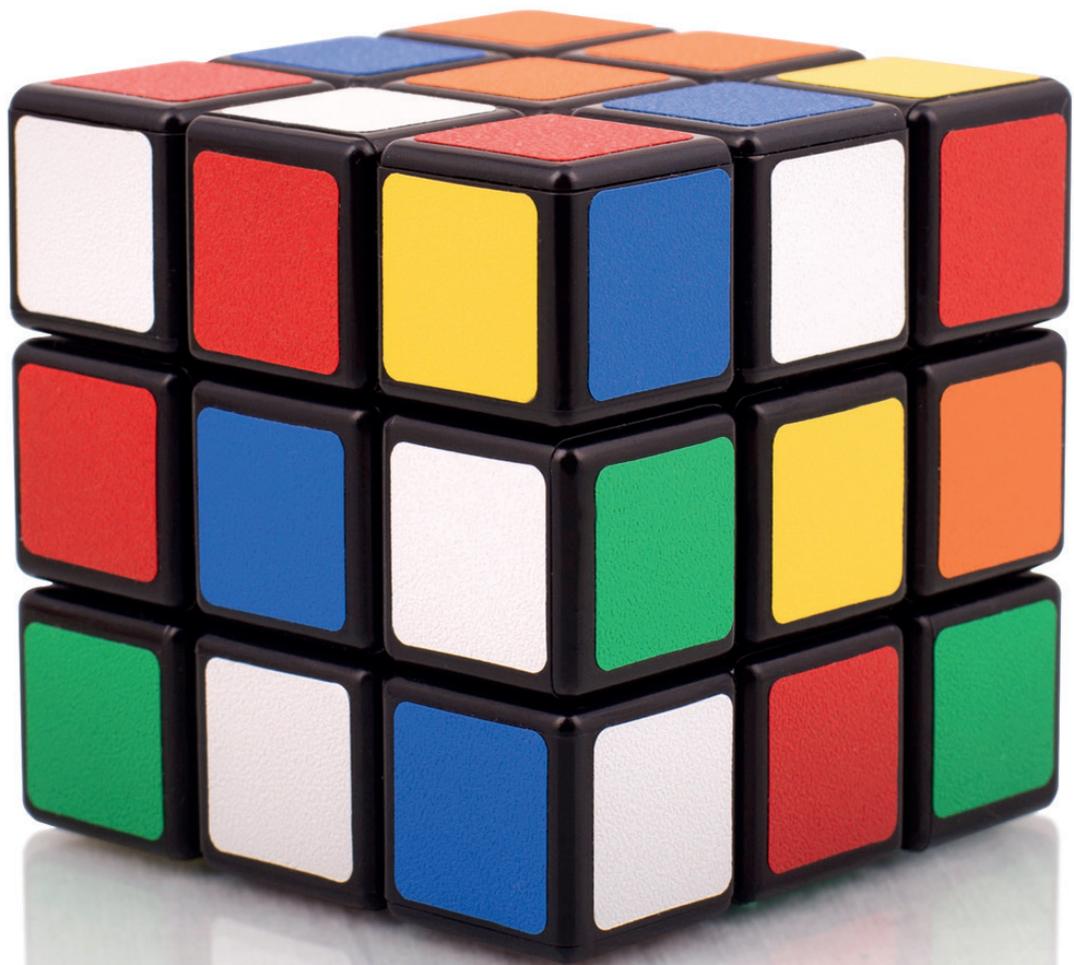


PENSIONS POLICY INSTITUTE

# PPI

Generation VeXed: solving the retirement puzzle



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Daniela is Head of Policy Research at the Pensions Policy Institute (PPI), and leads the Policy Research team. She has a wealth of experience in conducting quantitative and qualitative research into all aspects of state and private pensions policy, writing articles for journals and national press, and presenting to a variety of domestic and international audiences, including radio and television appearances.

Daniela originally joined the PPI in 2008 and took a short break in 2012 to work as a Committee Specialist for the Work and Pensions Select Committee.

Prior to working in research and policy Daniela was a social worker with vulnerable adults and children. Daniela has an MSc in Social Policy and Planning from the London School of Economics.

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Anna is an Associate Policy Researcher at the Pensions Policy Institute, and is also studying an MA in Public Policy & Ageing at King's College London. Her research focuses on the implications of demographic population ageing and interactions between pensions, health and social care systems. As a former Management Consultant in financial services, Anna has worked extensively with asset and investment managers, including pension funds, across a wide range of topics including regulatory impact analysis, post-merger integration, portfolio management and execution platforms. She also brings personal insight into the impact of policy on transitions in later life, retirement savings and income, care choices and funding.

## **Tim Pike, Head of Modelling, Pensions Policy Institute**



Tim is the Head of Modelling of the PPI responsible for delivering the models and modelling to support the PPI's current research program. He joined the PPI in July 2015 and since then has analysed the projected implication of pension policies upon many significant groups. These have included the self-employed, women, younger generations, and the Exchequer.

Tim has worked alongside academics and other researchers on collaborative projects including WHeRL and CASPeR. These projects bring multidisciplinary research to widen the research scope to give a more complete view of the implications of interacting areas of policy.

Prior to joining the PPI Tim worked for Legal and General where he spent nearly ten years contributing to a wide variety of actuarial modelling projects, from financial reporting to annuity pricing.

Tim has an MA (Cantab.) having studied mathematics at Fitzwilliam College Cambridge.

## The Pensions Policy Institute (PPI)

The PPI is an educational, independent research organisation with a charitable objective to inform the policy debate on pensions and retirement income provision. The PPI's aim is to improve information and understanding about pensions and retirement provision through research and analysis, discussion and publication. It does not lobby for any particular issue or reform solution but works to make the pensions and retirement policy debate better informed.

The PPI is funded by donations, grants and benefits-in-kind from a range of organisations, as well as being commissioned for research projects.

Pensions affect everyone. But too few people understand them and what is needed for the provision of an adequate retirement income. The PPI wants to change that. We believe that better information and understanding will lead to a better policy framework and a better provision of retirement income for all. The PPI aims to be an authoritative voice on policy on pensions and the provision of retirement income in the UK.

The PPI has specific objectives to:

- Provide relevant and accessible information on the extent and nature of retirement provision
- Contribute fact-based analysis and commentary to the policy-making process
- Extend and encourage research and debate on policy on pensions and retirement provision
- Be a helpful sounding board for providers, policy makers and opinion formers
- Inform the public debate on policy on pensions and retirement provision.

We believe that the PPI is unique in the study of pensions and retirement provision, as it is:

- Independent, with no political bias or vested interest
- Led by experts focused on pensions and retirement provision
- Considering the whole pension framework: state, private, and the interaction between them
- Pursuing both academically rigorous analysis and practical policy commentary
- Taking a long-term perspective on policy outcomes on pensions and retirement income
- Encouraging dialogue and debate with multiple constituencies

**A Pensions Policy Institute report**

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**PHOENIX GROUP**

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## Sponsor's foreword

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Environmental, Social and Governance or, more accurately, its three-letter abbreviation - 'ESG' - is an increasingly common phrase. Whilst it is often used to mean different things by different people, it is best articulated in the purpose statement of an organisation when answering the question: "Why do we exist in Society?"

As the largest Life and Pensions Consolidator in Europe, the Phoenix Group serves over ten million policyholders. Put another way, we are entrusted with the long-term savings of ten million people. This is both a huge privilege and a great responsibility. It is our duty to nurture these savings and to help people to provide for their retirement and beyond. It is the very essence of our 'S' when we consider what ESG means in the context of our business.

This responsibility is why we sponsored the Pensions Policy Institute (PPI) to undertake research into the long-term savings position of 'Generation X', encompassing those aged 39 to 53, totalling 13 million people, circa 20% or one-fifth of the population. In other words a large group!

One of the most successful public policy ventures of recent decades is automatic enrolment. It has transformed the savings landscape in the UK, with over ten million additional people contributing to a workplace pension. At Phoenix, we are responsible for almost two million of these individuals via our Standard Life Assurance business.

This achievement is significant and worth celebrating, but we should acknowledge that, for many Generation X individuals, Automatic Enrolment has come too late to deliver the positive impact on retirement incomes that it will for younger savers. A particularly impressive feature of Automatic Enrolment is the extent to which it has increased saving amongst those aged under 30: since its introduction in 2012, the 22 to 29 age group has witnessed the largest increase in pension participation, rising from 24 per cent to 84 per cent in 2018.



Generation X individuals are less likely to have the levels of Defined Benefit (DB) provision enjoyed by, the so-called 'Baby Boomers' aged between 54 and 73. The number of active DB savers in the private sector has fallen from 8 million in 1967 to just 1.1 million in 2019.

This conundrum inspired the title of the report - 'Generation vexed'. We asked the PPI to undertake detailed analysis to understand better the extent of the challenges facing this demographic. The findings make for compelling reading: one-third of people in Generation X currently will fail to achieve more than the minimum income levels in retirement. Whilst Millennials (those aged 19 to 38) face similar challenges, the critical difference is that people in Generation X will retire in the next 12-28 years and therefore have less time to remedy their financial shortfall.

This report brings these issues into sharp focus, it serves as a useful prompt of how we can act collectively to address them. One clear finding from the report is that there is no single solution - the oft quoted 'silver bullet' - nor is there a single actor that can confront the challenges in isolation. Rather, it will take a collaborative effort on the part of Government, Regulators, the Industry and Employers, as well as Savers.

At Phoenix, we stand ready to play our part. Indeed, it is a vital element of our response to the question of why we exist in Society.

Phoenix is grateful to the PPI for the professionalism it has shown in writing the report. It is first rate. Daniela Silcock, Anna Brain and Tim Pike have assembled a wide range of complicated technical material, argument and facts in a coherent and visually helpful manner, whilst remaining consistent with the PPI's fiercely independent status.

**Clive Bannister**  
**Group Chief Executive Officer, Phoenix Group**

# Executive Summary

**Without collective action from policy-makers, industry and employers, people in Generation X are more likely to have difficulty achieving an adequate, flexible and sustainable income in retirement than their parents' generation, difficulty which risks being sustained by generations that follow.**

**MILLENNIALS**  
Born 1981-2000  
Aged 19-38 in 2019

**GENERATION X**  
Born 1966 – 1980  
Aged 39-53 in 2019

**BABY BOOMERS**  
Born 1946-1965  
Aged 54-73 in 2019

The time that members of Generation X have to prepare for retirement is reducing; Generation X will approach retirement over the next 12 to 28 years. This cohort is working and saving during labour market and pensions transitions, and a challenging economic climate, which have increased the complexity of preparing for later life.

The decline in private sector Defined Benefit (DB) provision, reductions in the proportion of future income from State Pensions, and the increase of casual working, mean that Generation X is likely to reach retirement with less income from sustainable sources than those in older generations. A decrease in house purchase among this cohort, a greater likelihood of indebtedness and an increase in the likelihood of the need to provide or receive care at older ages means that those in Generation X are likely to have higher expenditure needs on average than older cohorts, which will further reduce their disposable income and make it more difficult to achieve a suitable standard of living in retirement. Attention and support from policy-makers, industry and employers are becoming increasingly important if interventions are to be made now which could help Generation X improve their quality of life in the future.

## **This report compares the characteristics and retirement income risks faced by Generation X to those of Baby Boomers and Millennials**

In order to understand how work and retirement are changing for Generation X, this report compares the risks they face in later life to those facing Baby Boomers and Millennials, and tracks how the cumulative effect of different savings behaviours and changes to policy, pensions and employment are affecting risk across the generations. Key drivers of retirement risk are identified, and the report concludes each section with implications for policy interventions which could mitigate risks for Generation X and retirees of the future.

### Baby Boomers: Born between 1946-1965 and aged between 54 and 73 in 2019 (15.5 million people)



Baby Boomers are the oldest generation in the study. They are likely to reach retirement with higher levels of Defined Benefit (DB) entitlement than younger generations, less Defined Contribution (DC) savings and higher State Pension entitlement. Baby Boomers are more likely to be owner occupiers, are less likely to be in debt and are more likely to have supplementary sources of income such as non-pension savings and assets, and housing equity at retirement than younger cohorts.

### Generation X: Born between 1966-1980 and aged between 39 and 53 in 2019 (13 million people)



Members of Generation X will reach retirement with lower levels of DB entitlement than Baby Boomers and more DC savings on average. However, Generation X members will not benefit from a full working-life of automatic enrolment as they will have been in their late 30s or older when their company first auto-enrolled, though some will have been saving prior to automatic enrolment. Generation X members are more likely to work casually, or to be self-employed than Baby Boomers at the same age, affecting their access to workplace pension saving. Generation X members will receive less income proportionally from State Pensions on average. Generation X members are more likely to reach retirement in rented accommodation or with an outstanding mortgage, more likely to have debt, more likely to need to provide or receive care, and less likely to have other savings or housing equity to draw on.

### Millennials: Born between 1981 and 2000 and aged between 19 and 38 in 2019 (17.2 million people)



Millennials are the youngest cohort in the study. While Millennials would benefit from attention by policy-makers, industry and employers, the majority of millennials still have time to make decisions or to benefit from policy changes aimed at improving retirement incomes, for example, increases to minimum required automatic enrolment contributions. Millennials are less likely to reach retirement with DB entitlement but will have greater DC savings as a result of benefiting for longer from automatic enrolment. Millennials are most likely of all generations to work casually or be self-employed but could benefit from future policies designed to assist those outside of full-time employed work, to save for retirement. Millennials are the least likely of any generation to reach retirement owning their own home outright, though future policy or economic changes could change the prevalence of house buying or the way that benefits are used to support those renting in retirement.

## What is a suitable retirement income?

### A suitable retirement income can mean different things to different people

Retirement income needs are individual and depend on many factors including the standard of living people had during working life, where they live, housing and living costs, and the health conditions of themselves and their families.

Three principal retirement income goals have emerged from previous PPI research on the changing nature of retirement: **adequacy**, **sustainability** and **flexibility**. This research measures the extent to which **employment patterns**, **income**, **assets**, **pension savings**, and **draws on income** might affect the ability of cohorts to maintain adequacy, sustainability and flexibility throughout retirement.

Key risks to cohorts are analysed in the context of **labour market**, **pensions landscape** and **economic** changes. Policy implications are drawn in order to inform debate, decisions and actions from **Government**, **industry**, **employers** to help to tackle the puzzle of reducing retirement risks for Generation X (ExFig1).



Individual behaviour will also play a significant role in mitigating retirement income risks; however, many individuals may be unwilling or unable to make informed decisions without the support of Government, industry and employers.

### **Adequacy, sustainability and flexibility:**

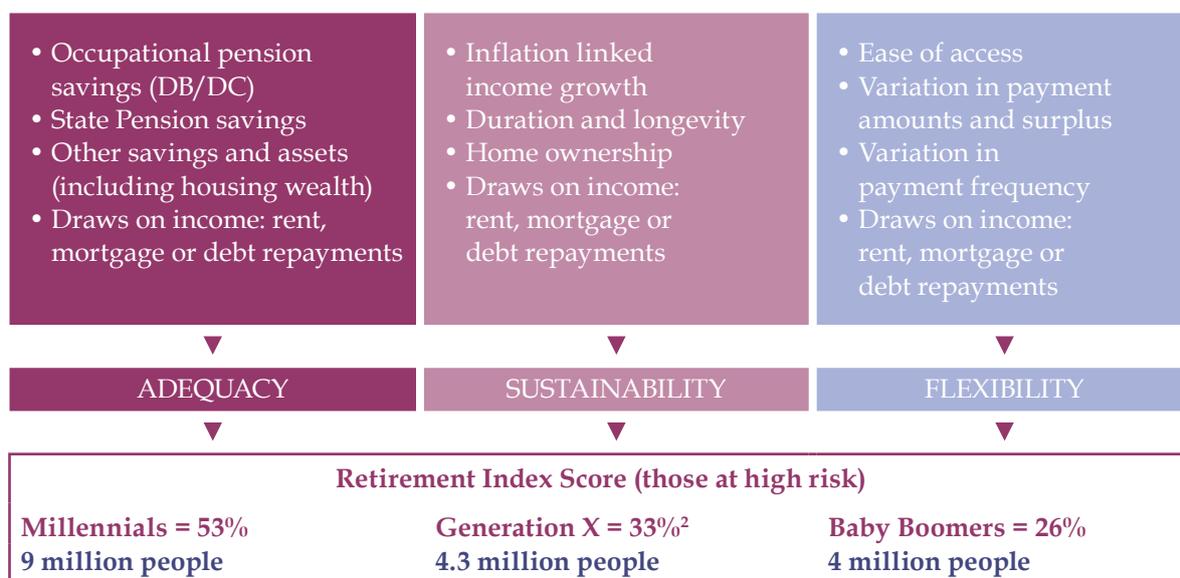
- **Adequacy:** Adequacy refers to whether retirement income allows people to afford a standard of living which they find acceptable. This often means achieving an income that allows people to replicate working life living standards, though other measures such as how much income people require in order to remain above the poverty line or to meet minimum needs are also used.
- While target replacement rates, of around two-thirds of working life income, have been widely used over the last few decades as a method of determining the income needed in retirement, this approach has become less meaningful over time. Changes to the tax relief given to pensioners, and the consumption patterns of pensioners have meant that two-thirds of working life income may no longer provide the same living standard as it would have two decades ago. The introduction of the pension flexibilities and the rise of DC means that people are more likely to have variable incomes in retirement than a steady annuity or DB income, which means that aiming for a steady level of income throughout retirement has become more complex. Replacement rates are also difficult for people to plan for, when they do not know what their future earnings trajectory might look like or whether they might take time out of work for health or care reasons.
- In this report, adequacy risk is measured by analysing the annual rate of contributions necessary for individuals and households to achieve a minimum to moderate standard of living as defined by the Pensions and Lifetime Savings Association (PLSA). The majority of people modelled for this research will have experienced living standards somewhere between these ranges during working life.
- **Sustainability:** Sustainability refers to whether retirement income increases with an inflationary measure and is guaranteed to pay out until the death of the recipient. Sustainability is important for maintaining a standard of living throughout retirement. Sustainable sources of income include DB pensions, State Pension entitlement and lifetime annuities.
- **Flexibility:** Needs change with household changes (for example, divorce, bereavement, children or grandchildren moving in or out) and changes in health and care needs. An income source from which people can withdraw in varying amounts as needs change, such as DC savings, non-pension savings and assets, housing equity, or inherited wealth, is useful for helping people

to meet spikes in expenditure needs and maintain living standards in retirement. Those on very high incomes, above adequacy levels, from less flexible sources, such as DB pensions, may have sufficient income to meet needs as they change while also maintaining living standards.

