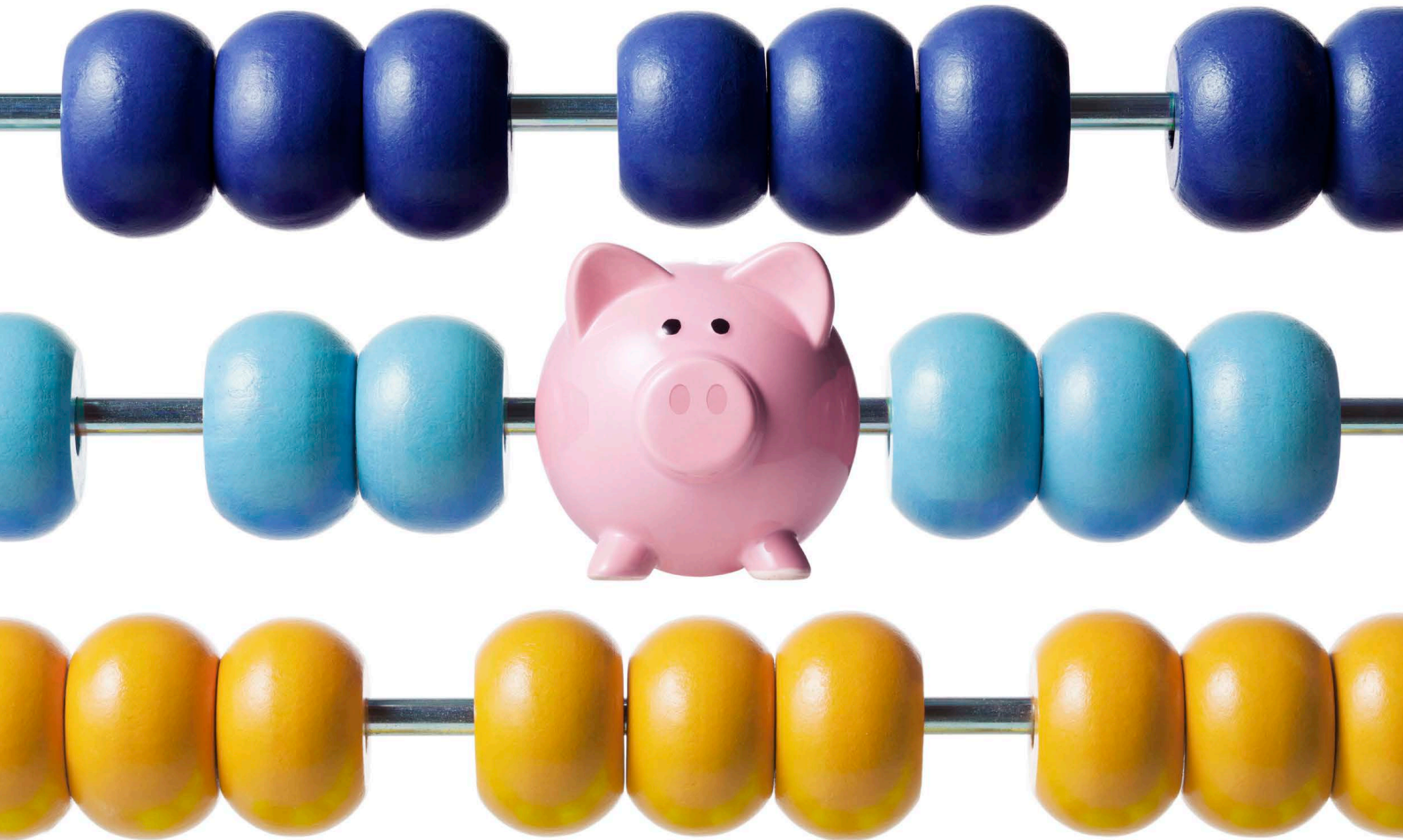




Institute
and Faculty
of Actuaries

Savings goals for retirement

Policy briefing



Ageing
population

Contents

- Key findings 1
- Introduction 2
- Savings Goals 5
- Recommendations 9
- Our approach 11
- Assumptions 13
- About the IFoA 15

Important notes on the Savings Goals (further details are set out in the report):

- We have assumed that people save into their pensions throughout their working lives at a constant rate adjusted by inflation, and have ignored any other income or assets they may (or may not) have except for the State Pension.
- In practice, people are likely to vary their contributions according to circumstances, so the Savings Goals represent an average benchmark
- The Savings Goals should be reviewed over time to reflect changes in economic and market conditions, and also life expectancies. In particular, a modest increase in long-term interest rates would substantially reduce Savings Goal 2.

Much of the analysis in this paper is based on the Pension and Lifetime Savings Association’s (PLSA) three Retirement Living Standards – ‘minimum’, ‘moderate’ and ‘comfortable’. The IFoA supports, and is also an advocate for, the need for government and industry to develop an outcome-based approach for those saving into a defined contribution (DC) pension. Therefore, while there are differences in our proposed three-tier system, and our conclusion as to how much people will need to save, we believe that the PLSA’s work makes an important and meaningful contribution to this debate and, as such, the IFoA is an official supporter of the Retirement Living Standards.

