OXFORD ECONOMICS

ROYAL LONDON

EXPLORING THE IMPLICATIONS OF HIGHER PENSION CONTRIBUTIONS IN THE UK

REPORT FOR ROYAL LONDON

FEBRUARY 2024

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FOREWORD

Foreword from Barry O'Dwyer, Group CEO, Royal London

Automatic enrolment is one of the most successful public policy innovations of modern times. Following decades of failed attempts, the move from 'opt in' to 'opt out' has transformed employee participation in workplace pensions, doubling take-up in the private sector in just a few years.

However, there is widespread acceptance that the policy remains unfinished business, with contribution rates well below where they need to be to secure a decent standard of living for most people in retirement. More than ten years on from the introduction of automatic enrolment, there is still no plan in place to address this.

Many commentators make the point that now isn't the time to be increasing pension contributions, when increases in the cost of living mean that employers and employees face many other financial challenges. However, this shouldn't stop us from considering a plan to improve people's longer-term financial wellbeing. After all, policies of this nature tend to progress over decades rather than years.

A baseline for driving discussion

We commissioned Oxford Economics to carry out research to examine some commonly held views, in order to provide a baseline study for driving discussion around the long-term approach to take.

For instance, it's easy to see that increasing pension contributions will, for most people, improve their retirement years. It's also clear, however, that paying more into pensions will affect what money people have to spend today. There is some fairly predictable short-term pain, for a longer-term gain.

Arguably, the impact on the economy of increasing pension contributions is just as significant a consideration. Pension schemes invest billions in UK companies, and all the major political parties are alive to the opportunities of building on this through more targeted investment, particularly in start-up ventures in sectors where the UK has renowned innovation capability. Equally, a more financially resilient retired population is likely to reduce reliance on state benefits, increase tax receipts, and improve spending in the real economy.

Moving towards an effective solution

The results of the research clearly show the short-term challenges, but also point to the long-term rewards—for everyone.

The modelling does not account for any further policy interventions from the government, other than implementing the recommendations of the 2017 automatic enrolment review, which are well advanced. As a result, the insights provide an opportunity to consider how downsides might be mitigated, or upsides increased.

For example, a government that is minded to reduce taxes for employers, employees, or both, could consider how this might be used, in part, to offset increased pension contributions. This could help address the argument that any increases would simply be seen as a tax on employment.

As is noted in this report, only 40% of employees are on track for a "moderate" standard of living when they retire, based on current savings levels and with the aforementioned policy interventions already in progress. I hope you find the analysis in this report provides an interesting and informative contribution to the debate about how we move towards a more adequate level of retirement savings.

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EXECUTIVE SUMMARY

UK HOUSEHOLDS CURRENTLY SAVE TOO LITTLE FOR RETIREMENT

Most private sector employees fail to save adequately for a moderate standard of living in retirement[1], despite the implementation of automatic enrolment and recent legislation to expand those in scope of this scheme. Our analysis indicates that only 40% of households with an individual pension in a defined contribution (DC) scheme are expected to possess the necessary savings for a moderate living standard in retirement by 2040.

Royal London commissioned Oxford Economics to evaluate the potential benefits of implementing reforms that could increase the mandated minimum contribution in private sector DC schemes. This study assesses the impact of reform options at the macroeconomic and household levels.

THREE SCENARIOS ARE MODELLED TO ASSESS THE IMPACT OF A RANGE OF POTENTIAL INCREASES TO THE MINIMUM PENSION CONTRIBUTION LEVEL

Under existing regulations for individuals enrolled in a DC scheme, a minimum contribution of 8% of their salary is required. Employers must pay a minimum of 3%, leaving the remaining portion to be covered by the employee. We have modelled three scenarios to highlight the range of potential impacts of reforms for those in a DC scheme:

- **Scenario 1:** employers raise contributions to 5%, resulting in the total minimum contribution level increasing to 10% (employees' contributions remain unchanged at 5%).
- **Scenario 2:** employers and employees increase contributions to 6%, leading to total minimum contributions of 12%.
- **Scenario 3:** employers and employees raise contributions to 7%, causing total minimum contributions to increase to 14%.

Our modelling introduces the changes from 2025, when the macroeconomic environment is expected to be more stable. This also enables us to assess the longer-term impact using Oxford Economics' global macroeconomic model. In addition, the changes are introduced gradually: employers and employers increase contributions by 0.5ppts each year in the scenarios.

THESE SCENARIOS RAISE PENSION CONTRIBUTIONS FOR A LARGE PROPORTION OF INDIVIDUALS IN A DC SCHEME

Our modelling finds that 65% of employees in a DC pension scheme are expected to see their total pension contributions increase in Scenario 1, underpinned by an increase in employer contributions in this scenario. In Scenario 2 and 3 this proportion rises further to 90% and 93%, respectively, consistent with the larger increase in the minimum contribution rate.

As shown in Fig. 1, we estimate that in the near term, the employer will bear most of the cost burden across the scenarios. In Scenario 1 the employer will bear the entire additional costs as the employee

[1] Based on PSLA Retirement Living Standards.

contributions remain unchanged. In Scenarios 2 and 3, both the employer and employee will need to increase their contributions to meet a minimum of 12% and 14%. Over time the burden of costs will reflect the extent to which employers pass on costs to employees in the form of lower wage and salary rises.

Fig. 1. Additional annual pension contributions by source for an average employee, 2023 prices[2]

Source of additional pension savings	Scenario 1: 10% contribution	Scenario 2: 12% contribution	Scenario 3: 14% contribution
Employer contribution	£325	£566	£828
Employee contribution	0	£292	£539
Income Tax Relief	0	£95	£175

Source: Oxford Economics, ONS

HIGHER PENSION CONTRIBUTIONS ARE EXPECTED TO RESULT IN STRONGER ECONOMIC GROWTH IN THE LONGER TERM UNDERPINNED BY LARGER BUSINESSES INVESTMENT

Increasing mandatory pension contributions is expected to impact the broader economy in the short and long term. The economic impact in each scenario is driven by four channels.

- **Wages and salaries:** increased employee retirement savings will reduce pay today and employers are expected to pass on costs to employees, further lowering wages and salaries.
- **Increased disposable income in retirement:** increased pension savings due to the reforms will result in higher disposable income for individuals when they retire in the future.
- **Private sector business investment impact:** higher employer and employee contributions will lead to more pension assets that can be used for investment in the UK.
- **Direct fiscal impact**: higher employee and employer contributions will cause wages and salaries and company profits to fall, reducing tax revenues for the government.

Over the 2025–2040 period, **disposable income** is between 0.1% and 0.4% lower than the baseline, depending on the scenario. The impact on disposable income is larger in the near term driven by increases in pension contributions reducing wages and salaries. The hit to disposable income starts to fade over the forecast period supported by higher pension incomes and stronger economic growth that result from the policy change.

Our modelling indicates that the **average annual investment** is between £60 million and £2.9 billion higher (in 2023 prices) than the baseline, depending on the scenario, over the 2025–2040 period. The investment impact grows over time, driven by the increase in pension assets available to UK businesses, which can support additional investment.

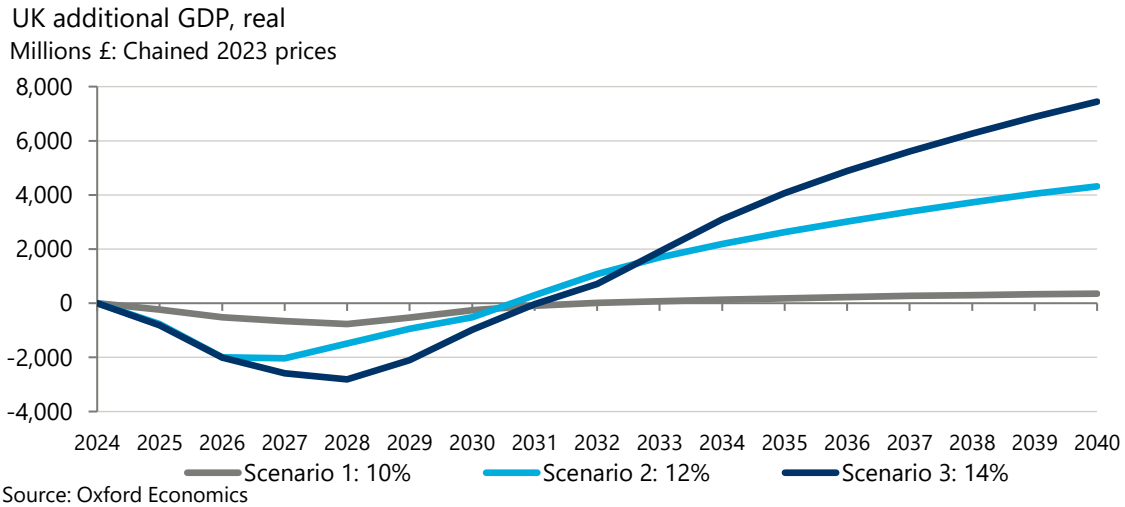
By 2040, GDP is higher than the baseline in all three scenarios as increased business investment boosts economic activity (Fig. 2). The GDP gains in Scenario 3 are the largest at £7.4 billion in 2040. This is to be expected as this scenario sees the highest increase in minimum contributions. However,

[2] Base figures derived using the WAS for the period Q2 2018-Q1 2020 and inflated using the change in CPI between 2019 and 2023 (OE forecast for 2023)

this will come at a short-run cost with GDP lower relative to the baseline across all three scenarios in the short term as the positive benefits of additional investment take time to offset lower disposable income.

Our modelling estimates that over the 2025–2040 period, **average annual GDP** is expected to be £2.6 billion higher in 2023 prices than the baseline in Scenario 3 and £1.6 billion higher in Scenario 2. Between 2025 and 2040, average annual GDP is expected to be largely unchanged in Scenario 1 as the increase in the long run is offset by the fall in the short run.

Fig. 2. Impact on UK GDP, 2023 prices



Source: Oxford Economics

Our analysis suggests that the average annual reduction in **government revenues**, over the 2025–2040 period, ranges from £500 million to £2.9 billion (in 2023 prices) depending on the scenario. This is driven by the direct impact on tax revenues of increased pension contributions reducing wages and salaries, and companies' profits outweighing the fiscal gains from stronger economic growth. The fiscal impact is largest in the short to medium term driven directly by the falls in income that result from increased contributions and amplified by lower GDP. As the impact of the policy on GDP turns positive in the medium to long term, the magnitude of the fiscal cost reduces.