### Generational risks

Table Ex1 shows the proportion of Baby Boomers and Millennials who face the same overall retirement risk as the third of people most at risk in Generation X. The principal risks for Generation X are associated with adequacy and sustainability of retirement income as reliance upon DC savings increases; their overall risk is somewhat mitigated by the likelihood that some of their income will be relatively flexible. In contrast, the strong elements of DB pensions and higher average State Pension provision among Baby Boomers reduces their adequacy, sustainability and consequently overall risk relative to Generation X (26%), but the lack of flexibility they have in accessing these savings offsets these advantages to a small degree. A greater proportion of Millennials face similar overall levels of risk as Generation X (53%) due to a greater reduction in the proportion of income that will come from sustainable sources, the effect of lower earnings in their early careers and the likelihood of indebtedness and not owning their own home in retirement. It may be harder to mitigate adequacy risk in retirement through interventions than sustainability or flexibility, making Generation X a particularly important cohort to focus on.

Table Ex1<sup>1</sup>



### Key differences and changes across the generations

Compared to other generations, the projected retirement outcomes of Millennials are likely to be most impacted by the long-term effect of recent industry, policy and economic transitions including the rise in DC pensions (which carry more risk in both the saving and retirement phases, than DB pensions), introduction of automatic enrolment, rising house prices and declines in wage growth that followed the financial crisis.

1 PPI Modelling using Wealth and Assets Survey data and ONS population estimates

2 Generation X score is derived by taking the third of this cohort at highest risk and then comparing their attributes with those of baby Boomers and Millennials

In contrast, Baby Boomers and older workers are most likely to face risks associated with the cumulative effects of individual employment, earnings and saving patterns throughout working life. Without mitigation, the effect of these trends is expected to become more established over time, potentially compounding the risks younger generations face. Baby Boomers are also most likely to have benefited from historic pension provision and economic cycles.

Generation X is particularly complex and of significant concern because it is experiencing the effects of both broader landscape changes and labour market trends. They have had limited time to respond to declines in DB and State Pension provision or benefit from the introduction of automatic enrolment, and have limited time ahead to make up for the cumulative effect of historic savings and labour market behaviour. Addressing these challenges will require collective action to reduce the number of people in Generation X facing risk in retirement, which may in turn benefit future generations.

Box Ex1 highlights some of the high-level differences between the projected retirement outcomes of Generation X, Baby Boomers and Millennials based on people's current employment, spending, earning and savings behaviour.

### Box Ex1<sup>3</sup>

- People within Generation X are at higher risk than Baby Boomers but at lower risk than Millennials of not achieving a suitable income in retirement.
- The profiles of people within each generation are diverse. Older members of Generation X are more likely to face risks that are characteristic of Baby Boomers, whilst younger members are often more similar to Millennials.
- Overall, the proportions of men and women at high, medium and low risk are comparable within each generation, but the underlying challenges facing men and women are significantly different. The requirements for women to achieve a suitable retirement income, such as the contributions they may need to make, are higher than men within each group.
- The proportion of women at high risk relative to men increases with age as the cumulative effect of lower earnings and non-linear employment patterns impacts pension savings, but the proportion at women at high risk is falling as female employment rates rise.
- The proportion of people in DB schemes is falling with each successive generation, but in every generation the proportion of women enrolled in DB schemes is higher than men due to higher rates of public sector employment.
- As the proportion of people enrolled in DC schemes increases with each generation, the contrast in adequacy and sustainability between DB and DC savers becomes more evident as DB savers make up increasingly large proportions of low risk groups.
- In all generations, self-employed workers and those in manual or routine occupations are most at risk, but without taking action to increase DC contributions, the decline of DB means that more individuals in intermediate or higher paid roles could find themselves at risk of not achieving suitable retirement income than in previous generations.

Inheritance may be used to increase the adequacy, sustainability and flexibility of some future retiree's income portfolios. However, it is not possible to project who might inherit or how much inheritance could mean, as the wealth of some members of older generations is likely to be spent on care.

## Government, industry and employer interventions

The next section discusses the three main drivers of retirement risk for Generation X and how Government, industry and employer interventions can be used to help mitigate their effects.

### Labour market changes

Generation X has higher rates of employment, particularly among women, and are likely to have longer working lives than Baby Boomers. While this offsets some risk, they are proportionately more likely to have non-linear employment patterns including part-time or casual work, self-employment, job changes and career transitions. Together these factors present significant long-term risks to the adequacy, sustainability and flexibility of future retirement income. Groups at particular risk are:

- **Women:** 54% (2.1 million) of Generation X in the high risk group are women. Although female employment rates are increasing, women in the UK are significantly more likely to take time out from work, work part-time and receive lower pay than men, which limits their ability to make pension contributions. As a consequence, women in their late 50s have on average just half the private pension wealth of men the same age (from both DB and DC savings),<sup>4</sup> a difference which equates to over £100,000 on average (£106,200 women, £226,500 men) by age 65.
- **Those who leave the labour market early due to health reasons:** Health is a crucial factor for labour market exit. Those who leave work due to ill health or the need to provide care will generally cease contributing to a workplace pension and have longer retirements to support. Rises to State Pension age (SPa) may mean that some members of Generation X will find it harder to work up until SPa.
- **Part-time and casual workers:** Part-time and casual work is associated with lower levels of pension contributions as people in these positions are less likely to be eligible for automatic enrolment. The proportion of people working part-time is increasing; part-time employment rose from 22% in 1992 to 26% in 2018.<sup>5</sup> Casual work is also increasing; the proportion of workers on zero-hour contracts increased from 1% in 2010 to approximately 3% in 2019.
- **The self-employed:** Self-employment is associated with low levels of pension saving. The proportion of those in self-employment rose from 12% of workers in 2001 to 15% in 2017.<sup>6</sup>

4 PPI Modelling

5 PPI Analysis of ONS (2019a)

6 ONS (2018a)

Government, industry and employer interventions could help mitigate risks associated with employment (Box Ex2).

Box Ex2

## How could Government, industry and employer interventions mitigate retirement income risks associated with employment?



### Government/regulators:

- Mitigate retirement income risks for people who are unable to work
- Incentivise education and retraining
- Promote access to employer contributions for workers in different types of employment
- Address low incentives for the self-employed to save into private pensions



### Industry:

- Develop products that support non-linear pension saving, for example, pension products which allow for contribution levels to vary with changes in working patterns, increasing contribution levels when members are in full-time work in order to make up for time out or periods of casual working
- Continue to provide and develop information, support and platforms for consolidating pension pots
- Engage with members during "teachable" moments



### Employers:

- Support employees with caring responsibilities and those returning to work after career breaks
- Support extended working lives through phased and flexible retirement
- Create and transform jobs to meet the needs of specific demographic groups, for example, creating training roles for older manual workers
- Maintain commitment to reducing the gender pay gap
- Signpost potential long-term effects of career choices

## Changes in the pensions landscape

As a result of policy and market changes, and rising longevity, average incomes from DB pensions will decline over time, average incomes from DC pensions will increase, and future retirees will receive proportionally less of their retirement income from State Pensions. Generation X bears greater risk of saving insufficiently into DC pensions, reaching retirement with less sustainable income, and receiving a lower proportion of retirement income from the State Pension. Some risk also arises from the complexity of the pension system and the frequent changes in policy, which can make understanding the system and planning for the future difficult; although the Government has been attempting to simplify the State and private pension system through, for example, the introduction of the new State Pension (nSP) and stricter regulation of private pension schemes.

- **Generation X will have less time to benefit from automatic enrolment:** Millennials who are automatically enrolled and remain saving will contribute to their pensions for a longer time than members of Generation X who began saving for the first time through automatic enrolment. For example,

a woman who saves 8% of total earnings into a DC pension from age 22 to SPa could retire with DC pot 148% larger than a woman who saves 8% into a DC pension from age 42 to SPa.

- **Younger generations will receive proportionally less income from the State Pension than older generations:** As a result of the introduction of the new (flat-rate) State Pension and the removal of the option to accrue entitlement to the additional earnings-related State Pension, younger generations will receive proportionally less income, on average, from the State Pension than older generations, though some individuals, for example, the self-employed, carers and those who receive a significant proportion of income from benefits, will receive a higher State Pension under the new system. 46% of Generation X aged 43 to 52 will receive a State Pension income around £13,000 lower over their lifetime than they would have received under the old State Pension system while fewer than 25% of Baby Boomers will receive a lower State Pension.
- **Members of Generation X will generally receive less income from sustainable sources:** DB and State Pension income is sustainable because it increases with inflationary indices and is paid out for the member's lifetime.

Generation X will receive less income from DB pensions than Baby Boomers, and will accrue less entitlement to State Pensions than they would have done under the old system. Therefore, members of Generation X may find it harder to ensure that their retirement income is sustainable throughout their retirement.

- **Some members of Generation X with DB income may transfer against their best interests:** As a result of less flexibility, falls in interest rates, increased Cash Equivalent Transfer Values and bad press associated

with some DB schemes, a significant number of people are transferring their DB pension entitlement into DC pots, which do not protect from inflation, investment or longevity risk. This means that some members of Generation X who are in a position to generate a sustainable income in retirement, may forgo the opportunity. However, for some people, transferring a DB pension may make financial sense.

Government, industry and employer interventions could help mitigate risks associated with pension saving (box Ex3).

### Box Ex3

## How could Government, industry and employer interventions mitigate retirement income risks associated pension saving?



### Government/regulators:

- Explore policies for increasing automatic enrolment contributions, such as increases to minimum levels or auto-escalation
- Be aware that policy changes affecting the State Pension are likely to have a significant impact on the standard of living of most pensioners
- Consider increasing the personal allowance for pensioners or changing pensioner tax bands
- Implement proposed automatic enrolment review recommendations; reducing lower earnings band to £0 and lowering eligibility age to 18



### Industry:

- Continue to explore and develop products which provide both sustainability and flexibility, for example, annuity/income drawdown hybrid products
- Ensure that advice takes into account the potential risks associated with transferring DB entitlement and that trustees are aware of the risks
- In conjunction with for example, the Pensions Dashboard and the PLSA living standards targets, provide members with online tools for calculating how they could meet lifestyle targets by increasing contribution levels
- Work with employers to provide financial education in the workplace



### Employers:

- Pay contributions at above automatic enrolment minimum levels and offer matching contributions

## Economic changes

Different economic climates have put upward pressure on the cost of living (predominantly accommodation), and downward pressure on inflation adjusted wage growth, meaning that younger cohorts are earning less and housing is more expensive. This affects the affordability of both pension contributions and housing. The economic downturn has also led to lower returns on contributions and lower equity growth in housing. As a result of reduced wage growth, higher living expenses, and the changing availability of credit, Generation X are more likely to reach retirement with debt

than older cohorts and may need to both save more and make higher contributions in order to achieve a similar standard of living to older workers:

- **Higher debt levels:** Higher levels of debt during working life are associated reduced affordability of pension contributions. Those who reach retirement with debt will have less disposable income available in order to achieve a suitable standard of living. Household debt levels are growing: the average debt-to-income ratio has risen from 115% in the decade 1998-2008 to 135% in the decade 2008-2018.<sup>7</sup>

7 FCA (2019a)

- **Affordability of pension contributions:** All cohorts have been affected by weak earnings growth in the past 10 years, though Millennials have seen the most dramatic impact. Lower earnings growth is associated with lower living standards in retirement and lower levels of disposable income available to use for pension contributions.
  - **Affordability of housing:** Fewer people are buying houses and those who are, are buying them at older ages. Average house prices have increased by almost 4 times in the past 30 years. The average age of first-time house purchase rose from 25 for Baby Boomers to around 30 for Generation X.<sup>8</sup> Generation X members are more likely than Baby Boomers to reach retirement without owning their own home outright. Renting or paying a mortgage in retirement is associated with a lower standard of living as a result of higher draws on income.
  - **Lower returns on pension contributions:** A prolonged period of low interest rates resulted in people who started saving for retirement between 1975 and 1995 benefiting from higher rates of investment return than those who started saving later (10.5% on equities and 6% on gilts between 1975 and 1995, compared to 3.7% on equities and 4.3% on gilts between 1995 and 2015). If trends persist, younger savers will need to contribute more to achieve similar sized pension pots.<sup>9</sup>
  - **Lower equity growth in housing:** recent increases in house prices mainly benefited Baby Boomers who bought property when prices were relatively low. Generation X tended to purchase houses nearer to the top of the price rises and benefited less from the growth, while spending more on their property purchases. This means that Generation X will have accrued less equity in their homes for potential use in retirement.
  - **Renting in retirement:** The need to pay rent in retirement, is the most significant indicator for a reduction in disposable income and corresponding reduction in standards of living. The risk is further compounded, because those renting in retirement who have saved into a private pension may lose eligibility for Housing Benefit, thereby reducing the incentive to save into a private pension for those likely to rent in retirement.
- Government, industry and employer interventions could help mitigate risks associated with renting in retirement and debt (Box Ex4).

#### Box Ex4

### How could Government, industry and employer interventions mitigate retirement income risks associated with renting in retirement and debt?



#### Government/regulators:

- Look at ways of ensuring that it is profitable for all, or most, workers to save in a private pension, even those renting in retirement



#### Industry:

- Ensure that people who come into contact with industry services are provided with prompts for debt support and guidance



#### Employers:

- Employers who provide financial education could ensure debt support is included in this
- Smaller employers could be provided with referrals to support and guidance to distribute among employees

8 FCA (2019a)

9 FCA (2019a)

# Introduction

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Retirement income needs are individual and depend on many factors including the standard of living people had during working life, where they live, housing and living costs, and the health conditions of themselves and their families.

Three principal retirement income goals have emerged from previous PPI research on the changing nature of retirement: **adequacy**, **sustainability** and **flexibility**. This research measures the extent to which **employment patterns**, **income**, **assets**, **pension savings**, and **draws on income** might affect the ability of cohorts to maintain adequacy, sustainability and flexibility throughout retirement.

Key risks to cohorts are analysed in the context of **labour market**, **pensions landscape** and **economic** changes. Policy implications are drawn in order to inform debate, decisions and actions from **Government**, **industry**, **employers** to help to tackle the puzzle of reducing retirement risks for Generation X.

This report explores the financial wellness of three generational cohorts and the risks facing people in later life. It explores policy, industry and employer interventions that could mitigate risk and help to solve the puzzle of how to achieve a retirement income that is adequate, flexible and sustainable. Three generations are considered, with the main report focus on Generation X:<sup>10</sup>

- **Baby Boomers:** Born between 1946-1965, aged between 54 and 73 in 2019
- **Generation X:** Born between 1966-1980, aged between 39 and 53 in 2019
- **Millennials:** Born between 1981 and 2000, aged between 19 and 38 in 2019

This report focuses on Generation X, who are a particularly important group because they will reach State Pension age (SPa) over the next 12-28 years and may need to act now in order to address the possible risks of not achieving a suitable income in later life.

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10 FCA (2019a)

**Chapter One** introduces Millennials, Generation X and Baby Boomers, examines how changes in the labour market, pensions landscape and economy are affecting the experiences that people have in later life, and sets out the trends and patterns which are emerging between and within each generation. It also describes the framework behind the analysis in this report.

**Chapter Two** explores the way in which labour market trends and behaviour affect the quantity and the type of work that people do, and how they influence the likelihood that people will achieve a suitable level of retirement income in the future.

