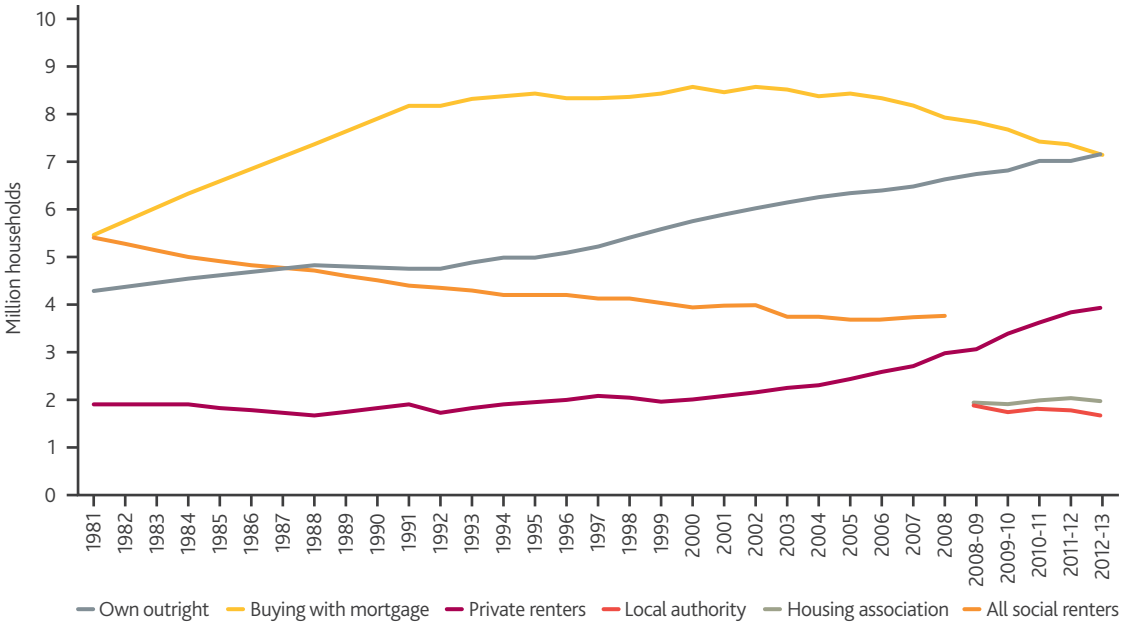
[37] Department for Communities and Local Government. English Housing Survey.

People are also buying their first home later.[38] Looking at the 25 to 34 age group in 2008, 66 per cent of all home purchases were for first homes. In 2012 this shifted to 72 per cent.[39]

It's certainly the case that more retired people own their home outright than younger cohorts. It appears likely, however, that more people in the future will be entering retirement with higher levels of mortgage debt and there will be more retired people in privately rented housing. As such, the cost of housing in retirement, based on mortgage payments and rents, could be higher for some retired cohorts in the future.[40]

Qualitative research from Which? found that paying off the mortgage was a key factor in deciding when to retire, in the sense of leaving work altogether. It could be that the need to pay off the mortgage before retirement drives the need to work longer and that trends in home ownership will be compensated for to some degree by the trend towards phased retirement. However, it could also mean that more retirees use lump sums or retirement income for this purpose than in the past.

Figure 1.1 Trends in tenure, 1981 to 2012-13



Sources:

1981 to 1991: DOE Labour Force Survey Housing Trailer
1992 to 2008: ONS Labour Force Survey
2008-09 onwards: English Housing Survey, full household sample

[38] HSBC analysis.
[39] Department for Communities and Local Government. English Housing Survey.
[40] Prudential. Class of 2014.

Debt

Another possible expenditure is debt. According to Prudential, 56 per cent of older people with debts owe money on credit cards.[41] Overall, debt among retired people appears to be falling and is lower in 2014 than it was in 2012. The picture for the population generally is more complex. Data suggests a fall in the prevalence of over-indebtedness but an increase in the depth of over-indebtedness. Or, to put it another way, fewer people are getting into debt but those who do are borrowing more.[42]

Data from the Wealth and Assets Survey (WAS) suggest that there is a relationship between retirement and debt, with both mortgage and non-mortgage debt being lower in the retired than in the non-retired population. Table 1.1 shows non-mortgage debt by age and retirement status. As can be seen, debt in the retired population is substantially lower than in the non-retired population. Median debt among those with debt in the non-retired population of 65 to 74 year olds is £1,724 as opposed to £1,123 in the retired population.

Table 1.1 Non-mortgage debt by age and retirement status

		Retired Age of HRP/partner branded				Not retired Age of HRP/partner banded			
		Mean (£)	Median (£)	Percentile 25 (£)	Percentile 75 (£)	Mean (£)	Median (£)	Percentile 25 (£)	Percentile 75 (£)
Household: financial liabilities	16-24					7,515	2,841	610	11,751
	25-34					8,197	4,304	1,270	10,950
	35-44	15,600	15,600	15,600	15,600	8,146	3,482	1,000	9,444
	45-54	14,305	15,100	1,500	23,674	8,448	3,860	850	10,376
	55-64	4,596	1,224	300	4,752	6,629	3,050	770	8,924
	65-74	4,162	1,123	250	4,421	4,498	1,724	500	5,020
	75-84	2,887	736	180	3,000	1,623	850	150	1,598
	85+	2,824	616	160	3,200				

Source: WAS Wave 2 2008-10

[41] Prudential. Class of 2014. 7th survey of unique retirement research.

[42] ISER (2010) Over indebtedness in Great Britain: An Analysis Using the Wealth and Assets Survey and Household Annual Debtors Survey. Research commissioned by the Department for Business Innovation and Skills

Retired people with outstanding balances on their mortgage tend to have much lower outstanding balances than those of equivalent age that have not yet retired. The median level of mortgage debt in the 65 to 74 age bracket is roughly double that of the retired bracket.

Looking ahead, it's conceivable that future retirees who include the automatically enrolled will have higher levels of debt. The descriptive statistics on debt indicate that being a young adult - particularly aged 25-35, a tenant, especially a social tenant, in a low income household, a lone parent, unemployed or sick or disabled, are all characteristics or circumstances associated with debt.

A strong relationship between over-indebtedness and attitudes to debt also emerges, but it's difficult to be certain about whether these cause, or are caused by, over-indebtedness. The 10 million who'll be automatically enrolled by the end of staging will look far more like the population generally than recent retirees who have been contributing to pensions before automatic enrolment. Overall they demonstrate more of the factors associated with indebtedness than those retiring today.

Day-to-day spending

There are different views on what makes up day-to-day spending, often referred to as 'basic' spending, but it generally includes food, bills and leisure. Snapshot data shows that older people spend less overall than younger age groups.[43] However, longitudinal data reports that older people are spending proportionately more on the basics than they used to.[44] Between 2004 and 2009 spending on necessities increased by 9.4 per cent among age groups 50 years and over. This increase is greater among those with the lowest incomes. At the bottom of the income distribution, just under half of income is devoted to the basics. At the top of the income distribution, the figure is 16.4 per cent.

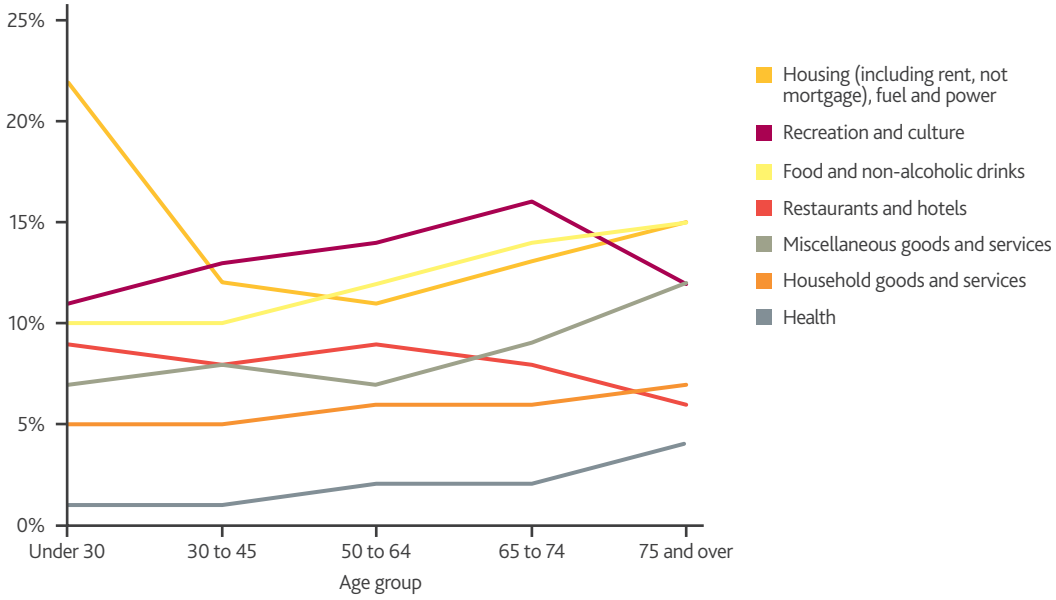
Spending on housing, fuel and power as a proportion of total household expenditure goes up in older households from around age 55. This is in part because of the additional domestic fuel costs associated with being at home more. Research suggests, however, that while expenditure is increasing in older age groups, fuel consumption is falling.[45] This reflects price rises and possibly retired people seeking to moderate their fuel use to deal with rising prices.

[43] ONS Family Spending. 2011.

[44] Banks,J, Nazroo, J and Steptoe, A (eds) October 2012 The Dynamics of Ageing: Evidence from the English Longitudinal Study of Ageing 2002-10 (Wave 5).

[45] Banks,J, Nazroo, J and Steptoe, A (eds) October 2012 The Dynamics of Ageing: Evidence from the English Longitudinal Study of Ageing 2002-10 (Wave 5).

Figure 1.2 Expenditure on selected items as a proportion of total spending by age of the household individual 2011



Source: Living Costs and Food Survey - Office for National Statistics

Care costs

Of all those aged 65 in 2009-10, half will face care costs of over £20,000 and one in ten will face costs over £100,000.[46] How these costs interact with retirement income and spending is a complicated area that this document can't adequately cover and the funding for long-term care is a matter of broader public debate.

The need for care, unsurprisingly, increases with age and the evidence suggests that more people will incur care costs in the future. The number of adults aged 85 or over, the age group most likely to need care, is rising faster than the population as a whole.

The cost of providing care depends on the type of care, how long it is required for, personal preferences, region and means testing. Residential care is the most costly form, although the length of residential stays tends to be short, and more than half of permanent and nursing home stays ended in the person dying in the home or within 30 days.[47] Even so, based on the most common length of stay, care home costs at current rates could be £2,500 or £3,300 in London and £2,060 or £2,364 in the north east.

[46] National Audit Office. Adult Social Care in England. March 2014

[47] Steventon, A and Roberts, A (2012) Estimating length of stay in publicly-funded residential and nursing care homes: a retrospective analysis using linked administrative data sets. BMC Health Services Research

Spending and inflation

The official rate of inflation, the Consumer Price Index (CPI), is designed to reflect changes in average prices excluding the costs associated with housing. It's calculated on the change in price of a basket of goods based on what the 'average' consumer buys. Changes in prices can be more acutely felt by certain groups and individuals. Lower income groups will be more affected by rising food prices, for example, where spending in this area takes up a much larger proportion of income. As spending and income tend to change as people age, the effect of inflation on different age groups also changes. Recent analysis suggests that those under 30 have the highest group inflation rate, followed by those over 75.[48]

Pensioner households, like households generally, are not homogenous. While it's the case that spending increases in certain areas for older households, like food and fuel, the extent to which these households are affected depends on their income and the assets they have to draw on.

The extent to which we're affected by changes in average prices can't be determined entirely by looking to the experience of those in a similar category. No one is truly average, even for our income or age bracket. We all buy different things, and so our own experience of inflation - our 'personal inflation rate' - will vary from the official measure.

Foreign-born workers and retirement plans

The number of foreign-born people of working age in the UK increased from 2.9 million in 1993 to slightly more than 6 million in 2012. Compared to the early 2000s, the presence of foreign-born workers has grown fastest in relatively low-skilled sectors and occupations. The increase in the share of foreign-born workers was fastest among process operatives - for example transport drivers, food and drink process operators - which grew from 8.5 per cent in 2002 to 25.3 per cent in 2012.[49]

The number of foreign nationals and the sectors within which they work suggests that a significant and growing number of non-UK born workers will save with NEST at some point. We have found little in the way of research as to the plans of this potentially large cohort of workers, for example whether they plan to retire in the UK or return to their place of origin.

[48] Alliance Trust. October 2014. Inflation by Age Group.

[49] Rienzo, Cinzia. Migrants in the UK Labour Market. 2013

How does current spending and consumption stack up against theory?

There are four popular and overlapping theories about spending in retirement.

- **People spend less**. As income levels typically fall on retirement, spending is adjusted to compensate. In addition, older people tend not to spend as much as younger people in work.
- **People spend more**. Because of increased leisure time, overall spending goes up. Because they're at home more retired people use more domestic fuel, they socialise more, and they go on more holidays. They do things that cost money that they couldn't do when they were working.
- **People spend the same amount**. According to the life-cycle model of consumption, individuals should allocate consumption across their lifetime to maximise lifetime welfare. In plain terms, this means that even though income typically falls on retirement, consumption should not fall to the same degree. People should plan for periods of lower income by consuming less when income is higher.
- **People allocate expenditure differently**. Retirement is a time when individuals might change the allocation of their spending across different goods. Consumption overall doesn't change, but people spend and consume differently.

Evidence suggests that none of these theories accurately describes how people spend in retirement. How much households spend and what they spend it on are determined by many different factors, including demographics, tastes and prices.

Spending isn't as different for older and retired age groups compared to younger people as might be assumed. While older people spend less each week they're not necessarily spending less on their own needs. There may simply be fewer people in their household to spend on. With the exception of leisure spending, it seems retired people don't decide to spend entirely differently once in retirement. The reallocation of spending around retirement across different goods is minimal once changes around the time of retirement are controlled for.

The way people spend is not driven by the act of retiring. While analysis is often structured this way there's no evidence to suggest that retirement is a causal variable. The fact that retirement does not mean a change in the level of basic spending is consistent with the life-cycle model of consumption. Although changes in overall day-to-day spending are minimal, specific and higher cost spending punctuate this. This likely reflects both changes in attitudes about life in retirement and the changing circumstances of the children of retirees.

Consultation questions

3. What conclusions should be drawn from the evidence presented on spending, housing wealth and debt for the needs of future NEST members in retirement? What other data on consumption and wealth should we be taking into account?

4. Given the heterogeneity of likely spending patterns in retirement, is it possible to reflect these in the design of retirement solutions?

Chapter two

How do people expect to access their pension savings

Chapter highlights

- What people say they want is guided not just by what would make economic sense for their circumstances. Cognitive and emotional biases have a significant role in forming their preferences.
- People have a strong desire for a consistent retirement income. They say that they value retirement income products that keep pace with inflation and protect them against outliving their retirement assets.
- Lump sums are also attractive and important. Most future retirees in research groups say they'll take a lump sum in excess of their tax-free allowance.
- In many respects, people want to have it all. They want a guaranteed and consistent income punctuated by 'bonus' style lump sums from time to time. Many savers are unlikely to have enough savings to meet this demand.
- There's appetite for what in the past may have been described as drawdown products. However, most people also want to protect a portion of their savings to be used as a guaranteed income for life at a later date.
- What people say they want isn't always borne out in the decisions they make. The annuity choices made by recent retirees suggest that people don't choose what they said was important to them.
- It's impossible to say with any degree of certainty what people will do. Research asking people what they'll do in light of the new changes is better at revealing preferences than behaviour.

Designing the right way for people to take their retirement pots involves taking account of what they want, what they need and also their capacity to take risk to achieve this. In this chapter we look at three areas of evidence. Firstly, the choices consumers have made under the current rules. Secondly, what consumers say they want and what they say they'll do in light of the new freedoms. And finally, the evidence on how preferences are formed and how emotionally determined preferences can drive what consumers want.

How do people use their retirement savings today?

What people do with their money when they take it out of their pension scheme has been largely driven by their limited options. The choices available have meant that people with defined contribution (DC) pots tend to take their maximum tax-free lump sum and use the rest to buy an annuity. How people think about and use their DC pension pots has also been determined by:

- how many DC pots they have
- the value of these pots, often considered as an 'extra' rather than a key income source
- the rules on commutation and pot transfers.

Given all of this, the way people take their money now may not be a good guide to the future. However, the kinds of decisions people make reveals preferences to some degree and shows how decision making is affected by how much is in their pots.

Annuities

The annuity market has grown as baby boomers, born 1946-1964 have begun to retire and DC pensions have started to mature. In 2012, 420,000 policies were sold compared to 115,000 in 1994.[50] The market was worth £14 billion 2012, up from £2.5 billion in 1994. However, 2013 saw an increase in the number of customers deferring an annuity purchase, with only 353,000 sold, with the market worth £11.9 billion.

Around three-quarters of people who take their money out of DC pension schemes use it to buy an annuity.[51] The price paid reflects the smaller DC pot sizes associated with savers who perhaps had other retirement income options and had saved in DB schemes. But pot sizes are increasing. The mean annuity in 2013 was bought for around £35,600, while the median was around £20,000. This is broadly consistent with median DC pension wealth amongst older age groups. 29 per cent of annuities are bought with a pension pot of less than £10,000.

Increasing numbers of annuities are being bought on the open market rather than from the provider of the pension scheme. 48 per cent of annuities sales were bought on the open market in 2012 and 2013, compared to 31 per cent in 2003. However, a great many people still buy their annuity from the provider they had saved for their pension with.

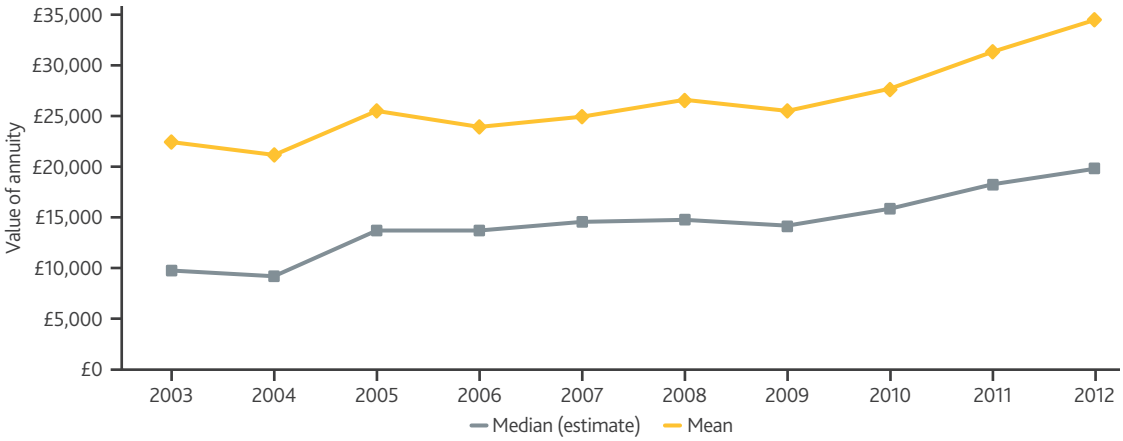
Having a small pot size is the strongest predictor of whether someone will shop around. Only 46 per cent of people who bought an annuity with a pot of less than £10,000 said they shopped around, compared to 63 per cent of the total.[52] Most people with pots below £10,000 don't shop around or switch, and most annuities bought by individuals from the same companies as they built up their pension pots are bought by people with small pots.

[50] Association of British Insurers. The UK Annuity Market: Facts and Figures. ABI 2013

[51] Pension Policy Institute. Freedom and Choice in Pensions: comparing international retirement systems and the role of annuitisation. May 2014

[52] ABI "Retirement choices: Baseline to measure effectiveness of the Code of Conduct, 2013

Figure 2.1 Nominal pension annuity purchase value, 2003 to 2012



Source: ABI Statistics

Note: Point estimates of the median purchase value assume uniform distribution of pots within value categories

What types of annuity are people buying?

- The proportion of joint-life annuities is rising and they made up 33 per cent of the market in Q4 2013. It's not the case that only people with larger pots choose a joint-life annuity - 41 per cent of joint life annuities were purchased with a pot value less than £20,000 in 2013.
- The proportion of enhanced and impaired annuities - 'lifestyle factors such as smoking and medical conditions that have an impact on a person's life expectancy - continues to rise. They made up 28 per cent of the market in Q4 2013. More people with the smallest pots are now buying enhanced annuities.
- Less than 10 per cent of all annuities are bought with any kind of escalation, rises in line with inflation or a fixed increase. This has fallen since 2008.
- 7 per cent of annuities are investment-linked.

Where people are aware of different types of annuity, they appear to be making active choices. Research looking at annuity purchasing behaviour[53] found that:

- 82 per cent of people for whom a joint annuity was an option were aware of them, and 49 per cent had bought one
- 51 per cent of people with a fund of more than £5,000 who might be entitled to an enhanced or impaired annuity, were aware of them, 19 per cent considered them and 10 per cent bought one
- 64 per cent of all annuity purchasers were aware of escalating or indexed annuities, 21 per cent considered them and 3 per cent bought one.

[53] Association of British Insurers. Annuity purchasing behaviour. 2010

Lump sums

As set out in chapter one, it's generally assumed that most people take the maximum tax-free lump sum. We've found no specific figures regarding the uptake of this option, although research from Prudential on the use of lump sums suggests that around eight out of 10 people drawing a company or private pension in 2011 took a lump sum from their fund at retirement.[54]

Drawdown

As an alternative to annuities, people over the minimum pension age can invest their pot in an income drawdown product. In practice, income drawdown has tended only to be taken up by those with pension pots well above the median DC pot size. This is because of the regulatory framework and the complexity of investment choices in drawdown products mean that paid-for advice is generally required to take this up. As such, the characteristics of drawdown customers to date can be inferred to some extent and it's most likely the case that their financial circumstances are quite different to the majority of NEST members.

Analysis from the ABI shows that there are around 21,000 new drawdown customers every year, suggesting an increase in demand for this sort of product. However, it isn't known whether this demand is from a more mixed consumer base. The long-term trend had been one of decline. We expect this decline to reverse in light of the 2014 Budget announcement.

What do consumers say they want?

It's worth noting that consumers' lack of understanding about pensions can make it difficult for them to take an informed view. Lack of familiarity with products can make it difficult to know good value from bad. When customers are more familiar with products they're better able to make informed and discriminating choices based on their preferences.

People value choice

The evidence strongly suggests that individuals value choice, even if they don't use it.[55] This is borne out in reactions to the 2014 Budget changes, with consumers being overwhelmingly positive that these emphasised choice and control.[56] At the same time, they're not necessarily confident about navigating their new options.

There are a number of apparent contradictions in the evidence with respect to consumers' comfort with retirement planning and their ability to take retirement related financial decisions. This is partly a function of surveys using different measures and concepts to describe consumer preparedness in this regard. On the one hand evidence suggests that most consumers say they are 'comfortable' with retirement planning,[57] but at the same time many are not confident about their ability to make choices.[58]

[54] Unpublished research referred to in: Centre Forum. A relief for some: how to stop lump sum tax relief favouring the wealthy. 2011.