HIGHER PENSION CONTRIBUTIONS ARE EXPECTED TO INCREASE THE LIVING STANDARD FOR RETIREES, BUT MAY NOT BE AFFORDABLE FOR POORER HOUSEHOLDS

Raising pension contributions improves the adequacy of individuals' retirement savings, but it also imposes an extra financial strain on households before retirement.

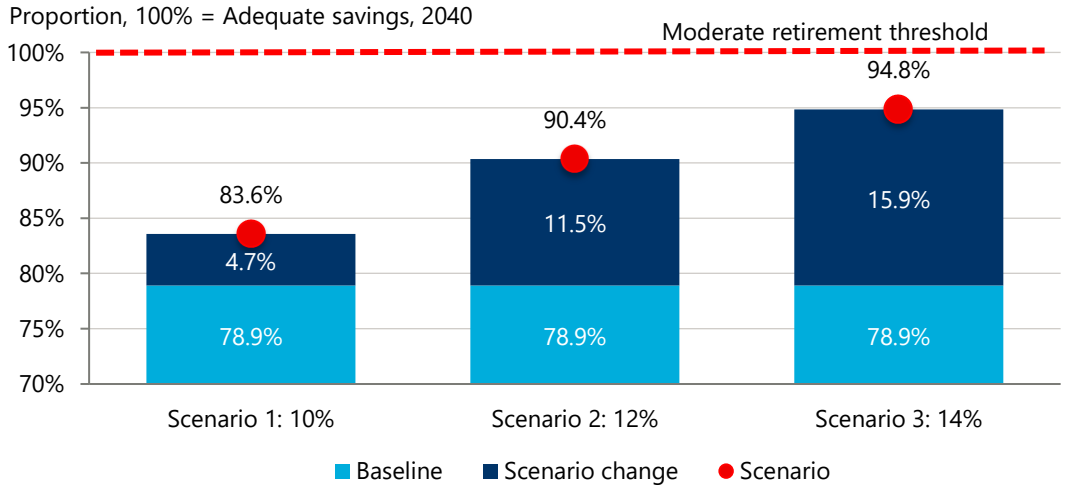
In the baseline scenario, only 40.4% of households with an individual in a DC scheme are expected to be on track to reach the required pension savings for a moderate living standard in retirement. The household-specific pension savings threshold is based on the Pensions and Lifetime Savings Association's (PLSA) estimate of the income required to provide an individual with a comfortable yet not extravagant lifestyle after their working years. An unequal pattern is found when assessing pension adequacy across household income quintiles. The median household in the lowest quintile only has 42.0% of the savings required for a moderate retirement, while the median household in the top two income quintiles exceeds the threshold required for a moderate retirement. The median for

the combined Millennial & Gen Z household and Gen X households are both below this threshold, though the median Gen X household is closer to this threshold, possessing 87.1% of the required pension savings while this is 72.5% for the combined Millennial & Gen Z household.

In each of **the reform scenarios**, there are improvements in both the level of pension savings for the median household relative to the threshold for a moderate retirement and the proportion of households exceeding the threshold.

In Scenario 3, the **proportion of pension savings relative to the moderate retirement threshold held by the median household** rises by 15.9ppts to 94.8% of the threshold for a moderate retirement. In Scenarios 1 and 2, the increases are smaller with the proportion of savings relative to the threshold rising by 4.7ppts and 11.5ppts respectively (Fig. 3).

Fig. 3. Changes in the savings adequacy of pensions in the median household across the scenarios



Source: Oxford Economics

Similarly, the **proportion of households who are on track to reach the moderate retirement threshold** in 2040 increases in each scenario. In Scenario 3, the proportion of households reaching the threshold increases by 6.8ppts from 40.4% to 47.2%. This increase is smaller for Scenarios 1 and 2 with the increase in the proportion of households reaching the threshold rising by 1.3ppts and 4.5ppts respectively.

Higher income households experience the most substantial gains, given their higher earnings but increased contributions still help to increase pension savings among those in the lower income quintiles. In Scenario 3 the lowest quintile sees their pension savings adequacy relative to the moderate retirement threshold rise by between 2.5ppts and 9.1ppts depending on the scenario.

In each scenario, both **Gen X and Millennials & Gen Z** (combined) see improvements in their pension savings compared to the threshold required for a moderate retirement. However, Millennials & Gen Z see the largest rise with the gap to the threshold for the median household in this group nearly closing in Scenario 3. This underscores the potential improvement households can experience by increasing their pension contributions at a younger age, underpinned by the compounding effect of investments.

However, higher pension contributions will be an **additional financial burden on households before retirement** which may put financial pressure on some households. Employees will need to pay for any employee contribution increase as well as any additional costs passed on by employers in the form of lower wage rises. Our finding suggests this may be a particular problem for those in the lowest quintile as the higher annual contribution in Scenario 3 equates to just over 11% of their easy-to-access savings, over three times the average. Furthermore, just over one in 10 households in the lowest quintile are expected to have less than £100 in easy-to-access savings when the policy is introduced by our modelling in 2025. In Scenario 1, the financial burden is significantly less than Scenario 2 and 3 as the employer raises their pension contributions. Therefore, while it provides smaller benefits for the poorer households, Scenario 1 may provide them with a better overall outcome as the financial cost in the short term is more limited and they will see an improvement in the longer term.

CAREFUL POLICY DESIGN IS NEEDED TO REALISE THE BENEFITS OF INCREASING PENSION CONTRIBUTIONS AND MITIGATE AFFORDABILITY CHALLENGES FOR POORER HOUSEHOLDS

Our modelling finds that only 40% of households with an individual in a DC scheme are expected to have the required savings for a moderate living standard in retirement in 2040. We illustrate that higher pension contributions could lead to a larger pool of assets available to invest in UK businesses **boosting economic growth**. It also results in an **improvement in the adequacy of pension savings** and leads to higher disposable income for households upon retirement. This could potentially alleviate the associated burden on the State of supporting those who have not saved enough for retirement.

However, **higher minimum pension contributions come with trade-offs**. Poorer households, with limited accessible savings, may find it challenging to afford increased pension contributions. A modest raise in the minimum contribution lessens the financial strain on these households, but it provides the smallest benefit in terms of overall economic growth and pension adequacy improvement. Affordability is less of an issue for those on higher incomes as they can afford to increase their pension contributions and will benefit from the longer-term gains.

This shows the delicate **balance involved in raising pension contributions** and suggests that a blunt solution such as a uniform increase in pension contributions for all individuals may not be appropriate. Indeed, the PSLA indicates that the state pension largely covers the amount required for a minimum standard of living in retirement. Therefore, a more carefully designed policy, which pays particular focus to addressing affordability issues for the poorest households, could help to ensure pension contribution reforms broadly achieve their objective (a higher overall rate of pension saving)—without creating short-term liquidity pressures for the poorest households.

1. BACKGROUND

OVERVIEW OF THE DEFINED CONTRIBUTION PENSION LANDSCAPE

The proportion of employees with pension contributions in the UK has been historically low, and was on a downward trend since the 1980s, underpinned by a significant fall in defined benefit (DB) schemes[3]. The 2008 Pension Act aimed to address this issue by reducing the number of people not saving, or saving too little, for retirement. A key feature of these reforms was automatic enrolment, which requires employers to automatically enrol all employees who met a set of criteria into a pension scheme. Minimum contributions required by employers and employees were phased in, reaching 8% of pensionable earnings in 2019. A minimum of 3% is required by the employer, while the remainder must be contributed by the employee[4].

Automatic enrolment has led to a significant increase in the total membership of defined contribution (DC) pension schemes[5]. There were 12.9 million members of DC schemes in 2021[6] compared to only 0.9 million in 2011[7]. Private sector pension contributions have also increased in real terms across all occupations[8]. This has successfully reversed the downward trend in workplace pension savings seen prior to the reform[9].

Despite the 2008 reforms, concerns remain that many workers in the UK are still significantly under-saving for retirement. The UK government has, in part, recognised the need to go further, having recently legislated to reduce the automatic enrolment age limit and to remove the lower limit on the "qualifying earnings band" so that contributions are paid from the first pound earned. However, there is now a growing consensus that the minimum contribution requirement must increase, with the Pensions and Lifetime Savings Association (PSLA) arguing it should be increased to at least 12%[10]. Indeed, several other developed countries, such as Australia, Canada, and Denmark, have already mandated increases to their minimum pension contribution levels.

BENEFITS OF INCREASING MINIMUM CONTRIBUTION LEVELS

Most private sector employees do not save enough to ensure a reasonable standard of living in retirement. We estimate that in 2040 only 40% of households with an individual in a DC scheme are expected to have the required savings for a moderate living standard[11] in retirement. This is even after accounting for the expected changes to the automatic enrolment age and qualifying earnings band.

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[3] Defined Benefit pension schemes, House of Commons Library, 2009

[4] Part of this contribution comes in the form of a tax relief from the government.

[5] A defined contribution scheme is a retirement savings plan where both employers and employees regularly contribute predetermined amounts to an individual's pension account, with the eventual pension pay-out determined by the accumulated contributions and investment returns.

[6] ASHE 2021 including those on a DC and group pension scheme.

[7] Occupational Pensions Schemes Survey, ONS 2011

[8] Ten years of Automatic Enrolment in Workplace Pensions: statistics and analysis, DWP, 2022

[9] Pensions: automatic enrolment - current issues, House of Commons Library, 2023

[10] Five Steps to Better Pensions, PLSA 2022

[11] Based on the PLSA estimate of a moderate income in retirement.

Retirement planning is difficult and economic literature suggests that short-sighted decision making ("myopia") often prevents individuals from making adequate pension contributions. This is partly driven by a status quo bias, a preference to maintain their current situation rather than to make changes, which leads individuals to stick with default options. In many cases, this may mean the current minimum contribution rates. However, it is important to note that for some individuals, under-saving for retirement is simply the result of their lower income and a lack of easy-to-access savings.

Higher pension contributions will also increase the pool of pension assets available for UK investment. This aligns with the recent Mansion House Reforms, which show the government is interested in boosting investment in businesses using pension assets[12].

AIM AND STRUCTURE OF THIS REPORT

In this context, Royal London commissioned Oxford Economics to assess the potential benefits of reforms to private-sector pension schemes that increase the mandated contribution. In this report three different reform scenarios are considered:

- **Scenario 1:** employers raise contributions to 5%, resulting in the total minimum contribution level increasing to 10% (employees' contributions remain unchanged at 5%).
- **Scenario 2:** employers and employees increase contributions to 6%, leading to total minimum contributions of 12%.
- **Scenario 3:** employers and employees raise contributions to 7%, causing total minimum contributions to increase to 14%.

