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Value for money in DC workplace pensions

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Executive Summary

Developments in the pensions landscape such as automatic enrolment and the introduction of pension flexibilities have led to a focus on value for money.

To date, regulators and other stakeholders have focused on charge structures, with less attention given to other elements that determine value, such as governance and communication. In turn, there have been discussions within the pensions industry around value for money. This report looks to expand the discussion to include other aspects of value for money by summarising existing research for the different factors, supplemented with PPI modelling results that explore the impact of investment, governance and individuals' choices at retirement.

This report considers the definition of value for money in workplace pensions, including both contract and trust-based pensions, in order to inform the development of Defined Contribution (DC) workplace pension provision. It primarily considers value for money from the member's perspective, although it recognises that pension schemes should also look to provide value to employers.

It may not be possible for IGCs and trustees to attain the best member outcomes for all members, these bodies may be required simply to make decisions that are broadly in members' best interests,

This reflects the fact that value for money varies in line with pension membership. It may be subjective, with two members in identical circumstances having different definitions of value.

However, while there is no single definition of value for money it is possible to identify three outcomes that are likely to be seen as positive for members across the board

These outcomes include:

- Value of the pension pot
- Security of the pension pot
- Trust in the pension scheme

These factors are used in the remainder of the summary and report as outcome measures.

A range of factors influence value for money in different ways

Pension scheme characteristics affect outcomes in different ways with each of these offering scope for attention and debate by the pensions industry. Charge levels and structures, investment returns, and contribution rates have a direct impact on outcomes, in monetary terms, as they affect the value of the pension pot. However, other areas such as governance, administration and communication are important in terms of sustaining members' trust and ensuring that the outcomes meet members' needs.

In practice, good governance can be the lynchpin for driving better value for money and, where this is absent, this could lead to significantly poorer outcomes for members

Good governance can help:

- Communicate the importance of contribution rates
- Ensure that there is transparency around areas such as charges
- Set the right default investment strategy for the membership (considering for example, appropriate levels of risk, return and volatility), monitor it, and then take timely and appropriate action to change it if necessary
- Ensure effective administration
- Ensure member communications are in the right form set at the right level of understanding and frequency, and that they increase member engagement, and drive good member decisions.
- Challenge, negotiate and possibly lower charges

Where the absence of effective governance leads to the mismanagement of investments or the absence of internal controls, this can lead to significantly lower value of pension assets.

Effective communication strategies can influence outcomes by leading to higher employee contributions

Some approaches used to date have been employee engagement or based on 'nudge' where inertia leads employees to follow a particular course of action, or a combination of these. Specific examples including automatic escalation can lead to higher contributions and have been popular with both employers and employees where survey research has explored these.

Final retirement outcomes in terms of pension pot value are largely driven by contributions

An increase in contributions from 8% to 9% or under automatic escalation up to 12% could mean a 12% or 44% increase to pension pot size for a 22-year-old median earner. While factors such as charge level and retiring earlier or later also have an impact, this is typically lower than increasing contributions for the duration of the member's working life.

Charge level alone cannot be taken as an indicator of outcomes, and should be considered together with levels of return to provide an insight into value for money

Higher charges can be justified by higher returns, resulting in better outcomes for members. However, some studies have shown that neither higher nor lower charges automatically lead to better outcomes. They suggest that although some funds with active asset allocations perform better than passive funds, as a sector overall, higher charges are not necessarily a predictor of higher performance. At the same time passive funds with lower changes will never outperform the market's benchmark returns (returns before charges are taken into account) whereas some funds with active asset allocations will.

Volatility management has the potential to decrease the chances of having negative outcomes and limit downside risk

Volatility management allows greater certainty of outcomes. It decreases the chances of having negative outcomes. Therefore, it may contribute to the outcomes of pension pot security, and trust in the pension scheme, provided that it operates in a transparent way.

Volatility management may be valuable to trustees, pension providers and members who wish to minimise detriment and to limit the range of outcomes that members might expect. This may be an approach that works for a risk-averse membership.

PPI modelling of traditional lifestyling and volatility-managed funds projects that the range of values of the volatility-managed fund is smaller. In terms of pension pot size at State Pension Age (SPA), the 10th percentile pot value is 48% of the median value (shown at 100%) for the lifestyle fund and 53% of the median value for the volatility-managed fund. The 90th percentile pot value is 207% of the median value for the lifestyle fund and 202% of the median value for the volatility-managed fund.

This suggests that individuals invested in the volatility-managed funds could have greater certainty around the range of pension pot values that they may have.

To date the pension regime has focused on value for money during the accumulation phase

In the future, Independent Governance Committees (IGCs) may want to consider value for money in decumulation. However, this role may only be extended where it is deemed that individuals are making decumulation decisions or being steered towards products that are not suited to their needs.

In decumulation:

- Members are aware that they need to make active decisions about decumulation but may not be or may not feel equipped to make these
- Communication and governance are becoming increasingly important during the decumulation phase but challenges remain around who will be responsible for this and how best to present options to members
- As with the accumulation phase, members may be best served where pension providers assess the likely behaviour of their own membership to adopt a suitable approach

In particular, the behaviour of members might have an influence on the type and volume of communication, depending on how much information members might be expected to absorb.

Similarly, member behaviour might have an impact on investment governance, with the rate at which members access their pension funds influencing the investment approach.

In conclusion, it may not be possible for IGCs and trustees to attain the best outcomes for all members. These bodies may be required to make decisions that are broadly in members' best interests. It is important to consider all determinants of value for money rather than narrowly focusing on charges.

Introduction

There has been a growing focus in recent years on the value for money offered by Defined Contribution (DC) pension schemes. In terms of workplace pensions, the complexity of pension products as well as the fact that it is the employer who selects the pension on behalf of employees have led the Office of Fair Trading (OFT), now the Competition and Markets Authority (CMA), to conclude that competition alone cannot ensure value for money for the consumer.[1]

These issues have been brought into focus further by the implementation of automatic enrolment. Previous PPI research has found that, in broad financial terms, it pays for individuals to save in workplace pensions.[2] The impetus is now to ensure that the pension schemes in which such individuals are enrolled offer rates of return in relation to the risk that they incur and, ultimately, provide them with value for money.

As a result of these concerns, the respective rule-making authorities for contract and trust-based pensions, the Financial Conduct Authority (FCA) and the Department for Work and Pensions (DWP) have brought in new governance provisions from April 2015:

- Contract-based workplace pension schemes are required to set up Independent Governance Committees (IGCs) which are tasked with representing the interests of scheme members in assessing the value for money of pension schemes.
- New minimum quality standards have been introduced for DC trust-based schemes requiring trustees to understand and assess value for money in their DC arrangements.

At the same time, an accumulation annual charge cap of 0.75% (of funds under management) was introduced for automatic enrolment pension schemes' default investment strategies. There is currently no charge cap for decumulation options.

There is a consensus amongst government departments, the pensions industry and the regulators that pension schemes must offer value for money, as well as an understanding of the requirement for trustees and IGCs to ensure that this is the case. However, there is also recognition that members do not always receive value for money, and no agreement around what value for money means in this context. This is complicated by the fact that value for money is subjective, and members and those involved in the pension provision may attach different values to various aspects of pension provision.

Therefore, the purpose of this report is to consider the definition of value for money in workplace pensions, including both contract and trust-based pensions. While the report considers the role of charges in determining value for money,

[1] OFT (2013)
[2] PPI (2014)

it also assesses the interplay of several factors which could influence a pension member's outcomes.

The report considers both the accumulation and decumulation stages of pension schemes. While, in reality, individuals' wider financial circumstances in retirement will have a bearing on the value for money provided by pensions, this report focuses on pensions alone in order to assess how pension schemes can work towards providing value for money.

The first chapter considers definitions of value for money, including the issue of who determines value for money, and some of the challenges around assuring value for money. It goes on to provide an overview of the main characteristics that drive value for money.

The second chapter considers the role of each of these characteristics in more detail during the accumulation phase.

The third chapter explores the factors that contribute to value for money during decumulation.

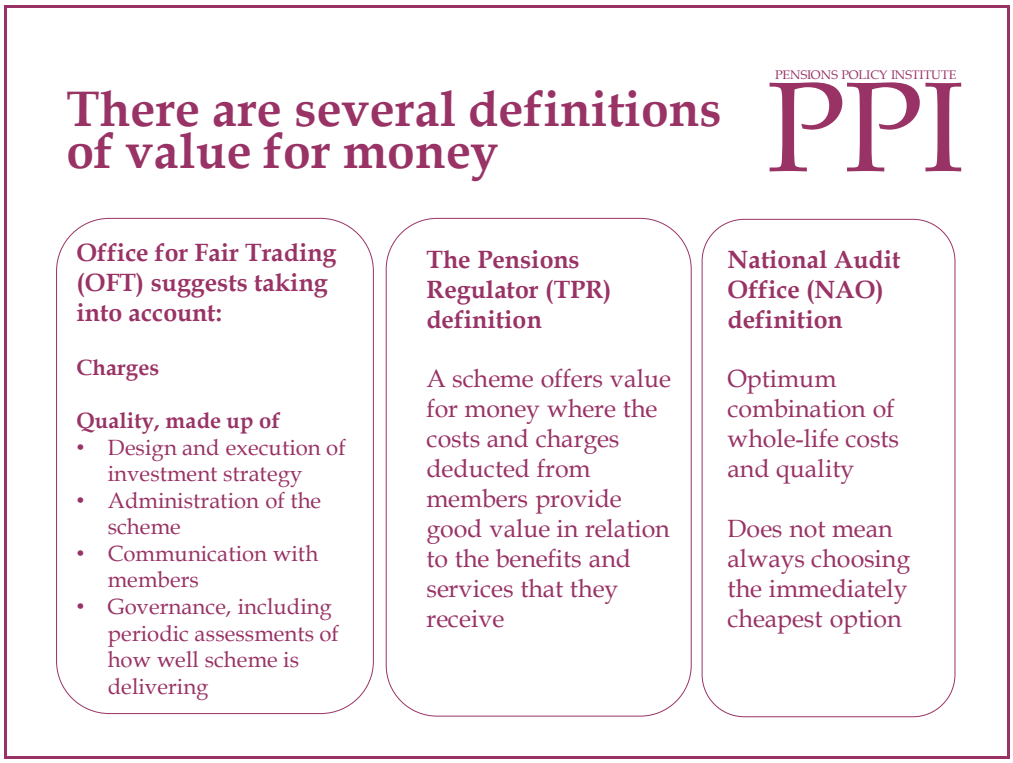
Chapter one: how is value for money defined?

This chapter considers alternate definitions of value for money, as well as the complications around reaching a common definition. It provides an overview of the bodies responsible for ensuring value for money and their respective responsibilities. It explores the role of the member around obtaining value for money, some of the factors that members might take into account and some of the challenges.

It goes on to provide an overview of the characteristics that drive value for money. This report primarily considers value for money from the member's perspective, although it recognises that pension schemes should also look to provide value to employers.

Organisations have provided different definitions of value for money (Chart 1).

