

DRAFT – UPDATE PENDING

An overview of the United Kingdom's Pension Landscape

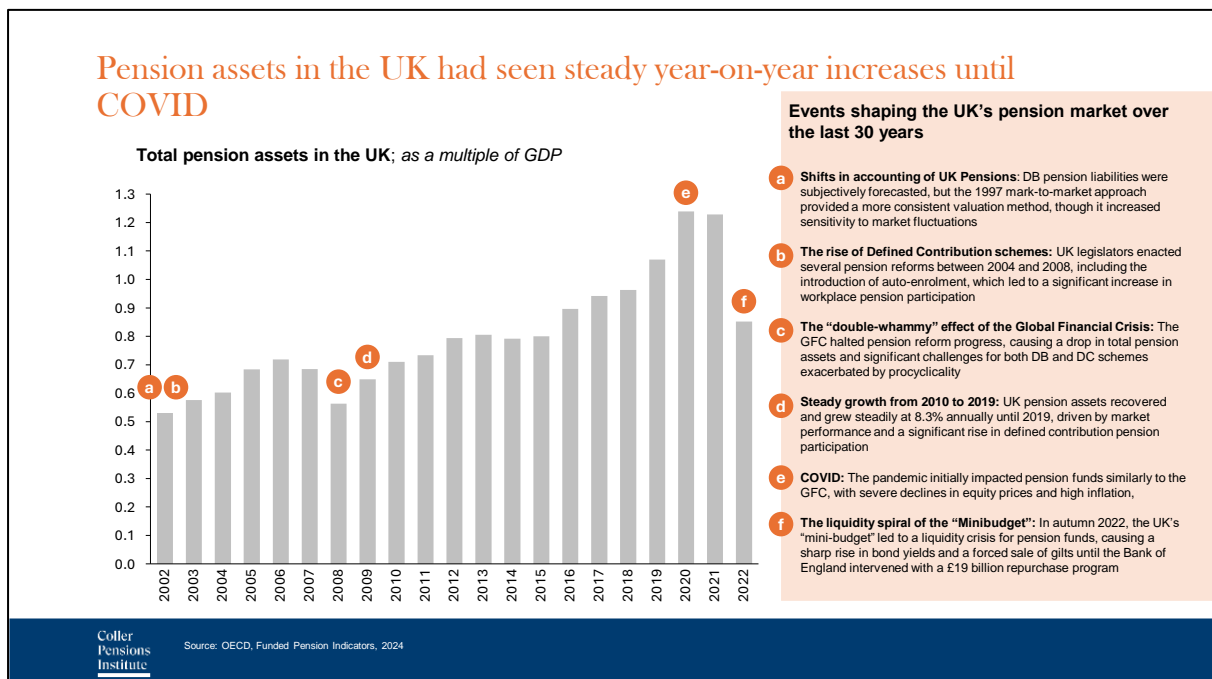
By Jeremy Collier, Fiona Reynolds, David Pinkus and Jorge Sanchez Cumming

INTRODUCTION

1. Background: significant events in UK Pensions over the last 30 years

There have been many noteworthy events in the history of the UK’s pension system since its inception. The landmark enactment of the Poor Law in 1838 and the introduction of employer pension contributions in 1925 through the Widows’, Orphans’, and Old Age Contributory Act helped lay the very foundations of social security in the United Kingdom. The democratization of pensions followed by the adoption of a universal state pension available to all in 1946. There have been scandals, perhaps most notably the infamous fraud involving Maxwell’s Mirror Group Pensions, as well as innovations, such as George Ross Goobey’s novel approach of investing pension assets in equities rather than bonds.

Over the last 30 years, the pension landscape has been particularly dynamic, with the rise of Defined Contribution schemes and the decline of Defined Benefit schemes. In this section, we explore in more detail six major events that have shaped the market over the last three decades and provide a historical basis for some of the main challenges we discuss in Section 2.



a. Shifts in accounting of UK Pensions (1997 to 2000s)

Prior to 1997, pension liabilities for Defined Benefit schemes (DB)—the amount of money payable to pensioners upon retirement—were valued on a “best-estimate” basis. This meant that pension funds had to conduct highly complex long-term forecasts involving interest rates, life expectancy, wage growth, inflation, and numerous other variables that were consistently difficult to predict. Estimating any one of these metrics individually is challenging and imprecise, let alone all of them at once! The core problem with this method was the degree of subjectivity involved—a necessary but problematic aspect of any forecast—that influenced the outcomes.