This report assesses the impact at both the whole economy and household level to provide a holistic view of the economic impacts of each policy reform option. The report is structured as follows:

- **Chapter 2:** identifies who is impacted by higher pension contributions and analyses how much their contributions will increase.
- **Chapter 3:** estimates scenarios' impact on key macroeconomic indicators using Oxford Economics' Global Economic Model. This model provides a rigorous and consistent structure for testing country-specific policy scenarios.
- **Chapter 4:** assesses the change in pension adequacy at the household level and the affordability of higher pension contributions.
- **Appendix:** presents the construction of the underlying dataset along with a discussion of the assumptions used in the modelling.

[12] Chancellor's Mansion House Reforms.

2. MODELLING WHO IS IMPACTED

An increase to the minimum pension contribution will impact a large proportion of employees in DC schemes. Employees will be impacted if the increase results in either their own or their employer's contribution rising. This section outlines the dataset used in the analysis and the policy reform scenarios assessed in the report, and provides estimates of the proportion of employees in DC schemes that will be affected in each scenario.

DATASET USED

A bespoke dataset underpinned by the Wealth and Assets Survey (WAS) is used to build a baseline against which we model the impact of a change in pension contributions. The WAS is a household survey with detailed information on individuals' savings and pensions, including pension contributions from both employer and employee by type of scheme, making it highly suitable for this analysis.

The WAS has been adjusted to account for two private pension reforms which have not yet been implemented. The Pensions Act 2023 reduces the age of automatic enrolment to 18 and removes the lower bound on qualifying earnings. We assume these policies are introduced in the baseline used in this analysis which starts in 2025; higher contribution estimates are considered against this baseline.

These reforms increase the number of individuals in DC schemes; with the impact growing as the minimum contribution increases. Including these adjustments, we estimate there are currently 13.5 million individuals who have a DC pension[13]. Further details on this calculation and the other adjustments made to the WAS dataset can be found in the Appendix.

SCENARIO ASSESSED

Under the existing regulations for individuals enrolled in a DC scheme, a minimum contribution of 8% of their salary is required. Employers must pay a minimum of 3%, leaving the remaining portion to be covered by the employee to ensure the 8% minimum contribution is met. We have modelled three scenarios to highlight the impact of a range of potential reforms to the minimum contribution level which are outlined in Fig. 4.

Fig. 4. Pension contribution scenarios modelled

Scenario	Total contribution	Employer contribution	Employee contribution
Baseline	8%	3%	5%
Scenario 1	10%	5%	5%
Scenario 2	12%	6%	6%
Scenario 3	14%	7%	7%

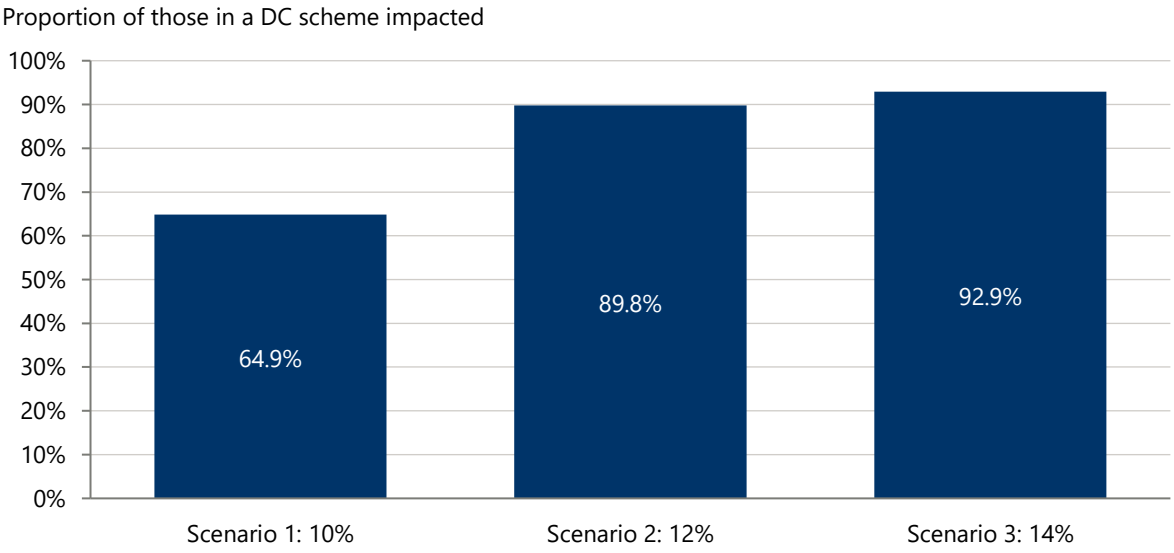
Source: Oxford Economics

[13] Based on the total number of employees in a DC scheme in ASHE 2021 (12.9 million) plus 0.5 million 18-21 year olds who are expected to be automatically enrolled upon the expansion of the scheme.

Our modelling introduces the increases in 2025 when the macroeconomic environment is expected to be more stable and to enable us to assess the longer-term impact using Oxford Economics' global macroeconomic model. Contributions in each scenario are then introduced gradually, by 0.5ppts each year up to the minimum contribution level in each scenario. This mirrors the slow increase adopted in both Australia and Canada. This approach is expected to mitigate the risk of potential affordability issues and give both the employer and employee time to adapt their finances.

As shown in Fig. 5, 64.9% of employees in a DC scheme are expected to see their pension contributions increase due to the higher employer contribution requirement in Scenario 1; this means 8.7 million employees are expected to be impacted[14]. This rises in Scenarios 2 and 3 as the minimum contribution for both employers and employees increase. In Scenario 2, 89.8% of individuals are impacted and this increases by 3.1ppts in Scenario 3 to 92.9%. This is expected to impact 12.1 million employees in Scenario 2 and 12.5 million employees in Scenario 3.

Fig. 5. Proportion of individuals with a DC scheme impacted, by each scenario



Source: Oxford Economics, ONS

Illustrative estimates of the additional pension contributions (assuming the reforms take full effect immediately) made by employees and employers in each scenario are shown in Fig. 6. This captures the variation in the mandated contributions made by employers and employees across the scenarios, as well as the income tax relief that employees will benefit from where their contributions increase[15]. However, it does not reflect any reduction in wages and salaries that result from employers passing their costs on to employees in the form of lower wage rises.

In Scenario 1, the employer will shoulder the full additional cost as their minimum contribution increases from 3% to 5%, while the employee's contribution remains unchanged at 5%. In Scenarios 2 and 3, both the employer and employee will be required to increase their contribution to provide a

[14] An individual will only be impacted by these reforms if their own contribution increases (employee contribution) or if their employer's contribution increases.
[15] The additional amount the employee contributes is tax-free but would otherwise have been subject to income tax.

minimum of 12% and 14% contribution. The employer will shoulder a substantial portion, covering 54% or more of the additional contributions in Scenarios 2 and 3, while the employee covers roughly a third, and the remainder comes from income tax relief.

Fig. 6. Additional annual pension contributions by source for an average employee, 2023 prices[16]

Source of additional pension savings	Scenario 1: 10% contribution	Scenario 2: 12% contribution	Scenario 3: 14% contribution
Employer contribution	£325	£566	£828
Employee contribution	0	£292	£539
Income Tax Relief	0	£95	£175

Source: Oxford Economics, ONS

[16] Base figures derived using the WAS for the period Q2 2018-Q1 2020 and inflated using the change in CPI between 2019 and 2023 (OE forecast for 2023)

3. MACROECONOMIC IMPACT

Increasing the mandatory minimum pension contribution is expected to impact the broader economy in the short and long term. In this section, we describe the mechanisms by which these changes might take place and quantify the impact on the key macroeconomic and fiscal indicators.

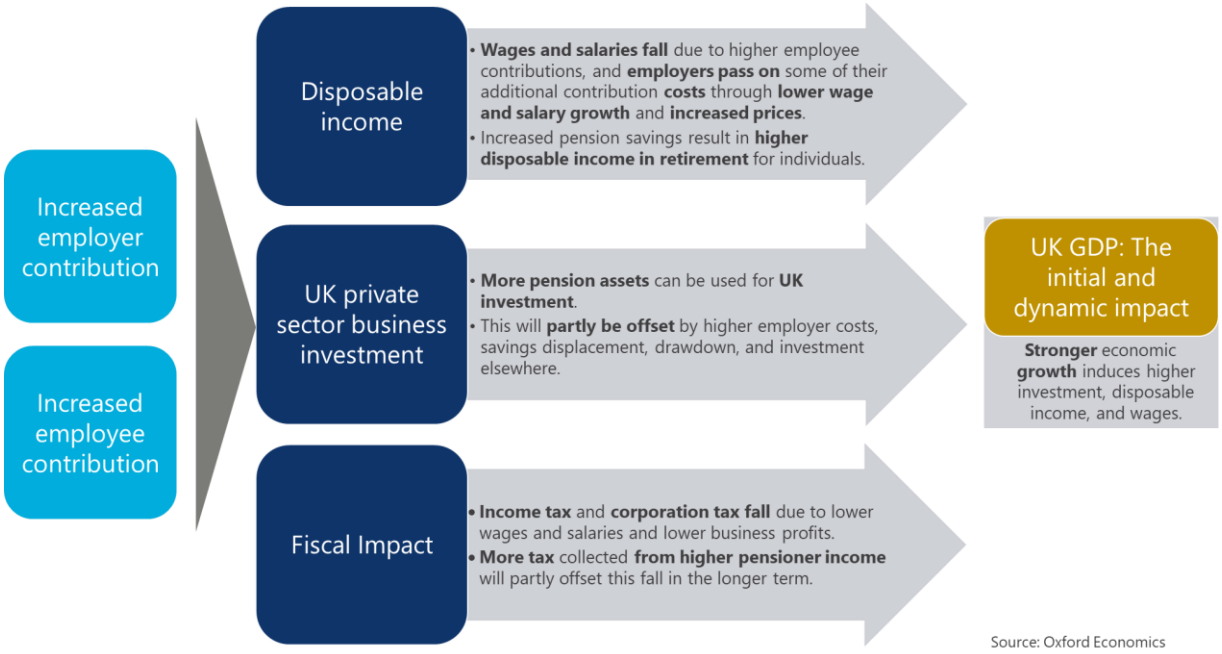
APPROACH

To assess the impact on the wider economy in each scenario, the aggregate impact is calculated by multiplying the average contribution increase by the total number of individuals impacted. The impact of the policy is based on a 0.5pp increase in employer and employee contribution rate each year. There are four channels through which higher pension contributions impact the economy in our analysis:

- **Wages and salaries impact:** the reforms will have a direct impact on wages and salaries as increased employee retirement savings will reduce take-home pay today. In addition to this, employers are expected to pass on some of the additional contribution costs they face to employees further lowering wages and salaries in the future. These impacts will in part be cushioned due to tax relief on employees' lower take-home pay, and the tax efficiency of pension contributions for employers.
- **Increased disposable income in retirement:** increased pension savings due to the reforms will result in higher disposable income for individuals when they retire in the future.
- **Private sector business investment impact:** higher employer and employee contributions will lead to more pension assets that can be used for investment in the UK. Once higher employer cost, savings displacement, and asset drawdown are considered, over a quarter of the remaining available pension assets are invested in UK private business with the remaining amount invested in government bonds and abroad.
- **Direct fiscal impact**: higher employee contributions will cause wages and salaries to fall, reducing the income tax collected by the government. Furthermore, higher employer contributions will lower business profit and corporation tax paid. More tax collected from higher pensioner income will partly offset the fall in the longer term.