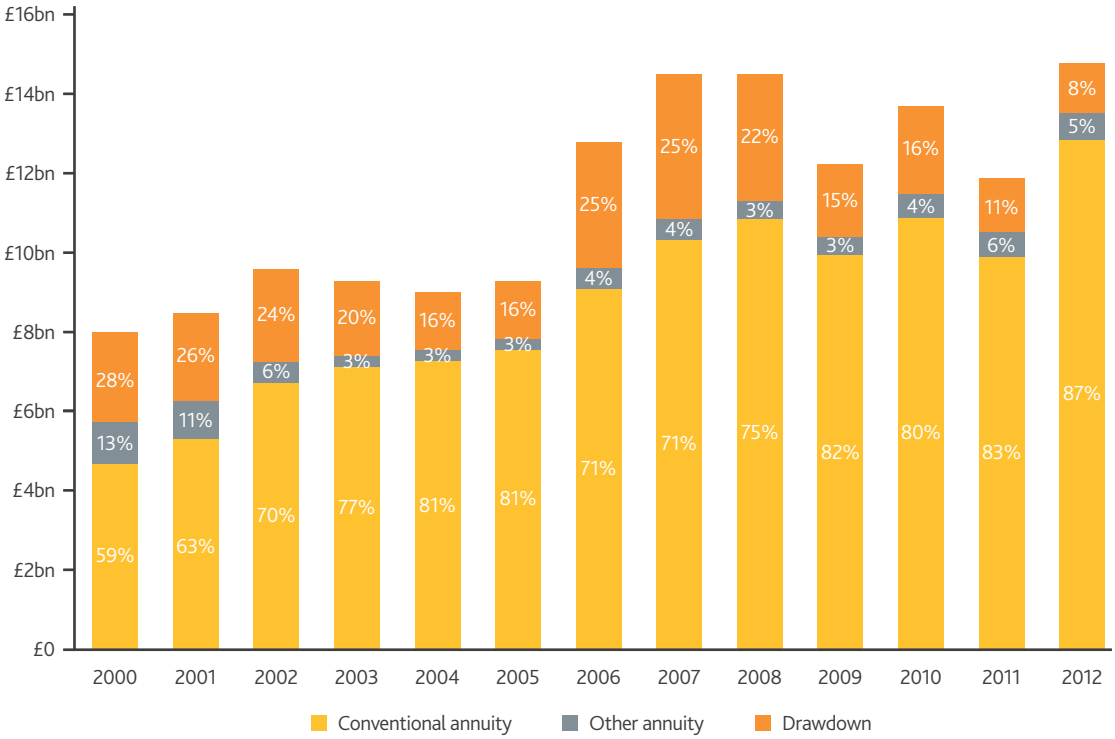
[55] DWP Individuals' attitudes to workplace pension reforms. 2009. See Chapter 6

[56] Unpublished research for NEST 2014

[57] Association of British Insurers. Retirement Choices: Measuring the Effectiveness of the Code of Conduct. 2014 (publication pending)

[58] Unpublished research for NEST 2014

Figure 2.2 Sales of UK retirement income products, 2000 to 2012



Source: ABI New Business Market Data

The tendency for over-confidence should be noted here. Evidence from Australia suggests that we shouldn't assume that those who say they are comfortable or confident will go on to make reasonable choices in practice.[59]

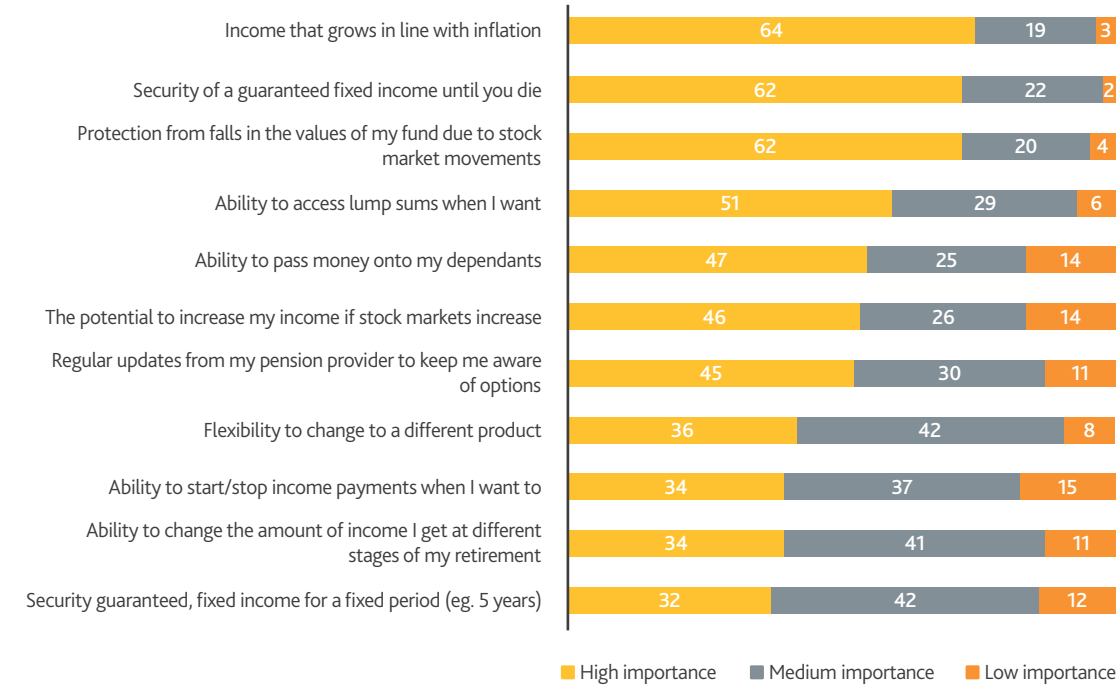
While consumers are positive about the idea of choice, there are limits to how much choice they want. Evidence also shows that the quality of decision making is inversely related to number of options presented - see chapter four. There's more of this in chapter five in our discussion of members' attitudes to deciding their own retirement pathway.

What's most important?

What's important to consumers when they're taking their money out of a pension scheme isn't terribly different to what's important to them while they save. Our research on member reactions to loss and their ability to engage with investment information revealed consumers to be inherently conservative when it comes to retirement. There's a strong desire to protect against volatility and loss and a desire for a predictable outcome. It's not surprising to find evidence of these preferences in relation to accessing their savings as well.

[59] State Street. Get Engaged: Overcoming member barriers to health decision-making. 2013.

Figure 2.3 Preferences for retirement products among customers



Source: Ignition House for NEST 2014. Base = 86 respondents. Data presented as counts, not percentage

It is notable that consumers much prefer a guaranteed income until death over a product that runs for a fixed period. This perhaps reflects growing awareness about increasing life expectancy and a fear of outliving their assets. It also reflects people's desire for certainty. Most consumers consider the 'ability to access lump sums when I want' to be important. This is in marked contrast to the way that annuities are currently designed.

Bequests and survivor benefits

Consumers want to pass on money to dependants, but it's unclear from the research detailed above whether this refers to survivor benefits or a bequest motive more generally. One of the key problems consumers report having with annuities is that they don't want their money to 'die with them' if they die earlier than expected. Even if a joint life annuity has been chosen, if one partner dies in the early years, it's seen as a loss or a waste of money.

This problem is not dissimilar to members' misunderstanding about falls in fund values while they're saving. NEST research found that many members, especially those on low to median incomes, saw it as money taken out of their pot.[60] They struggled to understand that their contributions had bought shares and that the value of these had changed.

Similarly, it seems annuity consumers may not understand that they've bought an insurance policy.[61] Research for PADA in 2008 found that many consumers didn't know that an annuity is essentially a policy bought for a fixed sum of money from a life assurance company. This perhaps explains the reaction to 'losing' money with annuities. As it isn't thought of as an insurance policy, it isn't necessarily well understood that this isn't refunded on their death.

This is rather different to a desire to leave money to loved ones on death. The evidence suggests that while leaving wealth to family and loved ones is important to many people, the trend to leave money to loved ones at death could be changing in favour of living well in retirement and sharing available wealth when it is needed - see chapter one. The desire to pass wealth down doesn't appear to be influenced by pre-retirement income or social class. It is important to those who have least ability to bequeath, as well as those who are financially better off.[62]

Risk appetites approaching and during retirement

There is evidence that members would prefer to de-risk as they approach the time when they'll be taking their money out of a pension scheme. This is consistent with lifestyling practices in DC in general and consistent with NEST's Consolidation phase. People's general impression is that investment risk is not good. There's a perception that although higher-risk funds might deliver a larger pension pot, members worry about the loss of capital or decrease in income that staying in higher-risk funds might entail.[63]

This apparent risk aversion as retirement approaches doesn't appear to change in light of the new freedoms. However, this insight is taken from research with people who haven't been able to fully consider the 2014 Budget changes alongside their own retirement planning and haven't had the benefit of the guidance guarantee.

Research suggests that consumers don't understand what effect investment losses might have on their retirement. 38 per cent of consumers felt unsure how much of their pension fund they could afford to lose - if re-invested - before it affected their retirement plans. Of those feeling able to give an opinion, 18 per cent felt that they could afford to lose around a fifth. Particularly when looking at those with £20,000 or less, this seems to contradict findings that suggest that expected pension pots will not match up to the levels required to allow consumers to live the lifestyle they desire in retirement.[64]

[60] NEST. Understanding Reactions to Volatility and Loss. 2010

[61] PADA Awareness, Knowledge and Attitudes Regarding the Retirement Process for PADA's Target Audience: Research to explore people's understanding of issues regarding pensions, and their information requirements when approaching retirement. 2008

[62] Which? Unpublished qualitative research on paying for care involving recent retirees. 2014

[63] Defined Contribution Investment Forum. A New Age of Retirement: The end to traditional retirement and the need for new investment solutions to cater for pension accumulation and decumulation. 2014.

[64] Just Retirement Unpublished research 2014

We've previously identified that consumers struggle to categorise pensions, that is, they struggle to define DC as either a savings or investment product.[65] This has implications for perceptions of risk and preparedness to take it. It's possible that consumers will be similarly unclear about the nature of retirement products, with implications for how they view their attractiveness and suitability.

In addition, there are other risks, beyond investment risk, that members will need to consider. Evidence suggests that consumers are both averse to investment and longevity risk.[66] Taken together, this could contribute to wholly inadequate outcomes. Consumers will need to be conservative about how long they expect to live and therefore the amount of time they'll need to make their money last, while at the same time potentially be prepared to be risk-seeking in order to grow their money during a period of financial prudence. From a communications perspective, there is a potential for these messages to appear contradictory.

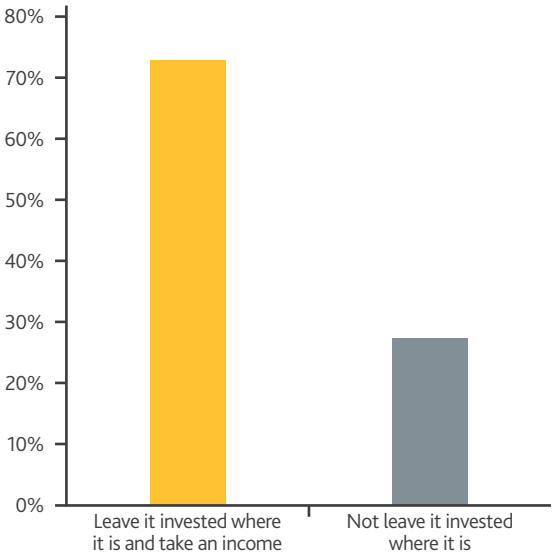
Appetite to leave pension pot where it is

Recent research shows a clear appetite among savers to leave their pension where it is. In a recent survey 73 per cent said that they'd prefer to leave their pension invested where it is than take it out to do something else with.[67] In isolation this seems to suggest that members have an appetite to invest their retirement savings with their pension provider. However, given the evidence base on risk and loss aversion, it's likely that this preference is driven by status quo bias, that is individuals' preference for the current state of affairs. It may suggest that media coverage concerning annuities has left some people afraid of getting the decision 'wrong'.

Many people will have several pension pots. On average, a typical full-time worker could have 11 jobs in the course of their working life.[68] It's unclear what effect this will have on retirement decisions. Encouraging consolidation into a single pot in order to get better rates for annuity purchase or forms of drawdown could be an important part of member communications and the guidance guarantee.

Figure 2.4 Saver preference to leave their pension pot invested

If it were possible, would you prefer to leave your pension pot invested where it is and take an income from it?



Source: Defined Contribution Investment Forum. 2014: A New Age of Retirement

[65] NEST. Improving Consumer Confidence in Saving for Retirement

[66] Milevsky, MA. Optimal Retirement Payout Structures: Reconciling Theory and Practice. Presentation to OECD Special Seminar of Annuities and Pensions. June 2011.

[67] Defined Contribution Investment Forum. A New Age of Retirement: The end to traditional retirement and the need for new investment solutions to cater for pension accumulation and decumulation. 2014.

[68] DWP. Making automatic enrolment work. October 2010.

What do individuals say they'll do after 2015?

This section draws on research with consumers about what they'll do given the new options presented by the 2014 Budget. It should be noted that there's often a significant gap between stated intentions and what people actually do. A good example is automatic enrolment opt-out rates, which are well below the levels suggested by research before the start of staging. In addition, people often respond to surveys with their 'best self' in mind. In this case, it's possible that people are responding based on what they think they'd ideally do. So, what people say they'll do is a decent indicator of preferences, if a poor one of behaviour.

Lump sum withdrawal

Evidence suggests that fewer people plan to take a tax-free lump sum than actually do. A survey of over fifties, including those who'd already taken their pension savings out or were preparing to do so, found that 56 per cent had either taken a lump sum or were intending to. This is somewhat different to the eight in 10 actually taking lump sums identified by previous analysis.

On average, consumers planning to take a lump sum expect to take just over £42,500, considerably more than 25 per cent of the average total pension pot. This doesn't reflect median pot size now or likely median pot size in the future. What this does reveal is that lump sums are attractive to people and that they have high expectations of this feature of their pension. Changing data on debt levels and mortgage sizes may play a part in decisions about lump sums in the future.

By and large, consumers don't want to take all their money as a lump sum. Where they do intend to take the whole pot as cash, pot values are small and this option was probably open to them before the 2014 Budget changes.

Living off their pension

Overall, consumers say they'll use their pension to provide them with an income in retirement, but they're unclear on how they'll do this and are unclear about their options.

Using drawdown equivalents

There is little in the way of large-scale research on broad consumer appetite for drawdown. More people are taking traditional drawdown products but those approaching retirement now aren't familiar enough with them to have an informed view.

Consumers are keen to leave their pension pot invested where it is. It's unlikely, though, that they really understand their risk capacity or how they might fund their retirement in this way given the size of their pension pot and their other retirement resources.

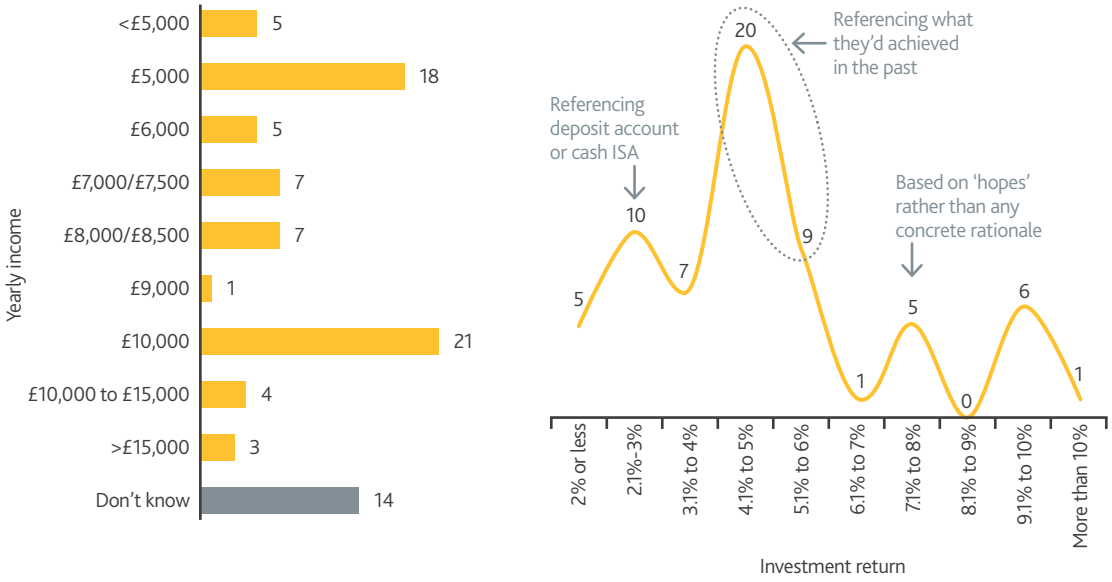
Some consumers said they'd leave their pension where it is and take repeated lump sums.[69] Where this was discussed, consumers anticipated that there'd be time limits imposed by their provider on withdrawal. Some suggested that flexibility should be built in so that they can respond to unexpected life events.

[69] Unpublished NEST Research. 2014

It appears that consumers don't fully understand the interaction between pot size, longevity risk and how long their withdrawals of lump sums to live off in the determined periods would last. When consumers were asked to estimate how much they could drawdown in a year and the investment return they expected to make each year after charges, the picture they presented was quite out of step with pot size.

Figure 2.5 Drawdown expectations based on a £100,000 retirement pot

How much income each year would you expect to be able to take from a pot of £100,000? What investment return would you expect to be able to make each year after charges?



Source: Ignition House for NEST 2014. Base = 85 respondents. Data presented as counts (left hand chart). Base = 64 respondents. Data presented as counts (right hand chart).

How consumers form their preferences

While we like to think that what we want and choose is based on consideration of the best options, psychological research has shown that we're predisposed to prefer certain options that reflect and speak to our emotional biases. The evidence supporting these ideas has been widely discussed in recent years and so we don't cover it in detail here. What this means, though, is that what people want and are attracted to isn't necessarily the most optimal or rational economic option. This in turn means that designing products or approaches based simply on what people say they want is potentially fraught with difficulty.

In this section we outline the key emotional biases and preferences we believe to be most important and relevant to designing appropriate retirement solutions. We'd welcome further input on how emotional and behavioural biases impact retirement decision making.

Prospect theory

Prospect theory shows that people are much more sensitive to losses, weighting them twice as much as gains.[70] This can drive people to make choices that don't make rational economic sense. This can affect how value is perceived in annuities[71] and potentially prevent consumers from taking risk that they have the capacity to take during retirement.

Certainty bias

There are a number of uncertainties that members need to negotiate with when planning for retirement. Investment uncertainty is just one of these. Others include divorce, death of spouse, potential care costs of unknowable degrees, periods of high or low inflation, an inability to work for longer, housing equity, changes in state benefit allowances and the policy landscape, and longevity. When and whether any of these risks will be realised is highly unpredictable. Members can take steps to mitigate the impact of them but only to the extent that they can afford to.

Neurologists have discovered an inbuilt preference for certainty in the human brain.[72] Where there is uncertainty, the brain fills the gap with fear. As such, people tend to perceive uncertainty as intrinsically negative. Psychologists have found that people prefer a lower outcome with more certainty over a much higher, more uncertain outcome even with good odds. This has implications for members' ability to judge drawdown and investment related products against those that deliver certain and consistent outcomes.

We've recently considered members' desire for certainty in detail in NEST's publication *Improving consumer confidence in saving for retirement*.[73]

[70] Kahneman, Daniel, and Amos Tversky. 'Prospect Theory: An Analysis of Decision Under Risk'. Econometrica. XLVII (1979): 263-291.

[71] Extended Abstract for Behavioural Finance Working Group/M&A Research Centre Conference, Cass Business School, London, UK.

[72] Crammer, C. (2005) 'Neural systems responding to degrees of uncertainty in human decision-making'. Science 9: Vol. 310, no. 5754: 1680-1683

[73] NEST. Improving consumer confidence. 2014.

Present bias

Economists have long understood that, overall, people are more likely than not to prefer consumption in the present over deferred consumption. Economists have also traditionally seen people as discounting future consumption exponentially in proportion to the length of the delay. The rate at which people do this – how much they value consumption now rather than in the future – varies from person to person. This is one possible explanation for low levels of voluntary pension saving seen prior to automatic enrolment. Not only does the amount which a person discounts future consumption vary from person to person, it may also vary over time.[74]

Research suggests that present bias currently influences consumers' choice of annuity. Most consumers choose or default to a level annuity in spite of a stated preference by many for inflation protection. When faced with the trade-off between the two options, a bias or need for more money today prevails. Research does not tell us whether consumers are making an informed decision about the impact of inflation on their future income. We've found little information on the decisions made to buy or not buy a guaranteed period, although present bias appears to play a part in decisions not to buy.[75]

Consultation question

5. Taking into account current retirement decisions, what people say they want and what the evidence says about behavioural biases, how are savers likely to act under the new freedoms?

6. What member behaviour risks do providers need to manage?

[74] Laibson, D Golden Eggs and Hyperbolic Discounting: The Quarterly Journal of Economics Vol. 112, No. 2, In Memory of Amos Tversky (1937-1996) (May, 1997), pp. 443-477

[75] Financial Conduct Authority. Pension Annuities: A Review of Consumer Behaviour. 2014.

Chapter three
Objectives and risks

Chapter highlights

- When making decisions members are likely to be very diverse in terms of their willingness to engage with their savings and their abilities to navigate the different options available to them.
- We suggest there are eight broad objectives and risks trustees should be considering - conversion risk, inflation and growth, longevity risk, flexibility, investment risk, market timing risk, clarity and cost.
- DC pension saving may be required to fulfil more functions for retirees in the future than has been the case to date.

The previous chapters have presented evidence about what members might reasonably need and what members want. This chapter looks to explore how trustees might translate this evidence and additional evidence from responses to this consultation into clear objectives to meet and clear risks to manage.

Member interest

Understanding members' needs and aspirations is one part of what trustees need to think about when designing an investment approach and options for retirement. Trust-based pension schemes need to balance this understanding with their fiduciary duty to first determine and then act in members' best interest.

In an automatic enrolment world where members are not required to make active decisions this has proven particularly relevant and challenging for designing default investment approaches. Increasingly this challenge will be felt by trustees when considering how their members are likely to want to convert their DC savings at retirement. There are likely to be times when members give trustees little direction as to what they want or need. There will also be times when what people say they want and what may be in their best interests as determined by trustees is not aligned.

Resolving these challenges and conflicts is key. Areas of design that trustees need to consider include:

- default investment approaches up to the point members want to take their money
- their role and responsibilities in helping members achieve their retirement goals when they look to access their pension saving.

Tied up with these two challenges is how members' options are communicated, and how trustees of a scheme can help members make reasonable decisions. This is particularly relevant in a world where inertia and a lack of engagement have been dominant features of the accumulation phase of saving.

Different levels of engagement

The new reforms increase member choice when they take their money out. The extra flexibility provided by the reforms is likely to lead to greater opportunities for NEST members to access their savings in ways that meet their particular needs. However, extra choice carries with it its own challenges. In particular, the difficulty of how to help members who find making longer-term financial decisions intimidating and those who just don't engage with their savings at all.

Discussion within the pensions industry about the free guidance guarantee announced in the 2014 Budget suggests that members of pension schemes fall into one of three broad segments.

- **Segment one** – high financial capability and experience

  These members are likely to be engaged with their pension saving and have a clear plan for their retirement. They're likely to seek professional financial advice and be prepared to pay for it, providing their pot size warrants it. Clear and timely signposting to their options within the scheme and on the open market is likely to meet the needs of these members.

- **Segment two** – less financial experience and less likely to want to pay for professional financial advice

  These members may well want to engage but they're likely to find financial decision making daunting and worry about making the wrong decisions. Providers will need to give these members straightforward options and decision making tools to guide them to suitable choices. There's more discussion of these options in chapter four.

- **Segment three** – very little financial experience and low levels of engagement

  These members will need a lot of support from providers, probably in the form of default strategies. We look at this in more detail in chapter five.

The objectives and risks that savers face as they approach retirement may well be similar for all three groups. The second two groups we envisage requiring a more interventionist approach from trustees, either by making their options and choices more manageable or making decisions on behalf of those who don't engage.

Managing key risks

Before the 2014 Budget proposals for greater flexibility and choice, objectives for DC schemes were relatively straightforward. Most members were likely to take cash lump sums and purchase an annuity. DC schemes' objectives focused on the accumulation phase and tried to smooth the transition into annuities and cash. The new freedoms raise new risks and opportunities around the decisions members might make or that trustees make on their behalf.

Our analysis of the research presented in the chapters on member needs and expectations has led us to outline eight main objectives that trustees will need to address when they consider what they're trying to achieve for their members and also assess what are the likely investment or annuity tools to deliver on these objectives. There may well be tension between some of these objectives, and different objectives will be more relevant for different types of member and different sized pots.

- **Conversion risk**
  When a member comes to take their money out, their asset allocation at maturity should ideally align with the underlying asset allocation of their method of withdrawing their retirement savings. Significant mismatches could lead to extra costs or greater uncertainty of whether expectations will match outcomes. For example, if someone wants to take their whole pot as a cash lump sum, high allocations to illiquid or volatile assets should be avoided in the run up to retirement.

- **Inflation and growth**
  Retirement pots or income streams will be at risk of losing real value through inflation. How pots and incomes are protected against inflation erosion - particularly for those who retire early or those who live for a long time - will be a key question for trustees and individuals.
- **Longevity**
  When most DC members had to buy an annuity, longevity risk was largely taken on by insurance providers. In the new regime, managing the risk of running out of money or not spending enough will become more of an explicit risk to be managed for people who don't annuitise or who only partially annuitise.
- **Flexibility**
  Retirement is a process that for many will be punctuated by unexpected events that are more common in older age. The ability to change plans and have access to pots is a key feature of the reforms. Solutions need to be flexible and reasonably liquid, or there needs to be a clear and significant advantage in taking up less flexible options.
- **Investment risk**
  Research shows that the automatic enrolment demographic has significant concerns about excessive volatility and the possibility of loss while saving for retirement. Evidence suggests that in later life this loss aversion is even more pronounced. Solutions in the new regime will need to recognise the emotional impact of down-side risk and the impact of the reduced capacity to work to meet any losses for people at the end of their working lives.
- **Market timing risk**
  The time at which an annuity is purchased can have a significant impact on outcomes. Similarly, in drawdown strategies the performance of markets at the point in which an individual starts to draw down their pot can produce wide dispersions of likely outcomes.
- **Clarity**
  Providers will need to consider how to make choices clear to consumers who aren't familiar with investing or ways to take their money out of pension schemes, and who don't have much confidence making long-term financial decisions. Solutions that can be explained and communicated easily are more likely to build confidence and trust than approaches that are opaque and require detailed expertise and knowledge.
- **Cost**
  Providers will need to be able to demonstrate both actual value for money, as well as addressing perceptions of value for money. A feature of the annuity market in the past has been rightly or wrongly a perception that an annuity doesn't offer value for money. Similarly, drawdown products have been perceived as expensive and therefore only suitable for a wealthy minority.