**Chapter Three** explores the way in which Generation X might save and access their pensions as a result of changes to the pensions landscape and policy, and considers how the sources of income that Generation X could reach retirement with might impact adequacy, sustainability and flexibility.

**Chapter Four** explores the effect that changes in the wider economy are having upon the affordability of saving and the financial risk that people face in retirement.

# Chapter One: How is the retirement landscape changing for all generations?

This Chapter introduces Millennials, Generation X and Baby Boomers, examines how changes in the labour market, pensions landscape and economy are affecting the experiences that people have in later life, and sets out the trends and patterns which are emerging between and within each generation. It also describes the framework behind the analysis in this report.

## Chapter summary

- Demographic, economic, industry and policy changes are reshaping working life, how people save, and the way in which generations retire both today, and in the future.
- Concerns over the sustainability of public and private pension systems have prompted changes in policy, and economic and social changes have led to changes in labour market behaviour.
- Together, the above factors are driving the changing needs of the emerging older population and the generations which follow.
- This report focuses on Generation X, a particularly important group because they will reach State Pension age (SPa) over the next 12-28 years and may need to act now in order to address the possible risks of not achieving a suitable income in later life.
- This report considers the risks faced by Baby Boomers, Generation X and Millennials of not achieving adequacy, sustainability and flexibility from their retirement income in comparison to Generation X.
- Generation X face more overall retirement risk than Baby Boomers but less than Millennials. Risk among Baby Boomers is largely driven by the cumulative effect of individual employment, earnings and savings patterned coupled with the effect of historic economic cycles. Risk among Millennials is largely driven by changes to policy and economic landscapes. Generation X are at risk of both.
- Generation X face more adequacy risk than other generations as they will reach retirement with less Defined Benefit (DB) pension entitlement than Baby Boomers and less Defined Contribution (DC) savings than Millennials.

## This report explores how the risks members of Generation X face in retirement are affected by in the labour market, pensions landscape and economy

This research examines how changes in the labour market, pensions landscape (including policy and industry initiatives) and wider economy are affecting people's employment patterns, income, assets and pension savings, as well as potential draws on their income. It measures the extent to which these variables could affect people's ability to maintain an

acceptable standard of living throughout retirement while ensuring that they can draw varying amounts of income to meet changing needs. The research uses three principal retirement income goals which have emerged from past PPI research: **adequacy**, **sustainability** and **flexibility**. Key risks to generational cohorts, socio-economic groups and individuals within them of not achieving a suitable retirement income are identified which could inform debate, decisions and actions from **Government**, **industry**, and **employers** to help to tackle the puzzle of reducing retirement risks for Generation X.

The report does explore how responsibility should be shared and which, if any, actor should take main responsibility for reducing risk, focusing instead on how they can work together to achieve this goal. Although there are potential benefits for each actor, such as reducing benefit expenditure for Government, growing asset values, products and services for industry, or enabling employers to provide more comprehensive employee benefit programmes, the report concentrates specifically on the outcomes for individuals in Generation X.

### Generation X will have different retirement experiences than Baby Boomers and Millennials

Concerns over the adequacy and sustainability of pension systems have prompted widespread changes to pension policy, and economic and social changes have led to changes in labour market behaviour. Analysis of each generational cohort has found that:

- Risks facing Baby Boomers are heavily driven by the cumulative effect of different employment, savings and earnings patterns among individuals throughout their working life. The majority of their pension accumulation phase was not impacted by the key changes to pension schemes, policy and economic landscapes which are affecting younger cohorts.
- Risks facing Millennials are largely driven by changes to policy and economic landscapes because income and savings gaps which arise from individual behaviours have had less time to become established. Risks associated with individual behaviours are likely to increase with age, but the introduction of automatic enrolment and rise in overall employment means that they may be reduced when compared to older generations.
- Generation X are exposed to risks from both policy and economic landscape changes, and the cumulative effect of individual patterns of employment, earning and saving. They also have less than 28 years to make changes that could positively impact their retirement outcomes, making them a particularly complex group to support through Government, industry and employer intervention.

Together, the above factors are driving the changing needs of the emerging older population and the generations which follow. This report focuses on Generation X, who are a particularly important group because they will reach State Pension age (SPa) over the 12-28 years and may need to act now in order to address the possible risks of not achieving a suitable income in later life.

On average, Generation X are more likely to receive private pension income in retirement and are also expected to accumulate more years of pension contributions on account of higher levels of employment at all ages, particularly among women, than older generations at the same age. However, their average level of pension income is likely to be below that of Baby Boomers, largely because they are likely to retire later with less secure, inflation linked Defined Benefit (DB) pension income and proportionally lower State Pension income than the preceding cohort. They will also have a shorter history of Defined Contribution (DC) savings than their succeeding generation, Millennials, who will benefit from longer years of private pension saving as a result of automatic enrolment. While reductions in average income may lead to a narrowing of the gap between the richest and poorest retirees over time, inequality within generations is likely to persist.

### Experiences of retirement will differ both between and within generations

The variation in experiences that people have approaching and going through later life are not limited to generational cohorts. Significant variation within groups is brought about by a number of factors including employment patterns and earnings. These factors, together with others such as gender, ethnicity, health, socio-economic status and age (which determines how individuals will be impacted by policy changes and economic cycles) are principle drivers of income inequality both in working life and in retirement.

## This chapter now introduces each generation in turn.

Baby Boomers are aged between 54-73 in 2019 (15.5 million people)

- Born between 1946-1965;
- Bought their first home, on average, at age 25;
- Expected to repay mortgage by their early 50s;
- Expected to become financially comfortable before retirement.

**Trends:** Increasingly using pension flexibilities to access savings with fewer people purchasing annuities; have accumulated significantly more wealth than previous generations at the same age.



**Benefited from:** House price increases, asset appreciation; combination of DB pensions and additional State Pensions provided stable income for many; improved choice and flexibility.

**Challenges:** At least half of the poorer individuals in this cohort are dependent on State Pension and not expected to achieve minimum income standards; increased life expectancy will require funding for longer retirement periods; concerns over how to practically access and use wealth; uncertainty over care funding.

Generation X are aged 39 to 53 in 2019 (13 million people)

- Born between 1966-1980;
- Bought their first home, on average, in their late 20s (5 years later than their parents);
- Expected to repay their mortgages, on average, by their early 60s;
- Expected to become financially comfortable close to retirement.

**Trends:** More likely to own their own home than younger generations, but less likely to have benefited from significant housing equity growth than older cohorts.<sup>11</sup> Less accumulated wealth than Baby Boomers at the same age due to low levels of cash savings; lower investment returns and higher levels of unsecured debt on average.<sup>12</sup> Likely to have less pension wealth; partly due to declining DB pensions and State Pension changes. Longer working lives but are more likely to be self-employed, work flexibly or work in multiple jobs throughout their lives than older cohorts.<sup>13</sup>

**Benefits:** House price increases for those with property; higher than average incomes; low borrowing costs; introduction of auto-enrolment in mid to latter stages of working life.

**Challenges:** Managing living costs while trying to save for retirement; less disposable income in working life makes pension and savings accumulation difficult; more short term borrowing to smooth consumption; increasingly providing care to children and older family members while working; declines in DB and changes to State Pension mean that retirement income may be less sustainable, leading to greater dependence on DC savings.

11 FCA (2019a) p. 8 para 1.17

12 FCA (2019a) p. 18, p. 6 para 1.10

13 FCA (2019a) p. 8 para 1.23

Millennials are aged between 19 and 38 in 2019 (17.2 million people)

- Born between 1981-2000;
- Bought their first home during their early-mid 30s;
- Expected to repay mortgage by SPa;
- Expected to become financially comfortable at retirement.

**Trends:** Beginning working lives with much higher levels of debt due to student loans; building savings and property wealth later in life than both previous generations; will have longer working lives and will have little DB income on average, requiring greater financial independence in later life.

**Benefited from:** Automatic enrolment throughout much of their working life; higher levels of education that will potentially improve long-term income potential and lifetime earnings despite lower income in early working lives.

**Challenges:** Housing costs, debt, variable employment patterns and lower earnings in early working lives may lead to difficulty accumulating wealth; combined pressure of housing costs and raising families at later ages may further limit savings; likely to be more dependent on savings and DC pensions in later life whilst State Pension will act as safety net.



## This report measures risks against adequacy, sustainability and flexibility

**A suitable retirement income can mean different things to different people**

Retirement income needs are individual and depend on many factors including the standard of living people had during working life, where they live, housing and living costs, and the health conditions of themselves and their families.

**Adequacy, sustainability and flexibility are all important goals to consider when measuring the suitability of an individual's retirement income**

Three principal retirement income goals have emerged from previous PPI research on the changing nature of retirement: **adequacy**, **sustainability** and **flexibility**. Together, these goals form the basis of the framework for this report and are used to measure the ability of individuals to maintain an acceptable standard of living throughout retirement, while ensuring that they can draw varying amounts of income to meet changing needs.

**The adequacy of retirement income is driven by living standards, which can be associated with broad ranges of income**

Adequacy refers to whether people achieve an income in retirement which they find acceptable. Adequacy can be assessed and projected using several different methods. This report uses living standard targets which are defined by annual retirement income bands and were developed by the Pension and Lifetime Savings Association (PLSA).<sup>14</sup> In this report, adequacy risk is measured by analysing the annual rate of contributions necessary for individuals and households to achieve a minimum to moderate standard of living.<sup>15</sup>

Individuals considered to be at **high risk** of not achieving income adequacy in retirement are likely to have low levels of accumulated pensions wealth. Members of this group would need to make annual contributions of at least **2%**, depending on their desired standard of living in retirement and the standard of living which they experienced during working life. In some cases, for those who are experiencing a relatively high standard of living during

<sup>14</sup> Please see Appendix One for more details

<sup>15</sup> Those who wish to achieve a higher standard of living, and those who live in London, would need to target higher levels of contributions.

working life and have made very little pension provision, contributions may need to be as high as to **35% (or more)** of their income. However, the majority of members of the high risk group are likely to be able to achieve an income close to their standard of living during working life on a lower level of contributions. Those at **medium risk** may already be on track to achieve their desired standard of living, others



may need to contribute anywhere from **1%** to **35%**, while those at **low risk** may need to make contributions between **1%** and **22%**, depending on their income level. Each risk group represents one third of people in Generation X.

The majority of members of these groups are likely to be able to achieve an income close to their standard of living during working life on a lower level of contributions than the top of their range.

**Sustainable retirement income, from a secure, inflation linked source is necessary to ensure that Generation X do not outlive their resources**

Sustainability refers to whether retirement income increases with an inflationary measure and is guaranteed to pay out until the death of the recipient. Sustainability is important for maintaining a standard of living throughout retirement. Sustainable sources of income include DB pensions, State Pension entitlement and lifetime annuities.

Individuals considered to be at **high risk** of not having sustainable income are those who are likely to have less than **87%** of their income from a secure, inflation linked source. Those at



**medium risk** are likely to have between around **88% and 91%**, whilst those at low risk are likely to have **more than 91%**. Each risk group represents one third of people in Generation X. The majority of sustainable income for Generation X will come from the State Pension.

**People may need flexible access to varying amounts of retirement income at different times in later life**

Needs change with household changes (for example, divorce, bereavement, children or grandchildren moving in or out) and changes in health and care needs. An income source from which people can withdraw in varying amounts as needs change, such as DC savings, other savings and assets, housing equity, or inherited wealth is useful for helping people to meet spikes in expenditure needs and maintain living standards in retirement. Those on very high incomes, above adequacy levels, from less flexible sources, such as DB pensions, may have sufficient income to meet needs as they change while maintaining living standards.

Individuals considered to be at **high risk** of not having income flexibility are those who are likely to have less than around **14%** from a flexible source. Those at **medium risk** are likely to have between **14% and 33%**, whilst those at **low risk** are likely to have **more than 33%**. Each risk group represents one third of people in Generation X.

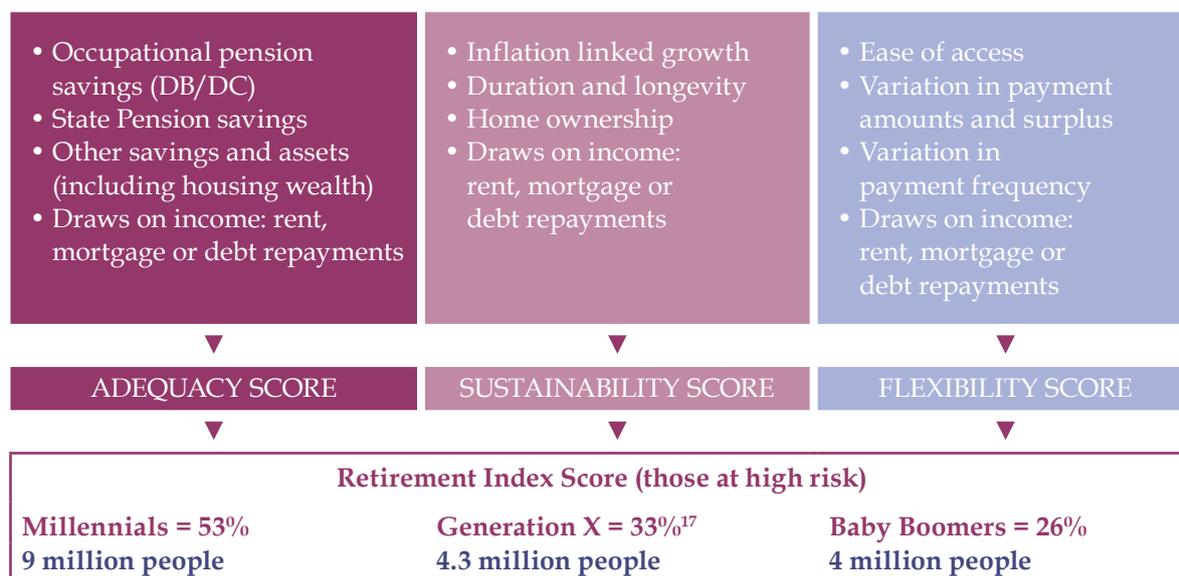


### This report builds an overall risk profile for each generation

Overall levels of generational risk are measured by assessing how well potential portfolios of

income, savings and draws on income allow individuals to achieve metrics of adequacy, sustainability and flexibility in retirement (Table 1.1).

Table 1.1<sup>16</sup>



Generation X risks are mostly associated with adequacy and sustainability of retirement income as average incomes from DB decrease and the likelihood of renting in retirement or indebtedness increase. Their overall risk is slightly mitigated by the likelihood that a higher proportion of their income will be from DC pensions and therefore, relatively flexible. In contrast, the strong elements of DB pensions and higher average State Pension provision among Baby Boomers significantly reduces their adequacy, sustainability and consequently overall risk relative to Generation X (26%). However, the lack of flexibility they have in accessing these savings will offset these advantages for Baby Boomers on a lower income.

A greater proportion of Millennials face similar overall levels of risk to Generation X (53%) due largely to an even greater reduction in

the proportion of income that will come from sustainable pension sources that typically provide greater levels of adequacy, the effect of lower earnings in their early careers on projected outcomes and higher levels of renting in retirement and indebtedness than older generations. *It may be harder to mitigate adequacy risk in retirement through interventions than sustainability or flexibility, making Generation X a particularly important cohort to focus on.*

Inheritance may be used to increase the adequacy, sustainability and flexibility of some future retiree’s income portfolios. However, it is not possible to predict who will inherit, especially as the wealth of some members of older generations will need to be spent on care.

16 PPI Modelling using Wealth and Assets Survey data

17 Generation X score is derived by taking the third of this cohort at highest risk and then comparing their attributes with those of Baby Boomers and Millennials

The following tables set out the main demographic and income characteristics of the three groups for Generation X (Tables 1.2-1.4)

Table 1.2:<sup>18</sup> Composition of Generation X risk groups

	Proportion in a DB scheme	Proportion with non-mortgage debt	Median amount of non-pension savings and assets/housing wealth
High risk	12%	54%	£0/£0
Medium risk	20%	51%	£1,800/£95,00
Low risk	63%	42%	£9,000/£170,000

Table 1.3:<sup>19</sup> Composition of Generation X risk groups

	Proportion who their own home or have a mortgage	Proportion renting	Proportion living as dependents on others
High risk	13%	73%	14%
Medium risk	88%	8%	4%
Low risk	94%	4%	2%

Table 1.4:<sup>20</sup> Composition of Generation X risk groups

	Proportion who are women	Proportion in manual and routine occupations <sup>21</sup>	Median income (pre-tax)
High risk	53%	47%	£14,800
Medium risk	50%	28%	£21,500
Low risk	49%	11%	£35,000

18 PPI Modelling based on Wealth and Assets Survey data and ONS population estimates

19 PPI Modelling based on Wealth and Assets Survey data and ONS population estimates

20 PPI Modelling based on Wealth and Assets Survey data and ONS population estimates

21 Based on SEC classifications - includes manual work and routine work, for example, factory work

# Chapter Two: How do differences and changes in the labour market affect the way Generation X are accumulating retirement savings?