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Key findings

The Institute and Faculty of Actuaries (IFoA) has completed analysis to determine a set of 'Savings Goals' to help people understand how much they need to save for retirement, depending on their likely needs.

Our analysis proposes the following three key Savings Goals. These give an indication of the average level of contribution into a Defined Contribution (DC) pension scheme that, together with the State Pension, is expected to be broadly sufficient to provide an adequate retirement income.

Savings Goal 1

Coupled with the State Pension, the current 8% minimum Automatic Enrolment contribution level is expected to be broadly enough to provide a minimum* level of retirement income.

1

Savings Goal 2

For an individual to be likely to achieve a moderate** level of retirement income, their total savings need to be around one quarter (26%) of average full-time earnings.

2

Savings Goal 3

If an individual or couple is aiming to achieve a comfortable** level of retirement income, they need to save more than double what they'd need to save if aiming for moderate.

3

These Savings Goals indicate that people need to be saving well above the automatic enrolment minimum if they are to achieve a 'moderate' standard of living. This is defined as 'being able to access a range of opportunities and choices, have a sense of security and the option to do some of the things that they would like to do'. The IFoA is concerned that people are not on track to achieve this. Polling carried out by YouGov on behalf of the IFoA found that 70% of UK workers whose main pension is their workplace pension only contribute the minimum into their pension. This indicates that a large proportion of the population will not be on course to achieve an adequate lifestyle in retirement.

Pensions are complicated and not well understood in the UK. The IFoA believes these Savings Goals could help give individuals clarity on how much they need to save. But this alone will not be enough to prevent a potential under-saving crisis. We believe collective action is needed by the government, the pensions industry, employers and individuals to address this issue in order to prevent a generation of workers

* Based on the Joseph Rowntree Foundation's 'Minimum Income Standard' (MIS).

** Based on the PLSA's Retirement Living Standards.

Introduction

In a world where responsibility for funding retirement is increasingly being placed on the individual, there is remarkably little consistent consumer information about how much someone should save into their pension, or what a ‘good’ pension pot constitutes. As a result, many savers in the UK are sleepwalking towards a retirement that does not meet their hopes and expectations.

Many have rightly praised Automatic Enrolment (AE) for getting more people saving into a pension, with over 10 million new savers now enrolled.¹ However, the stark reality is that current minimum contribution rates of 8% (3% from employers, and 5% from employees) are unlikely to be sufficient for many individuals to secure an adequate retirement income. Crucially, the power of inertia that has supported the success of AE means that people are not engaging with the question ‘How much do I need to save into my pension?’ and then taking appropriate action. The IFoA is concerned that widespread under-saving will leave many unable to achieve the type of retirement they expect.

The Department for Work and Pension’s (DWP’s) most recent review of AE² highlighted a number of inadequacies in the levels of defined contribution (DC) retirement savings in the UK:

- Current saving levels present a substantial risk that the retirement expectations for a significant proportion of the working-age population will not be supported.
- While more individuals than ever before are saving, they are not necessarily engaged with saving or taking personal responsibility to plan, and save more, for their retirement.
- There are significant gaps in coverage of AE, notably those in multiple low-paid, part-time jobs, younger workers and the self-employed.

According to the DWP, 12 million people are still under-saving for their retirement despite AE.³ This equates to 38% of the UK workforce who are not doing enough to prepare for an adequate retirement. Almost half (5.7 million) are ‘mild’ under-savers, 4.8 million are ‘modest’ under-savers, and around 1.5 million are ‘substantial’ under-savers.

Although the 2004 Pensions Commission was clear that AE was not intended to provide sufficient contributions to achieve an adequate retirement, being set at a rate that would provide a mass-market mechanism for pension saving, there is too little public awareness about the realities that many individuals will face when they cease working, if they fail to save anything above the minimum mandatory amount.

The changing nature of retirement planning makes this all the more important. With the decline of defined benefit (DB) pension schemes, the responsibility for investment and longevity risk is increasingly being placed on the individual. While many (but not all) of those in older cohorts will more likely be able to rely on DB pensions to fund some, if not most, of their retirement, younger cohorts will be much more reliant on DC pensions.

There is therefore a need to raise awareness of the importance of pension saving, and the potential impact of under-saving on individuals’ lifestyles and wellbeing when they retire. At present, there is no consistent public narrative or nationally recognised amount that help individuals understand how much they need to be saving into their pension each month to secure a ‘good’ retirement.

The figures in this report, when compared to the AE minimum contribution levels, are high. However, we believe they are robust and show the need for an urgent debate among policymakers, employers, commentators and the pensions industry about what is an appropriate figure, and individuals need to take action. While recognising that these numbers will appear daunting to many people, we believe that it is in the public interest to demonstrate to savers of all ages the impact that under-saving will have on their eventual retirement prospects, but also to advocate for solutions.

1 | DWP figures: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/789480/enabling-retirement-savings-for-the-self-employed-pensions-and-long-term-savings-trials.pdf

2 | DWP (2017) Automatic Enrolment Review: Maintaining the Momentum https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/668971/automatic-enrolment-review-2017-maintaining-the-momentum.PDF

3 | Ibid.