Chart 1[3,4]

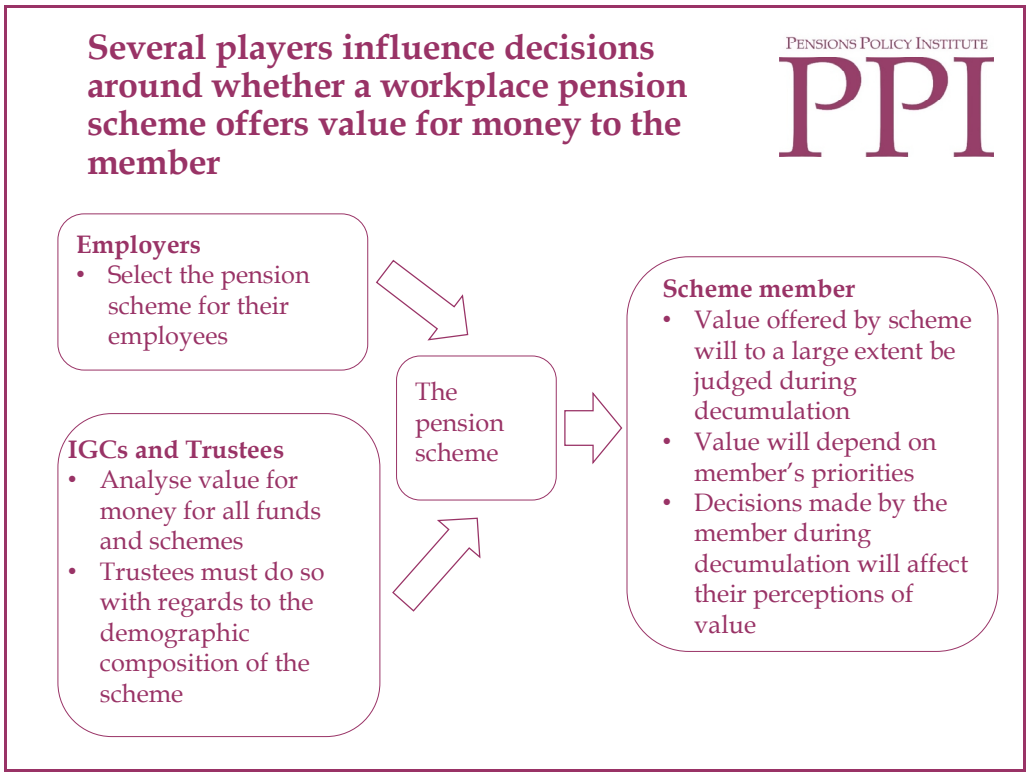


While there is no single definition around value for money in pensions, all of these definitions illustrate the agreement that the scope of this should not be restricted to charges but should also include more qualitative elements, such as communication with members, and governance. Similarly, they suggest a trade-off between containing costs and the provision of benefits by the pension scheme, depending on members' needs.

[3] OFT (2013), TPR (2016), NAO (2009)
[4] The OFT is now the Competition and Markets Authority (CMA)

Several players influence the decision as to whether a pension scheme offers value for money to members (Chart 2). These include employers who, in most cases, select the pension scheme on behalf of the employee and may select the appropriate contribution. In turn, advisers such as Employment Benefit Consultants may influence employers' behaviour. Other players include trustees and Independent Governance Committees (IGCs) who are responsible for assessing the extent to which a scheme offers value for money. The role of the member in determining value for money is more complex and is explored later in this chapter.

Chart 2



Independent Governance Committees and trustees are responsible for determining whether a pension scheme offers value for money to the member

Governance bodies have a regulatory responsibility to analyse and ensure value for money taking into account the following:

- They must assess value for money for all investment strategies (not just default ones) and all schemes (not just automatic enrolment ones).
- This includes older contract-based pension schemes, some of which have high charges that are considered to be at risk of delivering poor value.[5]
- A default investment strategy could be compliant with the charge cap but not offer value for money.
- In the case of trust-based pensions they must analyse value for money with regard to the individual demographic composition of their scheme.

[5] National Archives (2013)

Several elements make it difficult for IGCs and trustees to judge whether a pension scheme offers value for money:

- Value for money is based on assessments of the purpose of the scheme, different member demographics and different timescales for saving.
- The definition of value for money can be subjective and, therefore, could differ between two identical schemes and for members within a pension scheme. It is based on members' perceptions that depend on factors such as trust in financial services and may be influenced by employer and colleagues' attitudes. If individuals do not trust a pension scheme they may withdraw their money when it is not in their interest to do.
- Assessing whether the scheme offers value for money will differ for accumulation and decumulation phases.

While members can make some decisions that influence value for money they face particular challenges around this

As the ultimate beneficiary, there is an argument that only the member can determine if something represents value for money as they are the ones who directly benefit. However, the reality of pension provision means that employers, trustees and pension providers make decisions on behalf of members. There is an expectation, contained in the regulations, that they will make decisions that reflect their members' priorities, although employers' decisions may primarily reflect business priorities.

The received wisdom is that members make decisions on whether a pension scheme offers value for money based on the following attributes:

- How much it costs[6]
- What benefits and services they believe/feel they will receive
- What substitutes are on offer

It is challenging for members to assess these factors (as explored later in this chapter). The employer is responsible for selecting the pension scheme, with concerns expressed that they do not have the capability or incentive to ensure that pension scheme members receive value for money in the long-term.[7] Employees are responsible for making decisions around their pension scheme membership, including whether to opt out of the scheme, whether they remain in the default fund and their contribution rate.

During the decumulation phase, in particular, members are responsible for making decisions around how to access their pension funds. There is evidence around challenges to individuals making decisions, during both the accumulation and decumulation phases, that affect the value for money they might obtain from their pension savings (Box 1). The research also provides some insights into the factors that individuals might use in order to assess the quality of a pension scheme.

[6] Typically costs in this context refer to the cost to the employees of their contributions
[7] OFT (2013)

In some cases, there is a risk that employees use factors that are unrelated to the quality of the pension scheme such as whether their employer values them, in order to assess the quality of their workplace pension scheme. This illustrates some of the challenges around the member assessing value for money of their pension scheme where they may reach an incorrect conclusion around the extent to which their pension scheme meets their needs.

Despite these challenges, it is important that pension provision meets the members' definition of value for money and the remainder of this report reflects this.

Box 1: Evidence around challenges faced by members in assessing value for money[8]

Trust

Low levels of consumer trust remain an ongoing challenge for the financial services industry. Longer-term drivers of distrust lie in the distinctive nature of consumer finance products:

- Consumers who are buying the expertise of the provider find it difficult to assess that expertise and do not know whether they are getting a fair deal or whether they will continue to get one.
- Unlike many other products, consumers' relationships with providers are typically ongoing. The products therefore do not require a person to periodically reconsider the available alternatives on the market.

Inertia

There is a high level of customer inertia in financial services because:

- Distrust means that consumers write financial service providers off as 'all the same', without even checking what is on offer,
- Consumers become disengaged in the face of market complexity.

The fact that members do not change annuity providers shows how difficult it is for members to make a decision about the value for money offered by different pension providers.

Recent Financial Conduct Authority (FCA) data showed only 36% of members changed provider when buying an annuity. This is despite the FCA finding (in its Thematic Review of Annuities) that of those who do not switch, 80% of people could get a more generous retirement income by shopping around and buying an annuity from a different provider.

While this illustrates the complexity around ensuring value for money it is possible to conclude that there are particular markers of value for money

Members may not feel they are receiving value for money unless they trust the pension scheme.

[8] SMF (2011), FCA (2014), FCA (2015)

Particular attributes can be identified as markers that a scheme may **not** be offering value for money to members, including areas such as lack of transparency around charge level and structures, and an absence of processes intended to ensure that the pension scheme design reflects members' requirements.

There is evidence that some of these attributes are present in existing pension schemes. Research has identified cases where pension providers have supplied services to both advisers and employers 'free of charge', then covered the cost of these services via the member charge.

Despite this, there remain the following complications around assessing value for money:

- It may only be possible for the member to assess whether they have received value for money from their pension scheme at the end of their life.
- The value of the pension scheme to the individual may depend on their other circumstances, such as their other pension schemes and their household circumstances. This, in turn, may influence how they wish to use their pension funds, for example whether they elect to draw down the entire cash value at retirement date.

The factors described above suggest that it may not possible for Independent Governance Committees and trustees to attain the best member outcomes for all members, and these bodies may be required simply to make decisions that are broadly in members' best interests

IGCs and trustees may have to reach a definition of value for money as obtaining best member outcomes for the most members in the given circumstances. However, even this may not be straightforward and is likely to require significant engagement with members (and rely on members' willingness to engage). Factors such as management of risk, the extent to which trustees and providers wish to minimise investment downside risk and issues around fairness (for example if trustees and providers wish to meet the definition of value for individuals regardless of their age) are also likely to influence pension scheme design.

The remainder of this chapter considers factors that pension providers, IGCs and trustees may wish to take into account when assessing the value for money provided by a pension scheme.

While there is some consensus that value for money is reflected primarily by higher retirement incomes, other 'good' outcomes exist

There is a correlation between higher retirement incomes and happier healthier later age, with a **guaranteed income** being associated with various aspects of wellbeing and leisure.[9] Well-being and quality of life in retirement typically increase in line with household income, although this effect begins to level out

[9] SMF (2014)

at an income level of around £40,000 a year.[10] This may have implications in terms of ensuring value for money during the decumulation phase where those individuals who opt for an income rather than a lump sum may obtain better value from their pension fund.

However, these findings relate to external measures of quality of life and may not reflect those elements identified by the individual as reflecting value for money, for example, under the new pension flexibilities the individual may value a large cash sum to a greater extent than a guaranteed income level even where the relative value of the two might be very different.

Along with the pot value, there may be softer outcomes that are valued by members related to issues around trust, such as:

- A sense that their pension scheme is secure
- Feeling valued by their employer
- Receiving communication on a regular basis

These outcomes illustrate the fact that member perceptions around their pension scheme are important. Outcomes that an individual may value are also likely to differ during the accumulation phase, (Chapter Two) and the decumulation phase, (Chapter Three).

Despite these complications it is possible to identify three outcomes that are likely to be seen as positive across the board but may attract differing levels of priority

- Value of the pension pot
- Security of the pension pot
- Trust in the pension scheme

In this context, security refers to the material security of members' pension pot while trust refers to more qualitative elements, such as members' perceptions that their provider can be trusted and will make decisions in their interest.

There may be some degree of compromise in terms of these outcomes for example members may prioritise security at the cost of value where they opt for a lower risk investment approach. Similarly, there may be a cost to activities such as communications through which pension schemes build members' trust, leading to higher charges. Despite this, it is possible to adopt the combination of these outcomes as markers of value and the remainder of this report focuses on these.

Characteristics that drive better member outcomes have been identified

In terms of characteristics that drive the outcomes identified above, there is a consensus around the key factors driving good accumulation outcomes. Each of these has been linked to the outcomes described above:

[10] NEST (2014)

- Contributions (pension pot value)
- Investment default approaches (pension pot value and security)
- Charges (pension pot value and trust in pension scheme)
- Governance (security and trust)
- Administration (security and trust)

It is difficult to measure pension scheme outcomes but pension pot value and replacement rates are useful measures

There may be challenges to assessing the value of pension schemes while members are in their 20s, 30s or 40s, as the final outcome from the pension scheme is not yet known. Similarly, the definition of a good member outcome may change according to how old the member is, how long they have saved for, their relationship with their employer, and external conditions.

The use of replacement ratios, that measure retirement income as a ratio of working age income, is challenging in the context of the new pension freedoms. However, they remain valuable as a way to measure adequate incomes and are used in the remainder of this report, along with pension pot value. Further description of these is provided in chapter two.

Chapter one has explored definitions of value for money and the factors that contribute to this.

Chapter two focuses on value for money during the accumulation phase.

Chapter two: value for money in accumulation

This chapter considers factors that influence value for money during the accumulation phase. It provides an overview of the factors, the ways in which they are inter-related, and developments to date in order to explore the direction of travel. It goes on to explore the respective contribution of each of these, focusing on the following outcomes:

- Value of the pension pot
- Security of the pension pot
- Trust in the pension scheme

The outcome that each factor influences is highlighted in the respective sections of this chapter. This chapter uses both pension pot size at retirement and replacement rates as measures of pension pot value (Box 2).

Box 2: Measures of pension pot value

This chapter looks to assess the respective contribution of different factors towards obtaining value for money, using both the private pension pot size and replacement rates that are designed to assess the adequacy of individual's retirement incomes. The first measure considers private pensions only. Replacement rates also take into account the State Pension and, therefore, look to provide greater insight into individuals' circumstances in retirement (although they do not take into account debt or other sources of income or outgoings).