In 1997, a group of actuaries recognized that the subjectivity inherent in pension accounting was making pensions inconsistent and volatile¹. J. Exley, S. Mehta, and A. Smith observed that corporate contributions to Defined Benefit schemes fluctuated by approximately 7% per annum. In other words, each year, pension schemes would significantly adjust member contributions based on the ever-changing and difficult-to-predict macroeconomic conditions of the time.

As an alternative to the prevailing funding approach, Exley, Mehta, and Smith proposed a mark-to-market approach. Under this method, pension liabilities would be valued similarly to other financial products with comparable cash flow streams, like bonds or equities. Essentially, if a pension is a promise of future cash flow, the best way to price that promise (i.e., the pension liability) is through a financial transaction with similar economic effects, rather than relying on actuarial “guesswork.” This principle is also known as the Law of One Price, which states that two identical cash flows should have the same market value.

This paper not only revolutionized the way pension liabilities were conceptualized but also influenced the investment strategies of pension fund managers. Under a Defined Benefit scheme, where employees are promised a fraction of their salary upon retirement, the best way to fulfil that promise is to invest in assets that will generate the required amount. Relying on coupon

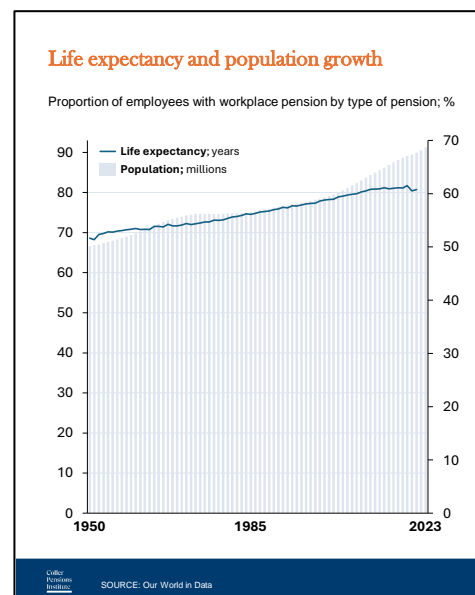
¹ C.J. Exley, B. S. (1997). The Financial Theory of Defined Benefit. Presented to the Institute of Actuaries, 28 April 1997.

payments, dividends, or derivatives contracts, managers began employing a liability-driven investment (LDI) approach, where the primary concern was ensuring sufficient inflows to meet obligations, and setting expectations of lower investment returns in exchange of less risk. But not only that, investment following the LDI approach made pension portfolios in the UK more susceptible to sudden changes to interest rates.

b. The rise of Defined Contribution Schemes (2002 to 2008)

The new millennium brought a renewed focus on pensions. Between 2004 and 2008 – a span of just four years - UK legislators passed three different Acts of Parliament, while the previous 90 years had seen no more than five major legislative updates. The purpose of these new Acts was to provide greater protection for pensioners under existing Defined Benefit (DB) schemes and to strengthen the foundations of the emerging Defined Contribution (DC) pension schemes.