What the UK thinks about pension saving

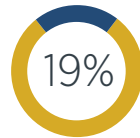
To help us understand the problem, we undertook some consumer polling on savers' attitudes towards pension saving.⁴



70% of UK workers who are in a workplace pension scheme contribute the bare minimum into their pension.



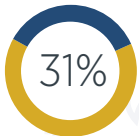
44% of UK workers believe rules of thumb or savings guidelines which could be accessed online or through their employer would be a helpful tool for retirement planning and pension saving.



A third (32%) of respondents said they would like to save more into their pension and intend to do so in the future and a further fifth (19%) would like to save more, but don't think they will in the future.



The main factor that prevents individuals from saving more into their pension is a lack of disposable income, with 65% of savers citing lack of extra money as the main issue.



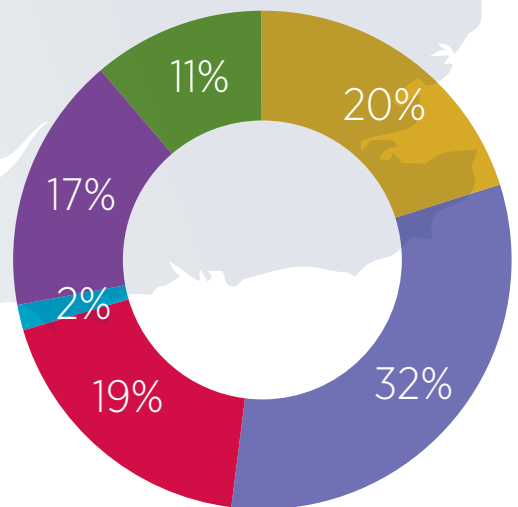
Almost a third (31%) of UK workers say they do not know what constitutes a 'good pension pot' with a fifth (20%) of workers considering a less than £100,000 pot to be sufficient. Using our modelling this would buy an annual pension of £2,825 at age 68 for a current 22 year old.



48% of UK workers say they are not confident that they are on track to save enough money to build what they would consider to be a 'good' pension pot during their retirement.

Satisfaction with current pension saving

- I think I am currently saving enough into my pension
- I would like to save more money into my pension, and intend to in the future
- I would like to save more into my pension, but I don't think I will in the future
- Not applicable - I am not currently saving into a pension
- Not applicable - I am not currently saving for my retirement
- Don't know



⁴ | All figures referring to current saving habits, unless otherwise stated, are from YouGov Plc. Total sample size was 2266 adults, who were workers aged 16 to 65. Fieldwork was undertaken between 25th and 29th July 2019. The survey was carried out online. The figures have been weighted and are representative of all GB adults (aged 18+).

A bottom-up approach

The IFoA is an advocate of an outcomes-based approach to pension provision. In our 2016 paper *Assessing Adequacy of retirement income: A bottom-up approach*⁵ the IFoA argued that such an approach would encourage individuals to think about the type of retirement they aspire to have and the specific needs that they might want to meet. Considering their retirement aspirations holistically, and the factors that may influence these aspirations, could help individuals to engage and enable them to make informed decisions, both when saving into their pension and when they use it to draw an income. One method of bringing this way of thinking to life is through a Gold, Silver and Bronze rating system that gives people three levels of outcome to aspire to.

The Pensions and Lifetime Savings Association (PLSA) recently launched their Retirement Living Standards (RLSs).⁶ Through an extensive study with researchers at Loughborough University, they interviewed individuals from around the country to understand their needs and desires for retirement, and used this research to help craft three distinct levels of retirement – or Retirement Living Standards (RLSs). The RLSs show the level of income needed to fund the type of lifestyle the participants in the PLSA study identified as:

- **Minimum** (participating in society but with very little choice or flexibility)
- **Moderate** (a lifestyle with some level of freedom and resilience to shocks)
- **Comfortable** (freedom and flexibility to enjoy additional comforts beyond what is needed to get by).

5 | IFoA – Assessing adequacy of retirement income: a bottom-up approach (2016): <https://www.actuaries.org.uk/documents/assessing-adequacy-retirement-income-bottom-approach>

6 | PLSA Retirement Living Standards: <https://www.retirementlivingstandards.org.uk/>

Savings goals

Once implemented and adopted, the PLSA's Retirement Living Standards should provide individuals with a useful way to think about their retirement in terms of goals, applying a monetary value to what the research has shown people value and expect from their retirement. However, to ensure this thinking translates into action, individuals will need to understand how they can achieve these living standards through saving.

The IFoA has modelled monthly Savings Goals for each of the PLSA's RLSs.⁷ We believe that providing a target savings level, or 'Savings Goals', will give individuals a starting point for assessing their current level of saving against their retirement aspirations.

Like any work of this nature, these Savings Goals will need to be tailored to an individual's circumstance, eg current level of saving and number of years until retirement. The goals cannot, and do not intend to, represent an exact figure that every individual needs to save. There are many external factors that will affect the way someone's pension pot grows over time and the circumstances they find themselves in at different

life stages. The Savings Goals are intended to give people something to aim for, and to demonstrate how increasing their saving above the minimum required under AE can positively impact their quality of life when they reach retirement. They are not intended to replace more bespoke tools, and regular checks are essential, especially as someone approaches retirement, to ensure they remain on track to meet their retirement expectations.