Broadly, replacement rates are defined as the ratio of retirement income to working life earnings. Where the concept of target replacement rates is used, this identifies the proportion of working life earnings that an individual would require in retirement to achieve the same standard of living as during their working life. More information is available in the DWP '*Framework for the analysis of future retirement incomes*'.

Effective governance, administration and communication can work towards the charging and return structure meeting members' needs

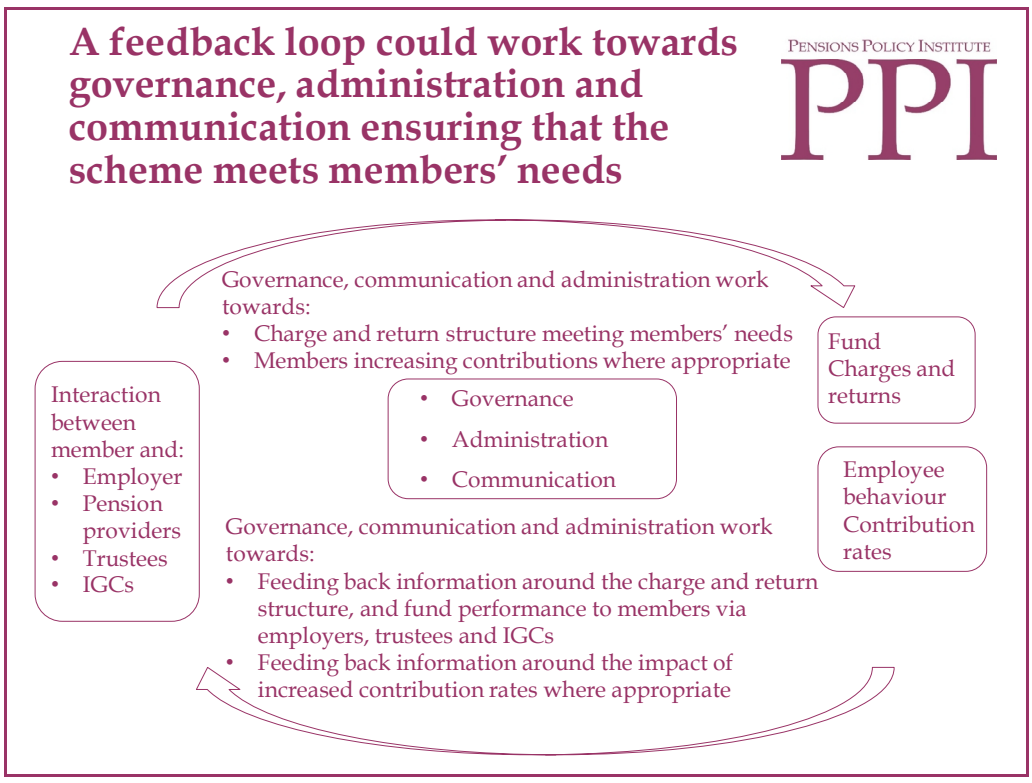
Pension scheme characteristics affect outcomes in different ways. Charge levels and structure, returns, and contribution rates, have a direct impact on outcomes, in monetary terms, as they affect the value of the pension pot.

Governance, administration and communication with members can play a role in ensuring that the pension scheme meets members' needs and ensure that they understand what they might receive from their pension scheme in retirement. In this way, they may make a less direct contribution towards pension pot value.

In the first instance, effective governance, administration and communication can be used to identify charge levels, returns, investment options and contribution rate structures that are suited to members' needs. Effective governance, administration and communication processes may then support the

provision of feedback to members, via trustees and employers, around the impact of contribution rates and the charge and return structure on their pension fund (Chart 3). In this way, these pension scheme attributes could support a feedback loop which regularly checks that the pension scheme is structured in line with members' needs. In addition, attributes such as effective governance, administration and communication with members may build trust in their pension scheme among members. Examples of instances where this has happened are provided in the relevant sections of this chapter.

Chart 3



The remainder of this report considers each of the following factors, including development to date, and uses PPI modelling to explore the impact of these on member outcomes:

- Charge structure and investment approach, including decisions around fund volatility management
- Governance, administration and communication
- The impact of employer and pension scheme's approaches to influencing member behaviour
- Contributions

Charge structure and areas such as levels of return should be considered together to provide an insight into value for money

While there has been a focus on charges, demonstrated in the introduction of a charge cap of 0.75% on default funds in automatic enrolment, charge structure should be considered along with areas such as return level in order to assess value for money provided by pension schemes.

Charges have decreased over the years, partly due to the charge cap, but there remain concerns around charges for older schemes

Reported headline charges on new schemes were, in 2013, at an historic low and providers have argued against lowering them further, except on older schemes with very high charges. [11]

Charges are higher for schemes that do not qualify for automatic enrolment and are lower, on average, for trust-based than for contract-based pensions. The average charge for schemes for both qualifying and non-qualifying schemes (for automatic enrolment) in the run-up to the introduction of the charge cap are shown in table 1.[12]

Table 1: Overview of charge rates

	Qualifying		Non-qualifying	
	Average charge	Members with charges under the 0.75% charge cap	Average charge	Proportion of members with charges under the 0.75% charge cap
Contract-based	0.55%	76%	0.81%	26%
Master Trust	0.46%	100%	0.60%	51%
Trust-based schemes	0.42%	88%	0.67%	55%

Charges will have fallen further for some members over the last year, since the introduction of the charge cap. These are the charges that apply to the default fund and do not include charges paid by the employer. If the member chooses to invest in other funds they may face an additional annual charge.

However, there remain concerns around older schemes with schemes set up before 2001 having an average annual charge which is 26 per cent (or 0.16 percentage points) higher on average than those set up on or after 2001.[13]

There are charges that members investing in a particular fund may pay in addition to the annual charge

These reflect additional expenses incurred by the fund manager (Box 3). These respective charges tend to be less than 1% per annum and are significantly lower than this for many members.

[11] DWP (2014)
[12] DWP (2015)
[13] Independent Project Board (2014)

Box 3: Charges that members may pay in addition to the annual charge[14]

Fund Manager Expense Charges (FMECs) relating to areas such as investment management, accounting and valuation
Among nine providers, 74% of all members' assets were invested in funds attracting an additional fund-specific charge of 0.01% or less. Beyond this, FMECs were typically low with only 3% of funds under management attracting FMECs above 0.2%.

Transaction charges representing the costs of purchasing any additional underlying assets by the fund and are not included in the charge cap.
Previous research has found it difficult to ascertain the level of transaction costs due to lack of available data for the following reasons:

- It was often held by third parties and in different formats and calculated differently.
- These third parties sometimes calculated costs differently.
- Fund managers chose different periods over which to measure transaction charges.
- Different funds were based in different markets, and faced different disclosure regimes.
- Where data was collected about fund entry transaction costs three out of four providers providing data estimated these were close or on zero. One estimated 0.05% to 0.4% of each contribution. For holding investment transaction costs five providers gave data:
    - One estimated transaction costs were less than 0.01% of funds per year.
    - Two reported costs of 0.5% to 1% per year.
    - Two reported costs of between 0 and 0.75% per year.

While these additional charges are not covered by the charge cap, the Government now requires trustees of trust-based schemes and Independent Governance Committees (IGCs) of contract-based schemes to consider and report on costs and charges incurred in their schemes. Disclosure and therefore comparison of charges should therefore be easier in the future.

IGCs have reported that, while providers have been helpful in their attitudes towards IGCs, it has been difficult to understand the data around transaction costs and charges.[15] However, this may become more straightforward over time as IGCs and their relationships with pension providers become increasingly embedded.

Charge level alone cannot be taken as an indicator of outcomes

Higher charges can be justified by higher returns, resulting overall in better outcomes for members. However, some studies have shown that neither higher nor lower charges automatically lead to better outcomes (Box 4).

[14] DWP (2015)
[15] PPI (2016)

They suggest that although some funds with active asset allocations perform better than passive funds, as a sector overall, higher charges are not necessarily a predictor of higher performance. At the same time passive funds with lower changes will never outperform the market's benchmark returns (returns before charges are taken into account) whereas some funds with active asset allocations will.

These studies have tended to focus on specific parts of the market or types of fund, and do not cover recent developments such as the charge cap or changes in distribution channels and commission structures. They also do not take into account volatility.

Box 4: Evidence around impact of higher charges on returns[16]

These sources do not provide a representative overview of the current Defined Contribution (DC) workplace pensions market but provide some insight into the relationship between charges and returns for pension and other funds. They suggest that trustees and IGCs cannot automatically assume that higher charges will lead to higher returns.

Analysis of the after-charge investment performance of a representative sample of contract- and trust-based default funds sold between 1990 and 2013 led the Pensions Institute to conclude that, at the time, there was no evidence that higher charges could buy more sophisticated investment strategies that deliver superior performance

Other analysis includes:
For non-Discretionary Fund Managed account multimanager multi-asset funds (similar asset spread to some pension schemes) high charges are not necessarily an indicator of performance (2014).

Jupiter Asset Management plotted all the funds in the Investment Association (IA) UK All Companies Sector over the previous ten years (2005 to 2015) and considers the annualised returns after deducting annual fees. It shows passive funds are cheaper than the funds with active asset allocations, but returns from the funds with active asset allocations may not always be considerably higher. The graph also shows, however, passive funds will never outperform the benchmark (returns before charges are taken into account) whereas some funds with active asset allocations will.

Charges are not the factor with the biggest impact on outcome, and there is an increasing focus on other ways in which these can offer value for money

While there has been a focus on the role of charges in eroding fund value, some providers and advisers feel that their focus should be the way in which charges offer value for money, arguing that higher charges sometimes allowed them to offer a range of higher quality services.[17]

[16] Pensions Institute (2014), Lang Cat (2015), Jupiter (2015)
[17] DWP (2014)

This also highlights the importance of considering what services the charges will provide. A nominally lower charge may be offered to the employer because the provider is requiring the employer to perform some of the tasks they would otherwise do (although it would represent a cost saving to the member). If this is the case, this does not strictly represent a cost saving as the employer has to fund the performance of these tasks.

Guidance indicates that there is no 'best' charging structure for DC workplace pensions

The decision around charging structures is complicated by the fact that the most appropriate charging structure will depend on members' current and future decisions. Although governance bodies can gain significant information about the membership of a scheme, the membership of individual pension schemes may be diverse. In addition, there are factors that are unknown to governance bodies such as the length of time that a member will contribute to their pension, when they will increase contributions and market conditions. These have an impact on the suitability of a charging structure (Box 5).

Box 5: Choice of charging structure[18]

The Independent Project Board (IPB) reported in its research of higher charging schemes (conducted April 2014) that:

"there is no one charge structure that is best for all savers all of the time. One of the key factors is the behaviours of individual savers and neither the IPB nor the savers themselves can know now what future decisions they may want or need to make."

"... value for money will depend on savers' decisions and behaviours, and also the important qualitative factors set out by the OFT, including governance, investment performance and transaction costs, and communication with savers."

While level of investment return has an important impact on pension pot value, the consistency and distribution of investment returns may also be important

Trustees and providers are responsible for the design of the charge structure default investment strategy, for accumulation and decumulation stages. The extent to which higher charges can be justified by higher returns is a key area of scrutiny, however, level of charges is not the only measure of value for money. Schemes may be looking for more consistent returns or an investment strategy in line with the level of risk that members are willing to take.

In practice, the vast majority of members are invested in the default investment strategy in accumulation, although this varies by type of pension scheme and member population.

[18] Independent Project Board (2015)

Despite these complications around selecting the most appropriate pension scheme, it is possible to draw the following conclusions about charging structure:

- IGCs, trustees and pension providers may have to analyse their membership to reach a charging structure that achieves value for money in terms of best member outcome for the most members in the given circumstances.
- Charging structures should be transparent to enable IGCs and trustees to ensure these are suited to pension schemes' membership profile.

Volatility management has the potential to decrease the chances of having negative outcomes and limit downside risk

Volatility management allows greater certainty of outcomes. It decreases the chances of having negative outcomes but the probability of hitting the target replacement rate may be lower. Therefore, it may contribute to the outcomes of **pension pot security**, and **trust in the pension scheme** provided that it operates in a transparent way.