The improvement in GDP will be determined by the dynamics between these channels. Fig. 7 illustrates the mechanisms through which increased pension contributions impact GDP. More details on the assumptions used can be found in the Appendix.

Fig. 7. How increased pension contributions ripple through the economy



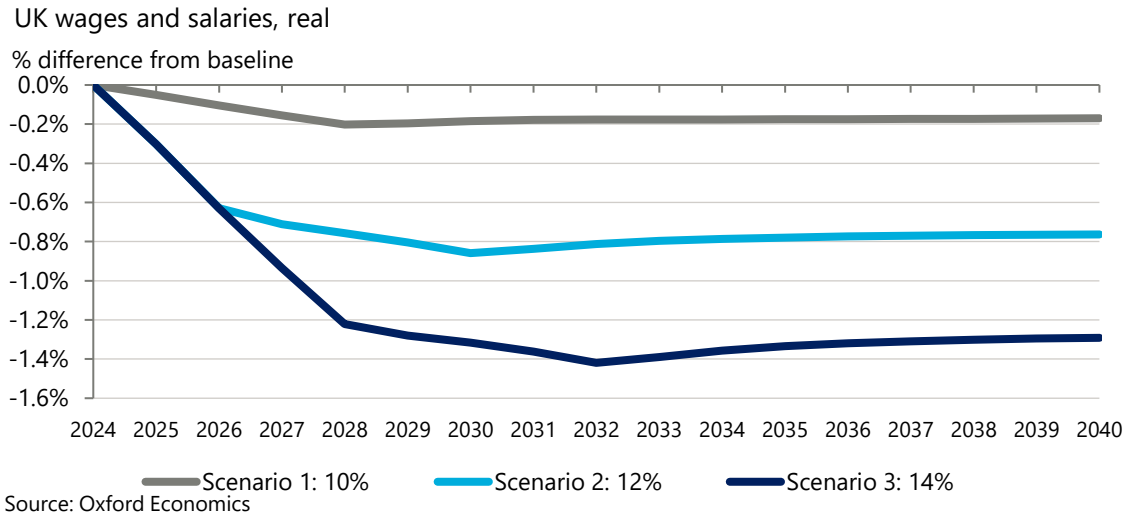
SCENARIO RESULTS

The following results focus on the four key macroeconomic variables affected by the policy change (wages and salaries, disposable income, business investment, and GDP), as well as the fiscal impacts that result. Our analysis accounts for both the direct policy impacts as well as second-round effects (e.g., higher GDP from increased investment leading to higher household disposable income).

Wages and salaries fall in the short to medium term, but begin to recover in the longer run boosted by stronger economic growth

As shown in Fig. 8, our modelling indicates that overall wages and salaries fall in comparison to the baseline in the short to medium term leading to slower wage growth. In the long run, wages and salaries begin to recover towards the baseline, supported by heightened economic activity due to the investment boost from the increase in assets held in pension funds. Scenario 3 sees the largest fall in wages and salaries as it mandates the largest increase in pension contributions. In this scenario, wages and salaries are expected to be on average 1.2% lower compared to the baseline in 2040. The fall is lower in Scenarios 1 and 2 with wages and salaries on average 0.2% and 0.7% lower compared to the baseline respectively in 2024.

Fig. 8. Impact on total wages and salaries, % difference from baseline

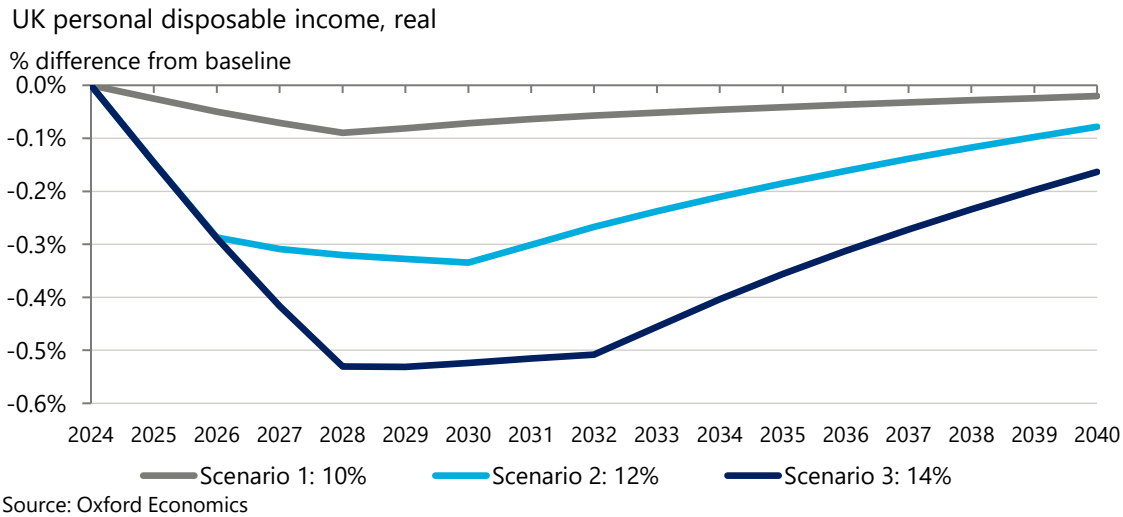


Source: Oxford Economics

While disposable income is lower than the baseline on average, an increase in pension incomes and stronger economic growth largely offset the initial fall in the longer term

The disposable income impact combines the impact of wages and salaries, together with the boost to pensioner income. As shown in Fig. 9, the results indicate household incomes are below the baseline due to lower wages and salaries compared to the baseline. However, this effect is partially mitigated by an increase in pension incomes and stronger economic growth from increased investment in the longer term. Over the 2025–2040 period, disposable income is between 0.1% and 0.4% lower than the baseline, depending on the scenario. Beyond the forecast period, pensioner income is expected to continue to improve and eventually outweigh the fall in wages and salaries.

Fig. 9. Impact on household disposable income, % difference from baseline



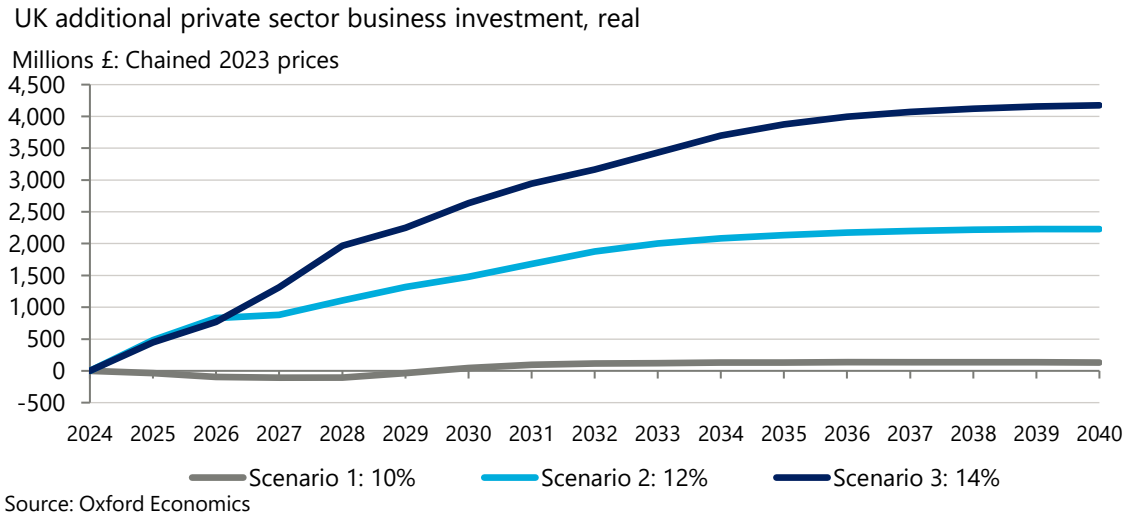
Source: Oxford Economics

Investment is boosted by higher pension contributions

Increasing pension contributions boosts the level of funds available to UK businesses, which can support additional business investment (Fig. 10). In our analysis, the uplift in investment builds as the overall rate of contributions increases. In the long run, the effect stabilises as more pensioners start drawing down their assets for retirement income resulting in the increase in availability of these assets for business investment stabilising over time.

The impact of increased employer contributions on investment is somewhat offset by higher business costs. In addition, lower personal disposable income is expected to cause economic weakness in the short run and weigh on investment. While pension assets available for UK investment are higher in Scenario 1, the economic weakness in the short run causes overall business investment to fall. However, this is expected to reverse by 2030 and investment is higher than the baseline after this period. Over the 2025–2040 period, our modelling indicates that the average annual increase investment is between £60 million and £2.9 billion higher in 2023 prices, depending on the scenario.