This chapter explores the way in which labour market trends and behaviour affect the quantity and the type of work that people do, and how they influence the likelihood that people will achieve a suitable level of retirement income in the future.

## Chapter Summary

- Employment rates are increasing at all ages and from one generation to the next, particularly among women and those in older age groups. A significant proportion of increases come from rises in part-time, casual and self-employed work.
- Generation X and Millennials face greater risk to income adequacy in retirement than Baby Boomers because, although they are more likely to work and to retire later, they are also more likely to have non-linear working patterns which are associated with lower earnings and pension contributions.
- It will be important to consider how the effect on retirement income of being unable to work in the years leading up to State Pension age (SPa) can be mitigated, since not everyone will be able to continue working to older ages as SPa increases.
- Government, industry and employers are all in a position to take action to ensure that people who want to work are able to so, including those with caring responsibilities and health conditions, and that people are encouraged to build adequate retirement savings no matter what type of work or working patterns they choose.

## Generation X and Millennials are more likely to work in casual jobs, be self-employed and change jobs as employment patterns become more complex and less predictable

Although Generation X and Millennials have higher rates of employment and are likely to have longer working lives than Baby Boomers,

they are also proportionately more likely to have non-linear employment patterns including part-time or casual work, self-employment, job changes and career transitions. Together these factors present a significant risk to the adequacy, sustainability and flexibility of future retirement income, outcomes which are typically associated with continuous, full-time employment (Key Facts 2.1).

Key Facts 2.1<sup>22</sup>

- Employment rose across all age groups between 1992-2018, increasing faster among women than men in every group and fastest at older ages.
- The proportion of all UK workers in part-time employment increased from 22% in 1992 to 26% in 2018, driven almost entirely by the increase in the proportion of men engaged in part-time employment.
- Between 1998 and 2018, the average age of labour market exit among women rose by 2.5 years from 60.6 to 63.1, and among men by 2 years from 63.1 to 65.1.
- Employment among people over 65 rose from 5% in 1998 to 11% in 2019
- On average, people have 11 different employers during their lifetime
- The proportion of those in self-employment rose from 12% of workers in 2001 to 15% in 2017.
- Self-employment increased from 11% among those aged 50-65 in 2001 to 14% in 2016, and from 2% to 4% among those over 65.
- 78% of people aged over 50 in 2017 felt flexible working would make it easier to stay in work.

**This chapter covers the effects on retirement risk of:**

- Rates of employment, and
- Types of employment.

**Employment rates are increasing across the generations and are associated with lower levels of risk in retirement**

**Generation X and Millennials have higher rates of employment across all age groups than Baby Boomers**

Unemployment is at a 40-year low. Although Millennials suffered higher levels of unemployment during the financial crisis than older generations (the rise in unemployment among 16-29 year olds was 104% higher than the overall rise), rates of unemployment among

Generation X and Millennials in their late 20s were around 25% *lower* than Baby Boomers at the same age.<sup>23</sup>

Employment among people aged 16-64 increased from 69% in 1992 to 76% in 2018 (Table 2.1).<sup>24</sup> Increases are due to a combination of factors:

- Policy initiatives to boost women's employment rates,
- Increasing healthy life expectancy,
- Rising State Pension age (SPa),
- Reductions in working age benefits, and
- Cumulative economic effects.

All of the above have put upward pressure on the cost of living (predominantly accommodation), and downward pressure on inflation adjusted wage growth.

22 PPI Analysis of ONS (2019b); Average lifetime jobs: DWP (2011); ONS Trends in self-employment in the UK; Over 65s in work: ONS (2019b); self-employment at older ages: ONS (2016) Employees and Self-employment by age, UK, 2001 to 2016; Flexible working: BIS (2018) Views on the ageing society: survey of older people; average age of first time buyers: Keepmoat Homes, Independent (Wednesday, 7 March, 2018) "First time buyers average age has risen by seven years since the 1960s, survey finds"; Levels of debt: ONS (2018d)

23 Resolution Foundation (2018)

24 ONS (2019b)

Table 2.1: Employment rates by age group 1992-2018<sup>25</sup>

Age & Sex		1992	2018	Increase
25-34	Men	83%	90%	+8%
	Women	70%	80%	+14%
35-49	Men	87%	91%	+5%
	Women	73%	80%	+10%
50-64	Men	66%	76%	+15%
	Women	47%	68%	+44%
65+	Men	9%	14%	+55%
	Women	4%	8%	+100%

Longer and fuller working lives can allow people to accrue additional pension savings, reduce the time spent dependent on pension income and result in a higher standard of living in later life. However, while a strong labour market brings significant benefits to the economy and individuals, people who are unable to work until SPa due to ill health or the need to provide care will require some sort of safety net or protection if the effects of less working on retirement income are to be mitigated.

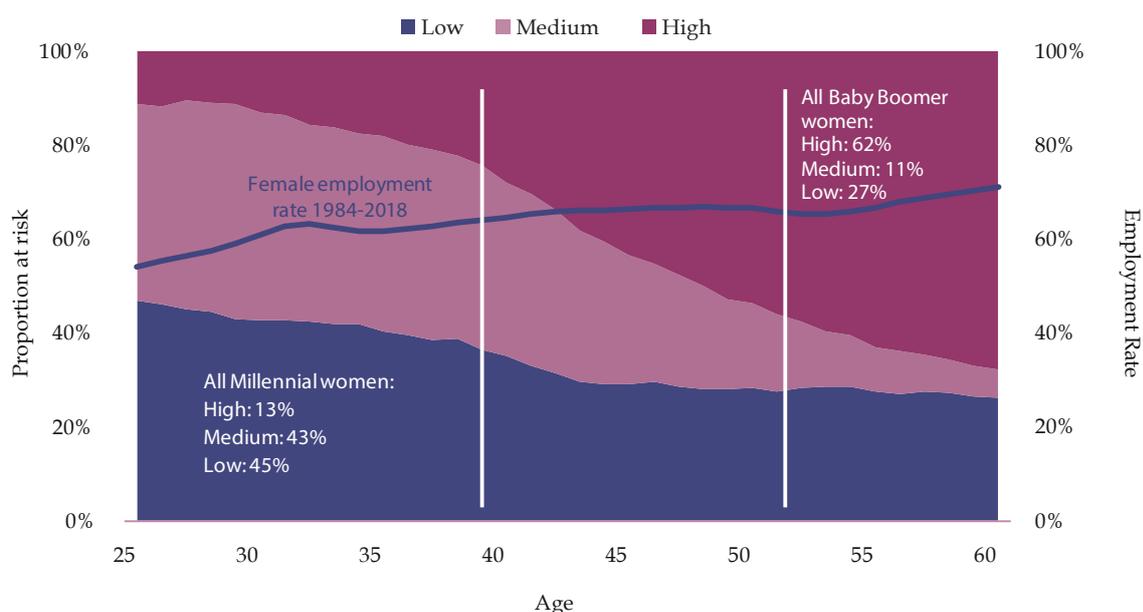
People who are unable to work until SPa due to ill health or the need to provide care will require some sort of safety net or protection if the effects of less working on retirement income are to be mitigated.

Successive increases in female employment by generation are contributing to reductions in the proportion of women facing a high risk of not achieving income adequacy in later life (Chart 2.1).

Chart 2.1<sup>26</sup>

**The risk to women of not being able to achieve adequate income in retirement is falling as employment rises**

The proportion of women likely to have to make high (more than 52%), medium (20% - 51%) and low (less than 20%) levels of DC pension contributions in order to achieve adequate income in retirement by age (5 year rolling average)



25 PPI Analysis of ONS (2019b)

26 PPI Modelling based on Wealth and Assets Survey data

**Although employment for women has increased, they are still reaching retirement with around half the private pension saving of men**

As a result of key policy initiatives including enhanced employment rights around childbirth, improved childcare support and individual behavioural trends,<sup>27</sup> employment rates among women (particularly those working full-time) are at a record high. Women's employment rates have risen roughly twice as fast or more as men's in all age groups and with the greatest differences seen between Baby Boomers (who also had higher rates than the preceding generation) and Generation X women. Male employment rates have remained broadly similar across all three generations.

Despite these increases, women in the UK are still more likely to take time out from work, work part-time and receive lower pay than men, generally resulting in lower pension savings. As a consequence, women in their late 50s have on average just half the private pension wealth of men the same age,<sup>28</sup> a difference which equates to over £100,000 on average (£106,200 women, £226,500 men) by age 65.<sup>29</sup>

**Boosting working hours increases retirement income for people returning to work after career breaks, but shortening breaks and/or working beyond SPa also makes a difference**

Increasing earnings by working more hours per week has the greatest impact on retirement savings for all workers, but particularly those returning to work part-time after a career break. Working an additional day a week over 25 years may increase income by around £10 per week in retirement on average, a boost of around 5%.<sup>30</sup>

The introduction of State Pension reforms and the new, flat-rate State Pension mean that most carers, job seekers and disabled people can accrue entitlement when they are not in the labour market, and that in the future there will be less impact from taking time out for those who will be dependent upon the State Pension. As a result, additional years of work are only likely to impact private pension income, which forms a minority of income in retirement for low and median earners or those whose lifetime earnings are low due to career breaks and part-time work. However, private pension savings could affect entitlement to means-tested benefits such as Housing Benefit and Council Tax Reduction.

Consequently, shortening career breaks or working to later ages at low pay will not significantly impact those who are unable to make substantial contributions to their private pensions, and may result in less than around £1 per week of additional income in retirement for those earning at the median level. For those who are able to make contributions by working additional years, working beyond SPa is likely to deliver greater increases in retirement income than shortening career breaks, and the difference is even more significant for people who have above a median level of earnings (Table 2.2).

**For those who are able to make contributions by working additional years, working beyond SPa is likely to deliver greater increases in retirement income than shortening career breaks.**

27 Resolution Foundation (2018)

28 PPI Modelling, DB and DC wealth

29 ONS (2018b); Adams et. al. (PPI) (2016)

30 Pike et al (2017)

Table 2.2 Annual increase in income in the first year of retirement for female median income earners aged 60 in 2016 with different employment pathways<sup>31</sup>

Employment pathway	Return to work 1 year earlier, retire at SPa	Return to work 1 year later, retire 1 year after SPa	Return to work 5 years earlier, retire at SPa	Return to work 5 years later, retire 5 years after SPa
Returned to part-time work after 16 year career break	£49.90 (+0.5%)	£98.80 (+0.8%)	£253.76 (+2.6%)	£555.88 (+5.8%)
Returned to full-time work after 10 year career break	£148.20 (+1.2%)	£186.16 (+1.5%)	£682.76 (+7.1%)	£1,068.08 (+9%)

### People are more likely to work until older ages than they used to be, but many still struggle to work up until SPa

The proportion of women aged 50-64<sup>32</sup> in employment increased by 44% between 1992 and 2018 compared to an increase of 15% among men, a difference partly influenced by the increase in women's SPa from 60 to 65 between 2011 and 2018.<sup>33</sup> A key driver of these changes are growing disparities between working age and pensioner benefits, for example, the income difference between Jobseeker's Allowance and Pension Credit increased from 30% in 1990 to 129% in 2018,<sup>34</sup> rendering people more likely to need income from employment to finance the cost of living prior to SPa.

The proportion of people choosing to work after SPa increased from 5% in 1998 to 11% in 2019.<sup>35</sup> The percentage of income from earnings among 60 to 74 year olds also increased from 15% in 1994 to 25% in 2017, representing a significant shift in the composition of income for people around SPa.<sup>36</sup> The increase in employment among older age groups and those over SPa is the result of a combination of factors including:

- The removal of the default retirement age in 2010 which prohibits employers from automatically retiring staff at age 65,
- Lower SPa among women over much of this period, and
- Improvements in longevity and healthy life expectancy (the number of years a person can expect to live in good health) compared to preceding generations.

However, further planned increases in SPa may reduce the growth in the proportion of people able to work past SPa in the future, suggesting that Generation X and Millennials may be less able to depend on income from earnings in retirement as Baby Boomers.

Further planned increases in SPa may reduce the growth in the proportion of people able to work past SPa in the future, suggesting that Generation X and Millennials may be less able to depend on income from earnings in retirement than Baby Boomers.

### Poor health is associated with leaving work early

Not all workers are able to work until older ages. 31% of men and 28% of women aged 60-74 and not in paid work report fair or poor health. In comparison 16% of men and 15% of women in paid work report fair or poor health.<sup>37</sup> Health is a crucial factor for labour market exit and may also extend to family members required to provide care. Without adequate mitigation, policies focussing solely on encouraging people to work longer may have negative consequences for many people, particularly low-income households without sufficient private pension savings.

31 Pike et al (2017)

32 Baby Boomers and those born in the early years of Generation X

33 PPI Analysis of ONS (2019b)

34 IFS (2019a)

35 ONS (2019b)

36 IFS (2019b)

37 IFS (2019b)

**Box 2.2: Policy implication – higher employment can increase pension income, but those who cannot increase the time they work may be negatively impacted by the system**

Options to support people who want to work while mitigating the negative impact on those who can't include:

**Policy changes:** Take steps to continue reducing the gender pay gap; review working age benefits to mitigate the impact of future SPa increases on the incomes of those under SPa; incentivise education and retraining, targeting demographic groups such as older workers, women, the self-employed and younger workers with lower earnings; continue to tackle age discrimination for older workers.



**Industry intervention:** Develop products and services that support non-linear pension saving, for example, pension products which facilitate increased contribution levels when members are in full time work in order to make up for time out or periods of casual working.



**Employer intervention:** Support employees through key life events<sup>38</sup> and those returning to work after career breaks; support extended working lives through flexible retirement; create and transform jobs for retention, for example, training roles for older manual workers; encourage job mobility within organisations; work to reduce gender pay gap and increase workplace diversity.



**Variation in retirement outcomes is also heavily driven by the type of work that people do and how much they earn**

**All cohorts have been affected by weak earnings growth in the past 10 years**

One of the drivers of pension contribution affordability is earnings, which are heavily driven by occupation. Although pay growth started to slow before the financial crisis, all generations except Millennials benefited from significant gains in earnings compared to preceding generations. Generational gains were partly driven by increases in cohort-on-cohort levels of qualifications, which have since slowed as the rate of change among Millennials (who have the highest levels of education to date) has reduced.

Since 2008, Generation X have earned more than Baby Boomers at the same age but Millennials in their 30s are earning less than Generation

X at the same age.<sup>39</sup> While the education gap is narrowing, the disproportionate impact of unemployment and lower or less secure pay on Millennials in their early careers, could put Millennials at greater risk of adequacy in retirement than either of the previous generations. Women continue to face higher risks than men because, as a result of earning less on average, they will need to contribute more to reach the same amount.

**Occupational status is closely linked to retirement outcomes.**

Across all generations, lower paid workers in routine or manual roles are least likely to achieve a suitable income in retirement and those who are most likely are in intermediate and managerial or professional occupations. Self-employed workers are also at particularly high risk (Chart 2.2).

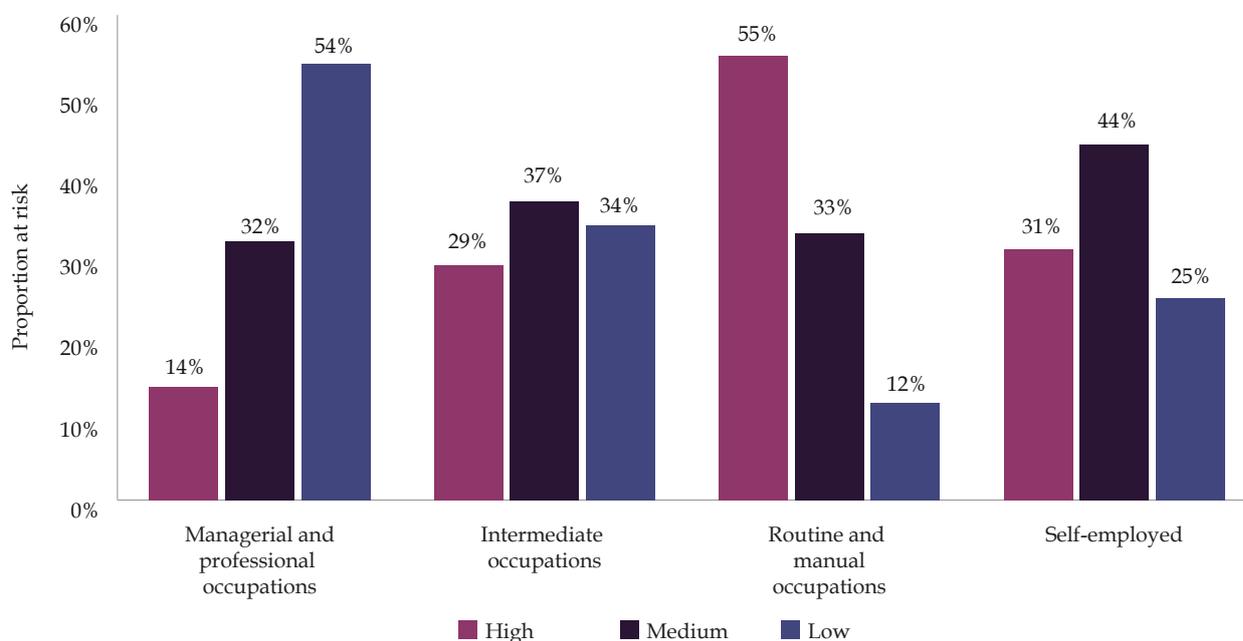
38 For example, bereavement, health conditions

39 Resolution Foundation (2018)

Chart 2.2<sup>40</sup>

### People in Generation X in routine, manual or self-employed work are at higher risk of not achieving suitable retirement income than other workers

Risk of not achieving financial adequacy, sustainability and flexibility in retirement for people in Generation X by occupation



#### However, the profile of people who are least likely to have suitable retirement income is changing with each successive generation

The types of people in low-risk groups at retirement today are more likely to be in medium to high risk groups at retirement in the future:

- The proportion of men at high risk is increasing relative to women, due in part to rising numbers of women in employment.
- The proportion of workers in managerial

and professional roles at high risk rises approximately threefold between Baby Boomers and Millennials.