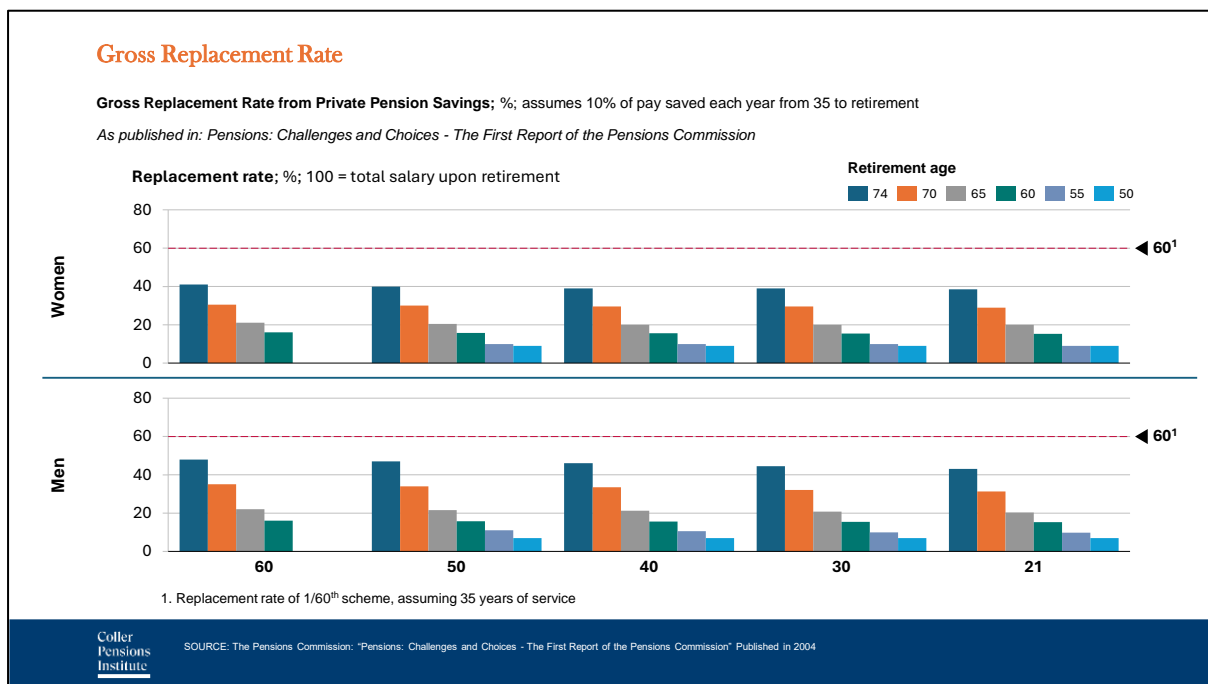
Although Defined Contribution schemes had been around the UK since the 1980s, the early 2000's saw a rise in DC schemes as a more viable alternative to Defined Benefit plans. First and foremost, the cost to maintain DB plans kept growing as a consequence of increasing life expectancy and population. Essentially, longer lives of pensioners meant larger liabilities for employers – i.e. larger promises of future cashflows from schemes to beneficiaries. This led to increasing financial strain on DB schemes. Market volatility was also used to favour DC schemes over DB schemes, with the former mostly transferring the risks of investment shortfalls from employer to workers. Other arguments in favour of DC schemes used in the UK, and around the world were [XXX,XXX,XXXX].



Thus the plan at the turn of the 21st Century was to favour DC schemes vis a vis DB. A first step was the creation of the Pensions Commission, established in 2002². The Commission was asked to do an in-depth review of pensions in the

² (2004). *Pensions: Challenges and Choices*. The Pensions Commission.

UK and among its many findings were the deficiencies in the existing DC schemes. For example, the Commission revealed that the gross replacement rate of DC schemes was significantly lower than that of DB schemes. In its First Report, published in October 2004, the group led by Adair Turner observed that pensioners saving the benchmark 10% of their annual salary for 40 years would receive less than 50% of their final salary during retirement (Figure 1). Most concerning, this 50% figure was in stark contrast to what regular DB schemes offered, which typically ensured approximately 65% of final salary upon retirement (e.g., a 1/60th scheme).