Table 1 on the next page shows the monthly savings goal an individual (or couple) could aim for in order to meet each of the PLSA's Retirement Living Standards.

The Savings Goals are intended to give people something to aim for, and to demonstrate how increasing their saving above the minimum required under AE can positively impact their quality of life when they reach retirement.

7 | Using methodology and assumptions outlined in Saving for Retirement: Rules of Thumb, IFoA Saving for Retirement Working Party 2019: <https://www.actuaries.org.uk/system/files/field/document/Saving%20for%20Retirement%20-%20Rules%20of%20Thumb%20-%20May%202019.pdf>

Table 1: IFoA Savings Goals and PLSA Retirement Living Standards

This number is based on the Joseph Rowntree Foundation's 'Minimum Income Standard' (MIS), which produces budgets for different household types, based on what members of the public think you need for a minimum acceptable.

The IFoA has argued in the past that the full State Pension should be enough to provide individuals with the Minimum Income Standard, ie that it should cover the cost of what is required to provide a socially acceptable standard of living.

Our modelling shows that for a couple, this is currently the case: for couples with a full National Insurance record, the combined State Pension payment would get them to the MIS. No more would need to be saved . . .

. . . However, our modelling shows that an individual would need to save £86 per month to meet the MIS on their own.

The current AE minimum contribution is 8% in total (made up of employer and employee contributions). Saving at the current AE minimum rate from age 22 should be sufficient to deliver an income above the MIS.

	Single		Couple	
Nationwide	RLS	Monthly Cost	RLS	Monthly Cost
Minimum ⁸	£10,200	£86 ⁹	£15,700	£0
Moderate	£20,200	£799	£29,100	£753
Comfortable	£33,000	£1,755	£47,500	£2,128
London				
Minimum	£12,400	£217	£19,800	£135
Moderate	£24,100	£1,090	£33,300	£1,067
Comfortable	£36,300	£2,002	£49,300	£2,262

The savings goal required to reach the 'comfortable' living standard is more than double that of the 'moderate' savings goal.

This is the total amount needed to be saved by the couple, not an individual Goal. It gives each person the flexibility to save a proportion of the total that makes sense based on their relative earnings.

The State Pension is no higher for someone living in London than those in the rest of the country, despite the cost of living being more expensive for those in the capital. This means that in order to achieve the MIS for someone retiring in London, even as part of a couple, each individual will have to save something, where the State Pensions would suffice in other parts of the country.

8 | Joseph Rowntree Foundation Minimum Income Standards: <https://www.jrf.org.uk/income-benefits/minimum-income-standards>

9 | Annual Survey of Household Earnings, Office of National Statistics <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/bulletins/annualsurveyofhoursandearnings/2018>

We have identified three Savings Goals that we think can help individuals understand how much they need to save to meet the goal they aspire to in retirement.

Savings Goal 1

Our modelling shows that the State Pension in its current form, plus the current 8% AE minimum contribution rates, are likely to be enough to deliver a minimum income standard, as defined by the Joseph Rowntree Foundation. This would equate to what society considers the minimum acceptable level of income to meet all necessary outgoings and have the opportunity to participate in society.

This should mean that the AE minimum contribution and the State Pension are able to give them basic financial grounding for their retirement from age 68, but means that responsibility for generating an income above the minimum rests with the individual saving above the AE minimum contribution rate, along with any contributions the employer is willing to make.

The main exception to this rule is an individual living and retiring in London, where the higher cost of living requires a larger top up to the State Pension, and hence higher pension contributions.

Savings Goal 2

For an individual to achieve a moderate level of retirement income, their total savings need to be around a quarter (26%) of average full-time earnings. This lifestyle is defined as offering an additional degree of financial security and some flexibility to make decisions and adapt to changing circumstances.

For someone on average full time earnings (£36,611¹⁰), the £799 per month needed to achieve a moderate retirement living standard according to our modelling, represents 26% of earnings. This means that the majority of people who are saving at the AE minimum rate are likely to be some way off achieving a moderate standard of living in retirement.

Savings Goal 3

Someone who is aiming for a comfortable level of retirement income will need to save more than double the amount they would need if they were aiming for the moderate Retirement Living Standard.

Our modelling suggests a figure of £1,755 per month would need to be saved to achieve the comfortable level. This significant sum is not realistically achievable for someone on average earnings (representing over 57% of monthly earnings for that group). Therefore we expect that the comfortable RLS is only an appropriate aspiration for those earning higher incomes throughout their working life. These people are likely to be more financially savvy and better able to afford to pay for financial advice to help them plan for retirement. We recommend therefore that this group is not the target audience for industry and government interventions in this area, and that the focus should be on getting a majority of people on track to achieving the moderate RLS.

The PLSA's Retirement Living Standards are based on thorough and robust research about what the public value and what they expect from their retirement. This bottom-up approach is a crucial starting point for deriving a meaningful set of goals that savers can aim for when planning for retirement.