As well as addressing these issues, there appears to be a significant appetite for greater certainty of outcomes while saving, and also a degree of certainty of income when members move from the accumulation to the consumption phase. This may lead to investment approaches that seek to underpin a certain level of income or provide a greater or lesser degree of certainty at the end of the pensions saving phase. Chapters six, seven and eight look at possible ways of meeting a desire for greater certainty.

While other considerations may come up for trustees, we suggest that most will be a variation of one of the eight broad areas outlined above.

Consultation question

7. Are there other risks and objectives to be taken into account for DC savers approaching and in retirement?

Replacement rates and the State Pension

As set out in chapter one, the nature of pension saving and wealth at retirement is changing. Increasingly, individuals will be reliant on just DC pension savings and a flat-rate State Pension to meet their needs in retirement. A feature of future retirement options will therefore be the reduced diversification of pension wealth, with much less accrued DB wealth and no Additional State Pension.

Figure 3.1 provides some simple modelling to illustrate how replacement rates of DC saving combine with the new State Pension, and how the role of DC saving has different replacement rate impacts across the distribution between the 10th and 90th income deciles. These are likely to be the savers that may have to rely on their DC pots to provide much of their retirement needs.

For all those except at the lowest end of the income distribution, solutions that involve more than just taking their saving as a cash lump sum look set to become increasingly important. However, it also suggests that for many the State Pension will provide – if uprating policies such as the triple lock remain in place – a secure and inflation-protected base income for life. When considering objectives and tools for retirement solutions we would be interested in views as to the interaction of the new State Pension and optimal ways to take money out of DC pots.

Figure 3.1 Contribution of new State Pension and DC saving to replacement rates across the income spectrum

Modelling assumptions: Income ranges cover most of the working age population by income decile based on one person household (bottom and top deciles not part of NEST's target market - as determined by automatic enrolment rules and restrictions on annual contributions to NEST). The State Pension is assumed to be the new State Pension. Individual is assumed to have full contributory history. Contributions to DC pension set to 8 per cent. Number of contribution years is set at 35 years to mirror full State Pension entitlement. Earnings assumed to grow with inflation (i.e., remain the same in real terms). Investment growth based on NEST's return objectives of broadly 2.5 per cent real growth. Charges are NEST charges (roughly equivalent to 0.5 per cent of AUM). DC Income calculated on the basis of a single male, age 65 taking a flat rate annuity of 5.89 per cent and not taking a 25 percent cash lump sum.

Source: NEST

Chapter four

Engaging members with their retirement options

Chapter highlights

- On average, people start planning their retirement at age 57. This is several years after the time when most DC schemes will have started de-risking.
- People generally don't decide how they'll take their pension pot until the time comes to actually do it.
- From a member's point of view there are a number of good reasons to leave decisions on taking their retirement pot until close to the event. These reasons include pot size, knowable financial circumstances, certainty of pot size and likely income becoming clearer closer to retirement.
- Despite general low levels of trust reported in pensions and financial services, evidence shows that people trust their own pension provider more than consumer groups and other sources to give them information on what they can do with their retirement pot.
- Theories of consumer behaviour suggest that providing information, framing choices and delivering advice and guidance appropriately are all important in shaping outcomes.
- The problem for members when planning for retirement is not bad heuristics but the lack of any frame of reference when making retirement planning decisions. Members lack relevant experience and the confidence to make decisions.
- Making good financial decisions as individuals get into their mid-fifties is likely to become increasingly problematic. By the time people get into their eighties, approximately half of the population suffer from a significant cognitive impairment, which makes them much less capable of making important financial choices.

Automatic enrolment pension schemes don't just have the problem of providing members with a suitable range of options, they also have the challenge of getting members to make any choices at all. This chapter looks at the different ways that providers might encourage members to make appropriate decisions and make these decisions at the right time. We set out some of the challenges and opportunities for providers in retirement-planning communications and stimulating engagement.

Barriers to engagement

Aside from attitudinal and emotional barriers, there are some physical and logistical barriers to engaging with pensions. Pensions are low touch-point products with no requirement for members to be in contact with their provider until the day they take their pension. People can also acquire many pension pots over their working life and lose track of them. People move and their contact details change and pension providers tend to be at the bottom of the list of organisations to inform.

In addition, there's the possibility that automatic enrolment, which sought to harness inertia - the power of doing nothing - might encourage consumers to think that there's no need for them to engage.

Much of the available evidence on retirement planning is based around retirement as a distinct, one-off event that occurs at the end of working life. This isn't the reality for many people's retirement and is likely to be less common in the future. Understanding how our members will make the transition from an active, working life to relying entirely on their pension savings will help us to maintain a scheme that meets their needs.

What drives engagement with retirement planning?

Studies report that not enough people are planning for their retirement and the plans that many people make are inadequate, or made far too late. Over a third of people realise after they've retired that their planning was insufficient, with potentially serious consequences for their standard of living in later life.[76] Survey research suggests that on average people spend more time planning their annual holidays than their retirement. One in 10 spend less than an hour arranging their retirement income.[77]

On its own, this appears to point to a lack of preparedness for a period of critical financial importance. But the situation is more complex than headline statistics suggest. In this section, we unpick what we understand about people's motivations for retirement planning.

Age and proximity to retirement

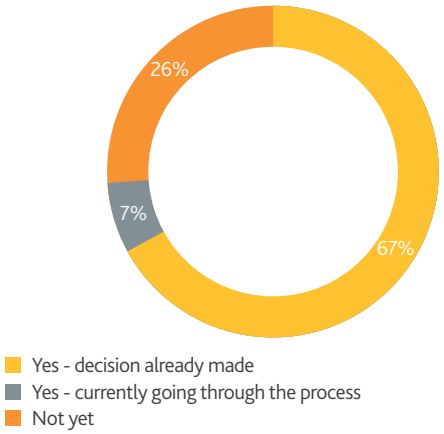
Engagement with pensions is generally low but it does appear to improve as people get closer to retirement. Interest in pensions increases after age 55 as people begin to head into retirement.[78] This contrasts markedly with pension scheme members generally, where less than a third say they look at their annual pension statement.[79]

[76] HSBC The Future of Retirement: Life after work? UK report. 2013
[77] Legal and General and Unbiased.co.uk. January 2014.
[78] NEST Unpublished research 2014
[79] Department for Work and Pensions. Understanding responses to pension forecasts: Qualitative research. 2008

Recent survey data suggests the average age people start to think about how they're going to access their pension and other assets for retirement, is around age 57.[80]

Figure 4.1 Decision making about retirement savings

Have you taken a decision yet on how you will access your pension savings and/or other savings and investments when you start to take out a lump sum or retirement income from them?



Source: Just Retirement, 2014 - 1,000 consumers aged 55+

Many people do no planning until they're due to take their money out of the scheme, or very close to it. Recent research shows that on average there's a year's gap between when people think about how they are going to take their pension and when they take action.[81] Annuity purchasing behaviour indicates that people start planning a matter of months, weeks and even days rather than years or decades, before making a decision.

Pot size

Analysis reveals that engagement and interest is correlated with pot size.[82] Pot size is also the strongest predictor of whether someone will shop around for an annuity.

It isn't clear whether there's a 'tipping point' pot size that stimulates interest, or whether this correlation reflects member affluence, social class and possibly education.

Gender

Evidence suggests a link between gender and retirement planning.[83] It's been observed that men report more interest in their pension than women and women tend to leave their retirement planning a year longer than men on average, even though women will on average live longer. Recent research for NEST also suggests that women report less confidence in financial planning than men, although the same research suggests male confidence may be misplaced.

[80] Just Retirement Unpublished research 2014
[81] Just Retirement Unpublished research 2014

[82] NEST Unpublished research 2014
[83] Unpublished Research for NEST and for Just Retirement, respectively. Both 2014. See also Crawford, R and Tetlow, G (2012) Expectations and experiences of retirement in Defined Contribution pensions: A study of older people in England

Box 4.1

What can we learn about engagement from the international evidence

Australia is often held up as a comparison for the UK. The Australian system has full compulsion and higher levels of contributions into occupational schemes. But despite there now being a more developed culture of retirement saving, engagement levels among members are low. More than half of Superannuation members are not engaged.[84] When engagement does occur, decisions are taken but not necessarily 'best' decisions that optimise benefits given individuals' circumstances. Many accept the default option and many choose cash as their primary asset class.

Efforts from the industry to stimulate engagement and good decision making through education and information have had varying degrees of success. Customised communications for different member segments, along with the use of peer-group comparisons - which are also used in the US - are gaining traction. But the industry is turning to product design to help members prepare for retirement, given the limited impact of efforts to boost financial literacy. At the same time, many members are unhappy with the quality of communications from their fund and the relationship between fund and member generally.[85]

We would be interested to learn more about the international experience on 'what works' with respect to member engagement - and in particular are their specific 'moments of truth' that can prompt members to engage with their scheme such as when savings reach a certain size, or particular life events happen?

The US also offers a useful comparator. One study found only a third of adults in their fifties have ever tried to devise a retirement plan[86] and a third of pre-retirees report a planning horizon of less than 10 years, while 35 per cent plan to never retire.[87] 73 per cent of middle-income Americans aged 47 to 65 say their financial situation, not age, is now the key indicator for when to retire.[88]

Financial literacy and confidence

[84] CoreData Member Engagement Report 2012.
[85] State Street. Get Engaged: Overcoming Member Barriers to Healthy Decision-Making. 2013.
[86] Lusardi, A and Mitchell, O S. 2011. Financial Literacy and Retirement Planning in the United States NBER Working Paper No. 17108
[87] Society of Acturaries. See: https://www.soa.org
[88] See http://www.centerforasecureretirement.com/studies/

There is some evidence to suggest that financial literacy and confidence drive engagement in retirement generally. That is, those who are more financially confident are found to be engaging more with pensions and retirement planning than those who are less confident.

The evidence suggests that confidence in retirement planning and getting involved in doing it is a two-way street. Cognitive sciences have shown that people employ 'heuristics', or experience-based rationales, to problem solving as a way to aid decision making. Heuristics are inherently conservative. They follow the tried-and-true method of building on what has already happened. When a person is confronted with an unfamiliar situation, heuristics begin to flounder and they lose confidence.

Experience-based rationales to decision making aren't perfect and can result in mistakes, but without these to unconsciously draw on, people feel ill-prepared to even try.

It's unsurprising, then, to find that people are generally more confident about their short-term financial planning than they are the long-term, because they do short-term planning more often. It's also unsurprising to find that those who have been in a pension prior to automatic enrolment report higher levels of confidence with longer-term financial planning than those who weren't contributing - 57 per cent compared to 39 per cent.[89]

Research with pension holders over 50 finds that those who are less engaged generally find pensions more difficult to understand than those who present as more engaged.[90] But it's not clear whether engagement produced gains in financial confidence and literacy or whether it's simply the financially literate and confident who were engaging.

Certainly the act of engaging, from a cognitive point of view, is a virtuous circle for experience and confidence levels. But there are some signs, from research with the newly automatically enrolled, to suggest that engagement has the potential to increase financial literacy and confidence. NEST evidence finds that NEST members who have activated their online account feel more informed than those who have not.

[89] NEST Insight 2013. For recent research on every day financial management, see also Money Advice Service. The Financial Capability of the UK. 2013

[90] NEST Unpublished research 2014

Uncertainty in retirement planning

It's well documented how uncomfortable people are with uncertainty and that people prefer not to commit when key variables are unknown. It seems that people feel more able to plan when there is more certainty. Research on contribution levels in the context of uncertain defined contribution outcomes has found that people are much more inclined to consider their contributions if the outcome of changing their contributions can be known.[91]

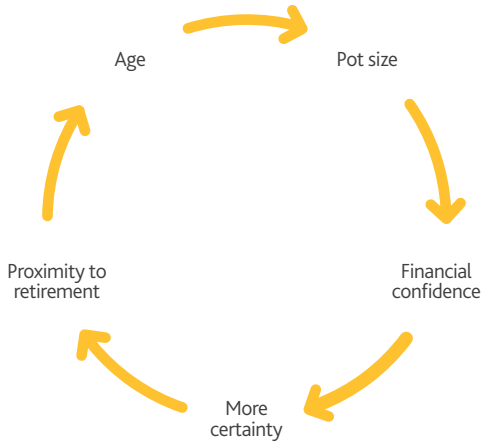
How the drivers of retirement planning correlate

It's difficult to determine from the available evidence that we're aware of, which of the above drivers are causal. These appear to be the main factors that correlate in some way with when people begin to think about retirement planning and take action with regards to accessing their pension pot. They appear to co-occur and it isn't clear whether any of these singularly prompts engagement.[92]

It's likely that each of these correlate with engagement and retirement planning because they all converge at a similar point:

- pot sizes are larger when people are older and closer to retirement
- people have gained more experience of financial planning when they're older and are therefore more financially literate and confident.

Figure 4.2 The drivers of retirement planning



The point at which confidence and pot size are both high and retirement is close is also the point at which people have more financial certainty in a number of important respects. They are likely to know more about things like whether they'll be able to pay off their mortgage and the value of their pension pot. In most DC schemes outcomes become more certain as savers get closer to the date they'll take their money out. At the same time, they'll have accumulated wealth or not and lack of time will greatly diminish the chance of changing this. Finally, they'll have a much clearer idea about their ability or desire to work for longer.

It seems then that factors linked to current retirement planning are also associated with a more certain pension outcome and financial resources for retirement generally. These together create a virtuous circle for retirement decision making.

[91] NEST Improving Consumer Confidence in Saving for Retirement. 2014
[92] Crawford, R and Tetlow, G (2012) Expectations and experiences of retirement in Defined Contribution pensions: A study of older people in England

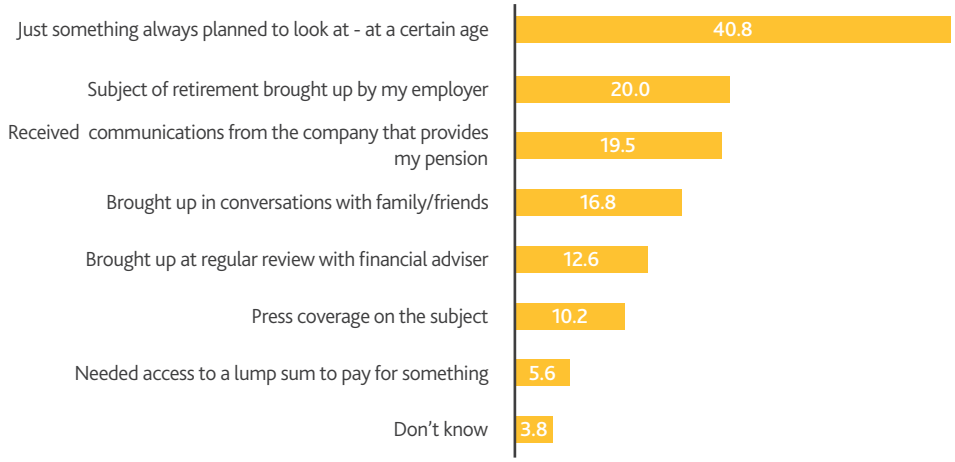
Other factors that might drive retirement planning

People give a number of reasons for starting to think about how they're going to start the process of retirement.

It's notable in figure 4.3 that 40 per cent of people say they'd always planned to engage with retirement planning at a certain point - which ties with the average age of 57 for planning. They say that this, rather than any other reason, prompted their retirement planning. This is important because, rather than late planning as a lack of foresight or a panic response as retirement looms, it's conceivable that this is simply the point that many people see as a reasonable time to start. This could perhaps be because they saw no advantage to doing it any sooner or perhaps because they didn't feel they would be in a position to really plan until this point.

Figure 4.3 What drives initial activity?

What was it specifically that prompted the need for you to think about how to access your pensions and / or other savings and investments in order to support your life in retirement? (percentage, more than 1 answer possible)



Source: Just Retirement, 2014. Unpublished

Accessing help in retirement planning

While people generally don't have much confidence in their ability to make decisions about taking their money, they're also unlikely to take independent financial advice. Most people who shop around for an annuity do so with the support of someone who can provide them with factual information to allow them to make their own choice. This could reflect the potentially more varied and complex options available to people who can afford to pay for financial advice. But it could also reflect a preference for one-to-one support with decision making from someone they trust.

Recent survey research shows that, overall, people would prefer advice to be delivered through one-to-one interaction, but there's a clear upper limit to what people are prepared to pay. They'll baulk at costs above £500, and expect to pay about £150.

While 41 per cent say they'll do their own research, 18 per cent say they'll be led by their current pension provider.[93] In reality, this 18 per cent could be closer to the 50 per cent who buy an annuity with the provider they held a pension with.

What sort of support do people want with retirement planning?

While it might be better for people to engage in retirement planning earlier than they currently are, consumers have yet to catch up with why. As such, their support requirements are led by what they think would help them at the point at which they take their money out, or close to it, rather than 10 or more years beforehand.

Understanding options and product comparison

Recent qualitative research showed 59 per cent of consumers are looking for support simply in understanding the different options available to them as they approach retirement. This points towards a limited understanding of retirement options.

45 per cent are looking for help identifying with which providers offer the best deals. Where people have used, or say they are intending to use an independent adviser, a relatively high proportion - 55 per cent - are interested in an adviser helping to outline which providers offer the best deals, not unlike a comparison service.[94]

[93] Just Retirement. Unpublished research. 2014

[94] All figures in this section are taken from Just Retirement. Unpublished research. 2014

There are signs that so-called 'shopping around' activity for annuities is improving.[95] However, there is a lack of shared understanding about what 'shopping around' actually means. It has come to mean everything from considering more than one option to using an adviser to review the market on behalf of their client.

Tax and interactions with state benefits

Consumers are confused and sometimes mistaken about the tax implications of their retirement choices. As such, some consumers could potentially benefit from a better understanding of income and pensions tax regimes, and there is some stated interest in this sort of support. The same applies to the effect pension decisions have on means-tested benefits.

Notable absences from stated support needs

Overall, the desire for support stems mainly from a desire to make the most economic product choices. This might reflect the previously limited options outside of annuities. However it's notable that consumers are not currently looking for support with whether or not they should take a lump sum, how much of a lump sum they should take, and how can they make their money work to meet their changing spending needs. These might well become paramount to good decision making but consumers' desire for help hasn't caught up with their changing options and needs.

Drawdown options represent a significant area for confusion

Research suggests that while members want to leave money with their pension provider and 'draw it down', they don't understand how drawdown products work.

The communication challenges this raises are similar to those around informing members about what happens to their money while they're saving, which has been the subject of extensive research by NEST. There are a number of topics that respondents struggle to come to grips with.[96]

- The fact that pensions are currently invested in anything other than a building society like account and that a DC pension isn't 'guaranteed'.
- What they're currently invested in and how life styling works.
- The implications of holding the entire fund in a 'safe' account for the next 20 years.
- That charges can vary considerably and that not all charges will be clear.
- That they might spend as long drawing down the fund as they did building up the fund, and the implications for how much risk they might be willing to take.
- The importance of investment returns on how long the money will last.
- The implications of a fall in the value of the fund early on in retirement.

[95] Association of British Insurers. Retirement Choices: Measuring the Effectiveness of the Code of Conduct. 2014 (publication pending)

[96] NEST Unpublished research. 2014

Previous research has shown that members perceive risk as a 'chance of losing' rather than the possibility of gaining, as described in chapter two. Communications about drawdown products will need to account for the high levels of loss aversion among consumers, as it could mean that this option isn't considered even where it might be suitable. At the same time we know that members are attracted to drawing down lump sums and leaving their pension where it is. Again, communications will need to be aware of this and help members to trade-off their desire for drawing down from their current provider with a level of risk they are willing and able to take, and an understanding of what represents value for money.

Appetite for online tools and resources

As is the case while they're saving in a pension scheme, people state in research that they'd find online tools helpful to aid their decision making. However, it's not known how far in advance of retirement people would begin to use these tools, or whether it's possible to stimulate engagement with them several years before they access their pension. In particular, people say they'd appreciate tools that show them the outcomes of a variety of 'what if?' scenarios. While on the one hand this shows that people are interested in the impact of different options, it also might suggest that they're keen to find a scenario that closely resembles their own circumstances and preferences to help them make the right choice.

People are also keen to engage specifically with their pension pot value and how long it would last under different retirement options. Where, hypothetically, a drawdown product had been taken up, members are keen to see an indication on their annual statements of how long the money would last based on current value and performance.

Previous research has revealed that providing this sort of information while members save can be demotivating. While this is arguably less of a concern when they're taking their money, it does suggest a mismatch between the amount members are contributing and their expectation regarding how much they should get.

What role does trust play in supporting retirement planning?

We know that trust is important. In some settings, who is providing support is as important as what they say, if not more so. But trust in the financial sector in general is low. We also know that the majority of DC consumers see little difference between pension brands. Who do members trust to give them retirement planning support and what role is there for pension providers here?

If pressed to rank the trustworthiness of different sectors within financial services, consumers generally place greatest levels of trust in face-to-face professional advice from a qualified adviser. After this, pension providers are the next most trusted source for independent and unbiased information. They're more trusted than information online, the third sector or the financial press.

Helping people to make good decisions

In previous published research, we've discussed lower financial literacy in the target market, which reflects the wider issue of poor financial literacy in the wider population. While financial capability and numeracy are important in how people interpret retirement information and make decisions, they're not the only or necessarily the most important factors at work.

Rational economic theory assumed that information was abundant and perfect and that, given the right information, consumers would make rational choices and seek to optimise benefits. The evidence strongly shows that this isn't how we make choices and that providing good information might not change behaviour or result in good decisions.[97]

There are a number of preferences and beliefs that are determined by our emotions. As chapter two outlines, these guide the options we're attracted to, even at the expense of other options that might produce better benefits. There are also a number of behavioural tendencies that, as chapter five explores, can prevent us from acting at the right time.

When people make choices, they make them in an environment where many features, noticed and unnoticed, can influence their decisions. Thaler et al. dubbed the person who creates that environment 'a choice architect'. The choice architect needs to be aware of several aspects of how people make decisions to support their choices without over influencing them to choose a specific option.

Getting the choice set right

We know that people value choice. When people are asked if they want choice, the answer is almost always 'yes' as, ultimately, we'd all rather have options than not. It's been argued that we have an innate need for control, and having the opportunity to make choices is central to fulfilling this need.[98] We know too that while people value choice in the abstract, they might not exercise it at every opportunity. However, this doesn't make having choice any less important. The perception of being in control is often enough to satisfy our need for it.

Some behavioural scientists have argued that there's a limit to how much choice we need to feel in control. Offering more choice to consumers isn't always helpful, as it can increase procrastination, reduce satisfaction and drive individuals to simple options or even result in decision paralysis.[99]

[97] de Meza, D., Irlenbusch, B. and Reyniers, D. (2008) Financial Capability: A behavioural economics perspective, Financial Services Authority.

[98] Leotti, LA, Sheena S. Iyengar, Kevin N. Ochsner. Born to Choose: The Origins and Value of the Need for Control. Trends Cogn Sci. 2010 October; 14(10): 457–463.

[99] Iyengar, S, Lepper, M. When choice is demotivating: Can one desire too much of a good thing? Journal of Personality and Social Psychology, Vol 79(6), Dec 2000, 995-1006

Some choices are more complex than others. It seems that the more difficult the choice is, the less desirable it is to have a lot of options. Iyengar et al show that offering a long list of investment options where workers are given 50 or 100 choices of funds is confusing and de-motivating for some. Based on data from 800,000 US employees on the uptake of 401(k) retirement schemes, the research found that 'other things equal, every 10 funds added was associated with a 1.5 to 2 per cent drop in participation rate'. They propose that group choices should be no more than five to nine categories.

Financial decision making and pensions in particular are perceived to be notoriously complicated. The stakes are high in terms of the impact our decision could have and making the decision generally involves navigating through technical language and concepts that are outside of everyday experience. As many consumers told us they'd prefer to defer financial decision making with respect to their pension to 'an expert they trust' rather than make the decisions themselves.[100] This perhaps reflects that many members feel choice to be a burden.

How people make choices

As mentioned, cognitive scientists have demonstrated that people tend to adopt experience-based - or heuristic - problem-solving approaches to their decision making. This is a far more practical way of dealing with the many decisions people make each day than systematically weighing up the pros and cons of every situation. They aren't inherently bad and, indeed, it's our use of heuristics that allows us to get on with life.

However, they aren't a perfect way of making decisions and, occasionally, we make mistakes. Often these mistakes are inconsequential and we move on. However, when it comes to financial matters and retirement planning, the stakes are higher and the implications of making a mistake are more severe. We aren't naturally good when assessing odds, seeing ourselves in a distant future context or in contradicting a currently held hypothesis - that is, we prefer to believe the view we already hold. We display these characteristics in the heuristics we employ.