Volatility management may be valuable to trustees, pension providers and members who wish to minimise detriment and to limit the range of outcomes that members might expect. As the range of outcomes could be smaller, this may be an approach that works for a risk-averse membership. In addition, this may be a way to ensure greater equality between different cohorts of pension members; for example where two members invest in the pension fund over different periods of time, the narrower range of expected returns from the fund should ensure that the members' outcomes are in line with each other to a greater extent.

PPI modelling (Box 6), based on hypothetical funds, is used in the remainder of this chapter to explore the potential relationship between the higher cost of volatility management and expected outcomes.

Box 6: PPI stochastic modelling

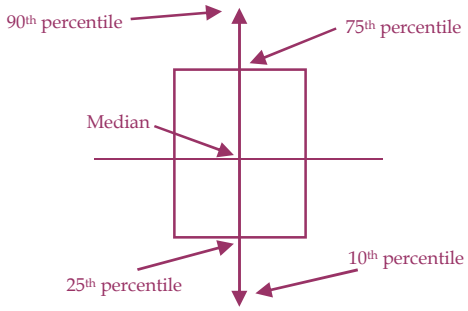
This chapter uses the PPI stochastic model to explore the impact of volatility management and increases in contribution rates on possible pension outcomes. The distribution and value of an individual's DC pension fund depends on many factors, including contribution rate, level of return and charges.

The stochastic model looks to take into account the possible uncertainty in these, and provide a range of potential scenarios based on different values. Therefore the model outputs should be viewed as providing an insight into what might happen rather than providing a firm prediction.

Further information is provided in the Technical Appendix of this report.

Box plots

The next chart is a **box plot**. Box plots allow graphic representation of a distribution of outcomes. The rectangle represents the 25th to 75th percentiles of the distribution while the end of the vertical line represent the 10th and 90th percentiles. The horizontal line through the box represents the median.



To date, volatility management has typically been confined to the period immediately before individuals reach retirement age, where funds have de-risked, normally in the ten years approaching retirement. However, there are alternate approaches to fund management that use volatility management over the duration of accumulation. Chart 4 compares these approaches, showing the range of pension fund values at State Pension Age (SPA) for a median earner[19] where:

- 100% of the fund is invested in equities with lifestyling used during the last ten years of the fund, with a charge of 0.35%
- Volatility is managed throughout accumulation (referred to as the volatility-managed fund in this section) and achieves the same return as equities but with only 67% of the volatility. There is a charge of 0.4% for volatility management in addition to the annual charge of 0.35%.

The results in this section are not based on a specific product, but on a hypothetical investment fund that achieves the same expected return but with lower volatility and higher cost than the lifestyle fund

The results are shown as percentage ranges, with the median value represented by 100%. The median value is £210,450 for the lifestyle fund and £220,507 for the volatility-managed fund. As expected, the range of values of the volatility-managed funds is smaller. The median value is higher for the volatility-managed fund because lifestyling, that typically reduces returns, is not applied to this fund during the ten years approaching retirement.

- The 10th percentile pension pot value is 48% for the lifestyle fund and 53% for the volatility-managed fund.
- The 90th percentile pension pot value is 207% for the lifestyle fund and 202% for the volatility-managed fund.

[19] A median earning male aged 22 in 2016 is assumed to earn £16,016, age-specific median earnings in 2016.

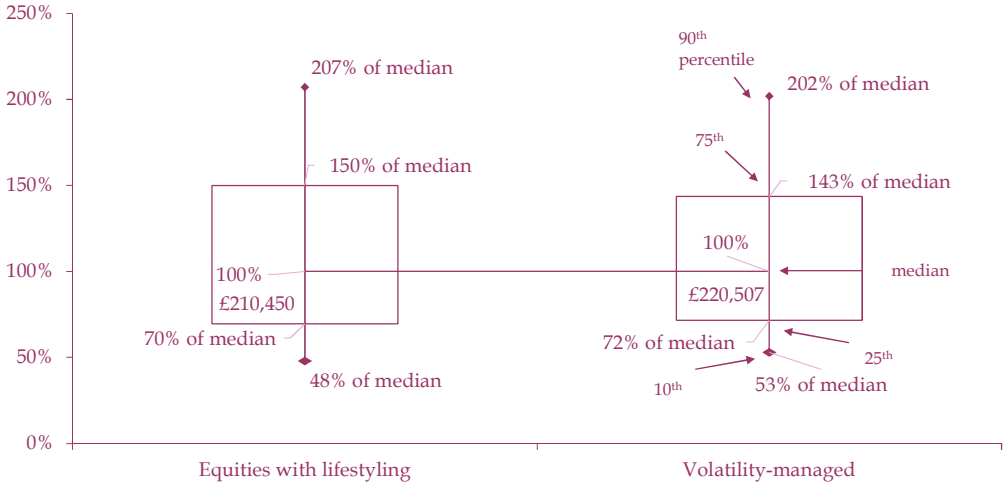
This suggests that individuals invested in the volatility-managed funds could have greater certainty around the range of pension pot values that they may have. However, this would only be the case if the volatility-managed fund were able to achieve the same level of return as equities at 67% volatility for the additional annual charge, in this example 0.4%.

Chart 4[20]

Volatility management throughout accumulation can lead to lower downside risk

PENSIONS POLICY INSTITUTE PPI

Distribution of pension pot sizes for median earners depending on the extent to which volatility is managed



The odds of a poor outcome, defined as the 5th percentile of the lifestyle fund value (pension pot of £83,045 or less)[21] would also be reduced from **5%**, where 100% pot is invested in equities, with lifestyling, to **3.2%** for the volatility-managed fund.

In terms of replacement rates, a median earner would have a **64%** probability of achieving their target replacement rate (67% of their working life income) for the lifestyle fund as they approach retirement. This would be **68%** for the volatility-managed fund.

A higher earner[22] would have a **26%** probability of achieving their target replacement rate (50% of their working life income) for both the lifestyle fund and the volatility-managed fund. This is low as the fund needs to 'outperform'

[20] These figures are for individuals who have paid 8% contributions on band earnings from age 22 until SPA

[21] This is set at the amount below which 5% might expect their pension pots to fall where the fund is 100% invested in equities with lifestyling as they approach retirement

[22] A high earning (based upon 90th percentile earnings) male aged 22 in 2016 is assumed to earn £24,700

the market to achieve the target replacement rate at the modelled level of contributions.

There is a trade-off between benefiting from volatility management and ensuring that the cost is not so high that it erodes any benefits

Volatility-managed funds are likely to have a higher annual charge, compared to, for example, equities with lifestyling funds. Volatility management can be used to ensure that members benefit from a narrower band of outcomes and that, at the same time, their risk of a low pension pot is no greater (and preferably smaller) than it would be in a lifestyle fund.

Individuals may have varying tolerance as to the level of charge they would be willing to pay for volatility management. It is therefore difficult to calculate an 'acceptable' cost for the level of protection provided by volatility management. It is possible to derive estimates of how large the extra cost could be before the benefit of volatility management – avoiding the worst outcomes – is lost because charges erode the value of the pension pot.

As different individuals might have different views as to what constitutes the 'worst' outcomes, we have estimated a cost range, based on avoiding between the worst 25% and worst 5% of outcomes. This analysis considers what charge, might be acceptable to reduce volatility to a particular level. As the higher charge for the volatility-managed fund reduces net return, thus the higher the charge the lower the impact on avoiding the lowest outcomes. In this way there is a balance between benefiting from volatility management and ensuring that the cost is not so high that it erodes any benefits.

This is the charge level at which volatility management could limit the probability of these outcomes without charges eroding the pension pot to the extent that these outcomes become more likely than 5% and 25% respectively. Both median and higher earning individuals could expect to pay an annual charge of between **1%** and **1.15%** to avoid receiving the worst outcomes.

The lower end of the charges range would avoid the worst 25% of outcomes, while the higher end would avoid the worst 5% of outcomes. In other words:

- A charge of **1%** might ensure that individuals have a 75% probability of avoiding the worst outcomes
- A charge of **1.15%** might ensure that individuals have a 95% probability of avoiding the worst outcomes

Governance, administration and communication are important in terms of aligning the pension scheme offer with member's interests, ensuring security of funds and building trust

While it is accepted that good governance is essential to the provision of effective pension schemes, it is not always clear what this might mean in practice. For members this typically means reassurance that those responsible for managing

their retirement savings are acting responsibly and taking account of members' concerns.[23]

While the extent of activity related to governance activity will depend on the size and complexity of the pension scheme, there is guidance from The Pensions Regulator (TPR) around the areas that governance should assess. These include:

- appropriate contribution decisions
- appropriate investment decisions
- effective and efficient administration
- protection of assets
- value for money
- appropriate decumulation decisions

In practice, good governance can be the lynchpin for driving better value for money and, where this is absent, this could lead to significantly poorer outcomes for members

Good governance can:

- set the right investment strategy for the membership (considering for example, appropriate levels of risk, return and volatility), monitor it, and then take timely and appropriate action to change it if necessary
- ensure transparency around areas such as charges
- ensure effective administration
- ensure member communications are set at the right level of understanding, frequency and form, and that they increase member engagement, and drive good member decisions.
- challenge, negotiate and possibly lower charges

Where the absence of effective governance leads to the mismanagement of investments or the absence of internal controls, this can lead to significantly lower value of pension assets.

There have been efforts to ensure that investment governance is appropriate for the membership profile of pension schemes

Analysis by the Department for Work and Pensions (DWP) found that both providers and intermediaries felt that investment governance was a key factor in driving positive member outcomes, stating that it was vital to design an investment strategy that was appropriate for the membership profile. Most default options actively marketed by providers now were seen as a safe and appropriate approach for most members, and were heavily influenced by DWP's default option guidance; although some older schemes were seen as offering greater risks to members.[24]

It is now a legal requirement to review the Statement of Investment Principles and the default strategy every 3 years. However, the majority of pension scheme providers and intermediaries recommend that those governing the default fund

[23] NEST (2014)
[24] DWP (2014)

should meet at least quarterly to assess investment performance, and review the overall scheme objectives at least every three years; but warned against reacting over-sensitively to market fluctuations by attempting to change strategy on too frequent a basis.[25]

Volatility management might be one way in which investment governance may be aligned with members' preferences.

Good communication plays an important role provided that it is tailored to members' requirements

There is evidence that effective communications have a valuable role to play in leading members to make appropriate decisions, whether that is increasing the level of contributions and the longevity of contributions, making good investment decisions, or decisions about how and when to take their retirement benefits. In this way, they can contribute to **pension pot value** and they can also help to build **trust in the pension scheme.** Increases in pension contributions by the employee can be a sign that they trust the pension scheme.

However, research also finds that information can overwhelm or distract individuals if the information is provided in a way that people struggle to engage with.[26]

There can be tension between full disclosure and providing people with information that they would rather not receive

While it has been found that provision of information around pensions can draw attention to concepts that may be uncomfortable for members, such as risk[27], there are examples of effective tools that communicate with individuals in a way that is meaningful to them.

Employers' investment in communications, support and modelling tools appear to have increased over recent years. Where this describes pensions in a way that is meaningful to, rather than uncomfortable for, members, this can influence some members' behaviour (Box 7).

Box 7: Example of employer communications leading to increased contributions

Scottish Power reported in February 2016[28] that it had seen a tenth of its stakeholder pension plan membership choose to increase their contributions following the introduction in early December 2015 of a new member communication tool. The portal models pension outcomes and warns if an individual is likely to miss their target. 15% of the membership had logged onto the portal. The standard member contribution is 5%, but members can choose to increase contributions automatically by 2% each year.

[25] DWP (2014)
[26] FCA (2015)
[27] NEST (2014)
[28] Pensions Expert (2016)

There is recognition of the importance of effective administration on outcomes, with administration becoming more effective due to the introduction of on-line processing

Effective administration can have an important impact on **trust in pension schemes.** Conversely ineffective administration can erode trust and result in individuals leaving financial services providers.