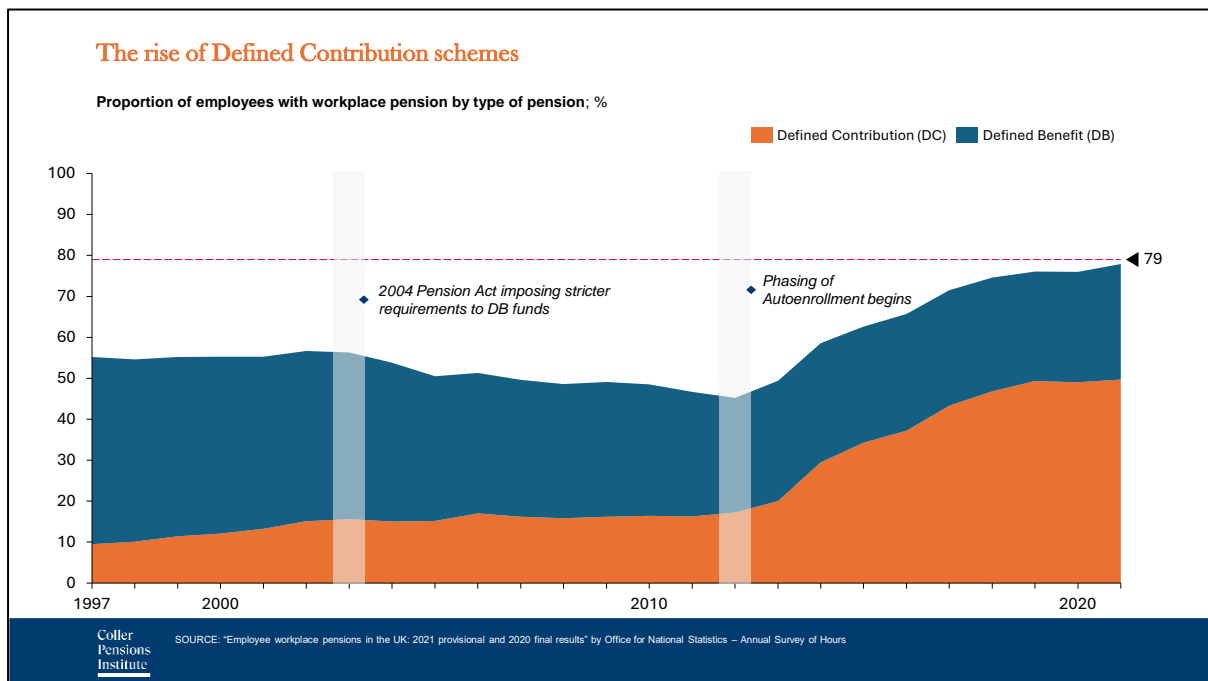
The first of three pension acts, the Pensions Act of 2004, was introduced to mitigate the risk faced by beneficiaries of DB schemes. In the early 2000s, the funding deficit of DB schemes was £76 billion, or roughly 3% of the UK’s GDP at the time³. Moreover, regulators anticipated that this deficit would grow significantly in the coming years—a prediction that proved accurate, with the deficit reaching £280 billion, or nearly 10% of GDP, by 2015. In response, they aimed to provide “safety nets” for pensioners. The Pensions Act of 2004⁴ established the Pension Protection Fund (PPF) to safeguard individuals with DB schemes in case their employer went bankrupt. Additionally, the Act replaced the existing regulator (OPRA) with the newly formed Pensions Regulator, granting

³ (2020). *The Purple Book*. Pension Protection Fund

⁴ (2004). *Pensions: Challenges and Choices*

it greater power and authority to ensure that pension schemes were adequately managed.

While the 2004 Act primarily focused on mitigating the risks within the Defined Benefit (DB) system, the Acts of 2007 and 2008 were designed to support the growth of Defined Contribution (DC) schemes. In 2007, the government adopted two key recommendations previously issued by the Pensions Commission. The first was to make the State Pension “less means-tested” in an effort to simplify and broaden access to the first pillar of pension provision. The second recommendation led to the creation of the National Pension Savings Scheme (NPSS), which became the National Employment Savings Trust (NEST) a year later.⁵



The original aim of the NPSS was to encourage saving for old age "amongst those who currently do not have a pension" and to fill the "savings gap" left by the decline of DB schemes. To create an attractive scheme, the Pensions Commission proposed a 4% employee contribution, matched by 3% from employers and 1% from the government in the form of tax relief. Additionally, it stipulated that pension funds could not charge more than 0.3% in annual management fees to pensioners.⁶