[100] NEST, Retirement Projections. 2013

Framing effects, language and meaning

Framing effects influence the way that people interpret probabilities. People will react differently to the same information about risk and probabilities if it's presented in the context of success than they will if it is presented in the context of failure - see Ricciardi 2004.[101] People may respond differently to a 20 per cent chance of success than they will to an 80 per cent chance of failure.

Other research from Iyengar indicates that careful considerations on how to present and frame information may aid people with their financial decisions.

Research suggests that as the problems are as much about the understanding of underlying concepts as with the vocabulary itself, problems run deeper than just the language. People need to have concepts explained to them if they're to cope with commonly-used terms. It's important that anyone providing retirement planning information has looked not just at the accessibility of language but at the meaning that's conveyed. We have found some significant misunderstandings while researching our member communications. Terms that are apparently accessible can lead to misunderstandings with serious consequences.

Financial decision making in older age groups

While financial confidence appears to grow with age, this isn't always borne out in decision making. 89 per cent of people in the Money Advice Service Capability Survey were able to identify a better deal from two financial options. But for those over 55, nearly one in five picked the wrong option.[102] The Financial Conduct Authority (FCA) found that 80 per cent of consumers who purchase their annuity from their existing provider could get a better deal on the open market.[103] Even if people feel more confident, they're still capable of making mistakes. They've also potentially built up financial decision making habits that may be suboptimal but provide comfort nonetheless.

The English Longitudinal Study of Ageing (ELSA) provides a six wave longitudinal dataset detailing the lives of people aged above 50 over time. The questionnaire includes a multiplicity of health-based questions, including a section administered by a nurse. It also includes two tests of cognitive function. These comprise a fluid intelligence test focused on numeric problem solving and a memory test based on the ability to recall a list of previously heard words.

[101] Ricciardi, V, A Risk Perception Primer: A Narrative Research Review of the Risk Perception Literature in Behavioural Accounting and Behavioural Finance (July 20, 2004).

[102] The Money Advice Service. The Financial Capability of the UK, 2013

[103] Financial Conduct Authority.Thematic Review of Annuities. 2014

Cognitive ability and age

Wave 6 of the ELSA survey examines two aspects of cognitive function in people aged over 50 - recall and fluid intelligence. Table 4.1 shows the progress of both of these aspects by five-year age band.

Table 4.1 Mean cognitive function scores, by age and sex: wave 6

Age in 2012	50-54	55-59	60-64	65-69	70-74	75-79	80+	All
Men								
Recall	11.3	11.3	11.4	10.5	9.5	8.5	7.3	10.3
Fluid intelligence	543	541.8	542.8	539.4	533.3	530.3	519.7	537.9
Women								
Recall	11.9	12.2	12.1	11.5	10.1	9.4	7.1	10.8
Fluid intelligence	535.3	534.5	534.9	531.3	524.1	521.8	511.8	529.2

Source: ELSA wave 6, table H6a

Banks J. Nazroo J. Steptoe A. (2014) 'The Dynamics of Ageing: Evidence from the English Longitudinal Study of Aging 2002-2012' http://www.ifs.org.uk/uploads/elsa/docs_w6/ELSA%20Wave%206%20report.pdf

Box 4.2

Definitions of cognitive ability

The age-related process of neurodegeneration is complex and its determinants are not yet well understood. One conceptual framework distinguishes between two types of abilities, fluid intelligence and crystallised intelligence.[104] The first type, fluid intelligence, consists of the basic mechanisms of processing information which are closely related to biological and physical factors.

One important aspect of these abilities is the speed with which many operations can be executed. The second type, 'crystallised intelligence', consists of the knowledge acquired during life with education and other life experiences. Unlike fluid intelligence, which is subject to a clear decline as people get older, 'crystallised intelligence' tends to be maintained at older ages and is subject to a lower rate of age-related decline.

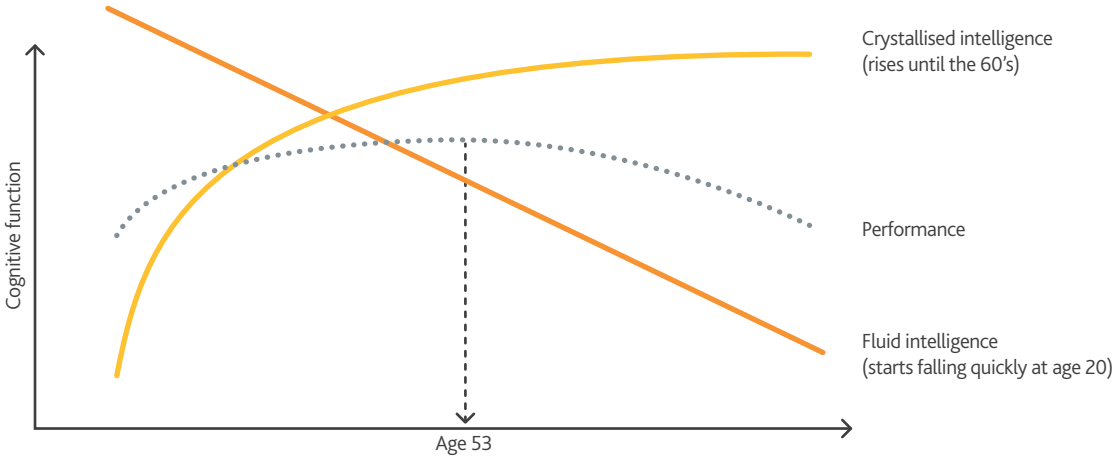
[104] Mazzonna F. Peracchi F. (2012) Ageing, cognitive abilities and retirement, European Economic Review (May 2012) Vol. 56, Issue 4, pp. 691 -710.

As can be seen, in men both recall ability and fluid intelligence remain stable up until ages 60-64. They then begin to decline. Men, on average will have lost about 30 per cent of their assessed recall ability by age 80. Fluid intelligence follows a similar pattern with decline in this aspect of cognitive function beginning at roughly the same point, although the decline is not so precipitous.

The pattern is similar for women, although women seem to have better recall ability than men up to ages 60-64 and poorer fluid intelligence scores. The pattern of decline is similar, though, with women's recall scores declining to a similar level to men by age 80 despite starting from a higher level.

Similar research from the US shows that cognitive performance peaks around age 53. Crystallised intelligence no longer offsets the decline of fluid intelligence. Making good financial decisions beyond this age is likely to become increasingly problematic. By the time people get into their eighties, approximately 50 per cent of the population suffer from a significant cognitive impairment, which effectively renders them incapable of making important financial choices.

Figure 4.4 Impact of age on financial decision making



Source: Laibson, Harvard University, "Behavioural Finance: Psychological Barriers to Optimal Investing", 14 May 2014 presentation

There are currently 1.38 million people aged over 85 and this is forecast to double in the next 20 years. The ability to engage with information and make informed decisions declines for some people as they age. This has implications for those who choose retirement strategies that require them to engage repeatedly and make decisions about how they'll manage their retirement income throughout later life. In addition, dementia affects one in six people over 80 and one in three over 95.

Consultation questions

8. What works in terms of communicating and getting DC savers to engage with decision making in the approach to retirement? How can we help members make good choices before and during retirement?

9. How can we help mitigate the risks associated with cognitive decline as people get older?

Chapter five

Supporting members who are less engaged

Chapter highlights

- Inertia dominates members' behaviour both in accumulation and at retirement.
- It is possible for inertia to be 'disrupted' and for members to take action, but not enough is known about the conditions under which this occurs and what impact the new freedoms might have on retirement planning.
- The issues around inertia disruption raise questions about how members can get the best possible outcome from their new freedoms in the new regime in the run up to and throughout retirement. .

The automatic enrolment reforms were predicated on inertia to boost participation. This chapter looks at the evidence of inertia in savers, the effects of defaulting and considers the implications for members taking their money out of pension schemes.

Recap on inertia

We know from our research when setting up NEST that most people automatically enrolled into a workplace pension won't make an active fund choice. Our investment approach recognises this and is designed to be suitable for as broad a population as possible. The current approach means that most members can accumulate up to the date they're due to take their money without taking any action. They're only required to act at the end of saving to get access to their pension pot.

It's possible that even with the right support available, retirement planning will be a lot like pension participation before automatic enrolment. Intentions are good and people see it as important, but they still don't get around to doing anything when they ought to. Evidence on current planning activity presents a picture of late and inadequate planning. Although the context may well change markedly with the new freedoms, it's possible that members won't engage sufficiently and soon enough to maximise the opportunities the new freedoms provide.

Previous NEST research has found that many people assume that their pension already provides them with a retirement income. For many, the act of contributing to a pension suggests to them that no further action is required on their part.

People have tended not to act when it comes to making decisions about their pensions. There are a number of reasons why people might not act, including unwillingness and affordability. However, behavioural scientists have shown that there are a number of behavioural tendencies that might prevent us from acting, even when we'd like to. These include:

- **Procrastination** - the tendency to put off decision making, especially when it is complex, onerous or dull
- **Status quo bias** - a bias towards doing nothing or maintaining a current or previous decision
- **Regret aversion** - forestalling the pain of regret associated with poor decision making by simply avoiding a decision.

We can see these tendencies in participation, fund choice and contribution levels. In this section, we summarise the evidence on consumer inertia in these areas and how automatic enrolment and scheme design has sought to minimise any member detriment that might come as a result of inaction.

Inertia and participation

Solving the participation issue has been something of a learning journey. Pension participation wasn't just low, it was also falling as defined benefit (DB) provision declined.[105] [106] Initially, the response to the participation issue was to deliver initiatives aimed at educating the consumer.[107] The lack of success of these initiatives coincided with growing understanding of evidence on default effects.

International experience showed that participation rates can be dramatically increased without compulsion just by changing the default position to being in a pension with the ability to opt out.[108] [109] [110]

So far, opt-out rates in NEST and across other automatic enrolment schemes have been lower than expected. DWP research in 2012 showed that 15 per cent of those eligible for automatic enrolment said they'd probably or definitely opt out when asked what they would do if enrolled by their employer. 15 per cent were undecided.[111]

DWP research with large employers with staging dates between October 2012 and April 2013 showed an average opt-out rate of 9 per cent.[112] Opt-outs of NEST currently stand at 8 per cent, less than half the minimum suggested by the survey research and around a quarter of DWP's original opt-out forecast.

Our general tendency to do nothing when it comes to pensions has been turned into a positive. It's simply been harnessed to solve the participation issue without having to persuade everyone to join a pension.

Inertia and fund choice

A similar pattern is observed with respect to fund choice. Consumers say it's important to them and that they'll exercise fund choice but in reality few do. DWP research with the target group for automatic enrolment found that just over half said that, if given the choice, they would choose how to invest their money. In practice, 99 per cent of NEST members have stayed in the default fund.

[105] Pensions Commission (2004) 'Pensions: Challenges and Choices: The first report of the Pensions Commission.

[106] Department for Work and Pensions. Family resources survey: estimates of private pension participation rates, 1999/00 to 2010/11. February 2013.

[107] Department for Work and Pensions. Simplicity, security and choice: working and saving for retirement. 2002.

[108] Madrian, B. and Shea, D. (2001) 'The power of suggestion: Inertia in 401(k) participation and savings behaviour' Quarterly Journal of Economics, Vol. 116 (November), pp. 1149-97.

[109] Choi, J. Laibson, D. Madrian, B. Metrick, A. (2001) For better or for worse: default effects and 401(k) savings behaviour, National Bureau of Economic Research (NBER) Working paper No. 8651.

[110] Choi, J. Laibson, D. Madrian, B. Metrick, A. (2002) Defined contribution pensions: plan rules, participant choices and the path of least resistance. National Bureau of Economic Research (NBER) Working paper No. 8655.

[111] Department for Work and Pensions. Attitudes to Pensions: the 2012 Survey, 2012

[112] Department for Work and Pensions. Automatic enrolment: Qualitative research with large employers. 2013

International evidence suggests that being defaulted into a pension makes members less likely to make an active fund choice. In the USA, new hires into a 401(k) plan featuring automatic enrolment were three times more likely to invest all of their contributions in the default fund, with 67 per cent doing so compared to 21 per cent. 70 per cent of Chileans in the multi-funds system do not make an active investment choice. Just 8.4 per cent of Swedes enrolled in the PPM system were making an active fund choice three years after its launch.

Inertia and contributions

There are a number of reasons why members might not contribute more than the minimum, including willingness, affordability and the behavioural tendencies outlined above. In addition to this, evidence indicates that the defaults are perceived to be a recommendation. A number of writers have pointed to the 'default endorsement effect' and the potential for this to be interpreted as ideal or correct. There is potential for minimum contribution rates to be construed as 'sufficient' given they're set as a default.[113]

Inertia and its consequences

The implications of inertia during accumulation of savings

If automatically enrolled members do nothing throughout their time saving in a pension scheme, their inertia has two potential consequences:

- They remain in a default fund that's been designed for the majority and which, potentially, doesn't meet their specific appetites or convictions but aims to deliver inflation-beating growth over the long term.
- By failing to contribute as much as they can afford they don't maximise the opportunity for tax-efficient savings that a pension represents.

[113] Choi, J, Laibson, D, Madrian, BC. (2009) The Importance of Default Options for Retirement Saving Outcomes: Evidence from the United States Beshears, J, Social Security Policy in a Changing Environment. University of Chicago Press.

The implications of inertia at retirement

Arguably, member inertia is less detrimental during the accumulation phase than in the years leading up to taking their money out. The greater risk is a member not being engaged in the run up to their retirement date. To benefit fully from the new freedoms, members would need to make decisions about how they want to take their benefits years before they access their retirement pot, and potentially beyond. Under NEST's current default approach, failure to engage could mean that the way members want to access their money doesn't match the way their fund was invested.

There's arguably an ideal journey to planning income and resources in retirement which is quite far from the reality of most people's experiences. Comparing the ideal with the reality shows the extent of the problem.

It's possible that the new freedoms and guidance guarantee will result in many more people considering their retirement options earlier. This doesn't necessarily mean, however, that they'll leave more time between planning and taking their money out. Recent research finds that most feel unmoved by the changes and don't expect to be any more engaged as a result. Only 9 per cent said they'll be much more engaged with a further 20 per cent slightly more engaged.[114]

Figure 5.1 How are people planning for retirement

There's an ideal journey to planning income and resources in retirement that research would suggest is quite far from the reality of most people's experiences.

Source: NEST

[114] Just retirement. Unpublished research. 2014

Box 5.1

The current default journey at NEST

- The member is automatically placed in the NEST Retirement Date Fund that matches their expected retirement age.
- The expected retirement date is assumed to be in line with State Pension age.
- The member enters the Consolidation phase approximately 10 years before their expected retirement date.
- During the consolidation phase the NEST Retirement Date Fund gradually moves out of growth seeking assets into assets that look to track the movement of annuity prices. At maturity the NEST Retirement Date Fund will be invested in 75 per cent annuity tracking assets and 25 per cent cash matching assets.
- If the member doesn't take their money out at the expected retirement date their pot is invested in the NEST Post-retirement Date Fund.

Implications for NEST's investment strategy

Given consumers' new freedoms when accessing their savings, we need to consider whether our current default approach during the later accumulating years remains suitable for most people.

Previously, the general consensus was that annuitising was the best course of action for most savers. More importantly, it was seen as the only realistic course of action for the majority, regardless of the views of members' and providers. The new consumer freedoms mean that annuitising is no longer a foregone conclusion.

It's possible, and even likely, that not all of our members will tell us their future intentions. In this context, we need to consider if our current default pathway to annuitise in the late stage of pension accumulation - the Consolidation phase - is still right. We must also consider our responsibilities in other areas. For example, what's best for members who'll actively access their pot but will be inclined to continue on the path of least resistance, such as taking the first option presented by their provider, or even a default option? There's some evidence to suggest that some of our members would prefer this to actively engaging with all of their options.

Of crucial importance to this discussion is that UK pension holders are only required to contact their pension provider at the point at which they access their pension. Engaging with members much earlier could present an opportunity to help them choose a consolidation path to suit how they want to access their retirement savings.

It's impossible for NEST trustees to try to second guess what people might do or what would suit their circumstances and preferences. Even with more evidence, it can't be known whether the default path taken is the right one in the end. Acknowledging that, the trustee has to decide something for those members that don't get in touch. In making these decisions trustees will need to weigh up the pros and cons of approaches that seek to reduce member detriment in general, with the desire to try and provide optimal solutions for the majority.

Ways of accessing savings

If the default investment pathway during consolidation is unchallenged by members there are potentially significant implications. The main one is that members could be invested inappropriately when they want to access their savings. A further consideration will be pot size. For those with small pots and modest DC savings elsewhere, options for different methods of accessing their pots are likely to be limited.

As set out earlier, the trustees could assume a number of different scenarios for how members are likely to want to access their pots.

Fully or partially annuitise

It's reasonable to assume that because the status quo has been to annuitise, for many that will remain an attractive option for some or all of their savings. This would lead to an asset allocation at scheme pension age predominantly consisting of bonds and cash.

Take cash as a lump sum or transfer savings elsewhere

This would lead to a targeting a cash asset allocation at the end of the default glide path. Our main role at this point would be to provide guidance and information so that they can access the cash in a tax efficient way, or in a way that doesn't impact any means-tested benefits.

Invest for drawdown or some form of pre-determined programme of payments

Now that restrictions around the use of drawdown have been relaxed, this may increasingly be an option for people with smaller pots who were traditionally excluded from this type of vehicle. The investment glide path would be dependent on the nature of the approach to drawdown, but would likely include some growth assets at the point of conversion.

A mixture of the above strategies

Alternatively a default strategy could target a blend of two or three of these strategies in order to reduce the potential for individual member detriment. This would require asset allocations that managed the conversion risk for a variety of strategies.

A further consideration for trustees is the default age that an investment strategy should be geared towards. The evidence from the member characteristics chapters and chapter four suggests working patterns are changing significantly and that when individuals do consider their pension, they do so too late. Our current approach targets State Pension age as a proxy for likely retirement age.

Multiple default paths based on member data

There is an alternative approach to choosing a single default strategy. We could, for example, use the data we have on members, such as pot size, contribution history, employment type and postcode, as proxies for how individuals may want to access retirement. This data could be used to push different segments onto different glide path strategies. At the very least, pot sizes will provide a useful proxy for the options that are available. Pot sizes of more than £20,000, for instance, are likely to require a different approach than pot sizes of less than £5,000.

Default options to secure retirement income

For a pension scheme member to access their savings they must have made contact with their scheme. Default drawdown or annuitisation is arguably an oxymoron, as in most cases an active decision to access savings will have to be made. However, in the same way that defaults in the accumulation phase support members unable or unwilling to make decisions about how their money is invested, there could be a similar need when it comes to the consumption of their pension wealth.

This approach is taken in a number of Australian superannuation funds. Members make an active decision to move from accumulation to consumption, but they don't have to make a decision about which option they should take. In the absence of an active choice individuals are provided with a default strategy, which is usually some form of drawdown. From the evidence set out in chapters five and six for parts of the automatic enrolment generation such an approach may have attractions.

Consultation questions

10. What is the role of default strategies in the new regime and the run up to and throughout retirement?

11. Should we consider having more than one default strategy for different types of member, and which variables can be reasonably used to differentiate member needs in the event of no member engagement?

12. Based on the member evidence presented, should the default target retirement age remain the same as state pension age? If not what are the alternatives?

Part two: Tools for delivering better retirement outcomes

In the following chapters we explore the main ways in which pension savings can be converted into an income stream. The aim of these chapters is to set out both the common and more esoteric approaches to converting pension saving. We wish to seek views and generate debate as to how these different products and approaches could meet our members' needs in the future.

The focus of part two

- **Chapter six** focuses on the mechanics of annuities and explores the features of different forms of annuity product.
- **Chapter seven** looks at ways of creating an income in retirement that aren't underwritten by an insurance company. In the past this has only been possible in the UK though specific drawdown products. We're interested in exploring how these products are likely to develop in the light of the new freedoms, as well as how other solutions may be developed that are conceptually similar.
- **Chapter eight** asks questions about the attraction for our membership of moving away from individualised solutions and looks at the concept of sharing risk across and between cohorts of members as a way of meeting the objectives set out in chapter three.

We're also keen to understand if and how the different approaches set out in the three chapters could be combined, either in parallel or sequentially, to better meet our members' needs and improve outcomes.

We're interested in comments on the available and planned products and solutions in the market currently and the expected direction of market development. We're also interested in evidence about what works internationally that could have potential for the development of solutions in the UK. Box 1 sets out a high-level overview of international experience, and we have also included a number of case studies of different approaches throughout the next three chapters.

Framework for decision making

In chapter three we outlined some objectives for how a pension is managed up to and through retirement. For the following chapters we welcome responses to the consultation questions framed in the context of how different solutions stack up against the objectives set out in that chapter.

The objectives or risks to be managed:

- conversion risk
- inflation and growth
- longevity risk
- flexibility
- investment risk
- market timing risk
- clarity
- cost and value for money.

Box 1

International perspectives

It's noticeable when looking at the international DC environment that policy decisions about accessing savings in more mature DC markets are in flux. Some countries have chosen to liberalise their retirement choices, for example Canada, Ireland and now the UK. Others, such as Singapore, have recently moved to more compulsory annuitisation. Australia is currently considering more defaults or possible compulsion within their retirement system as part of a wider 'Financial System Inquiry'.[115]

The Organisation for Economic Co-operation and Development (OECD) recommended in its 'roadmap for the good design of DC pension plans' that there should be a move towards more annuitisation to protect against longevity risk with a cost efficient supply in the annuities market.[116] In light of this evidence and after considering the current retirement choices within DC pensions markets, we've identified several key determinants in how decisions are made at retirement:

- **Value within the annuities market**
  The Pension Policy Institute (PPI) note on international retirement systems highlights that popular annuities markets often involve a degree of state intervention to improve levels of return.
- **Taxation**
  Taxation regimes are often used to force preferences in the market. For example, in Denmark there is choice in the system, but the taxation environment pushes those choices towards greater certainty in income. In Australia the Association of Superannuation Funds of Australia (ASFA) have argued for stronger tax incentives for deferred annuities.
- **Making retirement decisions**
  A number of countries are grappling with making sure people understand the choices they make at retirement. Some have removed a lot of choice from the system, such as in Singapore, to make these decisions easier. In Denmark occupational schemes may have default retirement choices built into them so that choice is managed at an earlier stage in saving.
- **The impact of other benefits**
  Means-tested benefits in retirement in Australia could be seen as encouraging people to spend their superannuation fund early in order to benefit from state funded healthcare and other benefits. In Singapore portions of the retirement account can be used for healthcare costs in accumulation. Clearly access to a wider set of benefits in retirement can be a driver for actions in the way pension pots are converted at retirement.

[115] Commonwealth of Australia. Financial Systems Inquiry. 2014. See Chapter 8 on retirement in July 2014.
[116] OECD recommendations, June 2012.

Table: Mature DC pensions markets and retirement choices

Country	Primary mode of access	Key determinant of how pots are accessed
Australia[117]	Small pots as cash, larger pots are drawn down	Very shallow annuity market, no tradition of annuitisation, tax incentives and means-tested benefits
Chile[118]	Flexible, majority annuitise, others use programmed withdrawal	Price – annuities have a government minimum rate and programmed withdrawal products are seen as expensive
Denmark	Flexible, majority annuitise, others use programmed withdrawal	Tax laws ensure that movements into different vehicles are only in the direction of greater certainty
Ireland	Drawdown	Choice Annuities seen as bad value
Israel	Annuitisation	Annuities are good value as they are partially subsidised by government
Singapore[119]	Compulsory annuitisation on savings above a minimum amount, with a choice on flexibilities within annuities LIFE Standard Plan and LIFE Basic Plan – the basic plan allows for a lower income with more for bequests	Compulsory annuitisation of funds saved in the compulsory central provident fund
Switzerland	Annuitisation	Annuities are seen as good value – they're largely offered by the pension scheme and the rates are regulated by the government
United States	Drawdown	Tradition of investing through retirement

[117] Association of Superannuation Funds of Australia (ASFA), White Paper, May 2013, part 4.

[118] Pensions Policy Institute Briefing Note 66 - Freedom and Choice in Pensions: comparing international retirement systems and the role of annuitisation.

[119] An FAQ on the LIFE Plans is available on the Central Provident Fund's website.

Chapter six

Securing a retirement income through annuitisation

Chapter highlights

- The income that people can achieve through annuitisation at the point of retirement has long been in decline as interest rates have fallen and longevity has increased.
- There may still be a major role for annuities in peoples' retirement plans, but they might achieve improved outcomes by annuitising later or annuitising differently.
- Understanding where this value-for-money tipping point falls will help DC schemes better design their glide paths into retirement.
- Fixed-term annuities or a phased approach to building up annuity income may reduce the one-off conversion risk that has characterised annuitisation to date.
- Conceptually, deferred annuities could have a role to play in hedging longevity risk, but costs of capital could limit insurance companies' ability to offer good value for money in this space.

This chapter explores how annuitisation has worked to date and asks what role annuities may have in light of the new freedoms and flexibility.