- More than double the proportion of Millennial workers in intermediate level jobs are likely to be at high risk compared to Baby Boomers, however
- The proportion of people in routine and manual positions remains high and increases from 41% among Baby Boomers to 66% among Millennials.

Table 2.3: Proportion of generation at high risk of not achieving a suitable level of retirement income by gender; and proportion of occupational group at high risk by generation<sup>41</sup>

Generation	All	Men	Women	Manager / Professional	Inter-mediate	Routine / Manual	Self-Employed
Baby Boomers	26%	46%	54%	10%	19%	41%	21%
Generation X	33%	47%	53%	14%	29%	55%	31%
Millennials	53%	48%	52%	33%	46%	66%	61%

40 PPI Modelling based on Wealth and Assets Survey data

41 PPI Modelling based on Wealth and Assets Survey data.

### Generation X and Millennials change employers more often than Baby Boomers and as a result, are likely to have lower levels of pension savings and multiple pension pots

High levels of pension savings and entitlement are generally associated with remaining in a single, medium to high skilled job, for a large employer, throughout working life. This type of employment history is more commonly found among Baby Boomers than younger generations who are more likely to change jobs several times throughout working life (and therefore have more varied contribution levels as different employers will offer different levels). For example, in 2000:

- Around 8% of those aged 35 to 49 (Baby Boomers) changed jobs compared to around 9% of those in the same age group (Generation X) in 2018, and
- 13% of those aged 25 to 34 (Generation X) changed jobs compared to around 16% of those in the same age group (Millennials) in 2018.<sup>42</sup>

Changing jobs more frequently can also result in people accruing a number of pension pots which, compared to people who either have a single pot throughout their working life or who consolidate their pension when they change employer, can increase the risk of administrative difficulties, extra charges or losing track of pensions.<sup>43</sup>

### Part-time employment is becoming more prevalent among all generations

Rates of part-time employment have risen among men at all ages and among men and women aged 60 to 64 as workers increasingly seek flexibility and phased retirement. The proportion of people in part-time work who did not want full-time employment increased

to 6.13 million (72% of all part-time workers) in the three months to July 2019. At the same time, the proportion of part-time workers who could not find full-time work has been on a downward trend from a high of 33% (men) and 14% (women) in early 2013, to 17% and 8% in mid-2019, there was a similar pattern of decline between 1993 and the 2008 financial crisis.<sup>44</sup>

### People who choose to work longer are increasingly opting to do so part-time

There was significant variation in part-time employment among men and women and people of different ages:

- The rise in part-time employment (22% in 1992 to 26% in 2018) was almost entirely driven by an increase in the proportion of men (6% to 13%) whilst rates among women remained largely unchanged (falling slightly from 42% to 41%),<sup>45</sup>
- Rates of part-time employment increased among men of all ages, the most likely being men aged 60-64 (today's Baby Boomers), who increased from 8% in 1995 to 14% in 2015. Full-time employment rates also increased for this group over the same period,<sup>46</sup>
- Part-time working increased among older female Baby Boomers aged 60-64 from 18% in 1995 to 24% in 2015 (during which time SPa for women was increasing), but did not increase among Millennials, Generation X or younger Baby Boomers. Rates of full-time employment rose sharply among women of all ages in the same period.<sup>47</sup>

The effect of lower earnings, career breaks and flexible employment patterns is generally associated with a lower retirement income among women, highlighting the risks faced by the wider working population as employment behaviours continue to evolve (Figure 2.1).

42 ONS (2018c) Figure 6

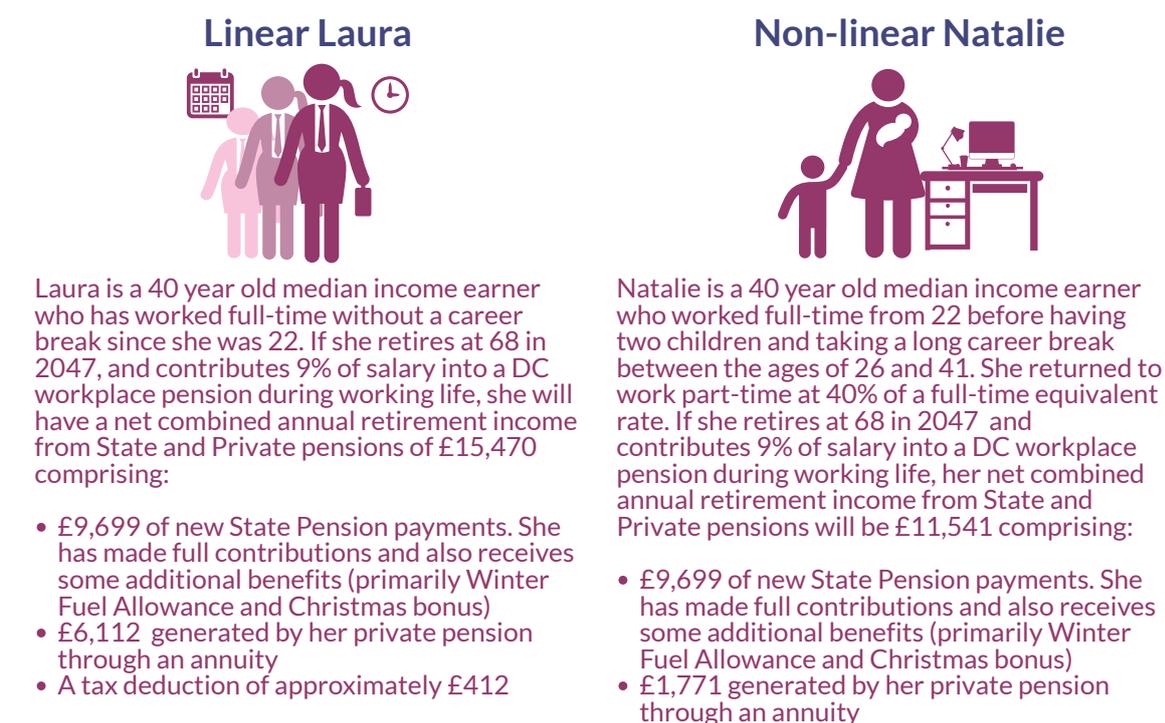
43 Baker, Pike (PPI) (2019)

44 ONS (2019c) Labour Force Survey

45 PPI Analysis of ONS (2019b)

46 PPI Analysis of ONS (2019b)

47 DWP (2016)

Figure 2.1: The effect of working patterns on retirement income<sup>48</sup>

**Both Natalie and Laura are most heavily dependent upon their State Pension. However, if both have average female life expectancy from age 65 and live to 85, Laura's total net pension income would be £263,744, over 28% or £57,382 higher than Natalie's at £206,362, a difference due primarily to lower rates of private pension contributions as a result of different work and earnings patterns.**

### Higher rates of self-employment and a higher level of risk among self-employed workers, puts Generation X at greater risk of insufficient retirement income than Baby Boomers

There is significant variation within self-employed workers as a group, but on average they are likely to have lower earnings and contribute less to private pensions than employees as they are not eligible for automatic enrolment or employer contributions.<sup>49</sup>

Although self-employed workers will benefit from the new State Pension (nSP), they will not gain from automatic enrolment and the

adequacy of future income will be at risk without significant preparation for retirement, a risk that increases with the rise in self-employment of each successive generation.

- In 2016, self-employment was around 3% higher for Generation X (at 13%) than it was for Baby Boomers when they were the same age,
- Self-employment was around 3% higher for Millennials, aged over 25 (at 9%) than it was for Generation X when they were the same age.<sup>50</sup>

<sup>48</sup> Adams et al (PPI) (2016)

<sup>49</sup> Resolution Foundation (2015), In contrast to workers, some may be able to sell their business to fund retirement but sale proceeds will depend on the company's size, performance and future market value, and may not be sufficient to guarantee suitable income in later life. Many self-employed contract workers are unlikely to have a tangible business to sell at the end of their working life.

<sup>50</sup> ONS (2016) Employees and Self-employment by age, UK, 2001 to 2016; using rough age groups; In 2001: Millennials were aged 1 to 20 years old, Generation X were aged 21 to 35 years old, Baby boomers were aged 36 to 55 years old; In 2016: Millennials were aged 16 to 35 years old, Generation X were aged 36 to 50 years old, Baby boomers were aged 51 to 70 years old

**Along with part-time work and self-employment, casual work is increasing across all three generations and the recent growth of zero-hour contracts may further affect the retirement prospects of up to 3% of workers**

Although younger workers including some Millennials are most likely to be working on zero-hours contracts, between 100,000 and 200,000<sup>51</sup> people in each generation could be affected during the years that they would typically expect to be contributing the most to their retirement savings.

**Between 100,000 and 200,000 people in each generation could work in a zero-hour contract and lose out on employer contributions during the years that they would typically expect to be contributing the most to their retirement savings.**

Casual contracts may offer flexibility to those seeking to earn income without committing to regular employment, but the risks to adequacy of retirement savings are high. In contrast to

regular employment, income streams are less secure and workers are less likely to qualify for employer pension contributions, putting them at a significant disadvantage to other workers.

- The proportion of workers on zero-hour contracts increased from 1% in 2010 to approximately 3% in 2019.
- Young Millennials aged 16 to 24 are most likely to be on zero-hour contracts (more than 7%), while older Millennials and most of Generation X (people aged 25 to 49) are least likely (less than 2%).
- Prevalence increases slightly after age 50, with more than 2% of those aged 50 to 64 (Baby Boomers and early Generation X) on zero-hour contracts rising to more than 3% of people over age 65.<sup>52</sup>
- 32% of people on zero-hours contracts (287,000) report that the hours are equivalent to a full-time job.
- Those whose zero-hour contract is their main job, work approximately 24 hours a week on average, compared to 36 hours for all people in employment.<sup>53</sup>

**Box 3.3: Policy implication – the suitability of retirement savings will depend on the type of work people do as well as the time they spend doing it**

Options to manage the complexity and risks associated with non-linear employment and pension contributions to pension savings faced by Generation X and future cohorts include:

- **Policy changes:** promote access to employer pension contributions for workers in different types of employment (part-time, casual work etc), address low incentives for the self-employed to save into private pensions; improve availability and affordability of care, including childcare and social care, to help workers stay in employment.
- **Industry intervention:** Consider approaches to mitigate risks associated with multiple small pension pots; engage employees with simple, tailored pension guidelines; provide information, support and platforms for consolidating pension pots; actively signpost the impact of working patterns on saving outcomes.




51 ONS (2019d)  
 52 ONS (2019d)  
 53 ONS (2019d)

## How do other countries mitigate risks associated with retirement through employment and retirement policy?

Germany has taken significant steps to increase the sustainability of its public pension system through incentives to increase

employment at older ages and payments linked both to earnings and changes in workforce contributions.

International case study 1<sup>54</sup>

## Case Study: Germany

Over the next 30 years, Germany is expected to experience fast-paced population ageing leading to labour shortages and higher public pensions spending, combined with rising income inequality in later life due to its earnings-linked pensions system.



Germany's population is one of the fastest ageing of all OECD countries but rates of employment among older workers also increasing rapidly. The number of people over 65 per 100 of working age is expected to increase from 35.1 in 2015 to 58.1 in 2050. Over the same period public spending on pensions is forecast to rise from 10% to 12.5% of GDP, despite Germany's relatively low replacement rates (51% for average earners compared to an OECD average of 63%) and the fact that employment among people aged 55-64 has risen 30% since 2000. Economic prosperity has driven strong demand for labour, and employment trends have also been influenced by policy reforms designed to boost labour force participation in sectors where population ageing is leading to declines in the workforce.

**The link between wages and benefits, and lack of basic and minimum pensions, means that Germany's pension system is less redistributive than other countries and it has the highest gender pensions gap in Europe at 46%. Workers with discontinuous careers (especially women), low incomes or education, and non-standard or self-employment (which have increased as the labour market has grown) are at significant risk of poverty in the future. Wage inequality has also risen in Germany in recent decades and is likely to lead to greater pension inequality in the future.**

Germany has a statutory single-tier earnings related PAYG public pensions system under which individuals earn points based on contributions throughout their working life. Points are accumulated annually and linked to national average earnings (one point is equivalent to contributions made by the average earner). Higher or lower earnings can proportionately change points achieved (up to a maximum of just over double average earnings) over a minimum of 5 and maximum of 45 years contributions. Points are credited to those who are short-term unemployed or raising children under 10.

Pension calculations are based on the value of points at retirement and can be adjusted to reflect changes in the workforce and its contributions. Point values are indexed to gross earnings as well as contribution and sustainability formulas that account for the ratio of pensioners to contributors and how much they pay towards pensions. Means-tested benefits are available for individuals whose pension is not sufficient to maintain a suitable standard of living. The taxable portion of pension payments is increasing annually to 2040 and retirees also contribute to health and social care spending. Recent reforms to improve flexible retirement provide relatively little incentive for workers to defer pension payments and workers with full contributions are able to retire with full pension up to 2 years before statutory retirement age (65, rising to 67 in 2029).

**Voluntary private pension contributions assume a contribution rate of 4% and are encouraged through tax incentives and subsidised by government.**

### Chapter Two policy box

In order to help protect Generation X from the risks associated with employment, Government, industry and employers could work together to ensure that:

- Those with complex health or care needs who wish to work are able to do so,
- The negative impact of time out of work on retirement income is mitigated,
- Those in casual, part-time or self-employed work are supported to save into private pensions.

# Chapter Three: How are differences and changes in the pensions landscape affecting retirement income for Generation X?

This chapter explores the way in which Generation X save and access their pensions as a result of changes to the pensions landscape and policy, and considers how the sources of income that Generation X could reach retirement with might impact adequacy, sustainability and flexibility.

## Chapter summary

- Changes to the pensions landscape mean that people will receive less retirement income from Defined Benefit (DB) pensions in future, more from Defined Contribution (DC) savings, and income from State Pensions will reduce proportionally,
- These changes mean that in the future, people reaching retirement will need to make more complex decisions about how to use their pension savings and will bear more risk during both the saving and the retirement phase,
- It will be important going forward that people are supported to understand the implications of the decisions they make about saving, accessing savings and potentially transferring DB entitlement into DC savings,
- Supporting people to increase contribution levels could significantly improve retirement outcomes,
- The State Pension will continue to provide a significant proportion of retirement income for future pensioners and decisions regarding the level of the State Pension will impact the standard of living of many older people.

## Income sources vary within and between generations

The principle sources of retirement income are Defined Benefit (DB) pensions, Defined Contribution (DC) pension savings, State Pension and earnings. The proportion of income made up by each source will vary between and within generations. For example, Baby Boomers are more likely to have high levels of DB entitlement, while Millennials will be most likely to have high levels of DC savings. However, within all generations certain individuals will be associated with particular income sources, for example, public sector workers will be more likely to receive significant levels of income from DB pensions, and younger pensioners will be more likely to receive income from their own, or a family member's, earnings. Some pensioners will

receive income from supplementary (non-pension) savings and assets (including housing wealth from primary and second homes).

## 60% of generation X at highest income and asset risk in retirement are women

Women are less likely than men to achieve a suitable standard of living in retirement. Based on current and expected income and asset accumulation, women are more likely to be at high risk, with 60% of those in the highest risk third being women. Those in lower socio-economic classes are also more likely to be at risk. 45% of those at high risk based on income and assets are in routine and manual occupations, compared to 28% in intermediate occupations and 18% in higher managerial, administrative and professional occupations.

**9% more Baby Boomers and 20% fewer millennials are at high adequacy risk than Generation X as a result of their likely income and assets in retirement, however 11% more Baby Boomers are at low risk of not achieving adequacy in retirement**

Millennials face lower adequacy risk than those in older generations because they are younger and have more time to make contributions

and meet adequacy targets. However, more Baby Boomers, who are close to retirement have actually accrued sufficient savings to be at low risk of adequacy than Generation X and Millennials (Table 3.1).