Despite the reporting of some issues, administration is generally becoming more effective due to the introduction of online rather than paper processing. However, the introduction of automatic enrolment has meant greater numbers of people in workplace pensions and, in turn, more data to process. Moreover, any errors in administration may reflect badly on automatic enrolment and individuals' views of pensions overall, particularly where this is the first time that they have participated in a pension, which could lead them to withdraw from pension participation. This highlights the importance of effective administration in terms of **trust in pension schemes** and potentially on **pension pot value**.

Final retirement outcomes in terms of pension pot value are largely driven by the contribution levels

These factors include:

- The level of the member contribution
- The level of the employer contribution
- Whether these levels are increased during membership
- How long these parties contribute for
- Whether they take any breaks from contributions

One particular factor may also have an impact on other factors; for example where an employer makes contributions towards a pension on the basis that these are matched by the employee, this may affect employees' behaviour.

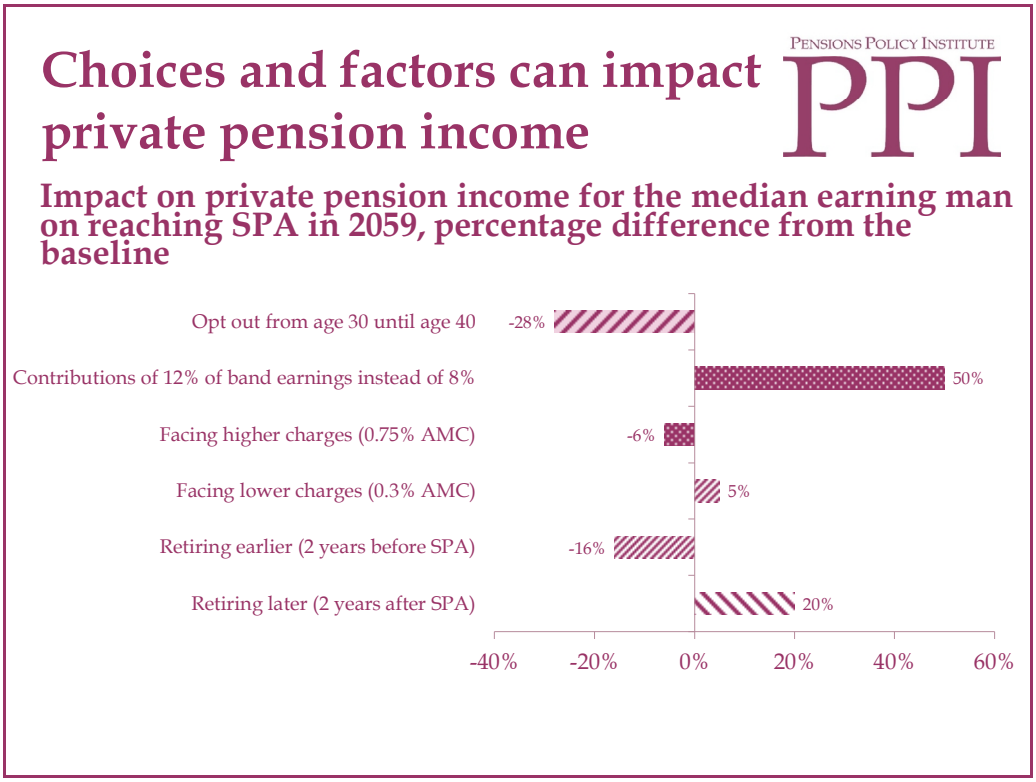
Chart 5 shows the respective impact of different factors on the level of private pension pots accrued in retirement, based on previous research conducted by the PPI. The contribution level was the most important factor (of those tested) affecting the final retirement income.

DWP[29] research around savings incentives also supports the finding that the contribution level is the most significant factor to the value of the pension pot, in excess of the increase from investment growth or the reduction due to charges.

Previous PPI research suggests that paying a contribution of 12% of band earnings (instead of 8%) would increase the final income by 50%. In comparison, working for two more years after SPA could increase final income by 20%.[30]

[29] DWP (2012)
[30] PPI (2012)

Chart 5[31]



Where individuals opt out of automatic enrolment at younger ages, in particular, this leads to smaller pension pots at retirement. In turn, this effect could be heightened by the finding that longer investment horizons may generally deliver better average outcomes with lower risk. This might mean that value for money, in terms of pension pot value, increases the longer the member remains invested, provided that charges are competitive.[32]

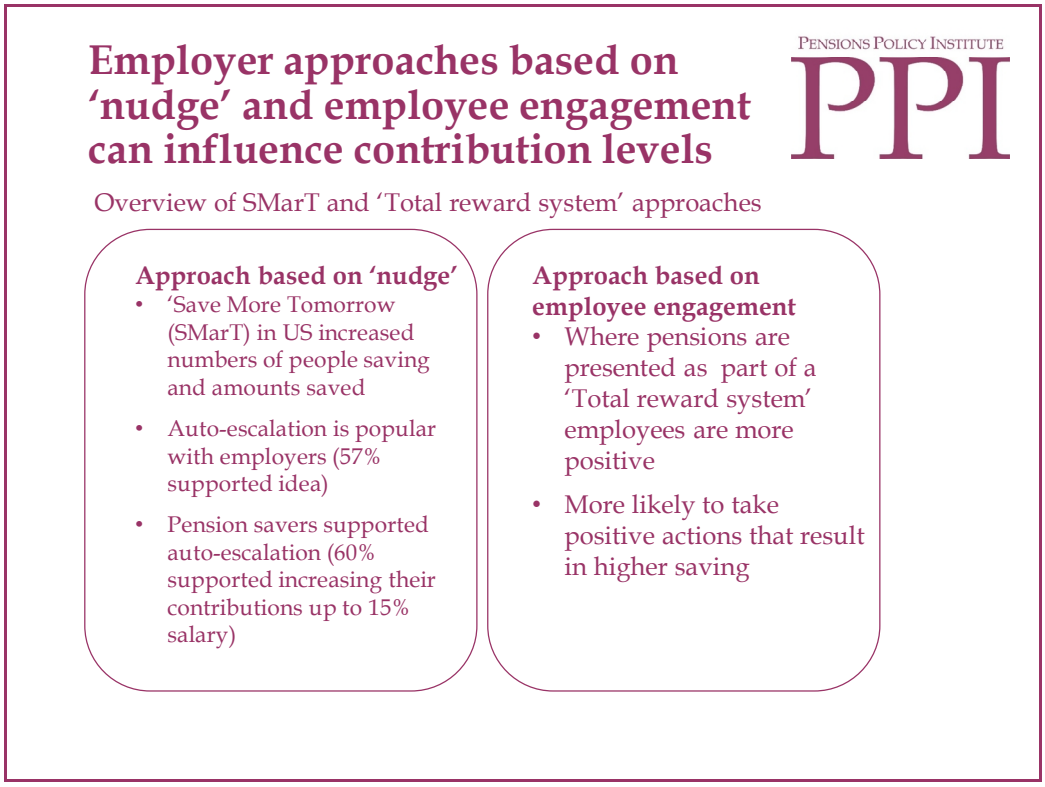
[31] The individual is a median earning male age 25 in 2016 and, throughout his working life, earns at median age-specific earnings for a man. He retires at age 68 in 2059. Between the ages of 22 and 68, he and his employer contribute to a Defined Contribution (DC) private pension. Charges are assumed to be 0.5%, and returns on assets assumed to be 6%. A 25% lump sum is taken at retirement and the remaining private pension pot is converted to a single life annuity.

[32] Pensions Institute (2014)

Employers' and pension schemes' actions can influence outcomes, either by the use of approaches based on theories of 'nudge' or by engaging employees in pensions

Some approaches used to date have been based on 'nudge' where inertia leads employees to follow a particular course of action and employee engagement, or a combination of these. 'Nudge' and approaches related to engagement may be combined to influence engagement (Chart 6).

Chart 6



These approaches are described in greater detail below.

Automatic escalation can lead to higher contributions and is popular with both employers and employees

Automatic escalation of contributions (usually in line with wage increases), known as the Save More Tomorrow (SMarT) programme in the US, has been implemented in an increasing number of employer-sponsored pension schemes in the US.

In one US 401k (DC) scheme with SMarT features, employees increased their pension contributions from 3.5% to 13.6% of salary over a four and a half year period. Take-up has tended to be highest where individuals are provided with financial advice. This suggests that, in some cases, combining approaches based on 'nudge' and on engagement may have the largest impact on employee outcomes.[33]

[33] Thaler and Benartzi (2004)

Automatic escalation is potentially a popular concept in the UK with both employers and individuals, with 57% of employers supporting the idea of 'automatic escalation schemes'.[34] Where individuals were asked which measures from government and employers they would support to enable them to save more or work for longer, they supported automatic escalation. 60% supported increasing their contributions up to 15% of their salary as their earnings rise.

Engagement of employees by employers can lead to higher contributions, with many employers offering matching contribution structures

The 'total reward' approach described presents to employees all of the benefits that an employer provides, using a 'Total Reward Statement'. Research that compared two groups of pension members, those with and without a total reward approach found that in general, the 'total reward system' employees had a more positive attitude to their pensions and were more likely to take the concrete actions that result in higher saving. Respondents from the 'total reward system' group were:

- 32.3% more likely than those from the other group to recommend a pension;
- 14.5% more likely to believe that a pension is the best way to provide for retirement; and
- more likely to be positive about deferring income.[35]

It may be that the comparison of a pension with more tangible or immediate benefits emphasises the value of the pension.

Those individuals who are already pre-disposed to making pension savings may be most influenced by engagement initiatives. For this reason, it cannot be assumed that this type of intervention would lead uniformly to higher pension contributions.

These findings suggest that both employee engagement and approaches based on 'nudge' may lead to higher employee contributions. PPI modelling quantifies the potential value of these extra contributions.

This section models the impact on **pension pot size** and likelihood of achieving target replacement rate where an employee engagement programme, costed at £500 per individual, leads to an increase in contribution rate from 8% total earnings to:

- 9% of earnings
- Automatic escalation so that contribution increases by 1% each year up to 12% earnings

Engagement leading to higher contributions could have the greatest impact for younger individuals

An increase in contributions from 8% to 9% and under automatic escalation up to 12% can lead to larger pension pots at retirement for low earning individual

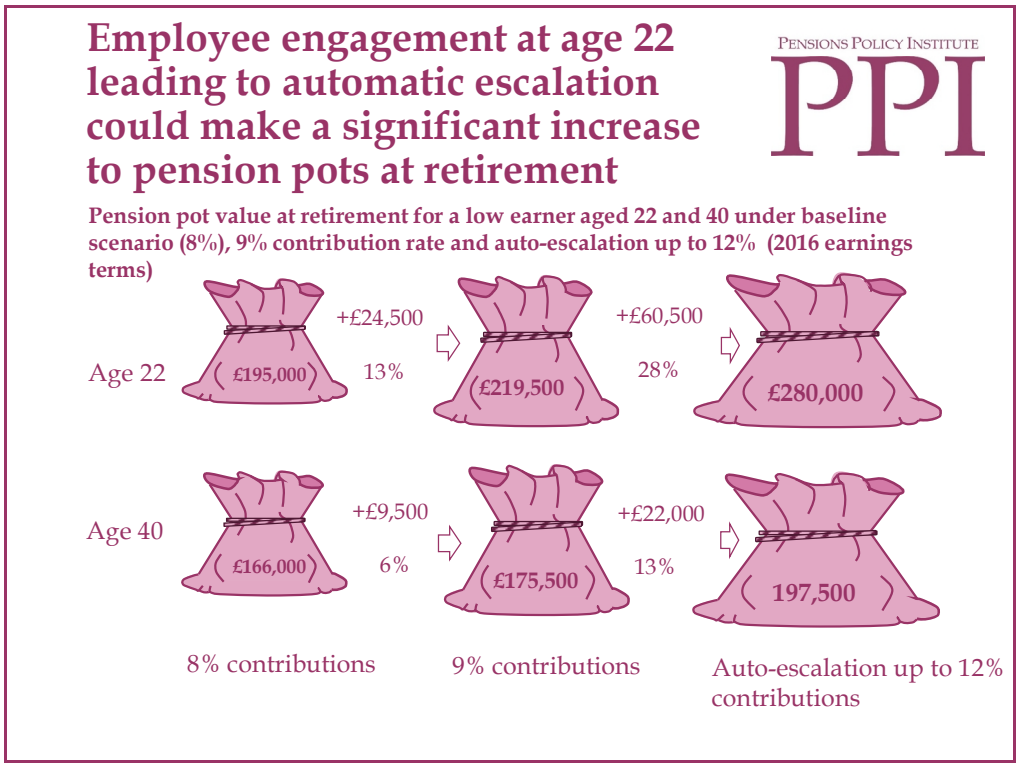
[34] ACA (2014)
[35] Thomsons Online Benefits and LSE (2013)

aged 22 and 40 (Chart 7). Where an employee engagement programme leads to an individual aged 22 making increased contributions for the duration of their working life, this could lead to an increase on average of **£24,500** (at 9% contributions) or **£85,000** (automatic escalation up to 12%). This suggests that there may be a rationale for higher charges where these are due to more effective engagement that, in turn, leads to better employee outcomes.