The role of annuities

The retirement income market in the UK has been dominated by annuities. The prevalence of annuities in the UK has been driven primarily by the legislative framework but also because, as a product, they have a number of uniquely attractive features.

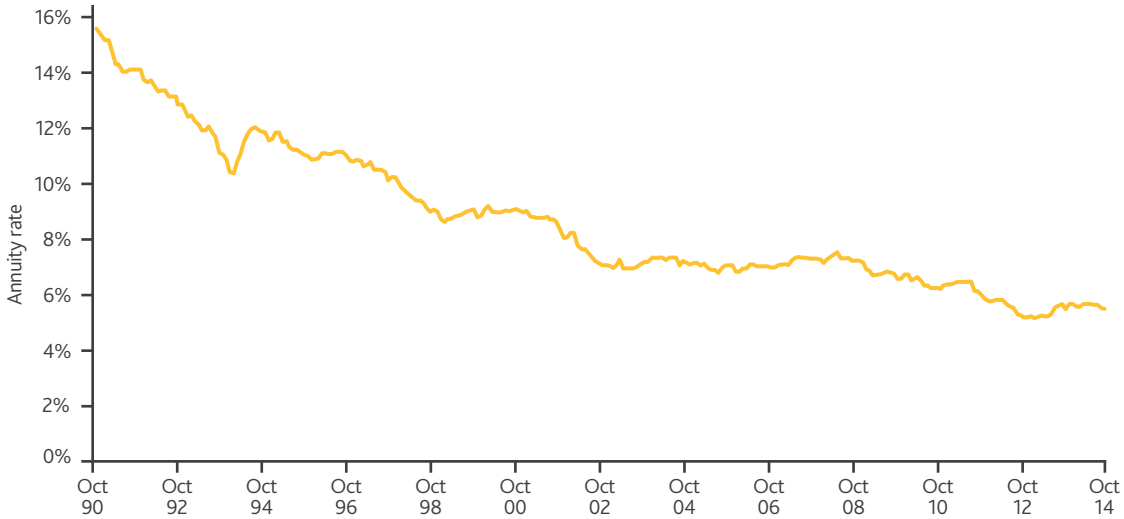
However the decline in interest rates combined with people living longer and the fact that annuities are relatively inflexible has made them less attractive to many consumers. A recent Financial Conduct Authority (FCA) study demonstrated that many consumers find it difficult to shop around and secure the best rates in the market.[120] The 2014 Budget reforms are likely to have a profound effect on the market for individual annuities. While it remains to be seen if consumers can be persuaded to continue to purchase annuities en masse, there are good reasons to believe that purchasing an annuity at some point still makes good economic sense for many.

When looking at suitable solutions for the large numbers of new savers being automatically enrolled in defined contribution (DC) schemes, it's important to understand the economics of annuitisation. This will help us ensure that, where appropriate, it's made an accessible and attractive option that offers value for money.

In addition, understanding if and when people should annuitise is a vital consideration when designing investment glide paths up to and through retirement.

This chapter explores how annuitisation has worked to date and asks what role annuities may have in light of the new freedoms and flexibility outlined in recent legislation.

Figure 6.1 The evolution of annuity rates in the UK



Source: W. Burrows, Key Retirement

[120] Financial Conduct Authority. Thematic Review of Annuities. February 2014.

Defining annuitisation

In the broadest sense, an annuity is a stream of income. However in the UK it's usually defined as an insurance policy that pays a guaranteed level of income over a defined term. This term is usually the remainder of the policyholder's life, where the policyholder has no further claim on the capital paid for the policy.

In the simplest case, a buyer of a lifetime annuity gives up their capital in exchange for having the insurer take on the risk of investments going up and down - investment risk - and that their money will run out before they die - longevity risk.

These risks are managed through the investment decisions that the provider makes, and **mortality pooling**. This is where the remaining capital, after allowing for any death benefit of those who die younger, helps support paying incomes to those who live longer.

Mortality pooling is also a significant benefit for the purchaser because, all else being equal, the provider can afford to pay a higher income than would otherwise be possible.

Factors influencing annuity rates

As with any insurance product, purchasing an annuity involves a trade-off between the price you pay and the value of the risk protection - the expected pay-off. Annuity pricing is a complex function of interest rates and life expectancy for individuals and the pool of annuitants.

- **Interest rates**
  A major determinant of annuity rates is the return the annuity provider can earn on the investments they make with annuitants' capital. Historically, annuity prices have been closely linked to government bond yields. More recently, providers are investing in diversified portfolios including corporate debt and property, and there's evidence that annuity prices now more closely track the yield on these portfolios.

- **Individual life expectancy**
  The rate an individual gets is determined to a large degree by the annuity provider's assessment of how long they'll live. Those with relatively shorter life expectancies can benefit from higher rates. Life expectancy is determined on the basis of current health conditions, whether the buyer is a smoker and socio-economic factors. Gender used to be a significant determinant. However, under EU gender discrimination rules it can no longer be a factor in annuity pricing for individuals, so males and females receive a unisex rate.

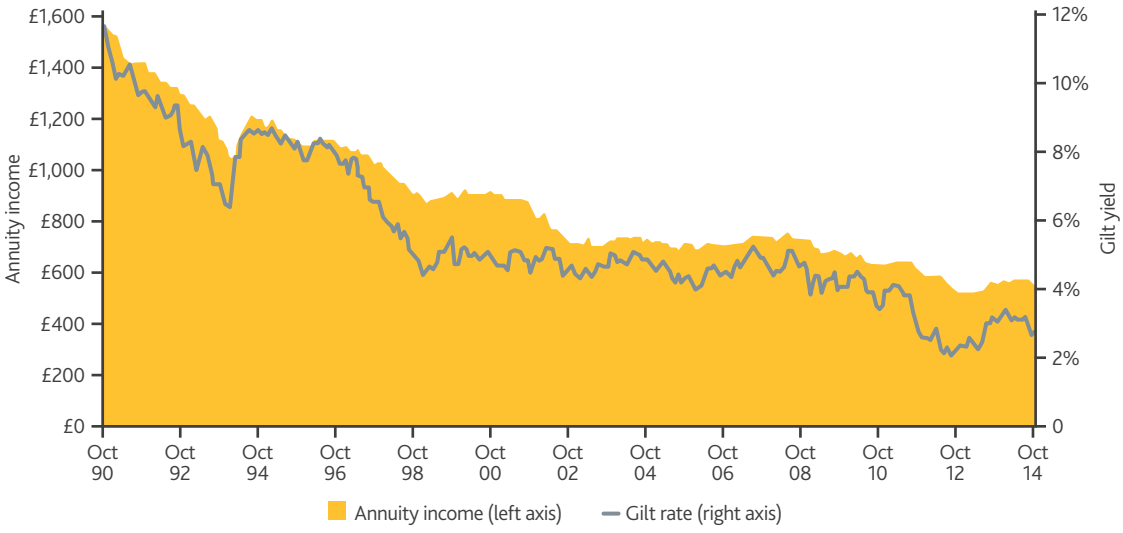
Pooled life expectancy

Mortality pooling is a critical feature of lifetime annuities. A **mortality cross-subsidy** arises when the capital of those who die younger than the mean expected longevity of the cohort is used by the annuity provider to support the incomes of those who survive longer. Annuity providers may still evaluate the aggregate life expectancy of the policies on their book on the basis of gender for their solvency capital requirements.

Trends in annuity rates over time

The decline in annuity rates over recent years reflects falling interest rates and increases in life expectancy. In addition to these parameters, there are market factors that play a significant role in the pricing of annuities. These include the forces of competition, risk appetite and the burden of capital requirements upon insurance companies. The last factor is likely to become a significant influence with the development of Solvency II, an EU legislative programme that introduces a new EU-wide insurance regulatory regime.

Figure 6.2 Trends in annuity rates and correlation with gilt yields



* Rate for man aged 65, £10,000 purchase, single life and level

Source: W. Burrows, Key Retirement

The value-for-money tipping point

It's been argued that if the various parameters in the annuity purchase decision are quantified then one could, in theory, evaluate the point when it's objectively, or economically rationally, the right time to annuitise.[121] However, these parameters vary significantly from person to person and from population to population.

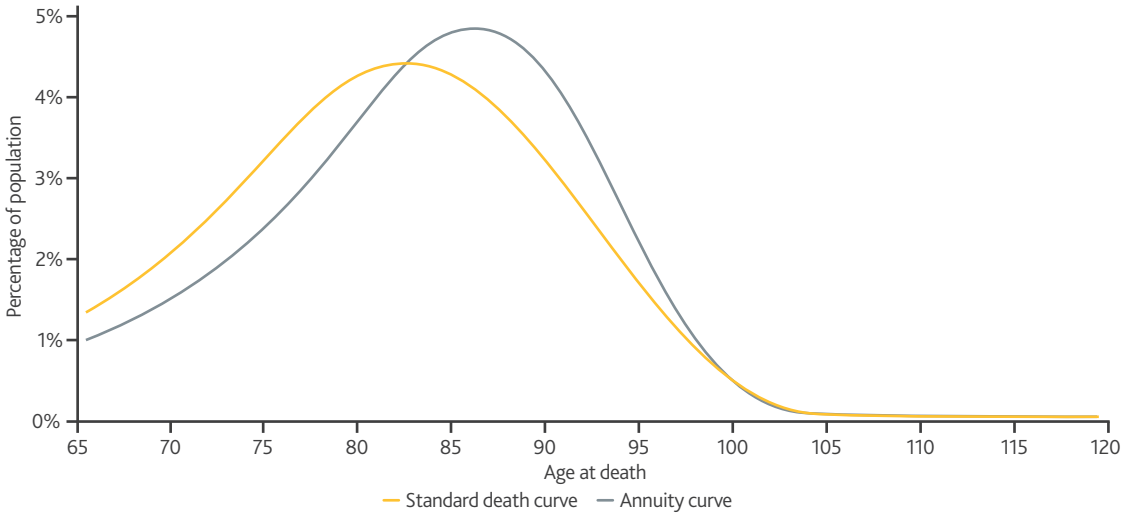
One aspect that could count against many consumers in automatic enrolment pension schemes is that annuities have been priced on the basis of the mortality expectations of the current pensioned population. As set out in chapter one, prior to automatic enrolment, access to pensions and accumulated pension wealth would have generally been associated with a demographic with a greater life expectancy than those without accumulated pension wealth.

To determine if and when there is a right time for some NEST members to annuitise we need to make some assumptions. These include assumptions about trends in mortality for this demographic and also how well this aligns with the pricing basis used by the life insurance industry. In addition, we may need to consider how the proposed legislative changes themselves - and indeed automatic enrolment - affect the market and pricing within the market in the years to come.

A further consideration is the value for money in annuitising a small pot. Annuity providers face certain fixed costs as well as variable costs per policyholder. These will have a proportionately higher impact on the rates that providers can offer those with small pots. Furthermore, we've seen in chapter two that those with smaller pots appear to be less inclined to shop around for the best deal from an annuity.

Figure 6.3 Population life expectancy versus pensioned life expectancy

This figure shows, the mean age of death for the wider population is 82.7 years while the mean age of death from mortality tables used in annuity pricing is 84.4 years. This mismatch reflects the link between retirement wealth and socio-economic factors such as life expectancy.



Source: Institute and Faculty of Actuaries - CMI tables "00" series

[121] Blake, D and Boardman, T (2010): Spend more today: Using behavioural economics to improve retirement expenditure decisions.

Optimising the decision to annuitise

Once a member has decided that annuities will be part of their retirement plans, there are arguably two key decisions to make - how much to annuitise and when to do so.

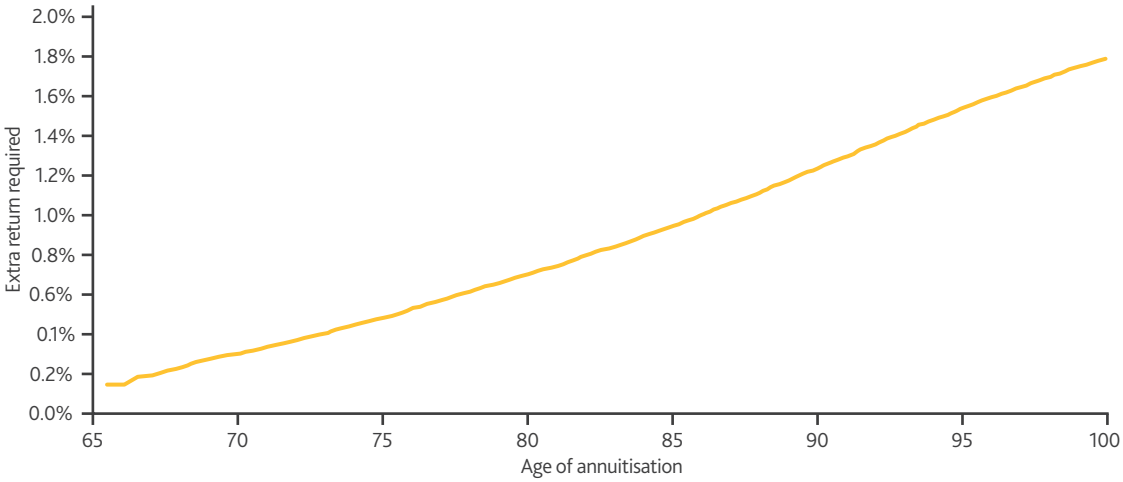
One approach to planning for retirement is to annuitise as much of your DC pension pots as is necessary to secure adequate income, making allowance for State Pension and any DB pension rights. If your pot is larger than that required to secure essential and adequate income levels through the purchase of an annuity, the remainder can be used to secure yet more income or can be passed on as a bequest.[122] Of course, as we've discussed in previous chapters, it's not necessarily straightforward for many people to gauge how much income they'll need in retirement.

The question of when to annuitise will be guided by the fundamental pricing mechanisms of annuities and how they compare with other ways of generating a retirement income. As a cohort ages, the annuity rates they can secure change. As you get older, the time until your death, the pay-out horizon, is decreasing. This pushes up the rate you can get when purchasing an annuity, as your capital needs to finance fewer years of payment - albeit the longer you survive into retirement, the greater the age at which you're expected to die. However if you delay purchasing an annuity, you miss out on the benefit of mortality cross-subsidy, this effect is called mortality drag, and is usually described as the extra investment return needed to compensate for delaying annuitisation.

As you get older, the effect of the mortality drag increases. When it is too great for investment returns to overcome, annuitisation should make economic sense, particularly if you are less concerned about leaving money to your heirs. One way to visualise mortality drag is shown in Figure 6.4. In this example, regular income is taken from the investment pot from age 65 and then the remainder is used to secure an immediate annuity at a later date. This is compared with simply purchasing an immediate annuity at age 65. The drawdown rate is assumed to be the same as the annuity rate. The graph shows the extra rate of return that is required during the drawdown period, in excess of the return from a portfolio of bonds, to enable purchase of an annuity that maintains this level of income at a later date. The return shown is the return required after paying any costs or charges associated with drawdown. Costs or charges will drag down the drawdown returns relative to the gross investment return.

[122] Blake, D and Boardman, T (2010)

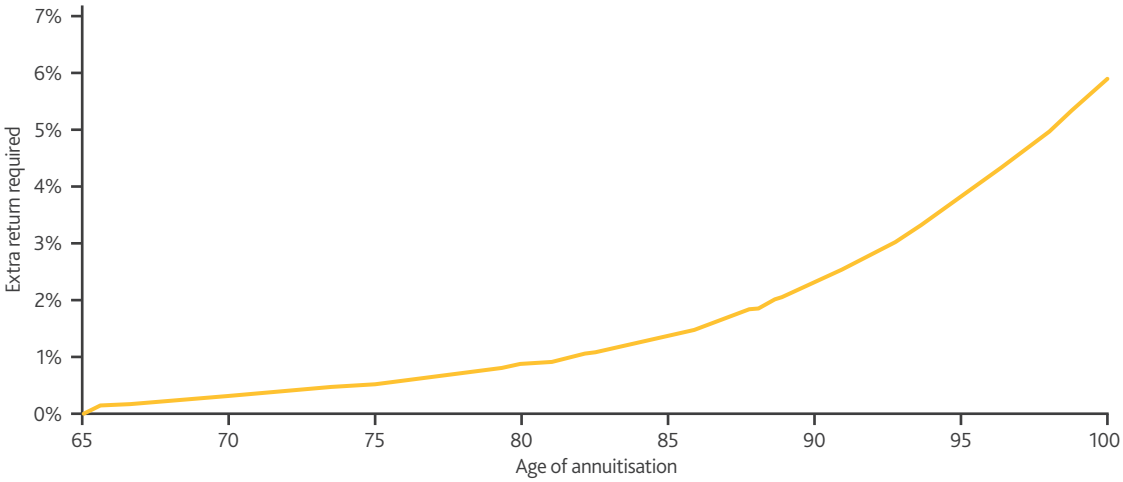
Figure 6.4 Additional investment return required for delaying annuitisation while drawing an income



Source: Legal & General Investment Management

Another way of visualisuing this is set out in figure 6.5. In this example a pot of money is set aside for a later date of annuitisation. No income is drawn from this pot, and the graph shows the required rate of return in excess of that from a portfolio of bonds.

Figure 6.5 The rate of return required if annuitisation is deferred and no income is drawn from the `annuity pot'



Source: Legal & General Investment Management

Note on assumptions used in the modelling:

The analysis above is illustrative and makes several simplifying assumptions. Firstly, it assumes that the starting point is a cohort of healthy 65 year olds who have saved in a private pension arrangement. It assumes that all survivors in this cohort use up all their remaining capital by purchasing an annuity at the later date, even if they are quite unwell at that future date. In practice this will tend to underestimate the extra return needed, because people purchasing annuities at a later date will tend to be a healthier part of the cohort, and insurers are likely to reflect this by offering a lower level of income to those people when they purchase their later annuity, thus increasing the return required during the drawdown period.

In addition, the charts make assumptions about the future pricing of annuities based on current longevity expectations, which may or may not turn out to be correct; for example, if there are significant unexpected medical advances in the future, then annuities may provide a lower level of income in the future, which would imply that the return required during drawdown would be greater. The analysis also assumes that interest rates and bond yields evolve in line with market expectations, which may or may not turn out to be the case, that there is no significant change in the assumptions and models used by insurers when pricing annuities over time, and that there is no major impact arising from any changes in the regulations that drive the way that insurers price annuities.

In principle, the tipping point should be quantifiable - or rather one could make an actuarial estimate of when it might arise.

In real life, of course, there are other considerations beyond sophisticated wealth planning and actuarial estimates of mortality drag, and it may be that these could dominate the value for money that annuities offer and the decisions that people make. We explore these in the sections that follow.

Functioning of the annuity market

Historically the UK market for individual lifetime annuities has been one of the largest in the world. With the Budget 2014 reforms, many people expect that the number of annuities being purchased will drop significantly.

Furthermore, in the Australian market, which is arguably one of the best developed DC pensions markets in the world, there's been a collapse in the number of annuity providers over the last 20 years. There's therefore a legitimate question as to whether members seeking to purchase annuities to provide a guaranteed retirement income will in the future be able to access a competitive market and get value for money.

Consultation question

13. Based on the evidence presented, should purchasing annuity income be part of retirement planning for DC savers? If so - on average - what age should this purchase happen?

Incorporating bequest motives into annuity policies

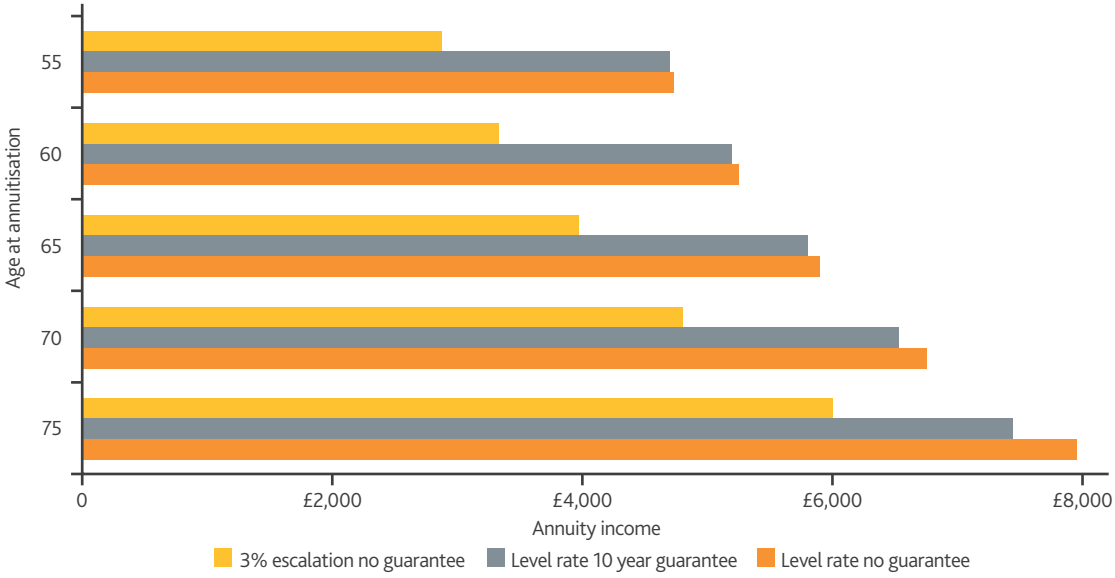
When a person purchases a pension annuity they give up control and, effectively, ownership of their savings. It's this aspect of annuitisation that's a major shortcoming of the model in many peoples' eyes, as we discussed in chapter two.

Joint life policies and guarantee periods offer prospective annuitants a means of passing on some of their pension wealth. In a typical joint life policy, a spouse will get a percentage of the income for the rest of their life after the purchaser dies. Guarantee periods offer protection in the event that the policyholder dies soon after taking out the policy, typically five or ten years. These features do, of course, come at the cost of a lower initial annuity income. Figure 6.6 shows the typical cost of these product features in terms of income.

Committing to a mortality pool is a fundamental part of buying an annuity in the UK and subsequently benefiting from mortality cross-subsidy. It's been argued that policies could be structured so as to address the perceived all-or-nothing nature of annuitisation.

Figure 6.6 The cost of annuity product add-ons

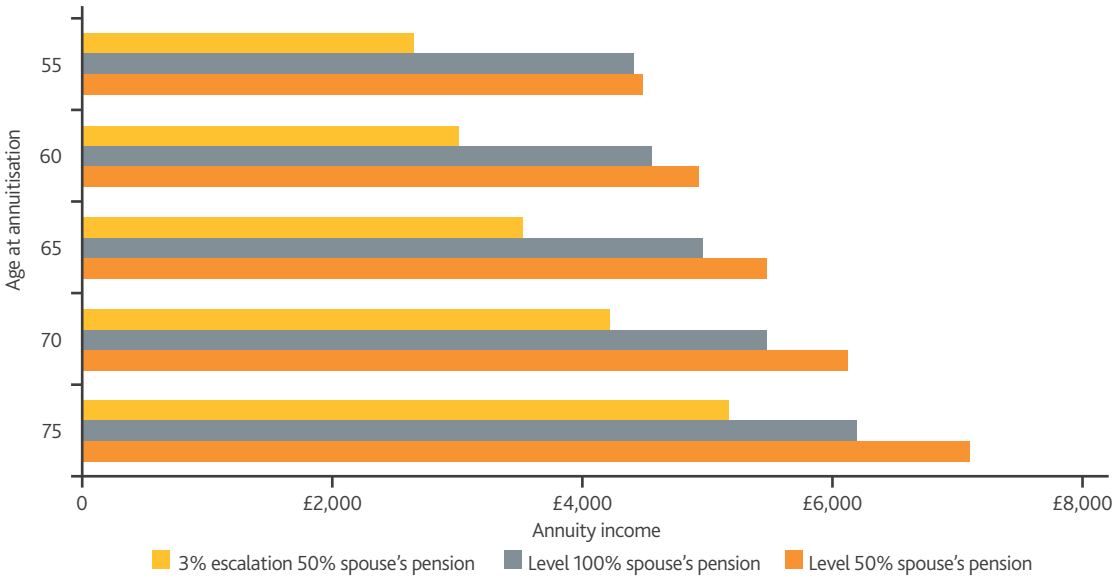
Annual income from £100k pot - Single life standard basis



Notes: Income rates at 23 October 2014, income paid monthly in arrears without proportion

Source: Money Advice Service, annuity comparison tables

Annual income from £100k pot - Joint life standard basis



Notes: Income rates at 23 October 2014, income paid monthly in arrears without proportion, spouse 3 years younger

Source: Money Advice Service, annuity comparison tables

Under the proposed new pension rules, consumers themselves can effectively structure their retirement plans to build in a guarantee period or guaranteed lump sum death benefit. They'll be able to put aside the pot they might want to pass on after they die while using the rest to buy an income. Alternatively they could take out a life insurance contract and pay the premiums from their annuity income. The multiple options demonstrate the complexity of retirement and inheritance planning. This is unlikely to be a straightforward exercise for most people.

However, the new rules also afford significant scope for product development in the annuity space. Annuities could now be structured so as to provide significant lump sum death benefits over virtually any time horizon.