Fig. 10. Impact on private sector business investment, 2023 prices



Source: Oxford Economics

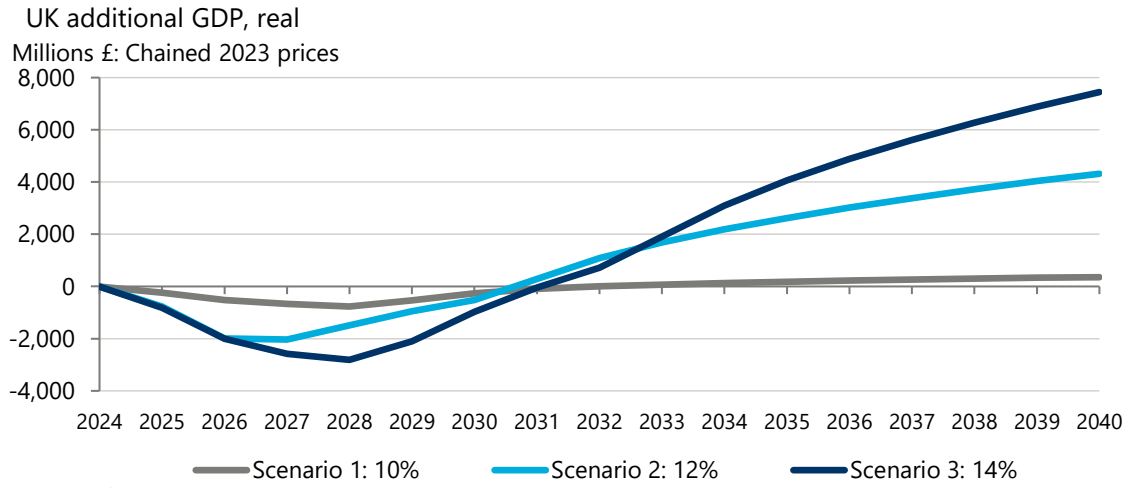
GDP improves in the longer term supported by increased business investment

Increased contributions are associated with lower wages and lower disposable income. This reduces household spending; the reduced demand has a negative impact on GDP, especially in the short term. However, the higher contributions are also associated with higher business investment, which boosts economic activity, leading to higher GDP over time. As shown in Fig. 11, increasing pension contributions results in lower GDP relative to the baseline across all three scenarios in the short to medium term. However, the GDP impact is positive beyond 2031 in all three scenarios underpinned by a higher rate of investment. Furthermore, these trends are expected to continue beyond the forecast period indicating a continued improvement in GDP across all scenarios.

Our modelling estimates that over the period 2025–2040, average annual GDP is expected to be £2.6 billion higher in 2023 prices than the baseline in Scenario 3 while this falls to £1.6 billion in Scenario 2. Between 2025 and 2040, GDP is expected to be on average lower in Scenario 1 by £75 million. However, this average masks the expected improvement in the long term. Indeed, in 2040, GDP is

estimated to be £350 million higher than the baseline and is expected to remain above the baseline beyond the forecasting period.

Fig. 11. Impact on UK GDP, £, 2023 prices

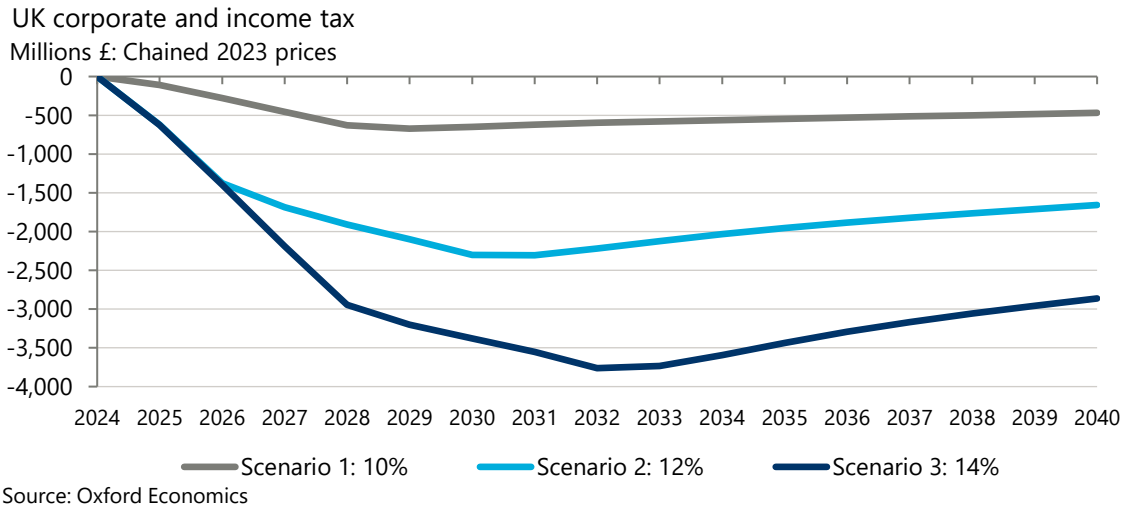


Source: Oxford Economics

Government revenues are lower due to a reduction in employees' wages and companies' profits

The falls in employees' wages and companies' profits are expected to reduce income tax and corporation tax paid to the government. In addition, lower GDP will reduce the total amount of tax collected in the short run but improves it in the medium to long term when the policy impact on GDP turns positive and taxable pensioner income rises. As shown in Fig. 12, between 2025 and 2040, our analysis suggests that the average annual reduction in UK income and corporation tax ranges from £500 million to £2.9 billion in 2023 prices, depending on the scenario. The improvement is expected to continue beyond the forecast period, underpinned by higher economic growth.

Fig. 12. Impact on UK income and corporation tax, £, 2023 prices



Source: Oxford Economics

4. IMPACT AT THE HOUSEHOLD LEVEL

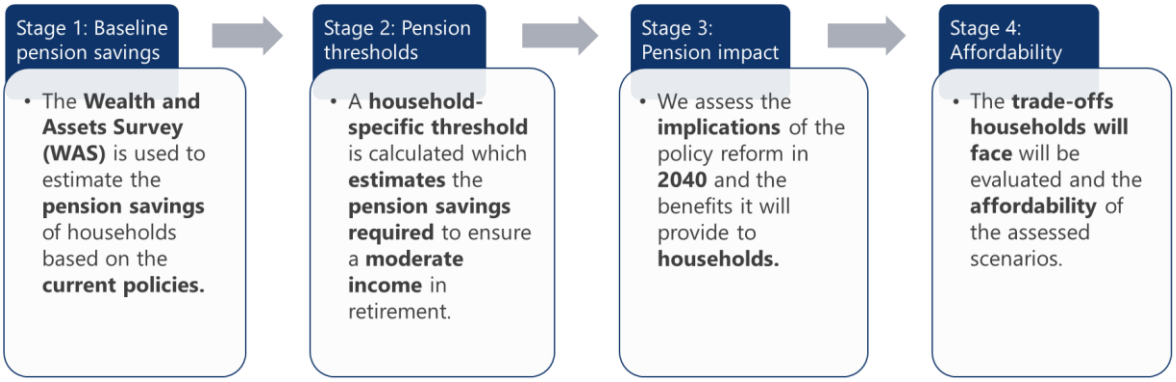
Increasing pension contributions enhances the sufficiency of retirement savings for individuals. However, it also introduces an additional financial burden on households before retirement. The following section first investigates the current adequacy of household pension savings in the UK. It then assesses the impact of each reform scenario on pension adequacy and the affordability of increased contributions.

APPROACH

The WAS underpins the household level analysis to ensure consistency with the wider economy findings. Pension adequacy should be assessed at the household level as individuals pool resources. As the policy change occurs at the individual level, we have aggregated the individual impact to the household level. The policy change is then introduced in 2025 and the impact of the scenarios is assessed in 2040.

To evaluate the impact on pensions, a pension adequacy threshold is calculated for each household based on the PLSA's estimate of a moderate income in retirement. This threshold is then used to demonstrate the impact of each reform. In addition, we assess the policy impact on the sufficiency of easy-to-access savings[17] to understand potential affordability challenges. As shown in Fig. 13, the impact at the household level has been estimated in four stages:

Fig. 13. Methodology overview



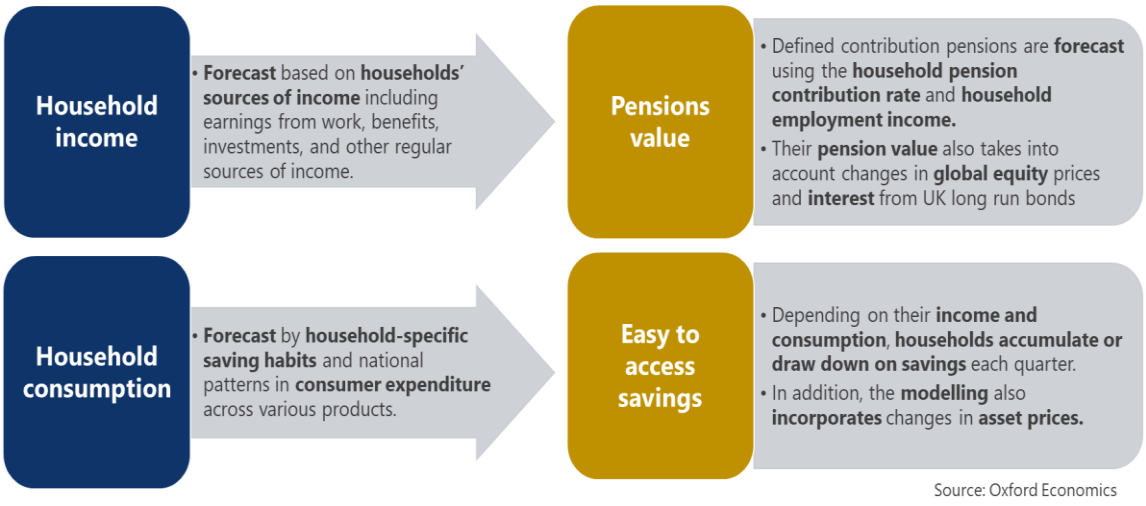
Source: Oxford Economics

Baseline pension savings

The latest WAS is based on interviews conducted between 2018 and 2020. We have forecast pension savings and easy-to-access savings out to 2040 using a wide range of macroeconomic data, and other survey information, as well as Oxford Economics' Global Economic Model (GEM). As shown in Fig. 14, households' pensions and easy-to-access savings are underpinned by forecasts of household income and consumption. For more details see the appendix.

[17] Easy-to-access savings include current accounts, joint accounts, cash ISAs, savings accounts, and national savings products.