⁵ (n.d.). Pensions reform: The Pensions Commission (2002-6). Institute for Government

⁶ Ibid

The Pensions Act of 2008 introduced another essential feature that would shape the UK pension landscape in the years to come: auto-enrolment. The basic principle of auto-enrolment was employees would be automatically enrolled in a workplace pension scheme unless said employee decided to opt-out.. But why provide an opt-out option instead of making pension saving mandatory? Three main arguments at the time were: (i) mandatory pension savings were already addressed in the first pillar; (ii) individual preferences regarding savings rates and retirement age should be respected; and (iii) personal circumstances, such as health or accumulated assets, could influence an individual’s approach to retirement.

The main reason for the introduction of auto-enrolment was to improve the coverage of pension schemes. Rooted in behavioural science, studies had shown that auto-enrolment could boost participation in pension plans from 50% to as much as 90%, compared to opt-in mechanisms⁷.

Further research on workplace pensions confirmed the success of auto-enrolment a few years after its implementation. In 2013, the National Audit Office reported that participation in workplace pensions had risen from 61% to 83% within a sample of 1.6 million workers.⁸

c. The “double-whammy” effect of the Global Financial Crisis (2008 to 2009)

The positive momentum generated by pension reform was halted by the Global Financial Crisis. Between 2008 and 2009, total pension assets dropped by 22% relative to GDP, resulting in a loss of US \$300 billion (the second-largest loss in absolute terms, after the United States). Although defined contribution plans were hit the hardest—primarily due to their exposure to equity markets—countries with a high share of defined benefit pension plans also faced significant challenges.⁹

In the UK, as well as in other countries with a high proportion of DB plans, the sharp decline in pension assets was similarly linked to equity markets but was also exacerbated by accounting and regulatory constraints. Under the mark-to-market approach, pension liabilities are highly sensitive to interest rates. When interest rates dropped sharply, pension liabilities increased rapidly as well. Between October 2008 and April 2009, the Bank of England slashed interest

⁷ Brigitte C. Madrian, D. F. (2001). The Power of Suggestion: Inertia in 401(K) Participation and Savings Behavior. National Bureau of Economic Research.

⁸ (2013). Automatic Enrolment evaluation report 2013. The Department for Work and Pensions.

⁹ (2023). *Pension Market in Focus*. OECD and analysis of Collier Pensions Institute

rates from approximately 5.0% to 0.5%, thereby increasing the “market” value of pension liabilities.

To meet the growing liabilities, DB funds had to boost their pension provisions, which they did by drawing down current assets. Additionally, due to the dire economic circumstances, the UK allowed employers to temporarily reduce pension contributions, which further depleted assets. The Pension Protection Fund, which safeguards DB pensioners in case of employer defaults, supported over 360 schemes and saw its deficit double between 2008 and 2010 through its more solvent members, which similarly depleted assets. This amplification of negative consequences for pension systems during an economic downturn, often referred to as procyclicality, weighed heavily against DB schemes¹⁰.

By 2010, 73% of all DB schemes were closed to new members and the aforementioned procyclicality further intensified the urgency to enrol new pensioners under defined contribution schemes.

d. Steady growth (2010 to 2020)

Pension assets in the UK recovered from the effect of the Global Financial Crisis and continued to grow steadily until 2019. By 2012, total pension assets in the UK were back to pre-GFC levels at \$2.1Tn, and from 2010 to 2019, assets grew at 8.3% p.a., faster than many other comparable pension systems such as USA, Canada, Australia, Japan, Denmark, and the Netherlands.¹¹

The rise in pension assets was supported by growth in the equity market (the S&P 500 grew at around 11% per year) and, more importantly, by an increase in workers contributing to defined contribution (DC) pension schemes. In 2012, when auto-enrolment was finally introduced, fewer than 20% of employees had a defined contribution pension. By 2021, more than 50% of UK workers were contributing regularly to a DC account. Ultimately, the uptake of DC pensions through auto-enrolment increased workplace pension coverage to nearly 80% by 2021.¹²

e. COVID (2020 to 2021)