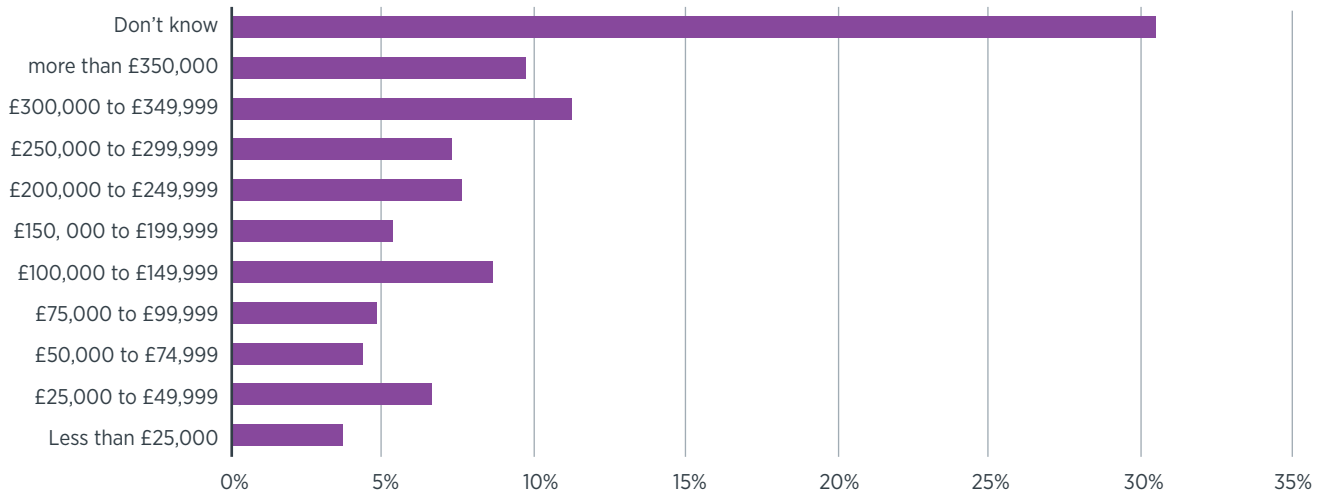
Savings Goals 2 and 3 are also relatively high compared with what we know about how much people are currently saving. In particular, younger generations, the majority of whom will rely solely on their DC savings to fund their retirement, are likely to experience a significant gap between what they can afford in their retirement, and what they expect from it. Our consumer survey gives cause for concern that people are not aware of

the impact of under-saving on their future outcomes, nor the realities of what saving at the minimum level is likely to mean for their retirement prospects.

Almost a third (31%) of UK workers we surveyed said they do not know what constitutes a 'good pension pot' and 20% of savers consider a pot of less than £100,000 as sufficient to live off for the duration of their retirement. Using our modelling this would buy them an annual pension of £2,825 for a current 22 year old. By contrast, our modelling showed that a target pension fund to provide a 'moderate' retirement income was £473,000 for a current 22 year old. Only 10% of these respondents thought a 'good' pension pot needed to be over £350,000.

Table 2: Consumer perceptions of what constitutes a ‘good’ pension pot – IFoA/YouGov Survey 2019

Approximately how much, if anything would you consider to be a ‘good pension pot’? (ie the total amount saved for retirement, from pensions and other investments, but not including the value of any properties owned). By ‘good pension pot’ we mean things like being able to live comfortably during the duration of your retirement, being able to cover all your basic expenses (eg housing costs and bills, food shop etc.)



This, coupled with the fact that a majority of DC savers are contributing at the minimum rate, suggests the savers may be unwittingly heading for a retirement that falls short of their expectations. While AE is lauded for getting the UK saving again, there is clearly unfinished business when it comes to ensuring people are saving enough. We are concerned that individuals are mistakenly assuming that the AE minimum contribution rates are the recommended contribution rates. So that people can make informed decisions about how much they need to save, it needs to be made clearer to them what the State and employers are mandated to provide, and that they as individuals are currently responsible for making up the gap that remains.

Given that the minimum level of retirement income should be achievable via the State Pension and minimum AE contribution, every additional % an individual saves above the minimum will work towards improving their quality of life when they reach retirement. This is a great basis upon which people can set goals and save towards achieving them, but needs to be communicated properly so they can understand the benefit of making contributions above the minimum.

We believe that a Savings Goal should be based on an appropriate nationally agreed and consistent level of retirement income, derived after wide-ranging discussion about an individual's ambitions for retirement. If the resulting Savings Goal is deemed unaffordable for general use, then it should be reduced by assuming individuals work longer and retire later. This should be made clear so that expectations are properly managed.

The Savings Goals identified by our research aim (but do not promise) to deliver a stable and secure retirement income at a level that protects individuals against investment, inflation and longevity risk. This type of retirement will look, for many, like what they expect from a ‘traditional pension’ ie of the kind delivered by a DB scheme. The size of the Savings Goals highlights how expensive this sort of retirement could be to DC-reliant generations, especially given the current very low long-term interest rates that prevail.

We hope our analysis will contribute to a necessary wake-up call for individuals, employers, the pensions industry and the government about the potential scale of the UK's under-saving problem. Each of these parties can play a part in preparing people better for the realities of funding retirement in the current landscape, ideally by getting people saving more, but at a minimum by ensuring people's expectations are aligned with reality.