Fig. 14. Baseline forecast



Source: Oxford Economics

Pension saving adequacy

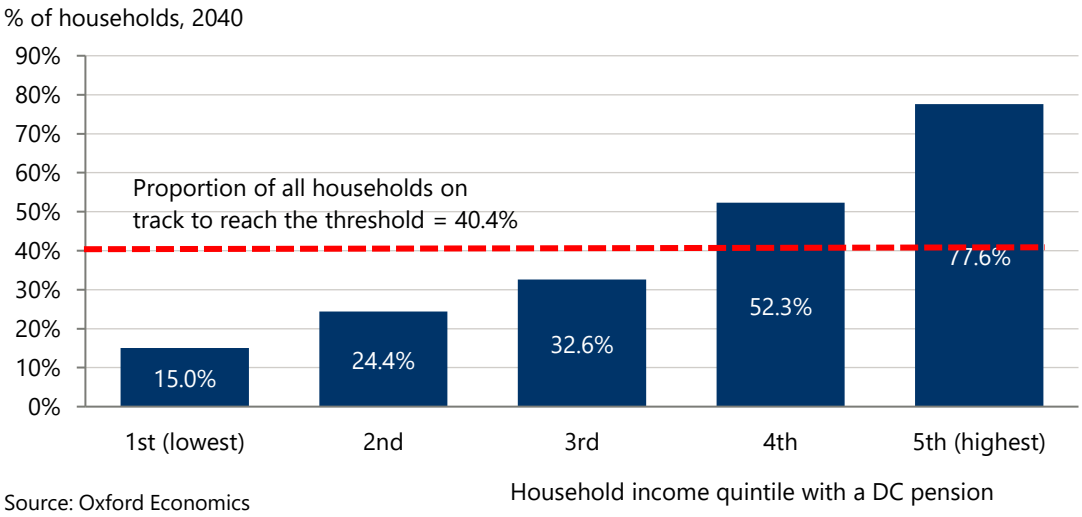
To assess the adequacy of a household's pension, a threshold has been developed that calculates the pension savings required, at each age, to ensure a moderate living standard during retirement. This age-specific threshold has been forecast out to 2040 and combines the PLSA's estimate of the income required to provide an individual with a comfortable lifestyle in retirement with a range of assumptions on lifetime earnings, pension drawdown, the return on pension assets and expected changes to the pension system. Further details on the assumptions that underpin these thresholds can be found in the annex.

IN THE BASELINE, MANY HOUSEHOLDS SAVE TOO LITTLE FOR RETIREMENT

In the baseline, only 40.4% of households with an individual in a DC scheme are expected to be on track to reach the required savings for a moderate living standard in retirement, in 2040. This is despite the recent reforms proposed that lower the automatic enrolment age to 18 and remove earnings requirements on pension provision. As shown in Fig. 15, a large proportion of higher income households are expected to have reached the required savings with nearly eight out of 10 households in the fifth income quintile on track to reach the threshold[18]. In comparison, fewer than one in seven of the lowest quintile are on track to reach the thresholds, significantly below the average.

[18] Quintiles are based on only those with a DC pension.

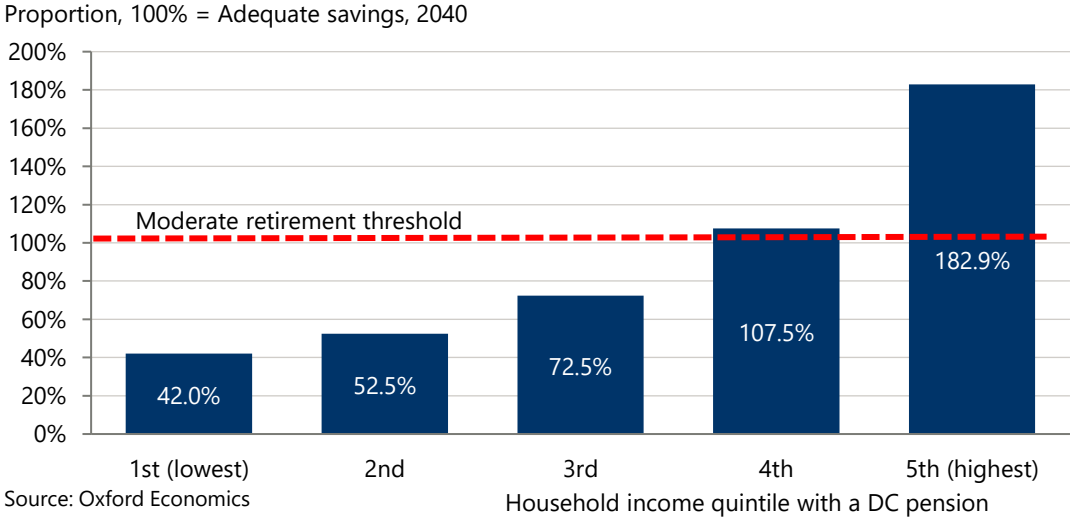
Fig. 15. Percentage of households by income quintile who are on track to reach the threshold, 2040[19]



Source: Oxford Economics

A similarly unequal pattern is found when assessing the median pension adequacy, relative to the threshold, across income quintiles. As shown in Fig. 16, the median household in the first income quintile only has 42.0% of the pension savings required for a moderate retirement, while the median household in the top two higher income quintiles is above the threshold.

Fig. 16. Proportion of pension savings compared to the threshold by median household income quintile, 2040



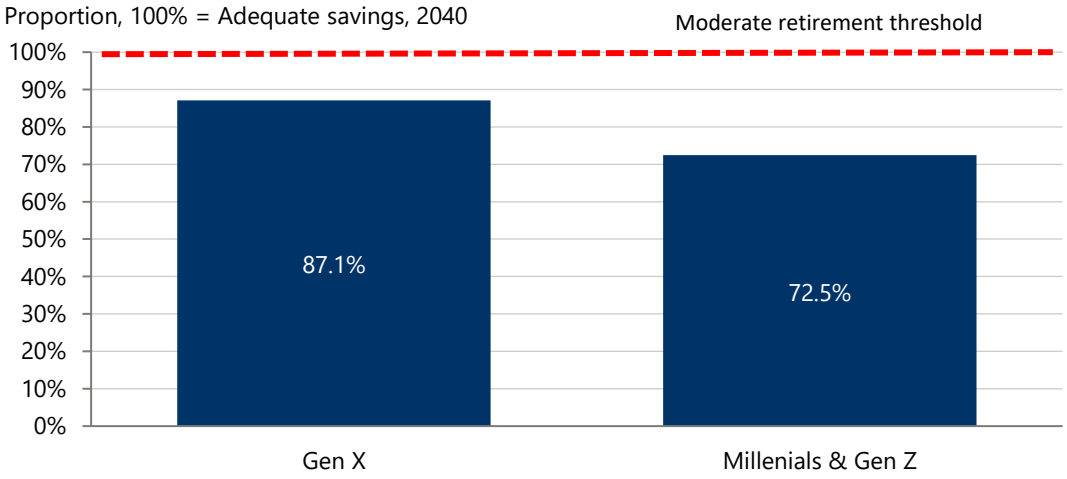
Source: Oxford Economics

As shown in Fig. 17, pension savings of both the median Gen X household and median Millennials & Gen Z household are lower than the threshold—indicating they are under-saving for retirement. The median Gen X household is closest to the threshold, with 87.1% of the required savings. Conversely, the median Millennials & Gen Z household fairs worse and only has three-quarters of the required

[19] Quintiles are based on only those with a DC pension.

pension savings (Fig. 17). This has translated into fewer Millennials & Gen Z households reaching the required threshold compared to Gen X households. Indeed, only 44.3% of Gen X households have reached the pension savings threshold while this is 35.6% of Millennials & Gen Z households.

Fig. 17. Proportion of pension savings compared to the threshold by median household in generation base groups, 2040

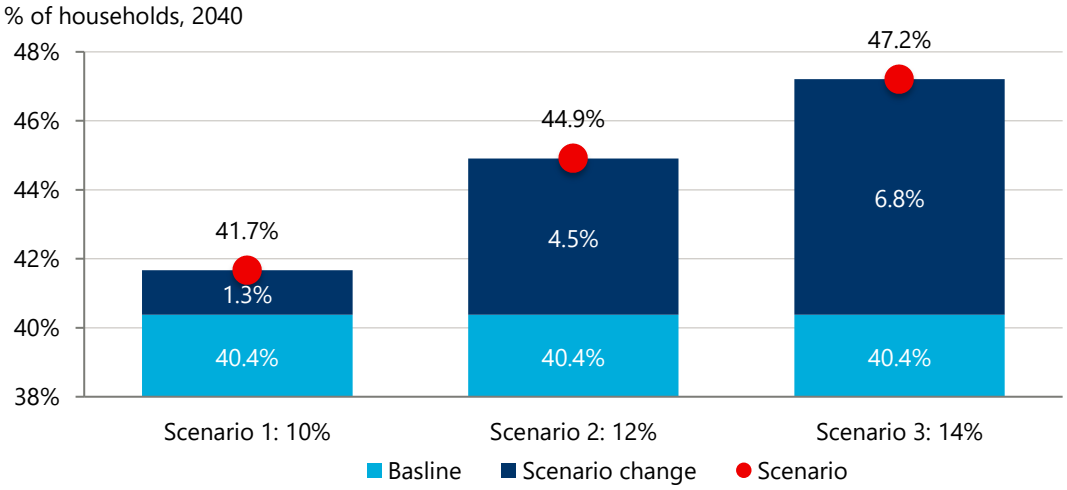


Source: Oxford Economics

ALL HOUSEHOLDS SEE AN IMPROVEMENT IN THEIR PENSION SAVINGS ADEQUACY WHEN THE MINIMUM PENSION CONTRIBUTIONS ARE INCREASED

By 2040, higher pension contributions increase the pension savings adequacy for all households. As expected, Fig. 18 shows a larger increase in the pension contribution leads to the biggest improvement. In Scenario 3, the proportion of households reaching the threshold has risen by 6.8ppts from the baseline of 40.4% to 47.2%. This increase is smaller for Scenarios 1 and 2 with the increase in the proportion of households reaching the threshold rising by 1.3ppts and 4.5ppts.