The increase is lower where the individual is aged 40, resulting in an increase in average pot size of **£9,500** (9% contributions) or **£31,500** (automatic escalation). The increase in pension pot size is much lower for an individual aged 60 (less than a **2%** increase where an individual opts for automatic escalation).

However, all of the calculations do not take into account the extra cost of contributions to the pension member where they have increased their contribution rate.

Chart 7[36]



This suggests that, in absolute terms, effective engagement or using an approach based on 'nudge' principles could have an impact on **pension pot value** where it leads to increased contributions. Unsurprisingly, this makes the greatest difference for an individual aged 22 as they would make the increased rate of contributions over a longer period of time and, in turn, returns on these increased contributions would accrue over a longer period of time.

[36] A 22-year-old lower earner is assumed to earn £13,208 per year. A 40-year-old lower earner is assumed to earn £23,150 per year.

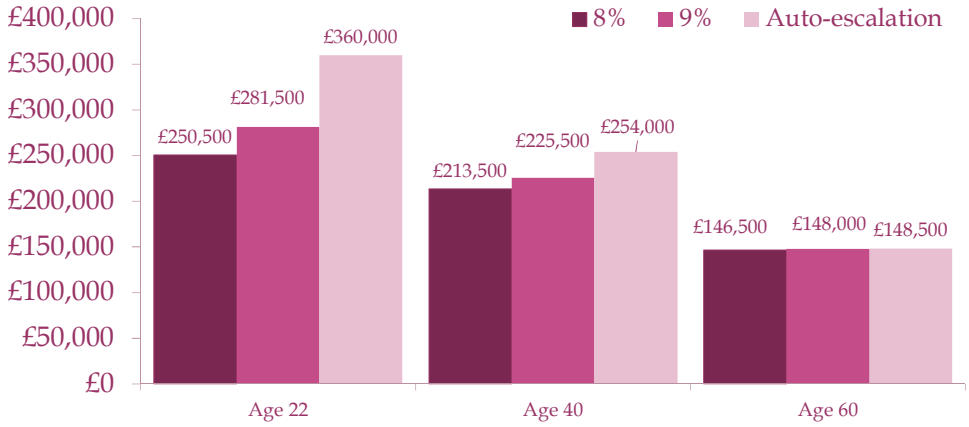
Chart 8 shows the median pension pot value where contributions are 8% of earnings (the baseline), increased to 9% and where automatic escalation up to 12% is adopted for median earners. Again, the individual aged 22 could experience the highest increases.

Chart 8[37]

For a 22 year old median earner, an increase to 9% and auto-escalation respectively could mean a 12% and 44% increase in pension pot size

PENSIONS POLICY INSTITUTE PPI

Pension pot size for median earner by age and contribution rate



The percentage increase in the value of pension pots is broadly the same for all levels of earner, reflecting the fact that contributions are a percentage of their earnings:

- The 22 year old could expect their pension pot to increase by around **12%** if they increase their contribution rate to 9% of earnings and by around **44%** if they accept an automatic escalation proposition and increase their contributions to 12%.
- 40 year olds could expect their pension pot to increase by around **6%** if they increase their contribution rate to 9% of earnings and by around **19%** if they accept an automatic escalation proposition and increase their contributions to 12%.
- 60 year olds could expect their pension pot to increase by around **1%** if they increase their contribution rate to 9% of earnings and by around **2%** if they accept an automatic escalation proposition and increase their contributions to 12%.

The 22 year old has a higher pension pot in absolute terms because their State Pension Age (SPA) is age 68 while the individual aged 40 has an SPA of 67 and the individual aged 60 has an SPA of 66. Therefore, if a 22 year old contributes

[37] A 22 year old median earner is assumed to earn £16,016 per year, a 40 year old median earner is assumed to earn £30,004 per year and a 60 year old median earner £24,336 per year.

between age 22 and their SPA he or she will make contributions over a marginally longer period than a 40 or 60 year old.

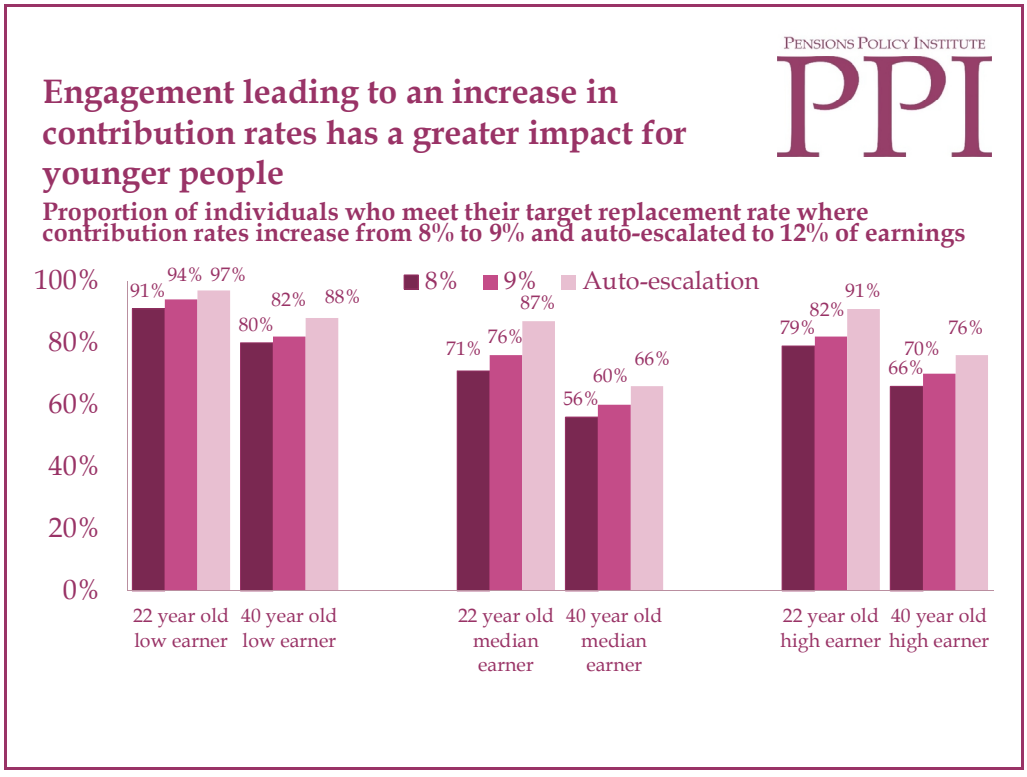
Where sources of state and private pension income are considered together, individuals aged 40 in particular may not achieve an adequate retirement income

This section considers the likelihood that each age and income group of individuals will meet their target replacement rate in retirement under the baseline scenario (8% contributions on total earnings) and where they increase their contributions to 9% and to 12% under automatic enrolment respectively. Replacement rates take into account the State Pension as well as private pension funds and, therefore, look to provide greater insight into individuals' circumstances in retirement. Trustees, IGCs, employers and pension providers may wish to take into account these circumstances in order to assess the role that private pension provision is likely to play for members.

While older individuals may have lower private pension pots their relatively high State Pensions means that they are much more likely to meet their replacement rate. For each income, individuals aged 60 have 100% probability of meeting their replacement rate. This is because many older individuals will have accrued relatively large amounts of additional State Pension under the current state pension system (that they can take forward and receive under the new State Pension as a protected payment).

This contrasts with individuals aged 40, particularly median earners, at particular risk of falling short of their target replacement income (Chart 9).

Chart 9



These calculations are based on the assumption that the State Pension will continue to be uprated by the triple-lock. The proportions meeting their target rate would be lower if the State Pension were uprated by earnings rather than the triple-lock. Previous PPI research finds that, if the State Pension were uprated by earnings rather than the triple-lock, a median earner making contributions from age 22 until SPA would need to contribute 14% rather than 11% of earnings in order to have a two-thirds chance of meeting their target replacement rate.[38]

40 year olds are particularly at risk of falling short of their target because, unlike 60 year olds, they have not accrued high amounts of additional State Pension and they will benefit from fewer years of triple-lock uprating of the State Pension than 20 year olds.

This demonstrates how the relative value of the pension private fund will differ in line with individuals' wider circumstances. It also suggests that the impact and value of interventions that aim to increase pension contributions will differ as follows:

- Whether individuals have a sufficient amount of remaining years in the workforce to accrue a significant additional pension pot
- The extent to which individuals are at risk of falling short of their target replacement rate in the absence of additional contributions.

Chapter two has considered the impact of factors on pension pot value, security of pension pot and trust in pension schemes during the accumulation phase in order to assess how members might be provided with value for money.

Effective governance, communication and administration play an important role in building trust in pension schemes, and ensuring that the charge and return structure, including decisions around fund volatility and management, reflect members' needs and preferences. They may also play a role in increasing contribution rates where appropriate. Ultimately, where governance is effective, this can be a powerful driver of value for money.

Contribution rates can have the largest influence on the size of the member's pension pot at retirement and approaches taken by employers such as those based on 'nudge' principles may influence contribution rates among some employees. However, these approaches would not have an impact without effective communication and administration.

While decisions during the accumulation phase have an impact on the size of pension pot value at retirement, decisions in the decumulation phase will affect the value of the pension pot to the member over the course of retirement.

Chapter three explores the impact of different factors over the course of retirement, and how value for money might be provided to members during the decumulation phase.

[38] PPI (2013)

Chapter three: value for money in decumulation

This chapter provides an overview of the complexity of decisions around decumulation, and developments to date in order to explore the direction of travel. It goes on to explore the implication of decisions around decumulation, focusing on the following outcomes:

- Length of time from retirement until the pension member exhausts their pension pot
- Income tax paid over the course of retirement

To date the pension regime has focused on value for money during the accumulation phase

While the regulatory framework and apparatus, such as Independent Governance Committees (IGCs), have focused on the provision of value for money, there is evidence that, in the future, they may be required to play a role in ensuring value for money during decumulation (Box 8).

Box 8: Financial Conduct Authority (FCA) statement around IGCs and value for money in decumulation[39]

FCA (2015) stated:
"We agree that IGCs may want in the future to consider value for money for scheme members in decumulation. We will consider making this a requirement once IGCs have their immediate priorities in hand. While the primary focus of IGCs will be on default strategies, there is no reason why this should not extend into consideration of decumulation and retirement income options".