Table 3.1: Millennial and Baby Boomer difference from Generation X in adequacy, sustainability and flexibility risk as a result of their income and assets portfolio

ADEQUACY			SUSTAINABILITY			FLEXIBILITY		
<b>Millennials</b>								
High risk	Medium risk	Low risk	High risk	Medium risk	Low risk	High risk	Medium risk	Low risk
20% less ↓	19% More ↑	equal	30% more ↑	8% less ↓	22% less ↓	2% more ↑	9% more ↑	11% Less ↓
<b>Baby Boomers</b>								
High risk	Medium risk	Low risk	High risk	Medium risk	Low risk	High risk	Medium risk	Low risk
9% more ↑	20% Less ↓	11% more ↑	30% less ↓	22% less ↓	52% more ↑	6% more ↑	6% less ↓	1% more ↑

**Baby Boomers face far less sustainability risk than Generation X and Millennials**

30% fewer Baby Boomers and 30% more Millennials are at high sustainability risk from income sources than Generation X. This is due to Baby Boomers reaching retirement with higher entitlement to income from sustainable sources such as DB pensions and State Pensions than younger generations. Generation X will receive less DB pension and State Pension on average than Baby Boomers but more than Millennials. 52% more Baby Boomers are at low sustainability risk than Generation X.

DC products which provide both sustainability and flexibility, for example, annuity/income drawdown hybrid products, could be an important mechanism for helping future pensioners meet suitable income targets.

DC products which provide both sustainability and flexibility, for example, annuity/income drawdown hybrid products, could be an important mechanism for helping future pensioners meet suitable income targets.

**Generation X are at the lowest risk for flexibility of income**

Generation X have the lowest risk of flexibility of income as they are likely to have more DC savings to draw on than Baby Boomers and more housing wealth and other income and asset wealth than Millennials. Though Millennials will have higher levels of DC income on average than Generation X, they are likely to have a less diverse range of income and assets in retirement with which to provide flexibility.

The rest of this chapter explores the changes in the way people accrue savings and assets that have led to the above results.

**Private and State Pension saving is changing for all three cohorts**

As a result of changes in policy, economic shifts and changes in the private and State Pensions landscape, people will use different combinations of income and assets to support later life in future. The next section looks at how the amount and type of savings that people accrue in private pensions is changing.

**Average income from DB pensions will decrease, State Pension income will increase gradually, if the Triple lock remains in place, and income from DC pensions will increase**

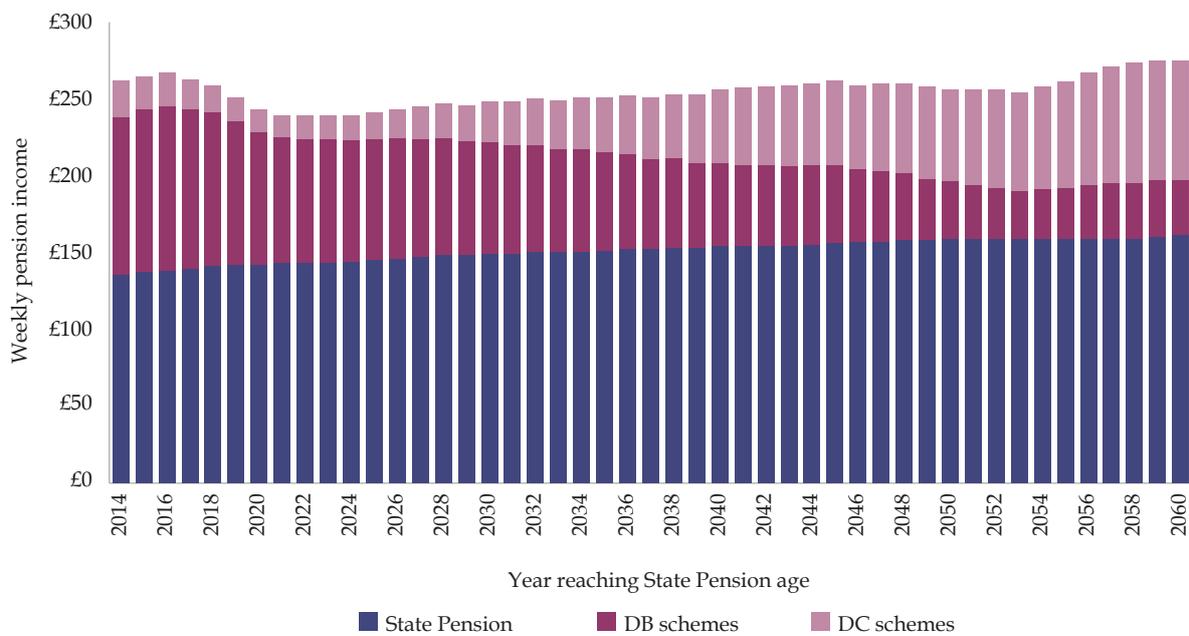
As a result of policy and market changes,

- Average incomes from DB pensions will decline,
- Average income from DC pensions will increase,
- Average State Pension income will not increase as rapidly as it would have done under the old, basic State Pension system, but will continue to gradually increase as long as the triple lock<sup>55</sup> remains in place.

Total average income for people reaching State Pension age (SPa) is decreasing from a peak of £267 in 2016 as a result of the reduction in DB entitlement (2014 earnings terms). If levels of DC saving increase as expected, and the triple lock remains in place, the average level of state and private pension income should return to the 2016 level around 2060 (Chart 3.1).

**Chart 3.1<sup>56</sup>**  
**State and private pension income is decreasing but could return to 2016 levels around 2060**

Weekly mean amounts of pension, by pension type and year reaching SPa, 5 year moving average, 2014 earnings terms.



The decline in private sector DB provision and increasing DC provision will lead to greater reliance on private DC savings to top up State Pensions and less dependence on DB income (Key Facts 3.1)

55 The inflationary measure for State Pension increase: every year the new and basic State Pension are increased in line with the higher of the increase in prices (CPI), earnings or 2.5%.

56 DWP, Pensim2 dynamic microsimulation; DWP (2015)

### Key Facts 3.1: retirement landscape changes<sup>57</sup>

DC savers bear greater risk of:

- Insufficient saving to achieve an adequate standard of living in retirement.
- Exposure to market, longevity and inflation risk.
- Complex decisions about saving, accessing savings and managing retirement income.



#### Key Facts:

- 88% of private sector DB schemes were closed to new members in 2018
- The number of active private sector DB savers fell from 8 million in 1967 to 1.1 million in 2019.
- The number of active DC savers rose from 5.5 million in 2012 to 13.3 million in 2019.
- Median DC savings for people aged 55 to 64 in 2019 were £30,000.
- Aggregate assets in DC schemes could grow to around from £430 billion in 2019 to £805 billion in 2039 if current trends continue.

### DB Scheme provision has declined in the private sector

Defined Benefit (DB) pension schemes historically dominated private sector pension provision, and continues to be the main source of provision within the public sector. However, private sector DB scheme active membership has declined from 8 million active members in 1967 to around 1.1 million in 2019.<sup>58</sup> Scheme closures can be attributed to several factors, including:

- **Increases in life expectancy:** pensioner members are living for longer and requiring pension payments for longer than originally anticipated.
- **Economic effects:** low bond yields resulting from the aftermath of the global financial crisis have increased the estimated value of liabilities. This has contributed to a shortfall between funding levels and estimated future costs.
- **Changes in policy, regulation and accounting standards:** legislative changes (which were designed to protect members' rights and to make the risks of DB pensions more transparent), surplus limits, and changes

to the way scheme liabilities are calculated have increased the cost and reduced the attractiveness to employers of providing DB pension schemes.

Those receiving income from DB pensions in retirement will find it easier to maintain their standard of living as DB income increases with inflationary indices and will not face the danger of running out of savings before death, as DB pensions are paid out for the member's lifetime. However, DB pensions offer less flexibility, and as a result of increased DC flexibility, falls in interest rates, increased Cash Equivalent Transfer Values and bad press associated with some DB schemes, a significant number of people are transferring their DB pension entitlement into DC pots, which do not protect from inflation, investment or longevity risk. Those transferring a DB entitlement worth £30,000 or more are required to take regulated advice before doing so. Between 2013/14 and 2018, the number of DB to DC transfers increased by 1300% (Box 3.1).<sup>59</sup>

57 PPI modelling; DB savers: PPF, TPR (2018) p.4

58 PPF, TPR (2018) p.4; Carrera *et.al* (PPI) (2012)

59 FCA (2019b)

### Box 3.1: Policy implication – it’s important for people to fully understand the implications of transferring DB savings to DC

While transferring may benefit some people, there are important risks associated with transfers from DB to DC.

- **Policy changes:** continue Financial Conduct Authority work on ensuring that the transfer advice people receive is appropriate to their circumstances.<sup>60</sup>
- **Industry intervention:** those providing advice or supporting employers who provide DB schemes could work to ensure that
  - Advice takes into account the potential risks associated with members transferring DB entitlement
  - Trustees are aware of the risks, and
  - Employers are not attempting to persuade members to transfer against member’s best interests.
- **Employer intervention:** ensure that transfers are not being used as a way of reducing liabilities; ensure members’ best interests are at the heart of all scheme decisions.



### Automatic enrolment has led to an increase in the number of people saving in DC schemes

The automatic enrolment policy, rolled out between 2012 and 2018, requires employers to enrol eligible employees into a qualifying pension scheme. Employees are permitted to opt-out of their scheme within a month in order to receive back their own contributions, and may voluntarily cease contributing at any time. To be eligible for automatic enrolment an employee must be aged between 22 and SPa and be earning £10,000pa or above in at least one job. Those who are self-employed or have several jobs which each pay below the £10,000pa threshold are not eligible. Automatic enrolment was designed to address widespread under-saving within the UK, and is intended to result in future pensioners reaching retirement with higher levels of private pension saving on average than previous generations.

For employees who do not opt-out, employers are required to make minimum contributions on a band of earnings (£6,136 to £50,000 in

2019/20). The total minimum contributions required from employers and employees is 8% of band earnings, with employers required to contribute a minimum of 3% of this, and employees contributing the remaining 5%, but receiving around 1% back through tax relief. Employers can choose to contribute more than the minimum, which reduces the required amount that employees must pay, but employers may require employees to contribute a certain matching amount.

Savings are dependent upon the level of contributions that individuals can afford, employers will provide, and the number of years that people make pension contributions during their working life. The key drivers of contribution rates are employment patterns, income, scheme types and participation rates, but the decisions that Government, industry, employers and individuals make have a significant impact on outcomes from saving (Box 3.2).

60 Blanket increases in contribution level could make pension saving less affordable for those on low income and may necessitate increasing the minimum that employers must pay in order to reduce the impact; auto-escalation may not work well for those who change jobs frequently and then reset to the minimum level.

## Saving has been more difficult for Generation X and Millennials than it has been for Baby Boomers

Economic factors, most notably house prices and interest rates, are driving differences in financial circumstances and needs between generations, particularly in the wealth accumulation phases. Millennials are further impacted by the introduction of university fees. Those who accumulated significant wealth before the financial crisis of 2008, particularly Baby Boomers who started saving in the 1970s, have benefited from both long-term property and financial asset appreciation (including pensions).

Generation X and Millennials who began accumulating significant wealth within the last 20 years, and for whom the decline in DB pensions will necessitate greater financial self-sufficiency, would generally need to make higher saving contributions and/or invest in higher yielding assets to achieve similar levels of provision in retirement. The role of the State Pension and additional retirement benefits is likely to remain of significant importance to those who are unable to accumulate sufficient provision through homeownership and savings.<sup>61</sup>

Generation X and Millennials who began accumulating significant wealth within the last 20 years, and for whom the decline in DB pensions will necessitate greater financial self-sufficiency, would generally need to make higher saving contributions and/or invest in higher yielding assets to achieve similar levels of provision in retirement.

A prolonged period of low interest rates has also meant that people who started saving for retirement between 1975 and 1995 benefited from higher rates of investment return than those who started saving later (10.5% on equities and 6% on gilts between 1975 and 1995, compared to 3.7% on equities and 4.3% on gilts between 1995 and 2015). If trends persist, younger savers will need to contribute more to achieve similar sized pension pots.<sup>62</sup>

61 UK House prices: UK House Price Index, Land Registry (2019); Average Income and House Price Ratio: FCA, (2019a); Intergenerational Transfers: FCA (2019a); Equity & Gilt Returns: FCA (2019a); Debt-to-Income Ratio: FCA (2019a); Student Loan Repayment: FCA (2019a).

62 FCA (2019a)

### Box 3.2: Policy implication - increases in the amount that people contribute could significantly reduce risk levels in retirement

Increases in contributions could be brought about through policy changes, industry and employer intervention or individual behaviour changes:

- Policy changes:** increases in required minimum contribution levels under automatic enrolment regulation and/or auto-escalation whereby contributions increase with pay rises or after contributing for a certain length of time; implement automatic enrolment review recommendations of reducing lower earnings band to £0, and lowering age of eligibility from 22 to 18.<sup>63</sup>

- Industry intervention:** industry, in conjunction with projects such as the Pensions Dashboard and the Pensions and Lifetime Savings Association (PLSA) Retirement Living Standards, could provide members with online tools for calculating how they could meet lifestyle targets by increasing contribution levels; pension providers and consultants could work with employers to provide financial education in the workplace; continue to explore and develop products which provide both sustainability and flexibility, for example, annuity/income drawdown hybrid products.
 
- Employer intervention:** paying contributions at above automatic enrolment minimum levels and offering matching contribution increases to employees who increase their contributions; working with external organisations to provide financial education in the workplace; choosing pension providers with high quality communications for members. Behavioural changes from individuals could be encouraged through other behavioural “nudges”. Financial education in the workplace and exercises helping individuals to engage with their older selves, are associated with people increasing pension contributions.<sup>64</sup>


Contribution levels are one of the most significant indicators for private pension outcomes in retirement. Box 3.3. explores how increasing contributions could affect the retirement income of Violet, a hypothetical individual.

### Box 3.3: Increases in pension contributions could raise the retirement incomes of those in danger of not meeting adequacy targets<sup>65</sup>

Violet is a 40 year old woman, with the median amount of DC savings for her age, of £12,000. If she contributes 8% of her earnings into her pension until SPa, she could yield an annual income of around £13,000 from a combination of her State Pension and withdrawing 3.5% from an income drawdown product.

- If it is assumed that she increases her contributions from 8% to 12% of total salary from age 40, she could yield an annual income around £14,000.
- If it is assumed that she increases her contributions from 8% to 17% of total salary from age 40, she could yield an annual income around £15,000 (all in 2019 earnings terms).

63 Blanket increases in contribution level could make pension saving less affordable for those on low income and may necessitate increasing the minimum that employers must pay in order to reduce the impact; auto-escalation may not work well for those who change jobs frequently and then reset to the minimum level.

64 Silcock & Adams (PPI) (2017)

65 PPI Modelling

Those who were closer to age 22 when they were automatically enrolled will have a longer time to benefit from automatic enrolment than those who started saving through automatic enrolment at older ages. Millennials who are automatically enrolled and remain saving will contribute to their pensions for a longer time than automatically enrolled members of Generation X. For example, a woman who saves 8% of total earnings into a DC pension from age 22 to SPa could retire with a DC pot 148% larger than a woman who saves 8% into a DC pension from age 42 to SPa (Figure 3.1).<sup>66</sup>

**Millennials who are automatically enrolled and remain saving will contribute to their pensions for a longer time than automatically enrolled members of Generation X. For example, a woman who saves 8% of total earnings into a DC pension from age 22 to SPa could retire with a DC pot 148% larger than a woman who saves 8% into a DC pension from age 42 to Spa.**

Figure 3.1<sup>67</sup>

Molly and Gemma were both automatically enrolled into a Defined Contribution (DC) pension scheme in 2012 when Molly was aged 22 and Gemma was aged 42. With their employer, they both contributed 8% of total earnings to their pension. At their State Pension age (SPa) (68 for Molly and 67 for Gemma), Molly's pot is 148% higher than Gemma's.