Recommendations

There is a growing consensus that a bottom-up approach to retirement saving, based on real-life outcomes rather than traditional replacement rates, is an effective way to engage people with their future retirement and save to achieve those goals.

We believe that adopting our proposed Savings Goals, combined with the PLSA's RLSs, has the potential to influence the behaviour of both consumers and employers through clear and simple messages. Our polling suggests that savers are open to something akin to the guidelines provided through the monthly Savings Goals, with 44% of respondents stating that some 'rules of thumb' that could be accessed online or through their employer that indicate how much a person should be saving each month/year into their pension, would be a helpful tool for retirement planning and pension saving.¹¹

If used throughout an individual's working life, this strategy would provide an early indication of the contribution needed for a reasonable retirement income, which can and should be refined at a later date once retirement plans start to emerge. We suggest that further market research is undertaken to test whether the Savings Goals would be helpful in practice. Pensions dashboards will clearly provide an opportunity to test and refine innovative communication with savers, of which the RLSs and accompanying Savings Goals could be a part. Consumer groups, industry partners and other organisations involved in dashboards, and other member communication, are ideally placed to perform this role. The key thing is that a set of savings goals are communicated consistently to all savers.

Below, we set out how we see a collective strategy – with roles for individuals, employers, the government and the pensions industry – could work to ensure the problem of under-saving is addressed, so that at the very least, everyone can retire with dignity.

Individual levers

- Use our Savings Goals to assess individual contribution levels, and adjust saving with the aim of meeting the appropriate RLS. In the absence of any mandatory increase in AE contribution levels, individuals will need to be encouraged to take the voluntary step to increase their contribution levels. Only just over a quarter (27%) of our survey respondents said they were contributing an additional amount above the minimum AE contribution level. While public conversations about pension saving remain low on the agenda, time will continue to tick by for savers, reducing the impact additional savings and compound interest can have.
- Continually assess progress towards individual goals. It is important to note that these goals will change over time. Retirement saving is a long process, and it is likely that individual circumstances, economic conditions and public policy will change numerous times over the course of someone's working life. Our modelling makes assumptions about the future economic environment that are impossible to predict with certainty. It is therefore necessary for individuals to check their situation periodically to understand how these changes have affected their potential outcome, and adjust their saving habits accordingly.
- Adjust to the idea of lower income if the Savings Goal is unaffordable, or working longer and retiring later to make retirement more affordable. If this is not possible, individuals may need to adjust their expectations of retirement. We are encouraged that the PLSA has committed to maintaining its RLSs into the future; this should help to show the extent to which expectations of retirement are changing.

We believe that adopting our proposed Savings Goals, combined with the PLSA's RLSs, has the potential to influence the behaviour of both consumers and employers through clear and simple messages.

11 | IFoA/YouGov Survey 2019

Employers – pensions v pay

Employers should seriously consider the balance of pensions vs pay they offer to their employees, and in particular how this balance looks for different groups of employees if they have old DB arrangements in place. Employers have, on the whole, deemed DB schemes too costly to run based on current demographic trends and economic conditions. This is understandable given many were set up when the life expectancy of retirees was considerably lower, and interest rates much higher. However, there is a broader societal question about the declining paternalism of employers. Employers wishing to provide a more holistic benefit package for their employees could consider:

- Rebalancing the idea of income today with future income by looking at the balance between pay and pension contributions. The same £ for £ contribution could be potentially more valuable to employees if paid into a pension rather than a pay packet. Employers would need to have a good understanding of their employees' priorities in this instance.
- Matching schemes can act as a strong incentive for employees to contribute more towards their pension. If framed well, this can be an important tool for encouraging individuals to save above the AE minimum.
- Education is also crucial and there is evidence that people value their employer as a trusted source of information about their pension. IFoA consumer testing from 2017 showed that 27% of respondents cited their employer as the main source of information and advice about their pension.¹² We have long argued that a public information campaign will be crucial to getting people saving more, and employers should be seen as a key channel through which this information is shared.

The government – educating, engaging and equipping

Automatic enrolment relies on inertia, and this has been part of its perceived success to date. But as we and many others have demonstrated, there is a real risk that people are lulled into a false sense of security by the portrayal of AE as a categorical success. The government needs to seriously consider how to strike the balance between inertia and engagement, so that saving becomes a habit early enough in life but people also engage and take action when they need to. This will help to build on the success of AE.

Some public policy initiatives that could help include:

- A public information campaign about the realities of saving beyond the AE minimum
- Pensions dashboards, which could transform the way people interact with their savings
- Widening the scope of AE to capture younger savers and those on lower incomes, getting everyone on a minimum footing to save for their future
- Provision of the Savings Goal guidelines when young savers start a new job.

The minimum employer contribution under AE is 3% from April 2019. A phased increase in employer contribution to 6% (with total contributions rising to 12%), as proposed by the PLSA, would provide some assistance in making DC pension provision more affordable for consumers, and getting people further on the path towards the 'moderate' RLS. We also support the government's proposal to remove the lower earnings threshold when calculating qualifying earnings.