In some respects, the crisis that pension funds faced in the wake of COVID—exacerbated by procyclicality—was not dissimilar to the challenges experienced during the Global Financial Crisis (GFC). The decline in equity prices during the

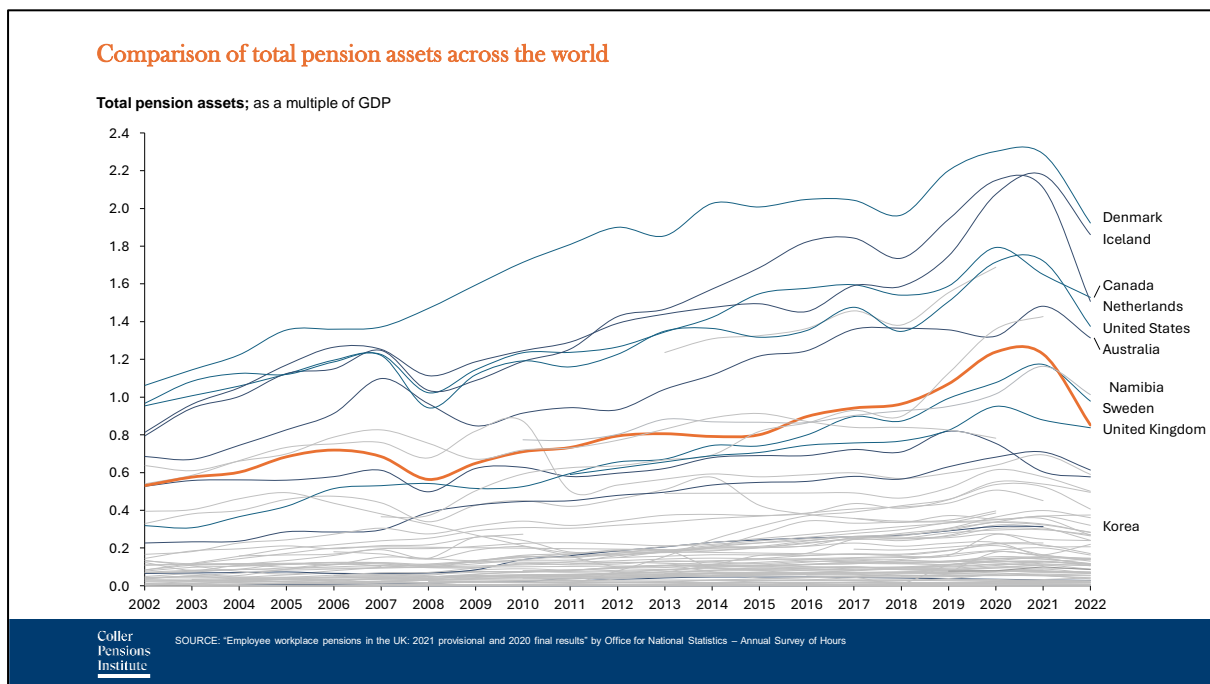
¹⁰ J. Yermo, C. S. (2010). The Impact of the Financial Crisis on Defined Benefit Plans and the Need for Counter-Cyclical Funding Regulations. OECD