Greater transparency in the way annuities are priced, perhaps combined with greater control or scope for the consumer to design bespoke policies, could go some way to addressing the most severe concerns people have about annuities. There's still a risk, though, that making a financial product more transparent and flexible can make it appear more complex.

Hedging conversion risk and enhancing flexibility

A standard part of DC investment design is the de-risking glide path where members' money is moved into lower volatility assets. Ideally, this also offers a smooth transition into providing an income in retirement by ensuring that the assets are sufficiently liquid that they can be efficiently sold or transferred without punitive transaction costs or spreads.

The glide path also seeks to manage conversion risk. Conversion risk describes a number of situations:

- when a person comes to annuitise, they may be doing so when annuity prices are particularly high, and annuity rates correspondingly low
- poor investment performance just before the member takes their money out could result in a smaller than expected retirement pot
- a shift in mortality assumptions could mean that a larger pot is required to purchase the same level of income.

When these risks combine, an individual can find that they're not able to secure the level of retirement income that they had recently anticipated.

To help mitigate or manage conversion risk, DC schemes often use a form of lifestyling whereby members' money is gradually moved into fixed income assets as they approach their scheme retirement age. In effect the way their money is invested in the last few years of the accumulation phase is similar to the way that an annuity provider will invest their money to provide their income.

There are, of course, conversion risk factors that are more difficult to hedge, such as changes in average life expectancy, the regulatory capital required to back annuities and the willingness of annuity providers to commit capital to the market. It's therefore difficult to fully hedge annuity conversion risk. Matching the duration of the Consolidation phase portfolio to the notional annuity portfolio is another challenge. In addition there's an observed lag between changes in asset prices and changes in annuity rates. This poses a particular problem when bond prices fall as the increase in interest rates may not be reflected in annuity pricing until subsequent periods. In this case the consumer is left with a smaller retirement pot with which to buy a still relatively expensive annuity.

While challenging, managing conversion risk can offer significant benefits to a pre-retirement or through-retirement investment strategy. It can make outcomes more certain and provide some peace of mind that the saver will be able to secure a reasonably well protected minimum level of retirement income whenever they choose to do so.

Alternative approaches to managing and mitigating conversion risk

Another way to mitigate conversion risk is to seek to diversify some of the timing risk that contributes to it. In other words, rather than make annuitisation a one-off event, members could buy multiple annuities at different times. Of course, changes in interest rates and longevity expectations may see rates deteriorate, as well as improve, over time. The benefit of this approach could be to spread the risk of getting the very worst rates, and instead achieve something closer to an average rate.

Iterative purchase of fixed-term annuities

A member could purchase a chain of fixed-term annuities (FTAs) to avoid locking in a single unfavourable rate for the whole of their retirement. This approach could:

- limit the harm done by annuitising in a period with an unfavourable interest rate environment
- allow both the annuitant and the annuity provider to consider circumstances such as health and income needs as they evolve
- annuitise only a portion of one's pension saving at a given time, meaning that the remainder will be retained in the individual's estate and can passed on if they die.

There are a number of potential drawbacks to this approach:

1. It requires ongoing engagement and financial planning by the retiree as they age.
2. FTA pricing will be based on shorter-term yields whereas the basis for lifetime annuities will span most of the yield curve, with a greater weighting towards the longer durations. With an upward sloping yield curve, this means lifetime annuities should be able to offer superior rates.
3. FTAs purchased early in retirement will benefit from virtually no mortality cross subsidy.
4. Some commentators have suggested that FTA pricing may not be competitive because of the structure of the market.[123]

Lifetime annuities with break clauses

As an alternative to purchasing a FTA, a member could instead opt for a lifetime annuity that had a surrender value after a certain period. If they don't exercise the option by the end of that period, they're then committed to the annuity and the mortality pool. This would allow people to benefit from a degree of mortality cross-subsidy while providing them with the flexibility to change their minds if their circumstances change or if rates improve subsequent to their initial annuity purchase. This may additionally address some of the negative emotions around annuity purchase, particularly regret aversion bias as discussed in chapter two.

Again, relative pricing remains an issue. Any optionality will come at a price. It isn't straightforward to evaluate if an option is fairly priced and in any case this is somewhat subjective. Members would need to consider the spread between the surrender value and the intrinsic present value of the annuity at the point of surrender. In order to get value for money from these products, most members would likely require help from a financial adviser.

[123] Financial Times. 21 September 2012: "Caution urged over fixed-term annuities"

Building up lifetime annuity streams

This approach may feature as part of a pre-retirement consolidation phase strategy, at retirement or indeed through retirement. The principle is that an individual, or their pension provider on their behalf, uses portions of their pension savings to buy deferred or conventional lifetime annuities over time. This would achieve an effective rate equivalent to the weighted average of the rates secured at each individual purchase.

The simple case, whereby immediate annuities are purchased, may prove to be an attractive option for those who expect to take a phased approach to retirement, e.g. by working part-time before stopping work completely.

On the other hand, where the individual is approaching retirement on a flat or increasing salary, purchasing 'live' annuity streams may not be appropriate. Instead an individual may wish to purchase annuities in advance which will commence payment when they retire. We explore the economics of so-called deferred annuities later in this chapter.

Consultation question

14. Would iterative purchase, phased annuitisation, or fixed term-annuities be a better way for DC savers to secure incomes?

DC schemes as a bulk purchaser of annuities

It's unlikely that savers with smaller pots will find approaches which involve multiple annuitisation events, including purchasing FTAs or slices of deferred annuity, worthwhile or even possible. An alternative approach that would require further exploration would be for a scheme to buy these products in bulk, either at the point at which members notionally retire, or during the consolidation phase, and use economies of scale to achieve better member value. Any economies of scale, however, need to be balanced against the potential detriment to members who may benefit significantly from a better achievable rate through bespoke underwriting. For example, they may be able to secure impaired or enhanced rates as an individual.

In these models, annuitisation is essentially part of the default journey. Optimising a default journey is of course far from straightforward. As with all approaches to using your savings in retirement, the amount of DC and other pension wealth is a major deciding factor in what's feasible and what's optimal. For example, for those with large and very large pots, annuity income perhaps need only be a relatively minor baseline to cover living expenses while keeping the majority of their savings invested for drawdown and/or growth with bequest motives in mind. Indeed many wealthier retirees may feel they have no great need for an insured retirement income at all.

There is a challenge, then, for providers of guidance and for pension schemes offering default retirement paths. They'll need to recognise the spectrum of retirees' needs while keeping the range of solutions and options to a sensible level. They also need to take a view about the degree to which they can and should make decisions, which are usually irrevocable, around annuitisation and insurance on behalf of their members.

It's important to note that, in the UK, the idea of DC schemes annuitising their members as part of a default journey is essentially hypothetical. There are various reasons why it would be a difficult strategy to implement in practice. Members of UK DC schemes have a right to choose the open market option (OMO) when purchasing an annuity. This means that, for example, if a member of a DC had a deferred annuity purchased on their behalf, they would still be entitled to surrender that annuity and use the OMO instead. The deferred annuity would therefore need to have either or both of a contractual surrender value or a liquid secondary market. Moreover, those members who would, in this hypothetical scenario, wish to exercise their OMO and relinquish their deferred annuity would in fact create an adverse selection bias in the pricing of those deferred annuities.

The costs and benefits of deferred annuities

There are two distinct roles that deferred annuities can play in retirement planning. In the previous section we described how deferred annuities might be an appropriate tool for people who want to build up a certain amount of annuity income in the run up to their retirement. The other obvious use for deferred annuities is to eliminate extreme longevity risk. For example, one can pay an amount today for a deferred annuity that will pay out a known level of income in old age. These are commonly known as advanced life deferred annuities.

In the simplest model of a deferred annuity, capital is paid today in return for an income commencing on some future date. Like a conventional annuity, the purchaser relinquishes claim on their capital and the seller is then effectively bound to their liability. The value of a deferred annuity, from the perspective of a hypothetical purchaser of deferred annuities, then hinges on trade-offs between a set of competing considerations, in terms of risks, rewards and emotional consumer preferences.

Pros

- By purchasing a deferred annuity the consumer can achieve peace of mind about what they'll get when they retire, or that they have an income secured for old age. They can more easily plan ahead for their retirement compared to waiting to purchase a conventional annuity. How much value an individual places on this will depend on their circumstances and attitudes.

- A deferred annuity offers something of a hedge against a future fall in interest rates. If the purchasing decision is actively managed, the consumer – or their pension scheme on their behalf – can take a view as to the timing of the purchases, perhaps on a safety-first basis.

Cons

- The longer the expected term of an annuity policy, the greater the uncertainty about quite how long the term is. Comparing an immediate lifetime annuity purchased at aged 65 with a deferred annuity that will pay from age 65 but purchased at 55, the 10-year deferral period increases the term and therefore the uncertainty faced by the insurance company. Furthermore, not only will the actuarial estimates have a much larger margin of error, but the insurance company will find it more difficult to purchase matching assets.

  Faced with greater interest rate risk and greater actuarial uncertainty, writers of deferred annuities will have to price them at a premium – each £1 of income will cost more upfront for the consumer.

- Savers will have to give up their capital much sooner than if they simply waited to purchase a conventional annuity. This introduces an opportunity cost where their pot doesn't benefit from future investment growth on that portion of capital. In the case of an advanced life deferred annuity, the saver faces the risk that they die before receiving any of the annuity income they purchased at all.

However, the writer of the annuity does hold these assets and benefits from the investment returns and can factor that growth into the level of income they ultimately pay out. The net cost or benefit arising is the expected differential in the returns earned on the assets when maintained within the pension pot versus the returns earned by the annuity writer, over the deferral period. The insurance company will typically have less incentive to take risk suggesting that this will work to the disadvantage of the purchaser.

Inflation will pose an additional risk when constructing value-for-money deferred annuities. An annuity that promises only a nominal level income commencing at some distant point in the future is unlikely to afford members the protection they need. It's likely, then, that inflation-linking will be crucial to deferred products, but this would further increase the actuarial and investment challenges faced by annuity providers.

Consultation questions

15. Should deferred annuities be included in the toolkit for DC retirement solutions?

16. Are there other ways of helping members hedge longevity risk?

Box 6.1

NEST round table on the development of the annuity market

As part of our research for this consultation paper, we held a round table discussion with industry experts to consider the key issues around annuities - see Annex A for more details. There was a strong, although not unanimous, feeling that while deferred annuities had some attractions in principle, the amount of capital required to be invested by members and set aside by insurers made them far less attractive in practice. Furthermore, there's currently no significant market for deferred annuities in the UK.

The Solvency II Directive will come into effect in January 2016 and will significantly increase the solvency requirements for UK insurance companies. This is expected to increase the level of capital required and hence the loading required in the premium basis and could well make writing policies such as deferred annuities more expensive. This extra cost is likely to be passed through to the consumer in the form of lower annuity rates.

Understanding the magnitude and sensitivities of deferred annuity pricing to these factors, or indeed any others, is crucial to evaluating the merits of incorporating the purchase of such policies into pension investment strategy.

Chapter seven

Investing through retirement - balancing growth and protection

Chapter highlights

- From an investment perspective, income drawdown can be delivered in a variety of ways to meet a variety of objectives.
- When using income drawdown, the saver carries all of the investment and longevity risk, so these products need to be carefully calibrated.
- The timing of withdrawals and the sequence of investment returns can have major consequences for outcomes.
- Managing downside risk in income drawdown is critical.
- Various approaches to managing drawdown portfolios, such as asset allocation, lifestyling, asset-liability matching, volatility management and risk hedging, present risks and opportunities in meeting retirees' needs.
- Innovations in structured products, such as variable or investment-linked annuities, may help bridge the gap between traditional drawdown and traditional annuitisation.

It appears likely that fewer people are going to annuitise and many of those that do may wait until later in retirement. Many will want to leave their retirement pots invested and generate an income directly from their pot. This has only been feasible previously through specific products known as income drawdown. The new freedoms are likely to see new products and approaches for a non-underwritten means of converting saving to a regular income. This chapter explores how these approaches could meet the needs of NEST members and a new generation of savers.

Suitability of drawdown for the DC mass market

Many people saving under automatic enrolment won't want to buy an annuity to secure a retirement income. In the UK the favoured approach to accessing retirement savings while investing through retirement has been through income drawdown. However, this has been available to only a minority of savers.

In a typical income drawdown product, the individual retains at least some of the investment risk and the risk that their money will run out before they die. On the other hand any money left over when they die can be passed on. Typically the money is invested in a fund that aims to achieve sufficient returns so that the saver can draw their desired level of income for the rest of their life. Mortality pooling is not a feature of conventional income drawdown. Beyond these core concepts, income drawdown can be designed and delivered in many different ways.

As a means of unlocking pension saving, income drawdown has generally only been available for pension savers with large pots. As a rule of thumb, retirees have been discouraged from considering income drawdown as an option unless they have £100,000 or more in DC savings, or have significant DB rights and a smaller DC pot. There are a number of reasons for this:

- **Risk capacity**
  The retiree needs to be able to withstand losses in their drawdown fund without putting at risk their ability to draw a sufficient income.
- **Cost**
  Income drawdown has tended to be expensive. It carries ongoing investment management fees and, typically, ongoing fees for administration and any statutory reviews.
- **Advice and engagement**
  Income drawdown has primarily been delivered on an advised basis.
- **Legislation**
  The rules around drawdown to date have required that a pensioner must have £20,000 secured annual income before they can use flexible drawdown, otherwise the level of income they could draw was capped.

To date, pension providers, fund managers and financial advisers have generally not designed income drawdown products for the mass market of DC savers with small and moderately-sized pots. While capped drawdown was in theory an option for the average retiree, in practice they would have had little motivation to use this approach and typically they were steered towards annuitisation.

From 2015, the change of the rules around how pension benefits are taken may mean that income drawdown will be considered by a much wider section of pension savers. The appeals of flexibility, potential for capital growth and the ability to leave any unused remainder of the pot as a bequest may make it an attractive alternative to annuitisation for those with the requisite risk capacity.

The challenge for the pensions and investment industry is to provide sufficient guidance and suitable investment vehicles that don't require extensive advice. This needs to be achievable at a reasonable cost if it's to be suitable for more than just those with large DC pots.

Key features of income drawdown for the mass market

In previous chapters we've explored the characteristics of the NEST members and automatic enrolment pension savers.

We've identified certain obstacles that have limited the uptake of income drawdown by the mass market and features that chime with what we know our members may want from a retirement solution.

Features	Obstacles
Investment growth	Investment risk
Control over level of income	Volatility of income
Ability to change provider	Complexity
Ability to change investment strategy	Cost of advice and investment costs
Wealth retained by individual's estate	Saver needs to be engaged with product

Goals, return targets and constraints

When we talk about goals we're referring to what the consumer hopes to achieve in using income drawdown as their means of converting DC pots into an income stream. These may include:

- drawing an income for the remainder of their life and having at least a certain amount left over to leave to family members
- drawing an income for life knowing that they're unlikely to run out of money before they die
- making their pension savings last as long as possible while drawing an income
- drawing an income while seeking to grow the retirement pot through investment returns with a view to buying a larger annuity income later
- topping up their State Pension.

Some people will prefer a stable and predictable income year after year, perhaps increasing to keep pace with inflation. Others will want their income level to vary with their consumption.

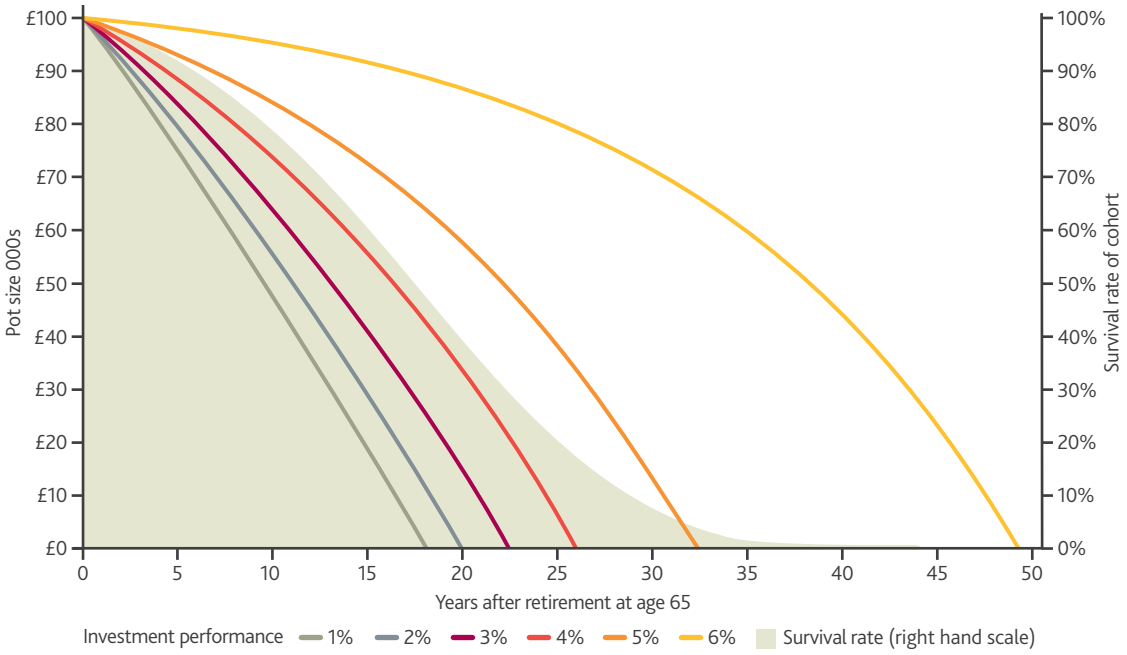
Return targets are what the fund needs to achieve to support those goals. These investment targets can take different forms. An obvious one is an absolute return target, such as 5 per cent a year after charges, meaning an individual can draw 5 per cent a year without depleting their capital, at least in nominal terms. Alternatively the return could be expressed in real terms, such as CPI plus 3 per cent, particularly if the goal is an income that increases with inflation.

Constraints include the fees the individual is prepared to pay, their requirement for liquidity and the amount of investment risk they're prepared to take and also their capacity to take this risk.

Income drawdown and investing through retirement is essentially about balancing the level of income you need to draw with the investment returns you can expect to earn on your invested capital. Longevity risk is of course a crucial consideration, but it's somewhat unknowable and generally beyond the control of the individual. Figure 7.1 provides a simple illustration of how long a member's pot would last in different scenarios of long-run average investment returns. We've also shown in the background the survival rate of a cohort commencing drawdown at age 65.

Figure 7.1 How long will a retirement pot last in different stable investment performance scenarios

Member draws a £6,000 nominal income, 6 per cent of their pot size at retirement, at the beginning of each year from a pot earning consistent nominal rates of return. Returns are before charges



Source: NEST 2014

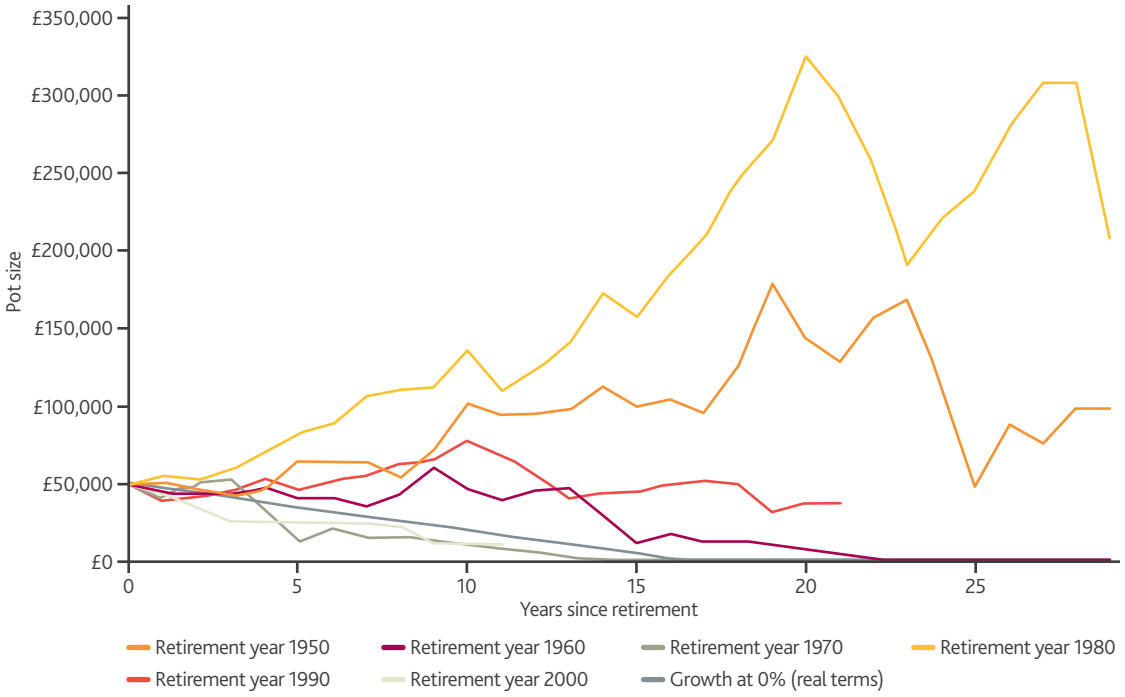
This simple illustration might make a prospective drawdown user overly optimistic. Earning a consistent but modest return of 2 per cent, for example, would see their pot last 20 years. This would provide for a 65-year-old through to their mean mortality expectation, notwithstanding the effects of inflation. In reality, the problems for this would-be drawdown user are twofold.

The first problem is that, while people in their cohort might be expected to die in their mid-eighties on average, for any one individual there is a 50 per cent chance that they'll live longer, perhaps much longer.

The second problem is that the path dependency of investments and inflation is especially severe for income drawdown. Figure 7.2 shows how income drawdown users – adopting the same investment strategies and the same nominal income levels – who had commenced drawdown at different times would have seen the real value of their pot evolve over time.

Figure 7.2 Variable returns of income drawdown for different historic cohorts

Member draws a nominal £3,000 per annum income from an initial pot of £50,000 invested in UK equities. Real returns before charges.



Source: Dimson, Marsh, Staunton and NEST 2014

The returns experienced in the early years of drawdown, when the capital value is at its largest, are critical to the outcome of the strategy. Strong returns in the early years can provide a significant buffer against poor performance in later years. Conversely, poor performance in early years is very difficult to make up when the capital is being depleted through drawdown.

Investing through retirement clearly poses some significant challenges but can potentially offer significant rewards in terms of growing money while meeting both the need for flexibility and bequest motives. Later in this chapter we explore certain models of income drawdown product design that might make it more attractive to, and appropriate for, the mass market.

Consultation question

17. Does investing through retirement, as an alternative to immediate annuitisation, have a significant role to play in meeting the retirement needs of DC savers?

Approaches to drawing an income

There are different approaches one could take in structuring how a drawdown vehicle pays out.

In chapter five we talk about the importance of default structures within financial products and we've presented evidence on how people respond to different levels of choice. We've considered whether a certain degree of structured choice or even paternalism may be appropriate for many savers.

We expect the changes in the pension regulations announced in the 2014 Budget, and the more recent death benefit proposals announced by the Chancellor, will spur innovation in the drawdown market. The next generation of drawdown approaches will need to find a balance between giving consumers control over their money with some governance of how much money is paid out over time.

Provider determined or default approach	**Stable**	The plan provider sets a stable pay-out rate. This could be defined as a percentage of the saver's initial pot size. In addition it could have the following features: • escalating, or inflation-linked pay outs • periodic review, adjusting account for market performance relative to the objective.
	Variable	The plan provider sets a variable pay-out rate. For example, this might be calculated as a percentage of the net asset value of the fund and could vary between expected minimum and maximum values, such as between 4 and 6 per cent.
Consumer determined or advised approach	**Stable**	The consumer decides on the periodic income they want to draw at the beginning and reviews their requirements from time to time. For example, every three years, as was usual for capped drawdown.
	Variable	The consumer draws as much or as little income as they wish from one period to the next.

Approaches to investing for drawdown

As well as providing the desired income, another important consideration is how the pay-out pattern responds to sharp falls in asset values. Even relatively short-term market shocks can have critical effects on income drawdown vehicles because losses on assets are realised if they're sold to generate an income. Pensioners could temporarily reduce their income from their DC pension pot to give the fund time to recover, but that brings another set of problems. Realistically this is only feasible for those who have other savings and income to rely on.

Providers have devised different strategies to address the problems posed by investment risk in drawdown. The following are some of the main methods of investing through retirement. They're not necessarily mutually exclusive. They may be complementary and a blended approach may be best suited to achieve a given goal.

Strategic asset allocation

This approach takes a medium to long-term view on the asset mix that will deliver a certain level of risk and return. It can be static or more likely dynamic, adjusting the allocation in response to evolving market risk and reward opportunities. The challenge for asset allocation in the retirement phase, however, may be somewhat different to that in the accumulation phase.