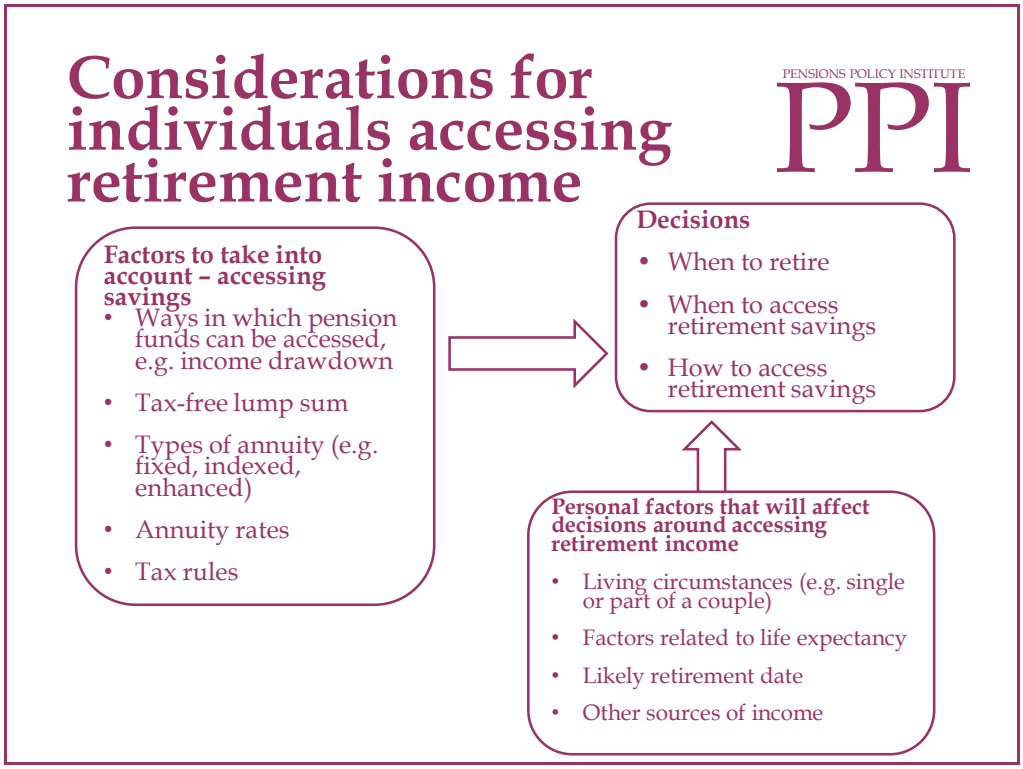
However, this role may only be extended where it is deemed that, without further governance, individuals are making decumulation decisions or being steered towards products that are not suited to their needs.

Under the new pension flexibilities members are required to assess the interaction of various factors to select the most appropriate decumulation option

Members are required to take into account both factors relating to their financial and their personal circumstances in order to reach a decision around how to access their retirement savings (Chart 10).

[39] FCA (2015)

Chart 10



Some of the personal circumstances, such as living arrangements, have a significant impact on the most appropriate option. As a result it is unlikely that trustees or employers would be able to select the most appropriate option for the employee, with the member ideally playing an active role in selecting their decumulation option. While there may be a role for trustee or employer selected defaults where members do not engage with decisions around decumulation, the use of these may lead to the selection of a decumulation strategy that is broadly acceptable to members rather than the most appropriate strategy for each individual member.

There is currently a high level of variation in drawdown charges

Where individuals opt for drawdown options, the difference in charge levels among 18 providers surveyed by Which?[40] between the least and expensive option could make a significant difference to members' outcomes (Table 2).

Table 2: Charges for drawdown options

Size of pot	Cheapest	Most expensive
£50,000 withdrawing 4% a year	£4,993	£8,100
£250,000 withdrawing 6% a year	£16,325	£26,490

Over a ten year period

[40] Which? Press release (July 2015) (https://press.which.co.uk/whichpressreleases/revealed-the-true-cost-of-pension-freedom/)

The same research also found annual management charges varied, as did setting up costs and annual fees, and a difference in charges for Uncrystallised Fund Pension Lump Sums (UFPLS) (from £270 to nothing). There is not currently a charge cap for drawdown options or for UFPLS, although this may change in the future. While there may not be high take-up of these options, there is the risk that in the decumulation phase, these charges may erode the value provided by employers and providers during the accumulation phase.

Members are aware that they need to make active decisions about decumulation but may not be equipped to make these

People are aware of the requirement to make an active decision about their pension savings in the new regime, with 57% of people very aware of the new pension freedoms.[41] However, this is typically a difficult decision, with members having to take account of the following:

- Required level of income
- Required certainty of income
- Sustainability of income
- Flexibility of income
- Inheritance
- Tax

In particular levels of financial literacy can influence[42] individuals in terms of shopping around for a product as opposed to taking the 'path of least resistance' option and purchasing from their original pension fund provider. This re-enforces the suggestion that, under the new pension flexibilities, those individuals with lower levels of financial literacy may be at risk of making sub-optimal decisions.

Individuals value flexibility during the decumulation phase

Previous PPI research has indicated that individuals value flexibility and ease of access during decumulation so that they are able to access funds in order to deal with unexpected life events.[43] However, once the potential trade-offs (for example, between rates of return and flexibility) were explained to individuals they were often willing to sacrifice some flexibility and lock away their pension pot for a fixed period. This demonstrates the importance of communication during the decumulation phase.

Communication and governance are becoming increasingly important during the decumulation phase but challenges remain around who will be responsible for this and how best to present options to members

There is recognition among the regulators that members will require support to make choices and recognition of the way in which communication can influence these choices but no consensus around how support should be provided.

[41] CII (2016)
[42] IFS (2015)
[43] PPI (2015)

It has been reported that members' choices are sensitive to the way in which options are presented to them;[44] pension providers may wish to take this into account in order to avoid influencing members unduly.

The timing of the provision of information may also be important, research suggests that people may wish to receive information relatively early with 56% expecting to take a decision on their pension savings 10 months or more before they retire.[45] Although members are able to gain information from Pension Wise and regulatory retirement risk warnings, a scheme may provide additional value for money scheme by helping members to make these retirement income decisions.

As with the accumulation phase, members may be best served where those responsible for scheme governance assess the likely behaviour of their own membership to adopt a suitable approach

This behaviour and characteristic may include:

- level of engagement
- financial literacy/numeracy
- how they access their pension savings
- rate at which they access their pension savings

The behaviour of members might have an influence on the type and volume of communication, depending on how much information members might be expected to absorb, for example where a pension scheme expects a membership with low levels of interest in finances to access their pension pot in cash at retirement, communication might focus on the tax implications of accessing pension savings in this way.

Similarly, this might have an impact on investment governance, with the rate at which members access their pension funds influencing the investment approach.

Investment governance remains important for the decumulation phase

The appropriate investment approach would depend on members' behaviour and characteristics, with the following considerations being relevant:

- Volatility and, in particular, the timing of periods of high volatility, can have a material influence on investment outcomes. This effect is particularly marked when the value of the pension fund has decreased.
- Sustainability of retirement income may be a priority for many members
- Whether the drawdown pension funds are sustainable partly depends on action the members take, in terms of the rate at which they withdraw income.
- Despite these complications, the decumulation investment strategy set by the scheme is important and may have, as a goal, the delivery of low-volatility growth. However, in practice, many schemes still have default funds which reduce investment risk in the run up to selected retirement age,

[44] FCA (2014)
[45] CII (2016)

which may not be the most suitable option given annuities are used less than previously.

In addition, there are specific choices that may be very costly to pension members. The remainder of this chapter focuses on these.

Some choices, such as withdrawing the entire pension pot at retirement date, could be costly to members – and some pension schemes may wish to focus on alerting members to these costs

The remainder of this chapter uses PPI stochastic modelling to compare three choices that members might make around decumulation, as follows:

- Withdrawing the entire pension fund and placing this in a cash ISA
- Leaving the pension fund invested in 60% equities, 40% gilts
- Leaving the pension fund invested in a volatility-managed fund

For each of these choices, it is assumed that the member requires £15,000 of retirement income from age 65 onwards in order to live. £8,094 of this is provided by the State Pension (uprated by the triple-lock over the course of retirement) while the remainder is withdrawn from the savings.

For each scenario this chapter compares:

- Number of years until the pension fund is exhausted
- Total tax payable

A pension pot could last an individual significantly longer where this is retained in a pension scheme rather than withdrawing it and placing it an ISA

Individuals have stated their intention to take their money out of their pension to place this into 'safer' or 'better' investments, typically meaning cash-based investments.[46] There is a risk to the value that they obtain from their pension where they take this course of action and, as a result, exhaust this pension pot prematurely. This is due to two effects:

- Placing it in cash rather than retaining it in a fund with assets with higher returns reduces the rate of growth of the fund
- Withdrawing the entire fund in one tax year accrues a higher tax liability

Where an individual has a pot of £50,000 this pot could last them until age 72, based on accessing it at age 65, if they withdraw their pension fund, place this into a cash ISA and access their ISA savings so that they have an income of £15,000 (including the State Pension).

Where an individual makes the same level of withdrawal but leaves their fund invested in a pension scheme invested 60% in equities, 40%in gilts, this pot could last until age 75.

Where an individual makes the same level of withdrawal from a pension scheme with volatility management, this could last until age 76 (Chart 11).

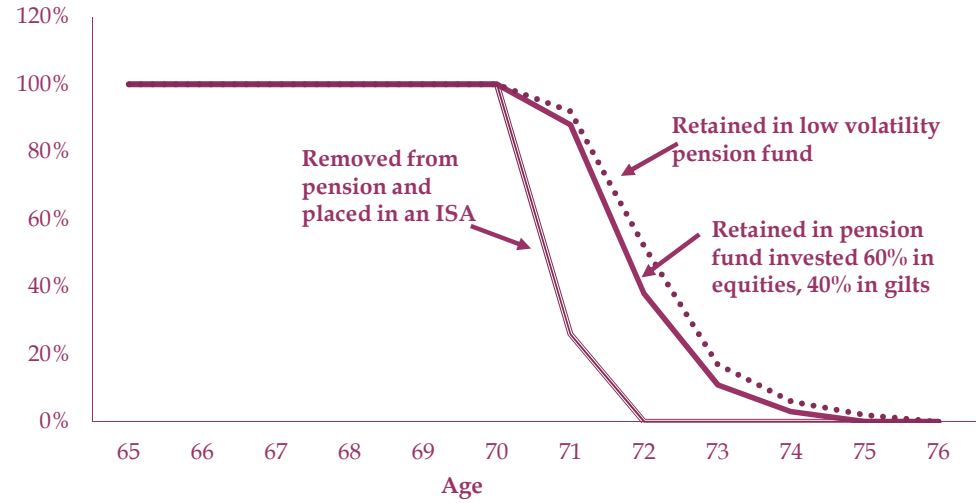
[46] PPI (2015)

Chart 11[47]

A £50,000 pot could run out more than 3 years earlier where this is withdrawn from a pension fund and placed in a cash ISA

PENSIONS POLICY INSTITUTE PPI

Median duration of pension savings of £50,000 where this is removed from or retained in the pension fund



This difference is more pronounced for a pension pot of £100,000, which could last an individual more than 25 years longer where this is retained in a pension scheme rather than withdrawn and placed in a cash ISA (Chart 12).