The pensions industry – innovation and communication

Part of the problem with affordability lies in the inefficiencies of the individual DC market. We therefore suggest there is a need to find ways to harness bulk purchasing powers, along with the benefits of pooling investment and mortality risks. This would make DC pension provision more affordable and predictable for the consumer. The growth of master trusts should lend itself to the development of such solutions, as would the introduction of Collective Defined Contribution schemes.

One aspect of particular concern is that the cost of individually purchased annuities is currently around 15% to 20% higher than the terms typically available to defined benefit pension schemes for bulk purchase under a buy-in or buy-out.

Low interest rates are a major reason for the high cost of pension provision, and changes in assumption about their potential future increase can have a huge effect on an individual's Savings Goal. While future rates cannot be predicted, the unravelling of the effects of quantitative easing should lead to an increase in interest rates, other things being equal. A rise in long-term interest rates could significantly reduce the cost of pension provision, eg an increase to say 3% pa from the current (October 2019) level of around 1% pa would reduce the Savings Goal, perhaps by around 30%.

The issue of affordability is a serious one and requires widespread discussion. We believe the concept of the Savings Goal can provide a useful platform for promoting such a debate, having regard to the various issues outlined above.

12 | Institute and Faculty of Actuaries, Retirement Readiness: Survey Report from Australia, the United Kingdom & the United States, October 2017, <https://www.actuaries.org.uk/documents/policy-briefing-retirement-readiness-survey-report-australia-united-kingdom-united-states>

Our approach

The PLSA's RLSs provide the target income an individual or couple will need to achieve one of three retirement lifestyles. Our research used these figures to model what size of DC pension pot (the 'target fund') would be needed to generate this level of income. This target fund at retirement is used to derive the level of monthly/annual contributions needed during the savings phase.

Three factors help to determine this:

- the choice of retirement living standard (RLS)
- the age at which an individual wishes to retire
- an individual's retirement objectives.

We illustrate our approach using the moderate RLS for an individual living outside London – £20,200. This is net of tax and equates to a pre-tax income of about £22,100. We have assumed that the individual will receive a full State Pension of approximately £8,700, and therefore the required retirement income from the target fund is approximately £13,400 a year. It is also assumed that the RLS and the State Pension will increase annually in line with average earnings in order to maintain their value in real terms.

In order to provide a personalised target, we have anticipated that each individual within a household will provide for their own RLS, with no contingent pension payable to a spouse or dependant after death. We recognise that many household costs are shared but we felt it would be more effective for planning purposes if each individual has their own RLS. The PLSA's figures show that saving as a couple will be more achievable, but relying on the target figures for couples may leave individuals short if their marital or cohabiting circumstances change in the future, or if a partner does not provide their share of the requirement.

Retirement age

The age at which an individual chooses to retire will significantly impact the contributions they will need to make, or the RLS they will be able to achieve for a given contribution. Clearly, if an individual wishes to retire earlier then higher contributions will be required to reach the target, and vice versa. For the purposes of this analysis, we have assumed a retirement age of 68 – in line with the expected State Pension age for those in their 20s today – on the basis that this is a widely understood figure and will also make retirement much more affordable for the target group.

Retirement objectives

The final factor to consider when determining the target fund is the extent to which the individual wishes to prioritise the following competing objectives:

- **Security:** that their pension pot can generate a guaranteed income for life
- **Inflation protection:** that their income is protected against the impact of inflation
- **Legacy needs:** that the pot will still deliver value for money in the event of early death, or that specific inheritance intentions are met
- **Flexibility:** that there is flexibility to vary the income to suit changing circumstances
- **Cash needs:** that they are able to meet any additional requirements at retirement, such as to pay off debt, finance a holiday, or another major discretionary purchase.

Clearly there is a challenge in choosing a way to fund retirement that offers a fair balance of the above objectives – particularly as these priorities are likely to be unclear to younger savers in the early part of their savings journey. We concluded that the target fund should be based on the estimated cost of purchasing a single life index-linked income for life for the following reasons (further information on our assumptions can be found at the end of this paper):

- It satisfies the requirements of security and inflation protection, by providing enough money to purchase a guaranteed index-linked income for life.
- It provides a reasonable fund for those wishing to pursue drawdown, where flexibility and legacy needs are more significant considerations, including some immediate cash requirements if needed.

A lower target fund could be considered, but would inevitably affect the ability to provide for the requirements of security and inflation protection, as well as the option to enable drawdown. Conversely, adopting a higher target fund would significantly increase the calculated cost of pension provision.

Following these considerations, we have concluded that for an individual currently aged 22, with an SPA of 68, the target fund at retirement age is £473,000 in present-day money terms.

Determining the monthly contribution

The target fund is a large number and does not obviously translate into knowing how much someone needs to contribute towards their pension. Therefore, we have calculated an indicative monthly contribution payable over a full working life to achieve the target fund.

We assumed a starting age of 22 because that is the current minimum age at which an individual can be automatically enrolled into a workplace pension. It is also the age by which most young adults will have completed education and entered the workplace.