### Younger generations will receive proportionally less income from the State Pension than older generations

From April 2016, the old State Pension system, which consisted of a flat-rate basic State Pension (bSP) and an earnings-related additional State Pension was replaced by the new State Pension (nSP). Anyone reaching State Pension age (SPa) after April 2016 receives their State Pension under the new system, though those who would

have qualified for a higher amount under the older system are provided this additional amount as a top-up to their new State Pension. As a result of the introduction of the new (flat-rate) State Pension and the removal of the option to accrue entitlement to the additional State Pension, younger generations will receive less income, on average, from the State Pension than older generations, though some individuals will receive a higher State Pension under the new system (Key Facts 3.2)

66 PPI modelling

67 PPI Modelling

### Key Facts 3.2: Younger generations will receive less income, on average, from the State Pension than older generations

- 65% of Millennials aged 23 to 32 and 75% of Millennials aged 33 to 38 will receive a State Pension income around £17,000 to £19,000 lower over their lifetime than they would have received under the old State Pension system.
- 46% of Generation X aged 43 to 52 will receive a State Pension income around £13,000 lower over their lifetime than they would have received under the old State Pension system.<sup>68</sup>
- Fewer than 25% of Baby Boomers will receive a lower State Pension. Those who do, will receive between £4,000 to £7,000 less over their lifetime than they would have under the old system.
- The remaining people in each age group will receive more under the new system of between £10,000 to £15,000 more over their lifetime.<sup>69</sup>



While the average income from State Pensions is lower under the new system, the new State Pension is more progressive than the previous system. Many of those who receive a higher income from the State Pension are women, carers and the self-employed who were disadvantaged under the old system through low or no entitlement to the earnings related additional State Pension.

#### Increases in the State Pension depend on maintenance of the triple lock

The triple-lock inflationary mechanism that guarantees a minimum increase in the State

Pension each year of the highest of the increase in earnings, CPI or 2.5%, was introduced in 2011. While some people will receive less in future as a result of the removal of the option to accrue entitlement to additional State Pension, the basic level of both the basic and new State Pensions are increasing in value above earnings, on average, for all recipients. However, legislation only provides for a minimum increase at the rate of increase of earnings. Therefore the bSP and nSP may be re-indexed at some point in the future, unless the triple lock becomes enshrined in legislation.

#### Box 3.4: Policy implication – the State Pension will remain an important safety net for people during Later Life

In Pensioner households where the head is over age 75, 54% of income, on average, comes from State Pension and benefits.<sup>70</sup> The State Pension will continue to provide a significant proportion of income to Generation X in future and the amount paid will have implications for the standard of living that pensioners can afford and their ability to avoid financial hardship.

- **Policy changes:** policy-makers should be aware that while policy is focussing on increasing private pension savings, State Pension income will still provide the majority of income that people receive in retirement for many decades, and that policy changes affecting the State Pension are likely to have a significant impact on the standard of living of most pensioners.
- The Government could consider other policy measures for assisting pensioners living on low incomes such as, for example, increasing the personal allowance for pensioners or changing pensioner tax bands.



68 PPI analysis of: Impact of New State Pension (nSP) on an Individual's Pension Entitlement - Longer Term Effects of nSP, DWP (2016); Life Tables, Principal Projection, United Kingdom, ONS (2015); State Pension age timetable, DWP, (2014)

69 PPI analysis of: Impact of New State Pension (nSP) on an Individual's Pension Entitlement - Longer Term Effects of nSP, DWP (2016); Life Tables, Principal Projection, United Kingdom, ONS (2015); State Pension age timetable, DWP, (2014)

70 DWP (2019) table 2.7

## How do other countries mitigate risks associated with retirement income?

Australia has made provision to increase the sustainability of its public pension system by means-testing payments, while ensuring that all employees build retirement savings through mandatory employer contributions regardless

of their desire to engage with savings. Both retirement age and contribution rates are rising in response to population ageing. Australia has actively adjusted tax incentives and encourages a flexible transition to retirement that seeks to mitigate the risk of insufficient income by allowing people to withdraw occupational pensions whilst working before retirement.

International Case Study 2<sup>71</sup>

## Case Study: Australia

**Australia has a three pillar pension system.** Its publicly funded Age Pension provides a means-tested safety net for people without adequate income or assets in retirement. Workplace pensions are provided through its Superannuation scheme, a pension savings framework introduced in 1993 and financed through mandatory employer contributions. Employee contributions to superannuation funds are voluntary but encouraged by tax incentives. Most people live on a combination of their own savings and the Age Pension.



**Significant recent policy reforms have aimed to improve coverage and sustainability, reduce public pension spending, increase DC savings and incentivise people to delay the age at which they retire and draw upon pensions.** Pension spending is 4.3% of GDP, less than half the OECD average. 65% of people rely on the Age pension as their main source of retirement income and replacement rates are relatively low at 43% (compared to the OECD average of 63%), but today's retirees had less time to benefit from reforms during their working lives. Rising State Pension age (67 for men and women by 2023) and a "Transition to Retirement" scheme which allows people to work while drawing down on super benefits are driving an increase in the average age of labour market exit which reached 65.2 for men and 63.6 for women in 2016.

**Australian employers will gradually increase pension contributions from 9.5% today to 12% by 2025,** made through a single employer gateway payment system. 86% of pension assets are in DC schemes, with some DB and hybrid pensions (14%), which together account for \$2,782.6 billion, and are projected to grow to \$6.1 trillion by 2035. Australia was one of the first countries to develop a target based system of retirement benchmarks.

**The system aims to maximise pension adequacy regardless of an individual's financial literacy or engagement.** Industry and policy objectives are currently geared towards facilitating greater member autonomy along with improved standards and outcomes through scheme consolidation, stronger regulation and oversight (including charging structures), and emphasis on sustainable long-term rates of return.

### Chapter Three policy box

In order to help protect Generation X from the risks associated with pension saving, Government, industry and employers could work together to ensure that:

- People fully understand the implications of transferring DB savings to DC,
- People are supported to increase contribution amounts where affordable and appropriate,
- The importance of the State Pension as a safety net is recognised.

71 Pension Spending: OECD (2017c); Replacement Rates: OECD (2017c); Labour Market Exit Age: OECD (2017d); DC / DB Pension Assets: Austrade (2019)

# Chapter Four: How are changes in the economy affecting financial risk for Generation X in retirement?

This chapter explores the effect that changes in the wider economy are having upon the affordability of saving and the financial risk that people face in retirement.

## Chapter summary:

- Future pensioners are more likely to reach retirement with high levels of debt and/or the need to pay rent or pay off a mortgage.
- They are also more likely to need or to provide care at ages around retirement.
- Care needs, debt, rent or mortgage payments can reduce disposable income and lead to financial difficulties.
- Life and health insurance contracts can reduce the risk associated with draws on income.
- The use of advice and guidance can help people to make informed decisions about how to manage complex expenditure needs.
- There are interventions which Government, industry and employers could make to mitigate the financial detriment which can arise from the need to pay rent or provide care.

## Mortgages, rent, debt or the need to provide care can reduce disposable income and corresponding standards of living in retirement

Income and assets are important indicators for living standards in retirement, however they cannot be considered without taking into account potential draws on income. Even if someone reaches retirement with a high level of income the need to pay a mortgage, rent, debt repayments or to provide care for oneself or a family member can reduce disposable income and corresponding standards of living. As with income and assets, draws on income will vary between and within generations in retirement. The most significant indicator for high draws on income is renting in retirement. Owning one's own home in retirement significantly reduces living expenses, while renting or paying off a mortgage is associated with lower levels of adequacy.

Income and assets are important indicators for living standards in retirement, however they cannot be considered without taking into account potential draws on income.

## 14% fewer Baby Boomers are at high adequacy risk than Generation X and Millennials as a result of potential draws on income

Baby Boomers are more likely to own their own home in retirement and less likely to reach retirement with high levels of debt. As a result, they are likely to have higher levels of disposable income during retirement as their outgoings through rent, mortgage or debt repayments will be significantly lower. Baby Boomers will also find sustainability and flexibility targets easier to reach, as draws on income will be less likely to interrupt the income sources which support these indicators (Table 4.1).

Table 4.1: Millennial and Baby Boomer difference from Generation X in adequacy, sustainability and flexibility risk as a result of draws on income

ADEQUACY			SUSTAINABILITY			FLEXIBILITY		
<b>Millennials</b>								
High risk equal	Medium risk 8% Less	Low risk 8% more	High risk 8% more	Medium risk 11% more	Low risk 20% less	High risk 3% less	Medium risk 17% more	Low risk 20% less
	↓	↑	↑	↑	↓	↓	↑	↓
<b>Baby Boomers</b>								
High risk 14% less	Medium risk 2% Less	Low risk 16% more	High risk 8% less	Medium risk 7% more	Low risk 1% more	High risk 9% less	Medium risk 6% more	Low risk 3% more
↓	↓	↑	↓	↑	↑	↓	↑	↑

The rest of this chapter explores the changes to the way people accrue later life savings and assets that have led to the above results.

### Baby Boomers face less risk of not achieving adequacy and sustainability as a result of draws on income, because they are less likely to rent, or depend on family members in retirement than Generation X and Millennials

Baby Boomers are less likely to have significant draws on income which prevent them meeting adequacy and sustainability targets because they are more likely to own their own home in retirement and more likely to have low debt-to-income ratios. In 2014/16:

- 80% of Baby Boomers were owner occupiers, 19% were renters and 1% were dependent on family, compared to,
- 69% of Generation X owning, 27% renting and 4% dependent on family,
- Millennials were far less likely to own their own home, with 22% owning, 26% renting and 51% dependent on family.<sup>72</sup>

It is likely that a significant proportion of Millennials will still purchase a home before retirement. A small proportion of Generation X may also purchase a home, though the majority of this generation are far past the average age for buying a first home, of 30 years old.<sup>73</sup> There are several reasons for the changes in house buying behaviour, most significant being the increase in house prices and the increased difficulty faced by individuals in funding house purchases (Key Facts 4.1).

72 PPI modelling using Wealth and Assets Survey data

73 ONS (2018f)

### Key Facts 4.1

- Average house prices have increased by almost 4 times in the past 30 years, increasing the gap with average income for first-time buyers by more than two times across all regions and up to three times in some areas. Whilst price appreciation has generated significant equity for existing homeowners, it has also made it harder for younger people to buy their first home, begin accumulating housing wealth and has limited the amount some are able to save towards retirement.<sup>74</sup>
- House purchase funding methods are evolving to meet the needs of different generations in the face of higher prices. Younger people are increasingly dependent on intergenerational transfers (62% of homebuyers under age 35 in 2017 received financial help from family and friends), while some mortgage products now allow loan repayments to continue beyond retirement age, increasing pressure on retirement funding for older borrowers.<sup>75</sup>

#### Box 4.1: Policy implication – Generation X are more likely to be renting or paying off a mortgage than older generations

Paying rent or a mortgage in retirement is associated with a lower standard of living, a higher risk of poverty and a higher chance of being eligible for means-tested benefits. If pensioners did not lose out on eligibility for means-tested benefits, such as housing benefit, by virtue of having private pension savings, then paying rent would not reduce their disposable income in retirement as significantly.

- **Policy changes:** while the new State Pension is set above the level of Pensions Credit (in order to incentivise saving in private pensions) those with housing costs in retirement could still lose out on means-tested benefit entitlement through Housing Benefit if they have private pension savings. If more people are likely to be reaching retirement in rented accommodation or paying off a mortgage, the Government may wish to review policies in order to ensure that it is beneficial for all, or most, workers to save in a private pension.

### Younger generations tend to have higher levels of debt

As a result of the introduction of university fees, a higher level of available credit, and lower levels of earning among young people, levels of household debt are increasing. A significant indicator of financial solvency is the proportion of income that households pay out in debt repayments. This calculation is known as the debt-to-income (DTI) ratio. Within the UK, a DTI of higher than 45%, which includes mortgage debt, is generally considered to be too high for households to manage and most lenders will not provide a mortgage to people that will bring their total DTI above 45%, though some will not lend to

people with ratios above 36%.<sup>76</sup> As the modelling in this report does not consider mortgage debt,<sup>77</sup> risk is measured using a lower DTI. Therefore, the research considers those with household DTIs of 10% or lower at low risk, DTIs of 10% to 20% as medium risk, and DTIs of 20% or more as representing high risk for all three metrics of adequacy, sustainability and flexibility, because high levels of debt will constrain the amount of available income to meet needs throughout retirement. In 2014/16, 9% of Baby Boomers had a DTI of 20% or above, compared to 16% of Generation X and 22% of Millennials. This is unsurprising considering recent increases in household debt levels (Key Facts 4.2).

74 HM Land Registry (2019)

75 FCA (2019a)

76 [www.knowyourmoney.co.uk/loans/debt-to-income-ratio-calculator/#what-is-a-good-debt-to-income-ratio](http://www.knowyourmoney.co.uk/loans/debt-to-income-ratio-calculator/#what-is-a-good-debt-to-income-ratio); [www.nationwide.co.uk/guides/news/articles/2016/11/whats-your-debt-to-income-ratio](http://www.nationwide.co.uk/guides/news/articles/2016/11/whats-your-debt-to-income-ratio); [www.indebt.co.uk/debt-to-income-ratio.html](http://www.indebt.co.uk/debt-to-income-ratio.html); [www.onlinemortgageadvisor.co.uk/mortgage-affordability/debt-to-income-ratio/#debt-to-income-impact-purchase](http://www.onlinemortgageadvisor.co.uk/mortgage-affordability/debt-to-income-ratio/#debt-to-income-impact-purchase)

77 As many people are expected to have paid off some or all of their mortgage debt by retirement and therefore, current amounts being paid on mortgages will not necessarily reflect the amount that people might pay in retirement

### Key facts 4.2: household debt is increasing

- 20% of people aged 18 to 30 are in debt all the time, 25% have worse debt levels now than last year and 36% don't think they'll be out of debt any time soon.<sup>78</sup>
- Women are more likely to struggle financially, 40% of young women struggle to make their income last to the end of the month, compared to 29% of young men.<sup>79</sup>
- The average debt-to-income (DTI) ratio has risen from 115% in the decade 1998-2008 to 135% in the decade 2008-2018.<sup>80</sup>
- The disposable income of some younger university graduates is limited by student debt which increased from an average debt of £10,870 in 2008 to £34,500 in 2017.<sup>81</sup>

**As a result of the introduction of university fees, a higher level of available credit, and lower levels of earning among young people, levels of household debt are increasing.**

### Box 4.2: Policy implication: debt at older age can reduce disposable income levels

Many different factors, including economic factors, the availability of credit and lifestyle factors, affect debt levels. It is unlikely that policies and behavioural interventions will completely stop people from borrowing. However, educational interventions, via courses or the provision of advice and guidance, can help people learn better how to manage debt and avoid a situation where debt becomes unmanageable.

- **Policy changes:** Many providers of financial guidance and community support for vulnerable people offer support and guidance around managing debt. There is potential to extend the support and guidance offerings to more services that work with individuals who are struggling financially.
- **Industry intervention:** Joint industry working could ensure that people who come into contact with education, advice and guidance services are provided with prompts for debt support and guidance.
- **Employer intervention:** Employers who provide financial education could ensure debt support is included. Smaller employers could be provided with referrals to debt support to distribute among employees.



78 [www.youngwomenstrust.org/what\\_we\\_do/media\\_centre/press\\_releases/843\\_debt\\_despair\\_third\\_of\\_young\\_people\\_expect\\_to\\_borrow\\_beyond\\_40](http://www.youngwomenstrust.org/what_we_do/media_centre/press_releases/843_debt_despair_third_of_young_people_expect_to_borrow_beyond_40)

79 [www.youngwomenstrust.org/what\\_we\\_do/media\\_centre/press\\_releases/843\\_debt\\_despair\\_third\\_of\\_young\\_people\\_expect\\_to\\_borrow\\_beyond\\_40](http://www.youngwomenstrust.org/what_we_do/media_centre/press_releases/843_debt_despair_third_of_young_people_expect_to_borrow_beyond_40)

80 FCA (2019a)

81 FCA (2019a)

## Caring represents a potential draw on income

The majority of care for older people is provided informally by family and friends with an estimated value of £59.5 billion in 2016, equivalent to 4 million carers a week.<sup>82</sup> A significant proportion of older people provide care for a partner or family member; in 2017:

- 22% of carers were aged between 50 and 59,
- 24% of carers were aged between 60 and 69,
- 20% of carers were aged between 70 and 79, and
- 13% of carers were aged 80 and over.<sup>83</sup>

## Caring has implications for employment and personal finances

Around 20% of carers give up employment to fulfil caring responsibilities. The employment rate for carers is below the national average at 67% with more than half of those not working saying they would like to do so. 53% of carers have borrowed money as a result of their caring role, and 60% have used all of their savings to cover the costs of caring.<sup>84</sup> The proportion of those requiring care at older ages is projected to increase. In 2015, 28% of people over 65 had difficulty with essential daily activities. This is projected to increase by 67% by 2040. Between 2018 and 2030, the number

of carers in the UK is expected to increase from 7 million to 10.4 million.<sup>85</sup> Women are more likely to provide care than men; in 2018, 42% of carers were men and 58% were women.<sup>86</sup>

## Caring can reduce retirement income, as those who leave or reduce working hours as a result of caring may stop or reduce pension contributions

The projected increase in the number of carers and rises in (SPa) increase the likelihood that Generation X and Millennials will need to provide care during their working lives compared to Baby Boomers and older generations. The projected increase in the number of people needing care also suggests that more people may need to fund some or all of their own care in the future unless there are significant changes to policy, for example, a cap on care costs required from individuals.