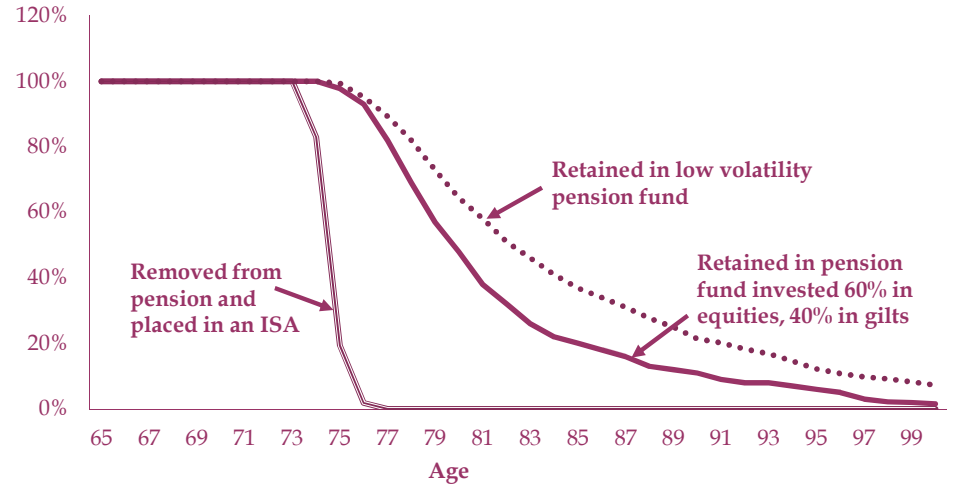
[47] The annual charge for the 60% in equities, 40% in gilts fund is assumed to be 0.35%, the annual charge for the volatility-managed fund is assumed to be 0.75%

Chart 12

A £100,000 pot could run out 25 years earlier than one that is retained in a pension fund

PENSIONS POLICY INSTITUTE PPI

Median duration of pension savings of £100,000 where this is removed from or retained in the pension fund

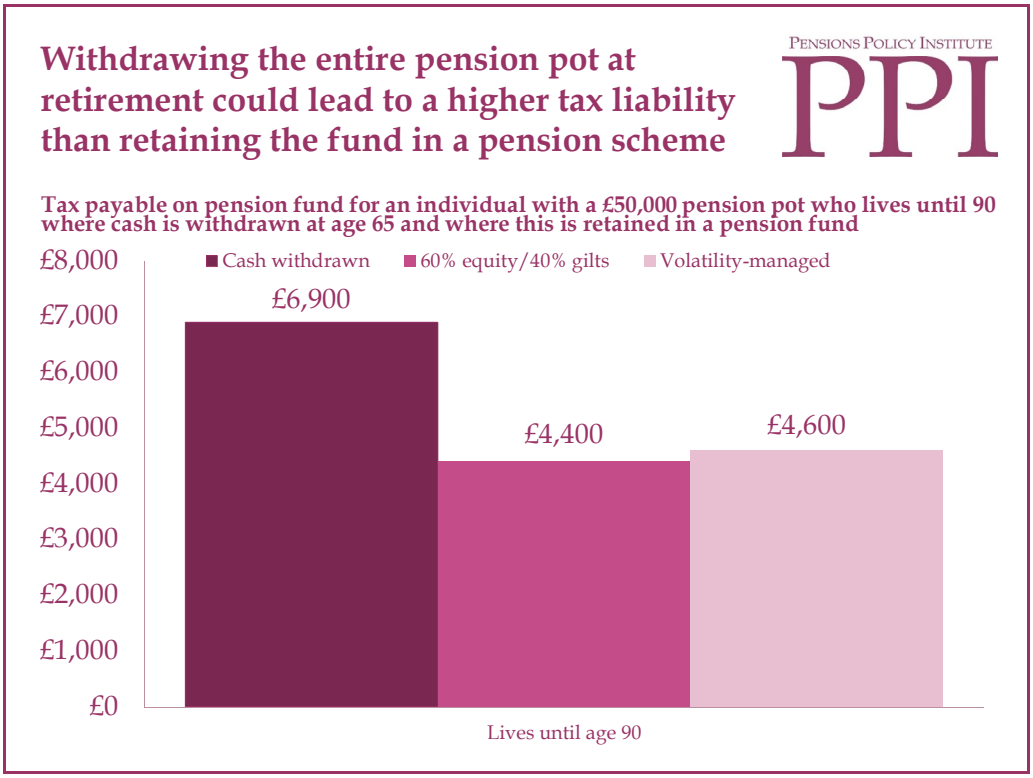


This difference is due in part to levels of return that are lower for a cash ISA than for funds invested at least partly in equities. In addition, the individual could incur a higher tax liability where they withdraw their pension fund in the first year of retirement.

Withdrawing the entire pension pot at retirement could lead to a higher tax liability over the course of retirement than retaining it in a pension scheme

Where individuals withdraw their pension pots at retirement, the entire withdrawal is counted as income and is, therefore, subject to income tax in the tax year in which it is withdrawn. This means that individuals may pay a higher tax rate on a larger proportion of their income than if they had withdrawn their pot over a number of years. An individual with a £50,000 pension pot who lives until age 90 may pay £6,900 if they withdraw their entire pension pot at retirement, compared to £4,600 if they retain this in a volatility-managed fund (Chart 13). This is despite the fact that the volatility-managed fund provides them with an income over a longer period of time than taking it out and placing it in a cash ISA.

Chart 13

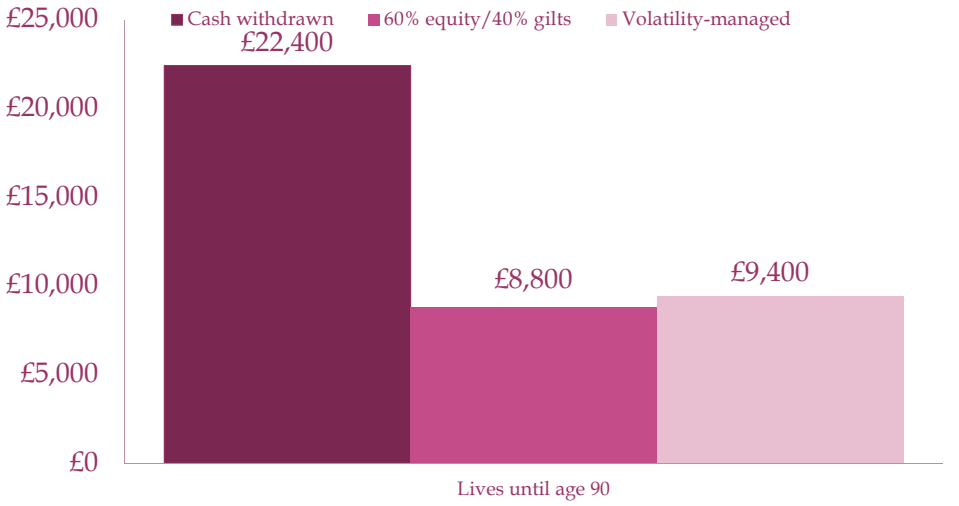


There is a greater difference in tax payable for an individual with a £100,000 pension pot as, where they withdraw their entire pension pot in one tax year, they pay 40% tax on a portion of this (Chart 14). The tax liability is higher for the individual for a volatility-managed fund because their fund is projected to last longer than the 60% equity/40% gilt fund.

Chart 14

For an individual with a £100,000 pension pot, withdrawing the entire pension pot at retirement could lead to a significantly higher tax liability

Tax payable on pension fund for an individual with a £100,000 pension pot who lives until 90 where cash is withdrawn at age 65 and where this is retained in a pension fund



While the above suggests that individuals may benefit from leaving their pot invested in a pension scheme, the optimal use of their pension savings will also depend on their personal preferences. As with decisions made during the accumulation phase, value for money might best be achieved by the effective assessment of members' needs.

Conclusions

While there is some consensus that value for money is reflected primarily by higher retirement incomes, other 'good' outcomes exist

Along with the pot value, there may be softer outcomes that are valued by members, related to issues around trust, such as:

- A sense that their pension scheme is secure
- Feeling valued by their employer
- Receiving communication on a regular basis

Final retirement outcomes in terms of pension pot value are largely driven by the contribution levels

Employers' and pension schemes' actions can influence outcomes, either by the use of approaches based on theories of 'nudge' or by engaging employees in pensions. Engagement leading to higher contributions could have the greatest impact for younger individuals.

It may not be possible for Independent Governance Committees and trustees to attain the best member outcomes for all members, these bodies may be required simply to make decisions that are broadly in members' best interests

This reflects the fact that value for money varies in line with pension membership. It may be subjective, with two members in identical circumstances having different definitions of value.

While it is difficult to reach a definition of value for money it is possible to identify areas where the industry could focus on delivering better outcomes

Good governance is the lynchpin for driving better value for money. It can set and monitor the right investment strategy, ensure effective communication to increase members' engagement, drive good member decisions and challenge, negotiate and possibly lower charges.

Charge level alone cannot be taken as an indicator of outcomes, and should be considered together with levels of return to provide an insight into value for money

Higher charges can be justified by higher returns, resulting in better outcomes for members. However, neither higher nor lower charges automatically lead to better outcomes. Although some funds with active asset allocations perform better than passive funds, as a sector overall, higher charges are not necessarily a predictor of higher performance. At the same time passive funds with lower changes will never outperform the market's benchmark returns (returns before charges are taken into account) whereas some funds with active asset allocations will.

To date the pension regime has focused on value for money during the accumulation phase but the new pensions flexibilities mean that the debate around value for money should take into account the decumulation phase

While the regulatory framework and apparatus, such as IGCs, have focused on the provision of value for money, there is evidence that, in the future, they may be required to play a role in ensuring value for money during decumulation.

As with the accumulation phase, members may be best served where pension providers assess the likely behaviour of their own membership to adopt a suitable approach

The behaviour of members might have an influence on the type and volume of communication, depending on how much information members might be expected to absorb, for example where a pension scheme expects a membership with low levels of interest in finances to access their pension pot in cash at retirement, communication might focus on the tax implications of accessing pension savings in this way.

Investment governance remains important for the decumulation phase

- Volatility and, in particular, the timing of periods of high volatility, can have a material influence on investment outcomes. This effect is particularly marked when the value of the pension fund has decreased.
- Sustainability of retirement income may be a priority for many members
- Whether the drawdown pension funds are sustainable partly depends on action the members take, in terms of the rate at which they withdraw income.
- Despite these complications, the decumulation investment strategy set by the scheme is important and may have, as a goal, the delivery of low-volatility growth.

Technical Appendix: The Modelling used in this report

The areas of modelling performed in this report consider the projection of an individual using the PPI's Individual Model using a stochastic approach of economic assumptions. The economic scenarios are generated using the PPIs economic scenario generator. Both models are detailed below. All results are based in current (2016) earnings terms.

Key assumptions

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

The pensions system

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

Investment returns

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

- Median equity return: 8.1%
- Median gilt return: 3.1%
- Median cash return: 2%
- Median earnings growth: 4%
- Median CPI growth: 2%

These are derived from the Office for Budget Responsibility projected figures. The investment strategies employed are detailed in the body of the report.

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

Other economic assumptions

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

Individuals

Individuals are assumed to work continuously until retirement at the legislated State Pension Age (SPA). Their earnings are assumed to follow an age and gender based profile derived from the Labour Force Survey (LFS).

Table A1 shows the assumptions around earnings levels.

Table A1: earnings levels assumed for modelling

2016 earnings				
Age	**Low (30th)**	**Median (50th)**	**High (70th)**	**Higher (90th)**
22	13,208	16,016	19,188	24,700
40	23,150	30,004	40,092	61,506
60	18,897	24,336	33,602	55,203
Uses: accumulation	Yes	Yes	Yes	
decumulation		Yes		Yes

Limitations of analysis

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

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

The Individual Model

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

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

Key results

The key output from the model is the built-up pension wealth and entitlement over the course of the individual's work history and the post-retirement income that results from this.

The post-retirement income is presented as projected cashflows from retirement over the future lifespan of the individual. These are annual cashflows which include the following key items:

- State Pension

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

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

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

Application of output

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

Key data sources

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

1. The individual

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

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

2. The policy options

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

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

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

3. Economic assumptions and scenarios

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

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

Summary of modelling approach

The model projects the pension features of the individual, both in accumulation (pre-retirement) and decumulation (post retirement) phases.
It projects the pre-retirement features of the individual through the accumulation of pension entitlement, both state benefits and occupational defined benefit schemes.

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

The Economic Scenario Generator

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

Key results

The model generates projected future inflation rates, and earnings growth

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

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

Application of output

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

Key data sources

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

1. Historical returns

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

2. Future returns

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

Summary of modelling approach

The six identified risk factors modelled are:

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

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

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

Where t denotes time in months.

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

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

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

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

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

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