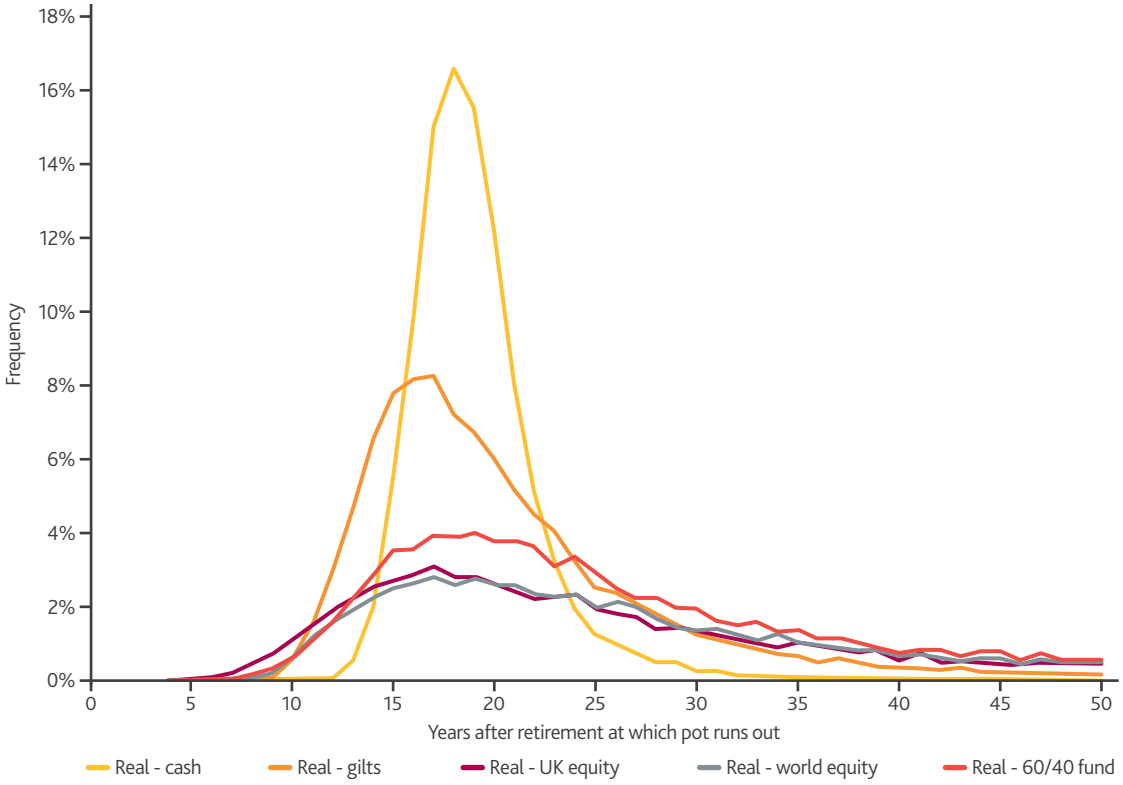
Asset allocation in the accumulation phase tends to be about maximising returns within a risk tolerance or budget. The investment time horizon in accumulation tends to be well defined. Reasonable assumptions can be made about a retirement date, for example. Furthermore, assumptions can be made about future contributions into the pot.

In retirement, however the investment time horizon is somewhat harder to gauge. Arguably both the short and the long term are important. In addition, there are unlikely to be future contributions to mitigate investment losses. In fact, drawing an income from a fund of assets that are falling in value will likely exacerbate losses.

As a result, achieving a level of capital protection is a critical part of investing for drawdown, ideally in tandem with sufficient growth or yield to sustain the pay-out of an income.

Figure 7.3 The sustainability of different asset mixes in drawdown

This chart shows the frequency (percentage of scenarios) that different investment portfolios run out of money after a certain number of years. It's assumed that the pot size at retirement is £50,000 and that £3,000 is withdrawn every year. These results are derived from a bootstrapping methodology using historical data.



Source: Dimson, Marsh & Staunton, NEST

Drawdown lifestyling

Lifestyling is the adjustment of the asset allocation over time along a reference risk glide path. The journey along this glide path can be predetermined and mechanistic or more dynamic with greater discretion as to how much risk to take and when.

This is a familiar concept from DC investment for accumulation, where savers' pots are de-risked as they approach retirement, as in NEST's Consolidation phase. However, in drawdown, as in accumulation, lifestyling may involve more than simply de-risking. Liquidity requirements are likely to change over time, particularly if the balance is declining, because the periodic withdrawal amount will become an increasingly greater portion of the remaining pot.

One objective for lifestyling in a drawdown vehicle may be to target annuity tracking assets after a certain period of time, so that the member can purchase a guaranteed income when it offers relatively attractive value and before mortality drag becomes significant.

Volatility management

With the objective of mitigating severe downside risk, volatility management is an application of dynamic asset allocation to trigger a de-risking of the fund on volatility signals. It can either be a mechanistic process, responding to a limited set of parameters, or be more subjective and take a holistic view of market risk.

Box 7.1

Volatility management

Volatility control strategies - or volatility-responsive asset allocation strategies - have become increasingly popular since the global credit crisis, when diversification alone failed to protect investors. A number of diversified growth funds have adopted this approach.

The key characteristic of these products is the desire to protect the portfolio against extreme market falls and provide relatively stable performance. Volatility usually increases in times of market stress and variations in market volatility are to some extent persistent.

The strategies rely on a number of risk indicators that attempt to forecast when markets might suffer a significant downturn. As volatility or other risk-focused signals move past a pre-defined critical threshold, the strategies reduce risk by allocating away from risky assets like equities and toward less risky ones like cash or bonds. As risk levels fall and markets normalise, portfolios are returned to fully invested strategic positions.

The aim of volatility management is to navigate through market turmoil and deliver a smoother distribution of returns without giving up too much upside. Some upside opportunity might be missed by being cautious during volatile rising markets or by maintaining a conservative asset allocation for too long.

Two potential issues around volatility management are often cited. The first is that such an investment approach is momentum-oriented. Because equity volatility tends to rise as equity prices fall, the strategy involves selling as markets fall and buying back as they rise. In certain market environments the investor ends up repeatedly selling low and buying high.

The second is that if they're widely adopted these strategies can create systemic risk. As the assets of NEST members grow, we need to be sure that our members are invested in strategies that are scalable and don't contribute to systemic risks.

The success of volatility managed strategies is highly dependent on the skills and experience of the management team, as well as the strength of the underlying models and processes. In addition, it's vital that markets are rich in liquidity relative to the size of funds managed.

Liability matching

This approach involves investing in securities that provide cash flows matching the size and timing of income withdrawals. Typically this approach focuses on fixed income assets and hence is less likely to benefit from significant capital growth, but it can create a more certain income profile. Liability-driven investment (LDI) is widely used in defined benefit (DB) pension plans and by annuity providers. While the concept is simple, execution can be difficult, depending on the nature of the liabilities. We understand that some providers are considering designing LDI-like drawdown strategies. However there may be considerable challenges in terms of identifying appropriate assets and generating sufficient income.

Liability-matching requires that the investor can purchase, at a fair price, the fixed income securities whose maturities and coupons match their pay-out profile. This becomes more difficult the longer the investment horizon.

The major drawback for applying LDI as an income drawdown solution in the current environment is that traditional fixed income assets, such as bonds, currently offer a very low nominal yield. Some investors may therefore look to income-generating asset classes beyond bonds, such as real estate, infrastructure and shares with high dividends. They'll need to be wary of the different levels of uncertainty both in asset values and income profiles of these different sectors of the market.

Box 7.2

Total return versus yield

From a purely academic perspective, there's no reason for investors to prefer taking retirement income from capital or from income generated by their assets, such as dividends from shares and coupons from bonds.[124] There may be elements in the tax regime that make one preferable over another, but both are valid approaches.

However, there is little doubt that individual investors prefer to withdraw retirement income from the cash flows generated by their investments rather than capital. We can see this in the popularity of equity income funds in the UK and in the number of drawdown products which are structured around income generating assets of this sort.

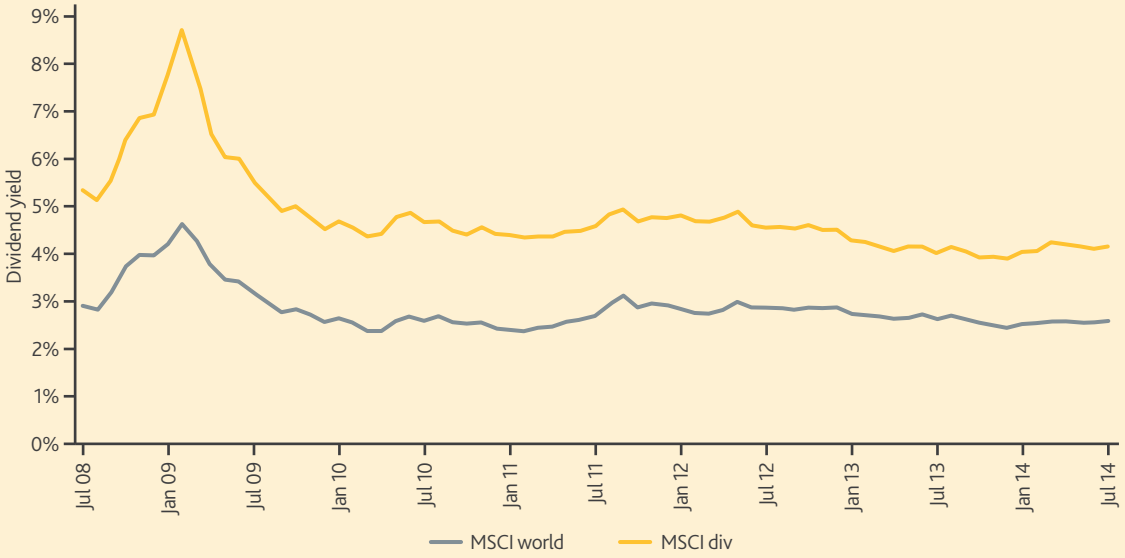
This is possibly a behavioural bias, although some argue that high yielding assets are likely to outperform over the long term. Even if the preference isn't rational, designing a product that acknowledges behavioural biases should make sense for providers.

There is a point, though, when high-income assets are fundamentally expensive, or the risks being taken to sustain the yield are excessive. Furthermore the cost of managing such income products, which tend to be actively managed, may be higher than other investments.

[124] Modigliani, F.; Miller, M. (1958). "The Cost of Capital, Corporation Finance and the Theory of Investment". American Economic Review 48 (3): 261–297

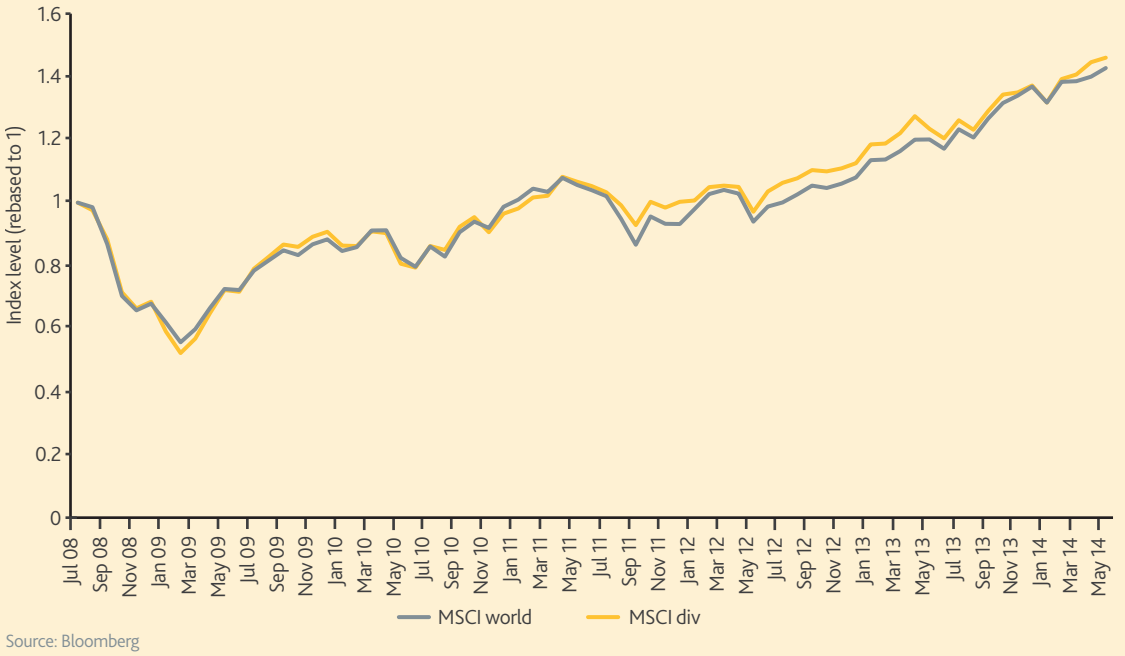
Figure 7.4 Dividend yields and the performance of high dividend stocks

This chart shows the dividend yield generated by a broad market benchmark – the MSCI world – and a version of that benchmark which includes only the higher dividend yielding stocks. Yields on the high-yield index have declined over recent years to around four per cent.



Source: Bloomberg

This chart shows that the total return performance of the broad market benchmark and the high dividend yield version of it are very similar. This chimes with the academic perspective on dividend policy and its effect on shareholder value.



Source: Bloomberg

Investment-linked annuities and structured products

Some retirement products combine the investment and insurance models. These have not been especially prevalent in the UK to date but may be worth exploring as a third way of meeting members' conflicting needs and expectations, particularly if the new rules stimulate product innovation.

An investment-linked annuity looks similar to a common income drawdown product but incorporates mortality pooling. In an investment-linked annuity, the value of your capital is not guaranteed and nor is the income you can draw from it, but the contract offers a trade-off. If you die, your remaining capital is retained by the insurance company, but while you survive your capital benefits from the mortality cross subsidy. As we discussed in chapter six, innovation could see annuities designed with a spectrum of death benefits, and this applies equally to investment-linked annuities.

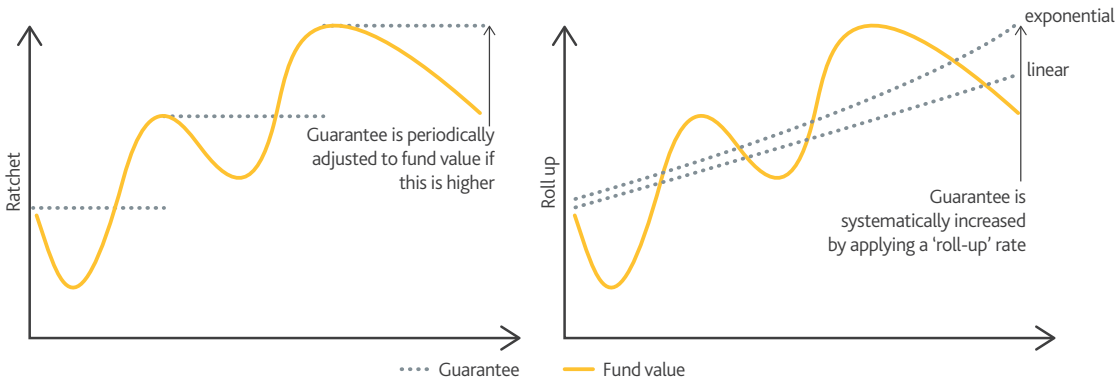
Structured products capture an array of investment vehicles. However, in the context of retirement solutions, some invest for capital growth while using various strategies and structures to ensure either a degree of capital protection or to guarantee a minimum of level of income.

Variable annuities are prominent retirement products in the US, and are commonly designed as structured products which combine elements of insurance-like guarantees with a unit-linked retail investment vehicle. The guarantees can be designed either as true insurance, where the liability is carried on the provider's balance sheet, or through derivative instruments that place the risk with a number of counterparties in financial markets. The objective in many cases is to maintain exposure to growth assets and, if capital grows sufficiently, to reflect this in higher levels of guaranteed income. Figure 7.5 illustrates two examples of how minimum income can increase if investment performance raises capital value above certain thresholds or 'high water marks'.

From one perspective, structured products may go some way towards giving consumers what the evidence base in chapters two and three suggests they want from their retirement vehicle. That is: a degree of certainty and protection from market crashes while retaining some control over their money and the opportunity for growth.

In the UK at least, uptake of structured products in retirement has been relatively low. This is likely due, in part, to a perception that they tend to be complex, opaque and, particularly in the case of variable annuities, relatively expensive.

Figure 7.5 Two types of conceptual variable annuity with an escalating guarantee feature



Source: Milliman illustration

Box 7.3

The cost of capital protection

Capital protection always carries an implicit opportunity cost. Safer assets offer lower expected returns than risky assets over the long term. The alternative to investing in low-risk assets is to either employ hedging strategies or purchase insurance.

The trade-off between cost and capital protection is a familiar one in the retirement space. In chapter six we discussed the costs of purchasing annuity policies from insurance companies. Hedging strategies can prove expensive, be it through the payment of option premiums, transaction costs or the fees paid to expert asset managers.

Structured products seek to avoid the onerous costs of guaranteeing an entire portfolio or income stream. They do this by taking a more piecemeal or iterative approach to locking in degrees of capital value, or levels of income, over time.

Different levels of protection and different types of protection cost more than others. While the value an individual puts on protection is highly subjective - a function of their risk aversion - we expect that some strategies will, structurally, offer better value for money than others.

One approach to achieving a degree of protection in your strategy at lower cost is to make it somewhat self-funding. An interest rate collar is a useful example of selling upside to pay for downside protection.

Another way of looking at is to consider the transferal of risk and return. When you buy portfolio insurance, you pay for someone to effectively take all the risks of your investments but benefit from none of the rewards. A different approach, where another party can share in the portfolio's returns when performance is very strong, might allow you to offload some of the risk at a lower explicit cost.

Case study 7.1

United Technologies Companies – Lifetime Income Strategy

United Technologies (UTC) is a US-based global technology conglomerate. UTC companies employ more than 212,000 people around the world. Over recent years, UTC has reviewed their US pension provision, most notably its DC investment plan. Its objective has been to provide their workforce more clarity and certainty as to what to expect from their savings in terms of income in retirement, while preserving the flexibility of their DC benefits. UTC launched its enhanced default program, the Lifetime Income Strategy, in 2012. This personalised lifestyling approach to retirement savings and drawdown combines a managed investment portfolio with a form of insurance that secures a guaranteed minimum income for life.

The strategy begins to gradually de-risk from an equity/fixed income split of around 90:10 after the member's 40th birthday (about 25 years before expected retirement), targeting 60 per cent equity and 40 per cent fixed income beyond the member's 60th birthday.

Central to the approach is that the programme gradually shifts assets from a traditional investment-only portfolio into a component called the Lifetime Income Strategy Secure Income Fund, which holds an annuity contract feature known as a Guaranteed Lifetime Withdrawal Benefit (GLWB). The transition starts at age 48 and continues until complete at age 60, or different ages as selected by members. Assets held in the Secure Income Fund are used to purchase, from a pool of different insurance providers, a guarantee that this money will provide a minimum level income for life upon the member's retirement.

Currently there are three separate insurers that compete to offer withdrawal rates for securing the income on each tranche of assets. A specific insurance premium of 1.00 per cent per annum is deducted from assets in the Secure Income Fund. Combined fees for the entire program start at 0.09 per cent per annum prior to the age of 48 and gradually increase to 1.19 per cent per annum by the age of 60. The premium fees increase as an individual approaches retirement and a greater proportion of assets are used to purchase a secure income.

When a member comes to retire, they begin to drawdown from their fund. The rate at which they drawdown is a minimum income amount equal to the weighted average of the rates they've secured from insurance providers over the course of their glide path into the insurance portfolio, and the greater of either 1) the assets contributed to the Secure Income Fund over time, or 2) the highest market value reached on any birthday prior to or at the time of retirement.

In the event that either:

a) investment performance is poor and capital is depleted before mortality, or

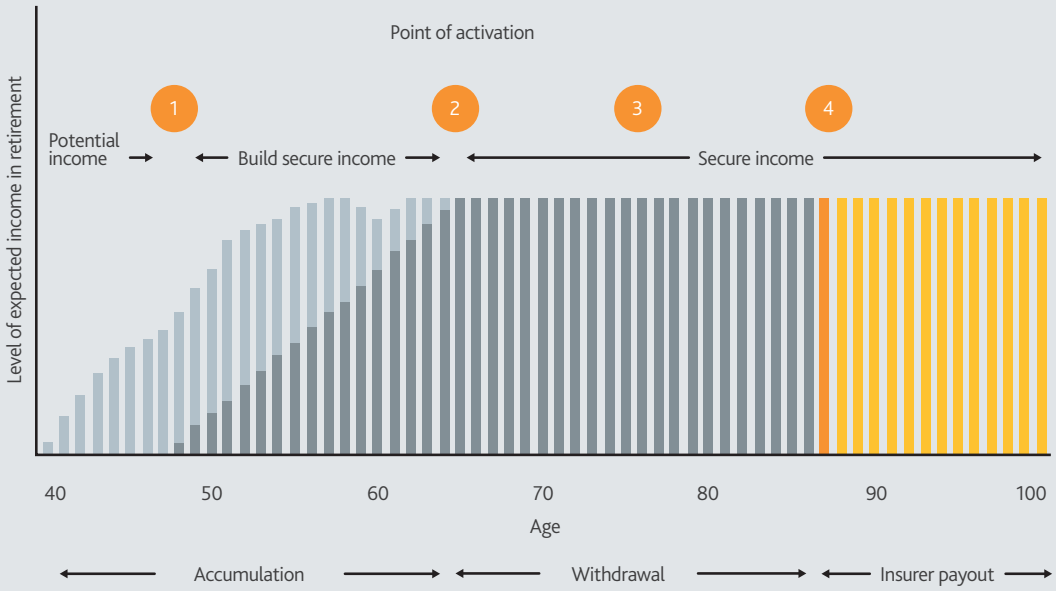
b) an individual lives beyond their life expectancy and their capital runs out solely due to minimum guaranteed withdrawals

the insurance companies will step in and provide the guaranteed level of income until death.

Members retain flexibility to withdraw or transfer any portion or all of their entire pot. The cost for this flexibility is the premium they've already paid and a proportional reduction in future guaranteed income. If a member dies before their fund has been exhausted, all remaining assets are passed on as part of their estate.

The level of guaranteed income a member receives can be ratcheted up if investment performance takes their fund value above the high water mark of minimum guaranteed income. This can be in the run up to retirement or after they've begun to draw it down.

Figure 7.6 Illustrative example of how the Lifetime Income Strategy works



1. Account balance invested in traditional investment portfolio starts building Income Benefit
2. Member activates Income Benefit and commences withdrawals, remains invested in markets
3. Member entitled to withdraw full value of Income Benefit each year regardless of performance
4. If account balance is depleted, insurer pays Income Benefit for remaining lifespan

Note: *Account balance remaining at time of death is paid to beneficiary and may be withdrawn by member at any other time with no additional fees. However, early and excess withdrawls may result in the foreiture of significant economic value.*

Source: UTC

In order to deliver investment solutions for income drawdown that are appropriate for a new generation of DC savers, providers will need to design products which balance cost, transparency, capital protection and returns. The approaches set out in this chapter will be stronger on some of those areas than others, but new methods might enhance a given strategy's performance across all the different areas.

Consultation question

18. If you were designing a default drawdown strategy for NEST members, how would you do it?

We believe such approaches will require innovation and are therefore interested in solutions that address the following issues:

- governance – including setting pay-out rules
- asset allocation and risk management
- flexibility for members
- incorporation of insurance for market and longevity risk

Chapter eight

Sharing risk between members

Chapter highlights

- Risk sharing is a familiar feature in pension design globally but elements of it have fallen out of favour in the UK. The financial services industry may consider revisiting these products in order to meet consumer desires for more certain outcomes.
- Collective defined contribution (CDC) schemes cover a spectrum of approaches that can be delivered in a variety of ways and have a variety of different features.
- Governance challenges around the need to treat different cohorts equitably may be the biggest driver of asset allocation for risk sharing schemes in operating in different countries.
- Evaluating CDC against DC involves a complex trade-off between risk, return, transparency, governance and trust. Above all it demands trading off between the risk appetites of scheme members and trustees.

This chapter explores the concept of risk sharing in DC investment and post-retirement income product design. Risk sharing up to and into retirement may provide an alternative way for NEST members, offering:

- a degree of certainty of outcomes
- a smoothing of investment volatility
- ongoing potential for investment growth.

We've included this chapter in light of the draft legislation proposing new types of occupational pensions and collective benefit DC schemes.

We're interested in views about the suitability of different forms of risk sharing as a way of meeting the needs of NEST members as they approach retirement and look to take out their savings.

Three principal techniques of sharing risk between members

The sharing of risk between individuals, rather than sharing risk with employers has long been a feature of the UK pensions and insurance system. Its primary aims are to provide more predictability about outcomes, reduce the dispersion of those outcomes among similar age cohorts or across generations, and attempt to protect individuals from losing out because of influences that are usually random, unknowable and out of an individual's control.

In essence, risk sharing tries to provide more equitable outcomes, reducing the potential for losers by reducing the potential for winners through trading-off exceptional gains against exceptional losses. There may well be additional benefits of efficiency through the collectivisation of risks and assets.