The projected increase in the number of carers and rises in State Pension age increase the likelihood that Generation X and Millennials will need to provide care during their working lives compared to Baby Boomers and older generations

### Box 4.4: Policy implication - the need to provide care at older ages can reduce disposable income levels

The need to provide care can reduce disposable income, lead to a loss of earnings and reduce the amount people contribute to private pensions.

- **Policy changes:** There are several possible policy options for assisting older carers including:
  - Extending eligibility for means-tested benefits for pensioners, such as Pension Credit, or for State Pension, to those under SPa who have had to leave work due to the need to provide care, could help bridge the disposable income gap for some carers.<sup>87</sup>
  - Reviewing the level of benefits provided to carers and people with care needs and assessing whether they compensate satisfactorily for the income forgone through loss of earnings or for reductions in disposable income arising from the need to fund care goods and services.
  - Implementing a cap on care costs required from individuals could reduce the burden of paying for care on some older people and their families, but would represent a significant increase in expenditure by the State.



82 ONS (2018e); In comparison, local authorities funded £20.4 billion of care and privately bought care was estimated to total £10.9 billion (NAO, 2018).

83 Provision of unpaid care by age group, UK, 2015 to 2017, Figure 1

84 Provision of unpaid care by age group, UK, 2015 to 2017, Figure 1

85 <https://carers.org/key-facts-about-carers-and-people-they-care>

86 NAO (2018)

87 HM Government (2017) p. 105

### **Buying insurance and using advice or guidance can help mitigate the risks of not achieving adequacy, sustainability or flexibility in retirement**

While income, assets and draws on income are instrumental in determining living standards in retirement, there are ways to mitigate the risks associated with accessing savings and income in retirement. In particular, sources of income that individuals can fall back on during times of hardship, such as life or health insurance, can help to ensure that after bereavement, job loss or other household changes, reductions in income are topped up by an alternative income source.

Generation X are currently more likely to have a long-term insurance policy such as life insurance, some of which will be as part of their mortgage arrangement. In 2014/16, 6% of Millennials, 16% of Generation X and 8% of Baby Boomers had term insurance policies.<sup>88</sup>

The use of advice and guidance can also help mitigate risks, through helping people to understand how to use their resources to meet

their own individual needs. Baby Boomers are currently more likely to use or to have used financial advice, although the proportion of Generation X and Millennials using advice will increase as they age. In 2014/16, 12% of Millennials, 17% of Generation X, and 19% of Baby Boomers had used financial advice.<sup>89</sup>

### **How do pension systems work in other countries with high levels of household debt?**

Household debt in Switzerland was among the highest of all the Organisation for Economic Co-Operation and Development (OECD) countries in 2018 at 212% of net disposable income, compared to 149% in the U.K.<sup>90</sup> It allows a relatively flexible transition to retirement which includes lump-sum payments, but there is a risk that this flexibility may result in income inadequacy at older ages and income poverty among people over 65 is 19%, much higher than the OECD average of 13% (excludes wealth and assets).<sup>91</sup>

88 PPI analysis of Wealth and Assets Survey data

89 PPI analysis of Wealth and Assets Survey data

90 OECD (2019)

91 OECD (2017e)

International case study 3<sup>92</sup>

## Case Study: Switzerland

Switzerland has a three-pillar pension system under which all carers receive credits towards their public pensions, and couples can combine public pension contributions and payments.

**First Pillar:** Mandatory contributions made by employers and individuals from age 20 to SPa (regardless of employment status) are made to the publicly funded AHV pension system. Credits are given for years spent caring for children and other persons, and for individuals who do not work but have a partner making contributions (together with their employer) which amount to at least twice the minimum contribution. Payments are dependent on level of income (subject to maximum upper limits) and for couples, each spouse's income is combined and the total divided by two to obtain the amount credited to each.

**Second Pillar:** Occupational pension schemes aim to achieve a total pension income of approximately 60% of final salary. They are funded by mandatory contributions paid by employers and employees earning over £17,338 pa and are usually paid in the form of annuities or part-lump sum with minimum conversion rates set by law (currently 6.8% at SPa).

**Third pillar:** Individuals can make tax-deductible contributions to private pension plans with restrictions on withdrawal and maximum contribution rates, or unrestricted contributions to a private scheme with fewer tax advantages.



Switzerland will have a lower SPa than other OECD countries in the future and is one of the few to maintain different retirement ages for men (65) and women (64). Despite a population which is ageing faster than many other developed countries and high spending on public pensions (11% GDP), several major reforms to increase the financial sustainability of the pension system have been rejected by voters.

Switzerland has high levels of employment at older ages (particularly part-time) and a flexible approach to retirement under which workers bear a high risk for income inadequacy at older ages but are allowed to:

- Withdraw AHV pensions 1-2 years ahead of SPa in return for reduced annual payments, or defer by 1-5 years in return for an annual supplement
- Access occupational pensions from age 58, some schemes offer supplementary payments as a bridge until AHV is received (funded by employer or individual), or receive one quarter of savings as a lump sum (higher proportions up to full withdrawal available before this in some cases).
- Fully withdraw private pension savings anytime from 5 years before SPa to the time of receiving AHV or postpone receiving by up to 5 years after SPa and continue making contributions whilst employed. Early access taxed separately and at a lower rate than income.
- Continue paying into a private pension plan up to five years after reaching the SPa even if they are unable to work for a time (e.g. due to unemployment)

### Chapter Four policy box

In order to help protect Generation X from the risks associated with draws on income in retirement, Government, industry and employers could work together to ensure that:

- Renting or paying a mortgage in retirement does not lead to financial difficulty,
- People are supported to pay off debt prior to reaching retirement,
- Those providing care at older ages do not have disposable income reduced to an unmanageable level.

# Appendix One: Adequacy targets

The adequacy targets in this report are based on the Pension and Lifetime Savings Association (PLSA) retirement living standards (Box A.1).

## Box A.1: Retirement Living Standard Targets

Only 23% of people know how much they need to save in their working life to achieve an adequate income in retirement, partly because current industry definitions of adequacy are not widely understood by savers. The Pensions and Lifetime Savings Association (PLSA) has, therefore, developed a set of Retirement Living Standards based on what level of income, after housing costs, the public think is needed to allow a minimum, modest or comfortable standard of living in retirement.<sup>93</sup> Income targets are based on a basket of goods which is reviewed on a regular basis. They are intended to help people understand how much they need to set aside for later life and provide benchmarks to support public policy initiatives that focus on increasing pension contributions, improving saver engagement and enabling industry providers to deliver value for money propositions.<sup>94</sup>

During their working life, most individuals will have experienced living standards around the minimum and moderate levels, so may not necessarily feel deprived if they achieve comparable standards of living in retirement. Those with higher incomes in their working life, or with higher aspirations in retirement, may be unhappy if they do not achieve a level closer to the comfortable measure. Each post-tax measure can be broadly categorised by the level of lifestyle it affords the recipient although in many cases people will have experienced, and will be happy with, a lifestyle between the levels.

PLSA - retirement living standards (post-tax)	Rest of the UK		London Weighting	
	Individual	Couple	Individual	Couple
Comfortable	£33,000	£47,500	£36,300	£49,300
Moderate	£20,200	£29,100	£24,100	£33,300
Minimum	£10,200	£15,700	£12,400	£19,800

93 Padley & Shepherd (PLSA) (2019)

94 Peaple *et. al.* (PLSA) (2018)

**Minimum:** A minimum standard of living in the UK today includes, but is more than just, food, clothes and shelter. It is about having what you need in order to have the opportunities and choices necessary to participate in society.

**Moderate:** A moderate standard of living in retirement in the UK is about more than just meeting your basic needs. It means being able to access a range of opportunities and choices, having a sense of security and the option to do some of the things that you would like to do.

**Comfortable:** A comfortable standard of living in retirement in the UK is about more than just meeting your basic needs; it is about having a broad range of opportunities and choices, peace of mind and the flexibility to do a lot of the things that you would like to do.

# Appendix Two: Modelling appendix

## Modelling overview

**Generations:** Individuals are assigned to generations based upon their year of birth:

- Baby Boomers, born 1946-1965
- Generation X, born 1966-1980
- Millennials, born 1981-2000

Analysis has been restricted to individuals who are aged at least 22 years old. This removes a number of Millennials, however there is inadequate employment data at younger ages than this as for those studying towards a degree.

**Overall risk score:** Individuals' circumstances are assessed using a number of criteria to derive a personal risk score which is applicable to them. This score represents the degree of risk to an individual's retirement outlook from the considered factors. The degree of risk has been bracketed such that one third of individuals in Generation X are deemed to be at higher risk, one third at medium risk and one third at lower risk. This defines threshold risk scores which are applied to all individuals in scope to label their relative risk status.

## Aggregation of risks: The overall risk score is an aggregation of:

- Income and assets risk, reflecting the accrual of wealth that may be used in retirement
- Draws on income risk, reflecting the risks of consumption to retirement income.

These two components are given equal weighting to an individual. All component risk scores have been standardised in the range [0, 1] using a normal distribution function. This allows them to be aggregated with externally derived weights based upon the relative importance of the indicators.

**Income and Assets:** Income and assets represents the risks to the accrual of wealth and pension entitlement that an individual may have in retirement. Three indicators are assessed, adequacy, sustainability and flexibility. These are weighted in aggregation:

- Adequacy: 50%
- Flexibility: 20%
- Sustainability: 30%

**Adequacy:** Adequacy risk is based upon the future rate of pension accumulation an individual would be required to make to meet an income target. The income targets are based upon the PLSA's Retirement Living Standard. An individual is assumed to be entitled to a full new State Pension (nSP) and further income in retirement must be met through private pension saving. The pension saving requirement to meet this income gap assumes that wealth is converted to income at retirement applying a factor of 3.5%. Private pension saving is calculated using the PPI's Individual Model. Current pension wealth is rolled forward to retirement growing at CPI + 4%.

Future income is projected from current income level and assumed to follow the pattern of median income by age (derived from the Labour Force Survey) allowing for future earnings inflation in line with OBR assumptions. The future pension contribution rate applicable to meet the retirement target is used to score adequacy risk. This is calculated at both an individual and household level and an individual is taken to be in the better of these two options. There is additional mitigation where an individual is currently a member of a Defined Benefit (DB) pension scheme and more likely to be making higher pension contributions.

**Sustainability:** Sustainability risk is based upon the proportion of income in retirement which is guaranteed to be paid throughout retirement; that is there is no risk that an income source may run out. Income derived from the State Pension or DB pension schemes are assumed to be sustainable, while DC savings are at risk of running out since pension flexibilities allows the drawing of pension wealth in any manner. An individual would be able to mitigate this risk through responsible drawing on DC pension savings.

**Flexibility:** Flexibility risk recognises the ability to draw upon income when it is needed. This is useful to combat the risk of consumption shocks. It is possible to hold wealth to mitigate this risk that may not otherwise be expected to be used as income. The risk is assessed based upon the proportion of wealth held at retirement that can be accessed in a flexible manner. This includes not only DC pension wealth and financial wealth but up to 60% of housing wealth which could potentially be accessed through some form of equity release.

**Draws on income:** Draws on income represents the consumption risks to wealth and pension entitlement that an individual may have in retirement. Three indicators are assessed, adequacy, sustainability and flexibility. These are weighted in aggregation:

- Adequacy: 50%
- Flexibility: 20%
- Sustainability: 30%

Draws on income risk assessment particularly reflects upon current levels of debt (including mortgage) as well as housing tenure and considers how these may lead to variation in consumption that may not otherwise directly impact living standards.

**Adequacy:** Adequacy risk recognises how draws upon income may impact future consumption levels. Where an individual is under a higher burden of debt, both financial or mortgage this used as a proxy for the potential needs to service debt later in life. The mortgage and financial debt is assessed using multiple metrics:

- The burden of debt assessed is self-rated as: a heavy burden / somewhat of a burden / not a burden at all;
- The scale of financial debt is assessed in relation to income;
- The scale of mortgage debt is assessed as a loan to value ratio.

Housing tenure is weighted with highest risk upon individuals who are renting and where the mortgage places a particular burden upon the individual and the mortgage may impede an ability to save for the future.

**Sustainability:** Sustainability risk recognises how the draw in income may change over retirement. This is based upon tenure and debt as above, however it is weighted to assume that mortgages will be paid off over time resulting in individuals owning houses outright. However particular risk is weighted on those to be renting as they will not have control of their housing costs.

**Flexibility:** Flexibility risk recognises how an individual may be able to alter their draws on income over retirement. Again this is based upon tenure and debt indicators as above, but weighted to these specific risks. The risk of renting is reduced as an individual will be more mobile than if they own their own home, this allows for some mitigation of rental costs. The risk of debt is also relatively reduced as there are options available to alternatively service debt.

## Data source

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

## The PPI's 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.

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

**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 from the Office for Budget Responsibility (OBR) projected figures. 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 (OBR EFO) (for short-term assumptions) and Fiscal Sustainability Report (FSR) (for long-term assumptions).

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

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

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

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

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

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

1. **The individual:** The individual to be modelled is specified based upon an earnings and career profile. Saving behaviour for private pension accumulation is considered, as well as the behaviour at retirement. These are generally parameterised according to the project in question, designed to create vignettes to highlight representative individuals of the groups under investigation.
2. **The policy options:** The policy option maps the pension framework in which the individual exists. It can accommodate the current system and alternatives derived through parameterisation. This allows flexing of the current system to

consider potential policy options to assess their impact upon individuals under investigation. This area has the scope to consider the build-up of pensions in their framework such as the automatic enrolment regulations for private pensions and the qualification for entitlement to state benefits. The framework in retirement allows for the tax treatment and decumulation options taken by the individual as well as other sources of State benefits which influence the post-retirement outcomes for individuals.

3. **Economic assumptions and scenarios:** The deterministic assumptions used in this analysis are 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.

# Glossary

**Active members:** Pension scheme members making current contributions.

**Additional State Pension:** Second tier public pension provision which allowed people to supplement their basic State Pension using Graduated Retirement Benefit (GRB: 1961 to 1975), State Earnings Related Pension Scheme (SERPS: 1978 to 2002) or State Second Pension (S2P: 2002 to 2016).

**Annuity:** A financial product that pays an income for a pre-determined period of time, generally from the date of purchase until the date of the annuitant's death.

**Automatic enrolment:** A policy requiring employers to enrol eligible employees into a workplace pension scheme. Employees have the right to opt out of the scheme. Employers (and usually employees) must pay at least a minimum level of contributions, on a band of earnings, into the scheme if the employee does not opt out.

**Basic State Pension (bSP):** Contributory public pension for people reaching State Pension age before 6<sup>th</sup> April 2016

**Baby Boomers:** People born between 1946 and 1965, and aged between 54 and 73 in 2019

**Contributions:** Money, often a percentage of salary, that is put into a pension scheme by members and/or their employer.

**Defined Benefit (DB):** an employee sponsored pension in which benefits are calculated based on years of contributions and salary (generally average or final salary).

**Defined Contribution (DC) Pension Scheme:** A trust-based or contract-based pension scheme that provides pension scheme benefits based on the contributions invested, the returns received on that investment (minus any charges incurred) and the way the savings are accessed.

**Dependency ratio:** A measure showing the number of dependants (the very young, and those over State Pension age) relative to the working age population.

**Drawdown:** A retirement income product which allows people to continue to invest their pension savings and receive investment returns while also drawing down an income.

**Freedom and Choice/pension flexibilities:**

Prior to April 2015, those with DC savings of a certain level were required to purchase a secure retirement income product in order to access their DC savings. The new pension flexibilities "Freedom and Choice" loosened restrictions so that those aged 55 and over may withdraw DC savings in any amount they like, taxed at their marginal rate, with 25% tax free.

**Generation X:** People born between 1966 and 1980, aged between 39 and 53 in 2019

**Healthy Life Expectancy (HLE):** An estimate of how many years an individual is expected to live without illness.

**Inflation:** A measure of the change in the general level of prices of goods and services.

**Member:** A general term for an individual who has built up entitlement in a pension scheme.

**Millennials:** People born between 1981 and 2000 and aged between 19 and 39 in 2019

**New State Pension (nSP):** A flat rate contributory public pension introduced in April 2016, designed to redistribute wealth across the population to provide all individuals with a minimum standard of living

**Pension Pot:** A general term for the amount of money accumulated for retirement.

**Private Pension:** Voluntary pension schemes generally provided through the workplace (also available to individuals directly through pension providers) and not directly funded by the state but encouraged by element of soft compulsion through system of automatic enrolment.

**State Pension:** The public pension provided by the UK Government to people from State Pension age with sufficient years of National Insurance entitlement.

**State Pension age (SPa):** The age when people can claim their State Pension. SPa is increasing and depends on an individual's birthdate. Currently increasing incrementally for men and women from age 65 to age 66 in a staged process until October 2020. Scheduled to increase to age 67 between 2026 and 2028.

**Triple lock:** Inflationary measure by which the value of the State Pension is increased each year by the greater of the increase in earnings, Consumer Prices Index or 2.5%.

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