By way of illustration, we derived the monthly contribution based on what the PLSA has defined as a reasonable target for an average consumer, delivering a ‘moderate’ lifestyle. As explained above, this requires a target fund of £473,000 at age 68 in present-day money terms for a current 22 year old.

We calculated the contribution rate using various alternative assumptions and concluded that an appropriate set of assumptions were those set out at the end of this paper. The calculated contribution rate using those assumptions is £799 per month.

Assumptions

The assumptions used to calculate our Savings Goals are outlined below. A wide range of assumptions are used across the pensions industry to estimate how much people need to save for retirement, and we suggest a greater consistency would be helpful to pension savers. Rules of thumb might act as a catalyst to help make this happen.

Calculating the target fund at retirement

We derived the target fund at retirement as the cost of purchasing an index-linked annuity. We substantially based the terms on which annuities can be purchased on those specified in the Financial Reporting Council's AS TM1¹³ (TM1) for the purpose of preparing Statutory Money Purchase Illustrations (SMPIs). Our approach has the advantage of being largely consistent with that used by an independent, widely-used source, and approximates to the current terms typically available for purchasing individual annuities. The assumptions were as follows:

- An interest rate equal to 50% of the sum of the FTSE Actuaries Government Securities Index-Linked Real Yields over five years assuming 5% and 0% inflation, less 0.5%
- Mortality based on the year of birth rate derived in equal parts from the tables PMA08 and PFA08 with projected mortality improvements using the CMI model 2 years prior to the calculation date and subject to a 1.25% p.a. long term level of improvements
- A 4% loading for expenses.

TM1 specifies that the interest rate to use in the financial year commencing 6 April is the one as at 15 February in that year, which for the 2019/20 financial year is -1.7% before the 0.5% deduction. Since 15 February 2019 index-linked gilt yields have fallen substantially, by around 0.7% p.a. as at 30 August; we have made some allowance for this fall by rounding down the interest rate from -1.7% to -2.0%, and thereby used an interest rate of -2.5% after the 0.5% deduction.

For the PLSA's 'moderate' RLS of £20,200 net of tax (£22,125 before tax), a DC pension of £13,400 before tax is required after allowing for the State Pension. The cost of purchasing a single life, index-linked annuity of £13,400 p.a. at age 68 for a current 22 year old using the approach described above is £473,000.

As many individuals are currently choosing drawdown, we undertook some stochastic modelling to illustrate the potential range of outcomes using drawdown, starting with a fund of £473,000. The results are shown in Table 5.

Table 3: Drawdown – illustrative range of outcomes: initial fund of £473,000

Years retired	Probability drawdown lasts	Lifetime income (before tax) that can be supported, inclusive of the State Pension	
20	100%	Median income	£21,400
25	99%	Range with a 90% degree of confidence	£17,500 to £24,900
30	92%		
35	77%		
40	57%		

Expected years to death are 25 using the assumptions adopted, but there is a 24% chance of survival for 30 years (to age 98)

Over a 30 year period, in 92% of our 1,000 simulations the drawdown fund did not run out, which is just over the 90% threshold that is commonly viewed as 'safe' over that period, although over longer periods than 30 years the chance of running out of money increases very significantly. We have calculated that the range of lifetime income that can be supported with a 90% degree of confidence is £17,500 to £24,900, compared with a target income of £22,125.

However, compared with a single life annuity, drawdown offers flexibility and value on early death, and significant upside potential (not guaranteed of course), while anyone wanting a secure lifetime income can buy an annuity instead with the same fund. There are various possibilities for partial or delayed annuitisation. For example, those who buy annuities tend to prefer level ones because they provide a higher initial income, are better priced (reflecting the high cost of insuring the inflation risk), and they could then manage the inflation risk using drawdown.

Assumptions adopted for the accumulation phase

For the accumulation phase, we have referenced the FCA's prescribed maximum rates of return that financial services companies must use in their calculations when providing retail customers with projections of future benefits.¹⁴

Earnings growth

The FCA recommend an assumed growth in earnings in excess of CPI of 1.5% p.a. to 2.0% p.a. in the long-term, reducing to 1.25% p.a. over the next 10–15 years. We have adopted an assumption of 1.5% p.a.; the bottom of the recommended long-term range in recognition of the shorter-term advice.

Investment returns during accumulation

Most savers are invested in their scheme's default lifestyle investment strategy and we have used that as a basis for setting our assumptions, assuming a 10-year lifestyle period which is fairly representative of the market.

The modern investment portfolio typically contains a wide range of growth seeking assets in addition to equities, and a typical medium risk diversified investment portfolio will target an investment return before charges of around 3.0% p.a. above CPI.

For lifestyling that targets drawdown, we assumed a target investment strategy at retirement providing a real return of 1.75% p.a. as a blend of lifestyling that targets drawdown and annuity purchase.

In summary, we assumed a return above CPI of 3.0% p.a. until 10 years before retirement, then uniformly reducing to 1.0% p.a. at retirement. These are before deducting expenses of 0.75% p.a. which is the current cap on the default lifestyle strategy for A/E purposes.

Further detail on our assumptions is provided in the working party's paper (refer to reference 9), which also explains how alternative assumptions were also considered before arriving at those described above.



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