It's possible that simple models of risk sharing, or perhaps a more comprehensive approach through the implementation of systems like CDC, could offer a means of delivering both security and flexibility for incomes in retirement. This is a combination of features not usually associated with either traditional annuitisation or income drawdown models. Enhancing predictability of retirement income for a given level of contribution may help to answer the question of how much to save. In doing so it could result in people saving more.

The three main risks that risk sharing schemes look to share are:

- market risk
- longevity risk
- economic and market timing risk.

Market risk is, for example, shared between participants of with-profits funds – one of the most popular ways of DC saving in the UK in the past. With-profits funds work by smoothing the fluctuations in investment returns usually present when investing in growth seeking assets like equities. A proportion of returns are held back in the good performance years so that pots can be topped up when performance is not so good.

Longevity risk has traditionally been shared through the pooling of mortality risk as set out in chapter six on annuities. The risk of outliving your savings - which is essentially unknowable beforehand - is shared with others.

Internationally, the sharing of **market timing and economic risk** has been achieved through the development of schemes like CDC pensions - popular in the Netherlands and some Scandinavian countries. Here the risks of investing or retiring at the 'wrong time' are shared across generations. The aim is to smooth the cyclical economic risk that individuals face when, for example, markets perform very differently in different periods, or where the experiences of interest rates and inflation vary for different generations.

Risk sharing in DC

Risk sharing in the accumulation and consumption phases of DC schemes can take a number of forms. Below are two examples of relatively familiar models which share risk between individuals and rely on insurance companies' balance sheets to a large extent to deliver on the targeted outcome. In these two examples the insurance entity is also the conduit for moving risk between counterparties.

Box 8.1

With-profit annuities

A with-profits annuity is conceptually similar to a with-profits accumulation fund, but the bonuses scale up or down the income disbursements rather than accruing to the fund. Like other with-profits approaches, the size of the bonus level reflects the performance of the underlying investments but with a degree of smoothing. The provider typically has wide discretion in deciding bonuses and investment strategy, and won't guarantee a bonus every year.

However, they'll generally follow and publish a set of principles and guidelines. The annuitant chooses their anticipated bonus rate (ABR), which is effectively the level of income they require, taking a value between zero and five per cent. The higher one sets the ABR, the higher the initial level of income, but the greater the risk that the provider will have to reduce the level of income at some point in the future.

The actual bonus or reduction is determined by dividing the bonus announced by the provider by the ABR. So if the notional annual income is £10,000 and the individual chooses an ABR of three per cent, then the bonus in different scenarios might be:

- the provider declares a three per cent bonus - the income remains flat
- the provider declares a four per cent bonus - the income is calculated as £10,000 x (1.04/1.03) = £10,097
- the provider declares a two per cent bonus - the income is calculated as £10,000 x (1.02/1.03) = £9,902 (assuming no smoothing)

If smoothing is in place, then rather than deduct £98 from the income in the case of two per cent bonus, the income will remain flat. However, this will be offset against a subsequent bonus in excess of the ABR.

Case study 8.1

TIAA Traditional Annuity

The Teachers Insurance and Annuity Association and the College Retirement Equities Fund were founded in 1918 and 1952 respectively. They're governed as a single entity called TIAA-CREF. TIAA-CREF has historically offered funding vehicles for DC plans.

Amongst TIAA-CREF's major offerings is the TIAA Traditional Annuity product. This offers scheme members guaranteed growth rates in accumulation and annuity rates for decumulation. Members build up known amounts of minimum retirement income while they save.

Each contribution paid into the TIAA Traditional account locks in a guaranteed minimum annuity rate which will be disbursed at the end of the accumulation phase. Under most TIAA Traditional Annuity contracts, the minimum guaranteed interest rate during the pay-out phase is 2.5 per cent. As in the accumulation phase, this guaranteed minimum rate may be supplemented by additional amounts declared by the TIAA Board of Trustees on a year-by-year basis.

These additional amounts reflect earnings in excess of the guaranteed minimum rate and pay-outs of unneeded contingency reserves.

For example, a 22 year-old who contributes $1,000 to the TIAA Traditional Annuity with a minimum 3 per cent interest rate in accumulation would know that this contribution will purchase at least $171.77 of annual lifetime income at the minimum annuity rates in many TIAA Traditional Annuity contracts.

Note: final pot size based on a minimum growth rate of 3% will be $3,564.52, and the minimum income in retirement of $171.77 reflects both the minimum interest rate of 2.5% and the repayment of principal.

Collective defined contribution

Recent proposed changes to legislation provide trustees in the UK more options to incorporate risk sharing into their pension schemes, with a view to offering members a greater degree of certainty as to what their savings outcomes are likely to be.

Given the lack of shared risk DC schemes in the UK today, we've looked at the experiences of schemes overseas and in particular their approach to asset allocation. In Annex B we've also compared these to the conceptual models that have been developed as part of the ongoing debate about CDC's suitability for UK pension schemes.

A note on definitions

In this document we use the term 'risk sharing' as a general term. However, the Pension Schemes Bill 2014 sets out specific definitions for new types of occupational pension schemes that can incorporate elements of risk sharing:

- A 'shared risk scheme' or a 'defined ambition scheme' refers to schemes with some form of pensions promise made to the member in the accumulation phase, but not a full promise like in DB. Such a scheme can contain a mix of promised benefits and non-promised benefits. Risks are shared between the member and an employer, or third party.
- A 'scheme offering collective benefits' is a benefit-level definition and contains no pensions promise. There is a targeted benefit instead of a promise. Risks are pooled between the members and are not shared with an employer. There is no employer liability to stand behind the targeted benefit.

What are the features of collective DC schemes?

CDC differs from models like with-profits in that it doesn't necessarily use an insurance company's balance sheet to provide solvency, but rather the collective savings of scheme's members. CDC schemes are by no means homogenous. What unites CDC schemes is a contrast with traditional DC. They provide a clear intent as to what individuals should expect in terms of performance and likely income at retirement. This commitment or indication of a target income is not a promise as is present within DB arrangements or contracts of insurance, and there's no requirement for an employer covenant to stand behind the commitment.

Critics of CDC have a variety of concerns about the suitability of CDC type schemes. Chief among these are:

- intergenerational unfairness - younger members losing out to older generations - particularly those older generations where pensions are already in payment
- the potential for complexity and opacity
- the lack of trust if pensions in payment are cut
- the difficulty in communicating a commitment that isn't backed by a counterparty
- the challenge for trustees or providers to fairly apportion returns to different cohorts.

International approaches to investing in CDC schemes

A look at CDC schemes in other countries reveals significant similarity to today's mature DB schemes, with bonds as the principal asset class. The investment approach and asset allocation point to an emphasis on yield certainty, an overall narrow spread of returns, with lower upside potential than typical pure DC schemes. A scheme with this asset allocation is likely to be both more able to sustain an appropriate pension commitment to members, and share returns between cohorts of members with some accuracy.

Proponents in the UK for CDC suggest a higher allocation to equities is more appropriate. Conceptual research conducted in the US[125] and UK [126] on CDC schemes support this.

If a higher allocation to equities were chosen there would be greater uncertainty about whether the target pension over or under-promised returns to cohorts of members and the sustainability of the pension promise. Adjustments may have to be made, the direction and magnitude of which may be felt by future cohorts of members. Maintaining trust in the scheme would be more challenging if public discussion becomes unfavourable about the intergenerational fairness of the investment returns apportioned to cohorts of members.

The governance questions surrounding the pension promise are likely to become more significant the higher the allocation to equities. This may help to explain why the CDC schemes we've analysed don't have a high allocation to equities, or follow the asset allocation indicated by conceptual research. There are also likely to be cultural elements to the different approaches to asset allocation in different regions.

The section that follows builds a picture of the current investment approach and asset allocation of shared risk and non-shared risk pension schemes. The section after that considers some of the governance questions that arise.

[125] Almeida, B and Fornia, W. B (2008) A better bang for the buck: the economic efficiencies of defined benefit pension plans

[126] Government Actuary's Department (2009) Modelling collective defined contribution schemes; Pitt-Watson, D. and Mann, H. (2012) Collective pensions in the UK; Aon Hewitt (2013) Collective defined contribution plans: A new opportunity for UK pensions?

Comparison of asset allocations in different pension scheme models

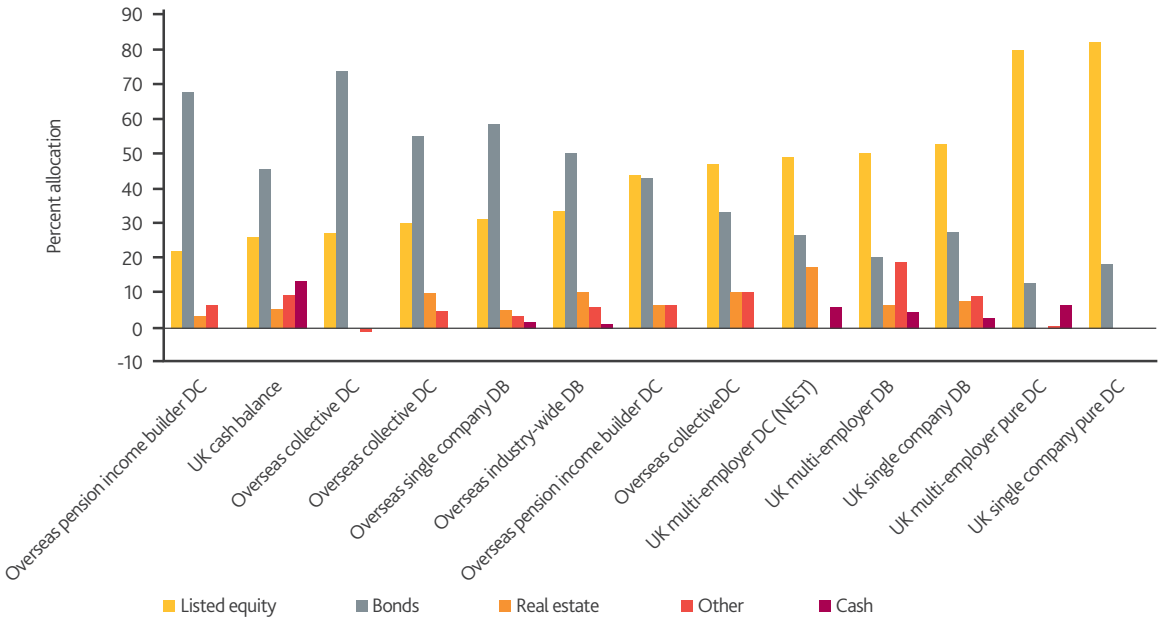
Individual pension scheme characteristics

The section looks at the allocation to equities, bonds, real estate, cash and 'other' assets for a sample of 13 large-scale, well-known, UK and overseas individual pension schemes. The sample schemes had five different types of arrangement on the risk sharing spectrum, or pension promise. These were pure DC, collective DC, pension income builder DC, cash balance, and salary-related DB.

CDC and pension income builder DC are shared risk DC schemes. Cash balance is a shared risk scheme that in some jurisdictions is classified as DC and in others as DB. Here we only refer to it as cash balance. Figure 8.1 presents the allocations. Asset allocations are as at the end of 2013. Moving from left to right across Figure 8.1, the pension funds are ordered from low to high based on the their asset allocation to equities.

On the right-hand side of Figure 8.1 are the two pure DC schemes. On average, 81 per cent of their assets are held in listed equities and 15 per cent to bonds. This is a common allocation among pure DC schemes.[127]

Figure 8.1 Asset allocation of different types of pension scheme



Source: NEST 2014

[127] Schroders (2014) FTSE Default DC Schemes Report, Issue 3, May

To the left of Figure 8.1 are the cash balance, collective DC, and pension income builder DC schemes. Between 22 per cent and 47 per cent of their assets are allocated to equities and between 33 per cent and 68 per cent is allocated to bonds. No examples of shared risk DC schemes with a high equity allocation were found.

The relatively low equity allocation of shared risk DC schemes may reflect several factors:

- providers wanting a high comfort level that the scheme can sustain the pension commitment made to members
- providers desire to reduce the extent to which returns are shared between cohorts of members and improve the ability to decide cross-subsidies between cohorts fairly and accurately
- employers are not approached for further contributions to make good any commitment to members should growth assets fail to provide the returns required.

The asset allocation of the four DB schemes are located towards the centre of Figure 8.1. Their differences in equity allocation compared to shared risk DC schemes may reflect the willingness of each employer to contribute additional funds in the event of poor market performance. As dependent as this is on the strength of the employer's covenant, the asset allocation may speak more about the employer's attitude to take investment risk.

Table 8.1 Asset allocation of pension schemes and their type of risk sharing

	Equities	Bonds	Real estate	Other	Cash
Average allocation					
Cash balance	26	46	5	10	13
Pension income builder DC	33	56	5	6	0
Collective DC	35	54	7	5	0
DB	42	39	7	9	3
Pure DC	81	15	0	0	3

Source: NEST 2014

Allocation to equity type assets in shared risk DC schemes

The evidence above suggests that shared risk DC schemes allocate less to equities than both pure DC schemes and even some DB schemes do. This evidence contrasts with conceptual studies that shared risk pension schemes should have a high allocation to equities. In looking to understand the debate about the merits of CDC in a UK context, we explore how recent conceptual studies of CDC compare to international experience. This study can be found at Annex B.

Pure DC alongside risk sharing approaches

Finally, we would be interested in views as to whether the provision of risk sharing approaches or pure DC needs to be a binary decision. We'd like to explore whether there are approaches where risk sharing could be used alongside DC as:

- a strategy available for specific cohorts of members, such as those in or approaching retirement
- a fund choice alongside existing default funds
- as part of a hybrid default fund, providing an underpin to a pure DC approach.

Consultation questions

19. Should NEST consider some form of risk sharing as part of a solution for NEST members in retirement – if yes, what sort and why?

20. Would there be benefits in combining a risk sharing approach and pure DC, and if so, what would these be?

Annex A

Summary of round table findings

To help us develop our thinking about the different approaches of delivering retirement solutions for NEST members, we hosted two round table discussions at NEST's offices in the summer of 2014. We are grateful for the time, expertise and enthusiasm of all those who took part.

Round table 1 - Securing an income for life, mortality pooling and bequests

Date: 8 July 2014

Organisations represented:

- Allianz Global Investors RiskLab
- Association of British Insurers
- Barclays
- Barnett Waddingham
- BlackRock
- Cass Business School
- Charlton Frank
- Deloitte
- F&C Investments
- Government Actuaries Department
- Legal & General
- Milliman
- Standard Life Investments
- State Street Global Advisors
- Towers Watson

This round table explored the existing annuity landscape and how it was likely to evolve in the context of meeting the needs of DC savers under the new freedoms.

The key themes:

- When does purchasing an underwritten retirement income make economic sense?
- Does the concept of default annuitisation make sense?
- Whether deferred annuities, both those which would pay out at the point of retirement and those which would pay out later in life as a longevity hedge, have a role in retirement strategies in the future?

Round table 2 - Investing through retirement

Date: 19 August 2014

Organisations represented:

- Allianz Global Investors RiskLab
- Barnett Waddingham
- BlackRock
- Charlton Frank
- Deloitte
- F&C Investments
- HSBC Global Asset Management
- Lane, Clark & Peacock
- Legal & General Asset Management
- Milliman
- Old Mutual Global Investors
- Schroders
- State Street Global Advisors
- Standard Life Investments
- Towers Watson

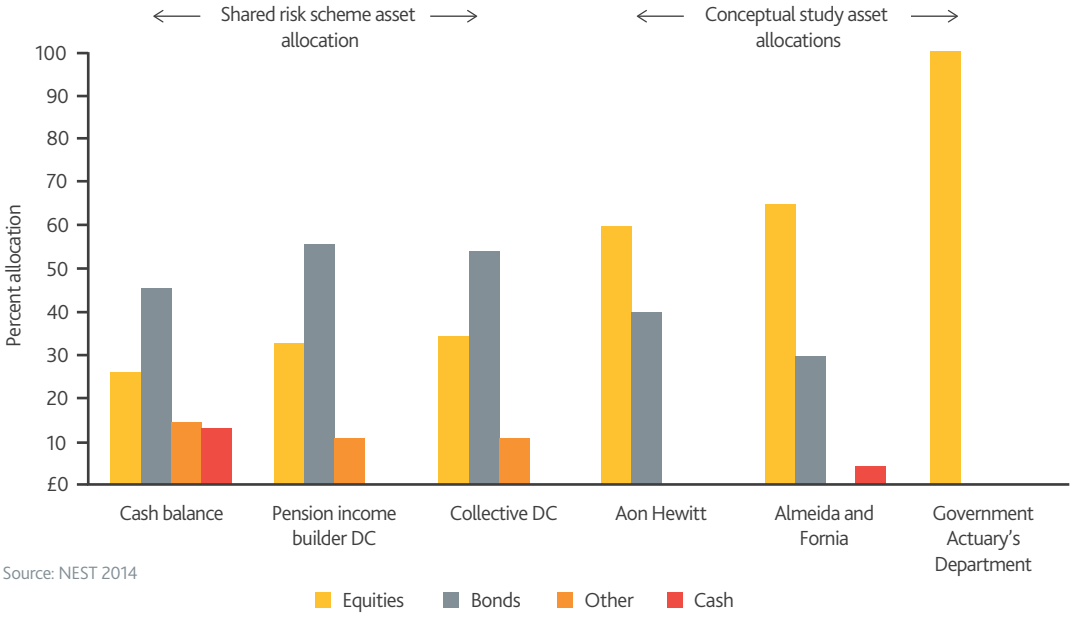
The purpose of this round table was to explore if and how post-retirement investment and drawdown vehicles can be structured to meet the needs of mass-market DC savers, and what constitutes reasonable expectations for people using such vehicles.

Annex B

Comparing CDC conceptual studies with international experiences

Figure B1 presents the asset allocation of the sample of shared risk DC schemes, excluding DB schemes, alongside the asset allocation used in conceptual shared risk scheme studies. Looking at conceptual studies first, their asset allocation is concentrated in one or two asset classes only, the principal one being equities. The allocation to equities ranges from 60 per cent to 100 per cent. The allocation to equities in particular is significantly higher than actual shared risk DC schemes.

Figure B1 Asset allocation of shared risk schemes vs asset allocation used in conceptual shared risk scheme studies



Source: NEST 2014

Table B1 summarises these trends and Table B2 details the conceptual studies and their asset allocations.

Table B1 Average asset allocation of actual and conceptual shared risk schemes

	Equities	Bonds	Other	Cash
Actual shared risk schemes				
Average cash balance	26	46	15	13
Average pension income builder DC	33	56	11	0
Average collective DC	35	54	11	0
Overall, average asset allocation	31	52	12	4
Conceptual shared risk schemes				
Overall, average asset allocation	75	23	0	2

Source: NEST 2014

Table B2 Conceptual studies of shared risk pension schemes

Author	Date	Title	Shared risk DC asset allocation	Pure DC asset allocation	Cost difference	Performance difference
Almeida, B and Fornia, W. B	2008	A better bang for the buck: the economic efficiencies of defined benefit pension plans	65 per cent equity, 30 per cent bonds, 5 per cent cash	65 per cent equity, 30 per cent bonds, 5 per cent cash, lifestyled to 10 per cent equity, 80 per cent bonds, 10 per cent cash	100bps disadvantage annually to pure DC	+ 46 per cent to shared risk
Government Actuary's Department	2009	Modelling collective defined contribution schemes	100 per cent equity	100 per cent equity lifestyled to 100 per cent bonds and cash	60bps disadvantage annually to pure DC	Up to + 39 per cent to shared risk
Pitt-Watson, D. and Mann, H.	2012	Collective pensions in the UK	Mixed portfolio	The same mixed portfolio lifestyled	30bps disadvantage annually to pure DC	+ 37 per cent to shared risk
Aon Hewitt	2013	Collective defined contribution plans: A new opportunity for UK pensions?	60 per cent equity, 40 per cent bonds	60 per cent equity, 40 per cent bonds, lifestyled to 100 per cent bonds	none	+ 33 per cent to shared risk

Source: NEST 2014

If a shared risk DC scheme was to adopt an investment approach with a high allocation to equities as indicated by conceptual studies, providers will have to accept significant uncertainty about whether the pension commitment over or under-promised returns to cohorts of members and the sustainability of the pension promise.

Financial sustainability can always be achieved by cutting benefits, but there is a risk of a loss of confidence and trust in the scheme. For example, this could mean a reduction in the value of all pensions today, protecting the pensions of some members, e.g. pensions in payment, and lowering the growth in pension value or pension income of younger members.

The governance questions surrounding the income target are more significant the higher the allocation to equities. The practical governance questions may help explain why:

- the investment approach of actual shared risk schemes appear different from that of conceptual studies
- shared risk DC schemes in different regions do not have a high allocation to equities.

The difficulty with a high equity allocation is the absence of any rule by which to convert accumulated assets plus future contributions into an expected level of income. With a high allocation to bonds there is at least an approximation that will allow members to know roughly what you're getting, but this is taking place within a framework that quite conceivably may be less generous than that available to members in a pure DC scheme.

Governance and risk appetites of CDC providers

The evidence we've looked at of different experiences of the implementation of CDC internationally suggests that the challenge of making commitments as to future outcomes causes a certain degree of cautiousness among providers of such schemes. The conceptual studies comparing pure DC to CDC suggest that a like-for-like asset allocation results in superior outcomes for the CDC approach, due to two main factors:

- the ability to continue to invest in growth assets up to and into a retirement phase - no requirement for lifestyling, no need to purchase an annuity
- greater efficiencies in terms of reduction in transaction costs and performance drag due to a steady asset allocation.

There is potentially a third factor that isn't covered by the conceptual studies, that of an illiquidity premium. CDC schemes have in theory an infinite investment horizon, and are perhaps more akin to an endowment fund than a pension in terms of investment approach. A longer investment horizon should allow investments in asset classes that pure DC has traditionally stayed away from, such as infrastructure, due to liquidity and daily pricing concerns.

We'd be interested, therefore, in views as to the behavioural changes that providers may exhibit in terms of governance and providers' own risk appetite when tasked with minimising intergenerational unfairness and delivering on commitments made to scheme participants.

It may be that increased returns potentially available in a CDC approach are tempered by a tendency towards greater conservatism when it comes to asset allocation. From a member perspective this may be a perfectly reasonable trade-off if they're presented with greater confidence in likely outcomes. A further consideration is the strength or confidence level associated with the commitment. A spectrum of probability of delivery is likely to be available under the new regulatory regime. Where a provider lands on this spectrum is likely to be a key driver of asset allocation and a key factor in the communication challenge of making a commitment that is more or less likely to be met.

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The subject of this bibliography is the characteristics, attitudes, behaviours and decision making of recent and future retirees.

This topic has a lot of material. A wide range of information sources has been consulted but this doesn't constitute a rigorous and systematic review of all of the evidence. The evidence used was selected because of its academic validity or because of the important emerging theory it points to.

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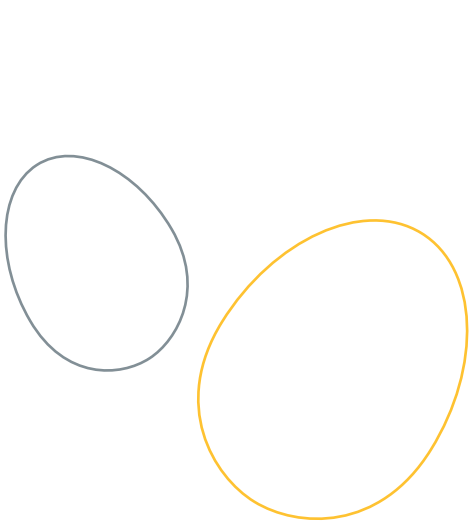

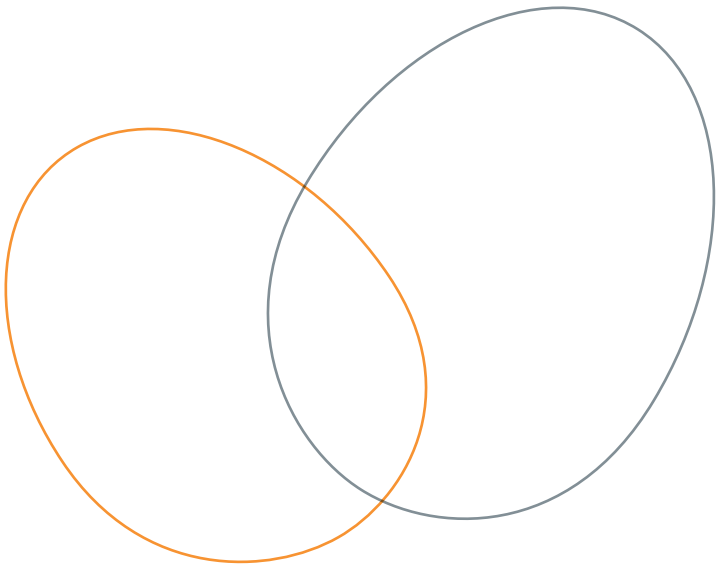

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