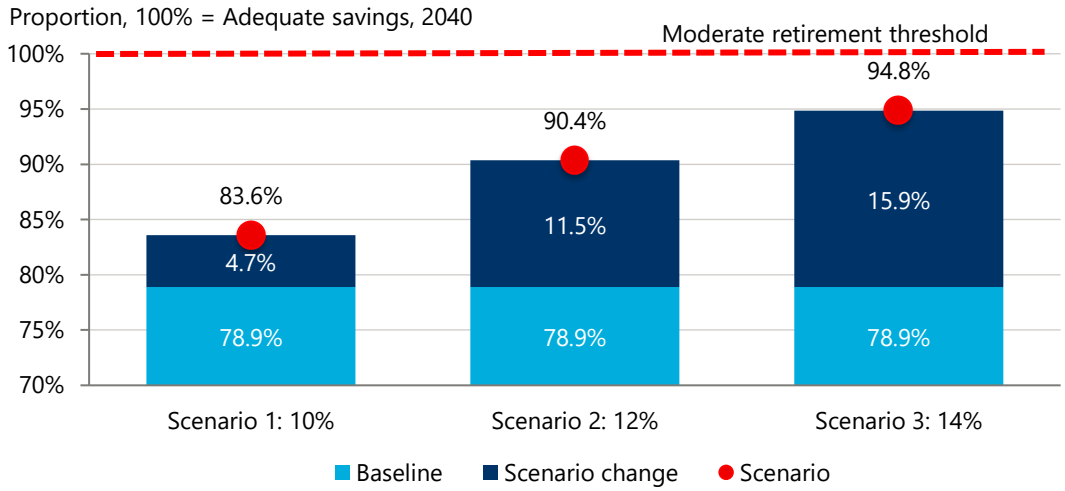
Fig. 18. Changes in the proportion of households who are on track to reach the threshold, 2040



Source: Oxford Economics

Similarly, the improvement of the pension savings compared to the threshold for the median household in Scenario 3 is over three times larger than in Scenario 1 (Fig. 19). As a result, Scenario 3 will see a rise of 15.9ppts from the baseline of 78.9% of the threshold to 94.8%. Scenarios 1 and 2 will see smaller increases, with the proportion of pension savings rising by 4.7ppts and 11.5ppts respectively, compared to the baseline.

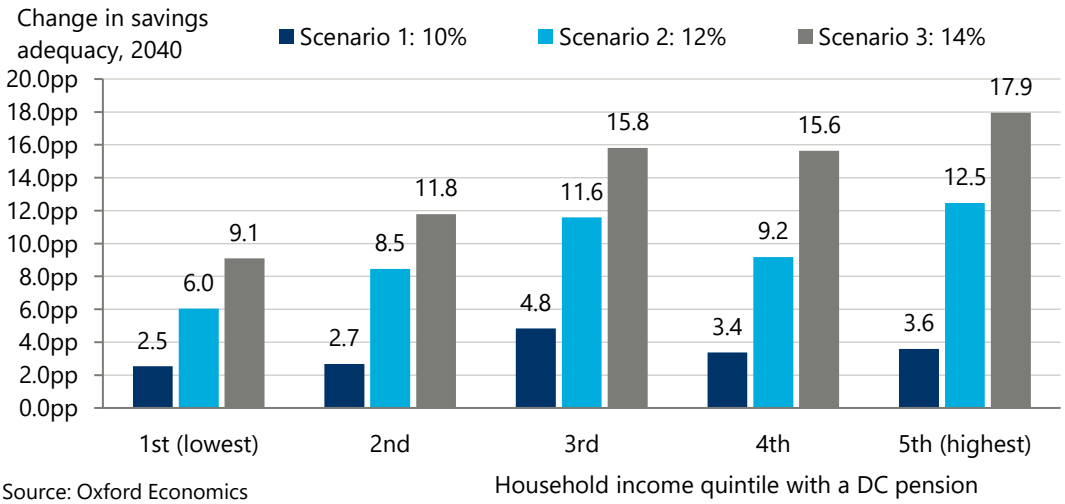
Fig. 19. Changes in the proportion of pension savings compared to the threshold for the median household, 2040



Source: Oxford Economics

As shown in 0, this pattern holds when looking at households by income quintile and Scenario 3 has the largest improvement. Higher income households experience the most substantial gains, given their higher earnings. That said, higher contributions help to increase pension savings for those in the lowest three quintiles who are below the threshold. Indeed, in Scenario 3 the lowest quintile sees their adequacy increase by 9.1ppts to 51.1% of the threshold while those in the third quintile see their adequacy increase by 15.8ppts to 88.3% of the threshold.

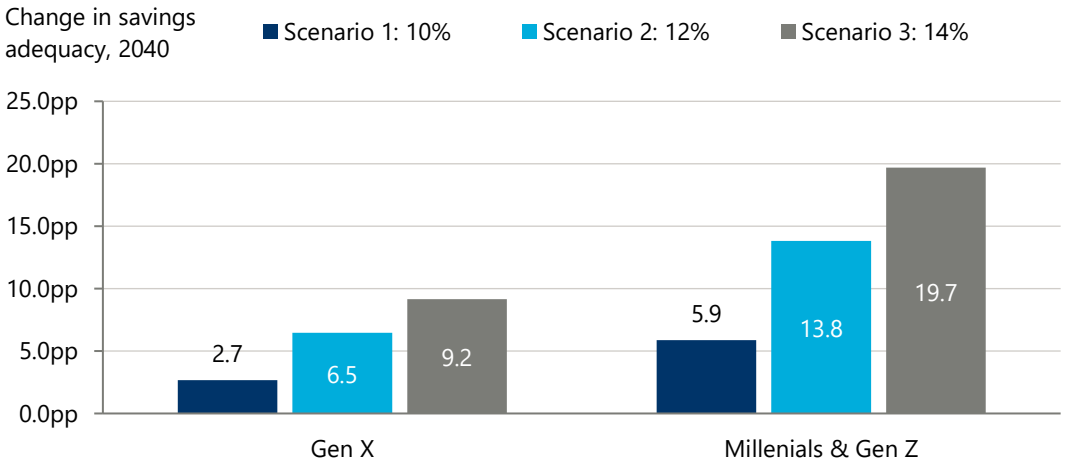
Fig. 20. Changes in the proportion of pension savings compared to the threshold by income quintile, 2040



Source: Oxford Economics

While both generations see improvements in the scenarios, the combined Millennials & Gen Z groups sees the largest rise (Fig. 21). In Scenario 3, the proportion of pension savings for the median household in this group has risen by 19.7ppts to 92.2% of the required savings and has largely closed the gap. This underscores the potential improvement households can experience by increasing their pension contributions at a younger age, underpinned by the compounding effect of pension savings.

Fig. 21. Changes in the proportion of pension savings compared to the threshold for the median household by generation, 2040



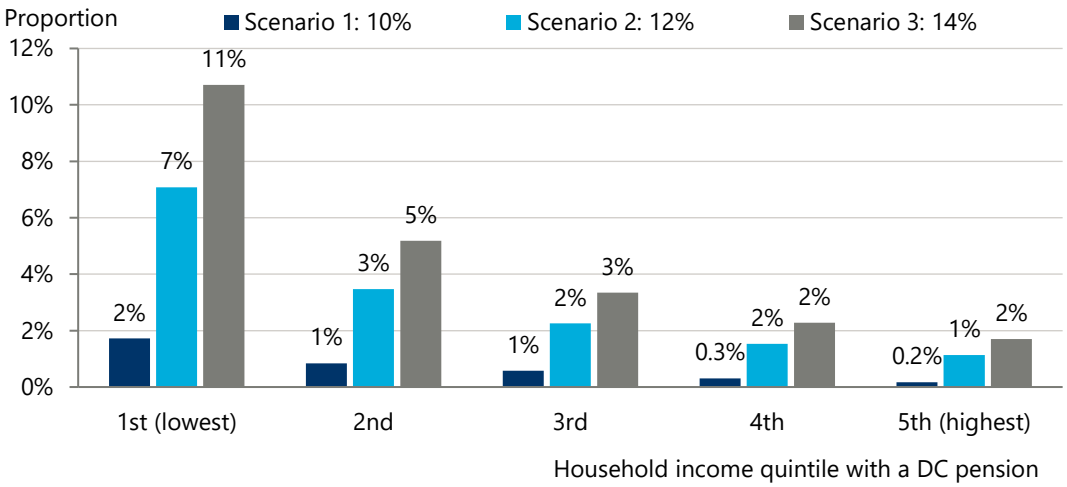
Source: Oxford Economics

POORER HOUSEHOLDS MAY STRUGGLE TO PAY FOR HIGHER PENSION CONTRIBUTIONS

Higher pension contributions offer long-term advantages, but households will face higher contribution costs in the present. While this may be affordable for some households, others could struggle. To illustrate this, we have compared the annual fall in disposable income that results from higher contributions with the household's easy-to-access savings.

As shown in Fig. 22, this cost represents a much larger proportion of the easy-to-access savings of poorer households and this proportion rises in Scenario 2 and 3. Indeed, in Scenario 3, the higher costs equate to just over 11% of the easy-to-access savings on households in the first income quintile over three times the average. This proportion falls for the higher income households indicating that they may be less affected by the higher costs.

Fig. 22. Annual fall in disposable income for the median household compared to easy-to-access savings by income quintile



Source: Oxford Economics

Nearly one in 10 households in the lowest quintile is expected to have less than £100 in easy-to-access savings when the policy is introduced in 2025. This falls to less than 1% for the highest quintile, again indicating that the affordability of higher pension contributions improves for higher income households.

With lower savings, poorer households would therefore be required to adjust their consumption to pay for the higher pension contributions which may be challenging. Furthermore, this adds to the discussion on whether a smaller or no increase in pension contributions is more appropriate for some. Indeed, the PSLA also publish an income estimate for a minimum standard of living in retirement and highlights that this is largely covered by the state pension[20]. This would suggest a lower increase from employers illustrated in Scenario 1 may be more appropriate for poorer households as the short-term financial costs are more limited and they will see some longer-term benefits.

[20] In 2022, the PSLA estimate the minimum needed for a single household is £12,800 while this is £19,900 if in a couple. The state pension will therefore cover the cost if a household is in a couple and largely cover the cost if they are single.

5. CONCLUDING COMMENTS

Despite automatic enrolment reforms, concerns remain that many workers in the UK are still significantly under-saving for retirement. Indeed, we find that only 40% of households with an individual in a DC scheme are expected to have the required savings for a moderate living standard[21] in retirement in 2040. This is even after accounting for the expected changes to the automatic enrolment age and qualifying earnings band.

In this study, we illustrate the potential implications at the whole economy and household level of increasing the minimum pension contribution threshold in the UK. Higher pension contributions are expected to result in a larger pool of assets available to invest in UK private businesses and higher pensioner income in retirement. In the medium to long run, this is expected to outweigh the fall in wages and salaries which leads to an increase in GDP relative to a no-change baseline. At the household level, higher pension contributions resulted in a significant improvement in the adequacy of pension savings and helped to close the under-saving gap. Indeed, this could potentially alleviate the associated burden on the State of supporting those who have failed to save enough for retirement.

There are however trade-offs associated with higher minimum pension contributions. Poorer households have limited easy-to-access savings and may struggle to afford higher pension contributions. A smaller increase to the minimum pension contribution level limits the financial burden that this policy change places on these households. However, at the macroeconomic and wider household level, a smaller increase offers the smallest benefit in terms of economic growth and improvements in pension adequacy.

This illustrates the delicate balance involved in raising pension contributions and suggests that a blunt solution such as a uniform increase in pension contributions for all individuals may not be appropriate. A more carefully designed policy, which pays particular focus to addressing affordability issues for the poorest households, could help to ensure pension contribution reforms broadly achieve their objective (a higher overall rate of pension saving)—without creating short-term liquidity pressures for the poorest households.

[21] Based on the PLSA estimate of a moderate income in retirement.

6. APPENDIX

The appendix covers the following:

- Development of the underlying dataset.
- Assumptions used within the wider economic modelling.
- Estimation of the pension savings threshold.
- Dataset used.

The Wealth and Assets Survey (WAS) has a wide range of financial data on individuals and households in the UK, including savings and pensions. The dataset has pension contributions from both employer and employee by type of scheme. However, it exhibits three shortcomings for our modelling:

- **Representativeness of the data**: the distribution of pension contributions does not match that of the more reliable, employer-provided, Annual Survey of Hours and Earnings (ASHE). We therefore update the pension contributions of individuals in the WAS to align with ASHE.
- **Removal of lower bound on qualifying earnings**: employees in a DC scheme can be in one of three schemes. Each has a different pensionable pay and minimum contribution requirements, one of which—pensionable pay—is based on qualifying earnings[22]. The WAS does not identify the type of scheme an individual is in, so this has been estimated. We have then reduced the lower bound of qualifying earnings for these individuals in the baseline. The change in pension contributions in the scenario will therefore be based on all earnings below £50,000.
- **Expansion of automatic enrolment to those aged 18-21:** we assume this group will be automatically enrolled and we have identified eligible employees between 18-21 in the WAS dataset. These have been included in the baseline.

The following section provides more information on these adjustments.

Representativeness of the data and identification of pensionable earnings

Before aligning the contributions data to ASHE, the missing employee and employer contributions in the WAS are estimated based on the contributions of those who have provided answers. The approach takes into account the sector individuals work in, the size of the company they work for, the age of the individual and their earnings.

After this, the employer and employee contributions are separately aligned to the ASHE. Employee contributions are first adjusted, with the proportions lined up with the latest employee pension

[22] Employees pensionable earning can be based on total earning, basic earning or qualifying earnings and will depend on the type of workplace pension scheme they are enrolled on. Basic earning excludes earnings such as bonus and holiday while qualifying earning are capped between £6,240 and £50,270 of total pay.

contributions found in ASHE[23]. After this, we align employee contributions with the ASHE distribution for each employer contribution band. During both adjustments, we rank the individuals based on their reported employee contributions and then adjust those at the margins within each employee contribution band. The goal is to achieve conformity with the ASHE distribution while minimising deviations from their initially reported contributions.

The type of pension schemes a household is in is then identified by their employee and employer contribution. Employees who contribute exactly 4% are assumed to be enrolled in a total earnings scheme. Employees are then identified who are in basic earnings schemes will have employer contributions of 4%, while in qualifying earnings schemes, the contribution requirement is 3%. We are only able to identify those with minimum qualifying earnings.

Expansion of automatic enrolment to those aged 18-21

The publicly available WAS dataset does not include the individual ages of those surveyed. Instead, they provide age groups with the two groups of focus being 16–19 and 20–24. In the age group 20–24, individuals who are not enrolled and have not opted out of a pension scheme are anticipated to be either 20 or 21. We then use the Annual Population Survey (APS) to predict who is 18 and 19 in the age group 16–19. This is based on a logistical regression and includes gross income, whether they work full time or part time, and whether their head of household owns their home or rents.

Wages are then used to identify those who are earning at least £10,000 and would become eligible under the new policy. To ensure consistency with the DWP assessment on the expansion of automatic enrolment[24], we match the number of individuals identified in their analysis. This means 530,000 eligible 18- to 21-year-olds are automatically enrolled in the baseline and individuals are chosen based on a score. This score depends on whether they are in the public or private sector, company size, and their wage and takes into account the average proportion of individuals enrolled in each of these cohorts. We have assumed they have the minimum qualifying contributions.

ASSUMPTIONS UNDERPINNING THE WIDER ECONOMY MODELLING

Increasing mandatory pension contributions is expected to impact UK households and the broader economy in the short and long term. For this analysis, we have had to make a series of assumptions on the direct impact of the policy on business costs, disposable income, and business investment. The second-round effects are then estimated using Oxford Economics' Global Economic Model (GEM). The GEM is a fully interlinked global macroeconomic policy model, used for forecasting and scenario analysis. The scenario is based on the December 2023 Oxford Economics forecast. The following section provides more information on the assumptions underpinning the modelling.

[23] Banded data are published from ASHE 2021 and used in the analysis. The individual contributions are adjusted to ensure the proportion of households in each band are consistent with ASHE.
[24] Pensions (Extension of Automatic Enrolment) 2023 impact assessment.

Higher business costs

Higher pension contributions will be financed by employers, employees, and the government. Businesses will face higher costs in the scenarios and the cost is expected to be distributed as follows:

- **Lower wage growth:** based on evidence from Australia, we assume that 71% of employer costs are passed on through lower wage growth[25].
- **Absorb the higher costs and increase prices:** the remaining cost is split between businesses absorbing the higher cost and increasing prices. Based on survey analysis, businesses were four times more likely to reduce profit rather than increase prices and this ratio is used to split the remaining cost[26]. Therefore, 23% of the cost reduces profit and 6% of the cost leads to higher prices.

Disposable income

The direct impact on disposable income will take into account both the reduced income of wages and salaries as well as the higher disposable income of pensioners.

- **Wages and salaries impact:** workers will see a fall in their wages and salaries since saving more for retirement reduces take-home pay today. Higher employer contributions are expected to lower wage and salary rises in future as employers respond to the cost of increased contributions in various ways. Both factors reduce the wages and salaries of employees in the model.
- **Pensioner income impact:** increased pension savings from greater contributions will result in higher disposable income during retirement. We account for both growth in pension assets over time (5% per year, on average)[27] and individuals drawing down on their pension pot equally over their life expectancy after retirement (21 years on average)[28].

Private sector investment

Total additional pension assets are calculated based on the size of the total contribution per employee and the number of employees. After this, private sector business investment is estimated, and it incorporates the following three key factors**:**

- **Savings displacement:** we first estimate the additional savings estimated to be in the UK economy. We account for the extent to which increased compulsory pension saving displaces other savings available for investment using evidence from Australia. Based on the full sample, an additional dollar in mandatory pension accounts boosts net financial wealth by 91 cents, indicating an offset of 9 cents attributable to reductions in other assets[29]. We therefore assume a displacement rate of 9%.
- **UK-based investment:** as expected, not all additional pension assets will be directed into UK private sector business investment. The PSLA calculates that 23% of the UK DC pension savings are invested in UK equities and 4% in UK corporate bonds[30]. We have therefore assumed that 27% of the non-displaced pension assets are passed through to UK domestic investment.

- **Business costs:** finally, we estimate the net private sector investment impact by accounting for the additional employer costs from the reform.

PENSION SAVINGS THRESHOLD

A threshold for the pension savings required for a moderate income in retirement is estimated for each household[31] within the WAS. This household-specific threshold incorporates the following:

- **Relationship status:** as the relationship status of a household at retirement is not known, an average cost for an individual has been calculated based on a weighted average of the single and couple costs[32]. This weight takes into account the higher proportion of households that are living in a couple compared to being alone in retirement. It also includes the higher probability of being part of a couple household in retirement if the household is currently in one.
- **Individual's lifetime earnings**: to assess households' pension savings status, retirement expenses have been distributed based on the working lifespan of an individual. This has been estimated taking into account the average earnings and employment rate at each age[33]. On average individuals experience their highest earnings and employment rates around their mid-40s, which tend to decrease afterwards. Accordingly, pension savings for individuals are expected to mirror this trend.
- **Return on pension savings and pension drawdown**: consistent with the wider economy analysis, assets are expected to increase by 5% (in nominal terms) and individuals on average live for 21 years after retirement.
- **Changes over time:** according to the latest estimates from the PSLA release, individuals will require an income of £23,300 for a single household and £34,000 for a couple to maintain a moderate standard of living in retirement[34]. This threshold has risen over time to take into account inflation and we expect this to continue. In addition, we assume a general improvement in living standards and the threshold therefore increases by CPI plus half the difference between wage and CPI growth. Furthermore, changes in state pension and the Personal Allowance will also impact the required savings. Forecasts of state pension are underpinned by Oxford Economics GEM and increase in line with the "triple lock" policy. We assume the Personal Allowance is frozen until 2028, in line with the current policy, before rising in line with inflation thereafter.

[25] Robert Breunig and Kristen Sobeck, "The Economic Incidence of Superannuation", Australian Treasury, 2020
[26] Employers' Pension Provision Survey 2019, DWP
[27] Asset growth consistent with Pensions (Extension of Automatic Enrolment) 2023 impact assessment where they assume a 3% real asset growth. We have assumed CPI is at the target rate and nominal assets should grow by 5%.
[28] Base on ONS estimates of life expectancy and the average retirement age.
[29] Ellis Connolly "The Effect of the Australian Superannuation Guarantee on Household Saving Behaviour", Reserve Bank of Australia, 2007
[30] Based on PSLA analysis of pension asset allocation in the UK. Pensions and Growth.
[31] A household has been defined as individuals who are living together and related or dependent on each other.
[32] Based on the proportion of individuals who are single or in a couple for the age cohort 65-69 in 2019 using ONS data published in the marital status and living arrangements.
[33] Data based on the labour force survey.
[34] PLSA moderate standard of living

The combination of these factors as well as the aging of the households are incorporated into the 2040 threshold.

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