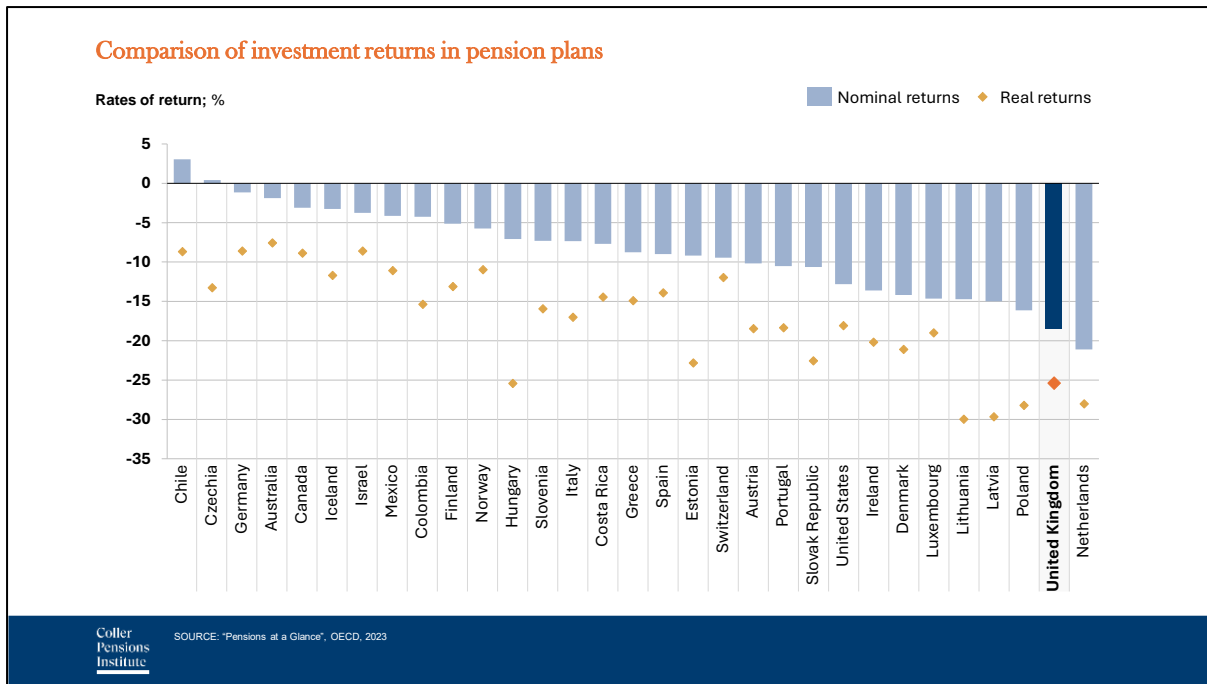
¹¹ (2023). *Pension Market in Focus*. OECD and analysis of Collier Pensions Institute

¹² (2023). Private pensions explained. Institute of Fiscal Studies

early months of the pandemic had a more severe impact in 2020 than in 2008, largely due to the growing share of defined contribution (DC) plans. However, with most pension assets still held under defined benefit (DB) schemes (roughly 90%), the overall impact on total assets was not very significant. Similar to the GFC, near-zero interest rates, rising pension liabilities, the relaxation of funding requirements to alleviate economic pressures on employers, and the need for additional support for the Pension Protection Fund (PPF) played significant roles in the early days of the COVID pandemic.

However, it was high inflation and the subsequent rise in interest rates starting in 2022 that had the greatest impact on pension assets. Between 2021 and 2022, the absolute value of pension assets in the UK decreased by more than 30%, primarily due to poor investment performance. The internal rate of return for UK pension funds between December 2021 and December 2022 was approximately -25% in real terms.





f. The liquidity spiral of the minibudget (2022)

The autumn of 2022 was significant for pension funds due to the UK Chancellor’s “minibudget” and the subsequent liquidity crisis. To provide some context, UK pension funds hold approximately 30% of the UK gilts market, which they often use as leverage in derivatives contracts.

In September of that year, the government proposed a series of tax cuts and fiscal stimulus measures. The markets responded swiftly to the news, and by the end of the month, the yield on 30-year nominal bonds had increased by 2 percentage points compared to the previous four weeks.

This abrupt change forced the counterparties of pension funds to make margin calls to address the rapid change in the value of UK bonds (which was made worse to the large bond portfolios encouraged by the aforementioned LDI approach). However, with insufficient cash to meet these demands, pension funds were compelled to sell some of their most liquid assets, namely UK gilts, which further drove down bond prices. The cycle was eventually broken when the Bank of England intervened with a £19 billion gilt repurchase program.¹³

We believe it’s essential to have a good grasp of the past to understand the present. The evolution of the UK pension system over the past two centuries reflects a complex interplay of legislative, economic, and market forces. From the significant reforms introduced at the turn of the millennia, the shift to Defined Contribution schemes, and

¹³ Ketan B. Patel, S. I. (2023). UK Pension Market Stress in 2022—Why It Happened and Implications for the U.S. Federal Reserve Bank of Chicago

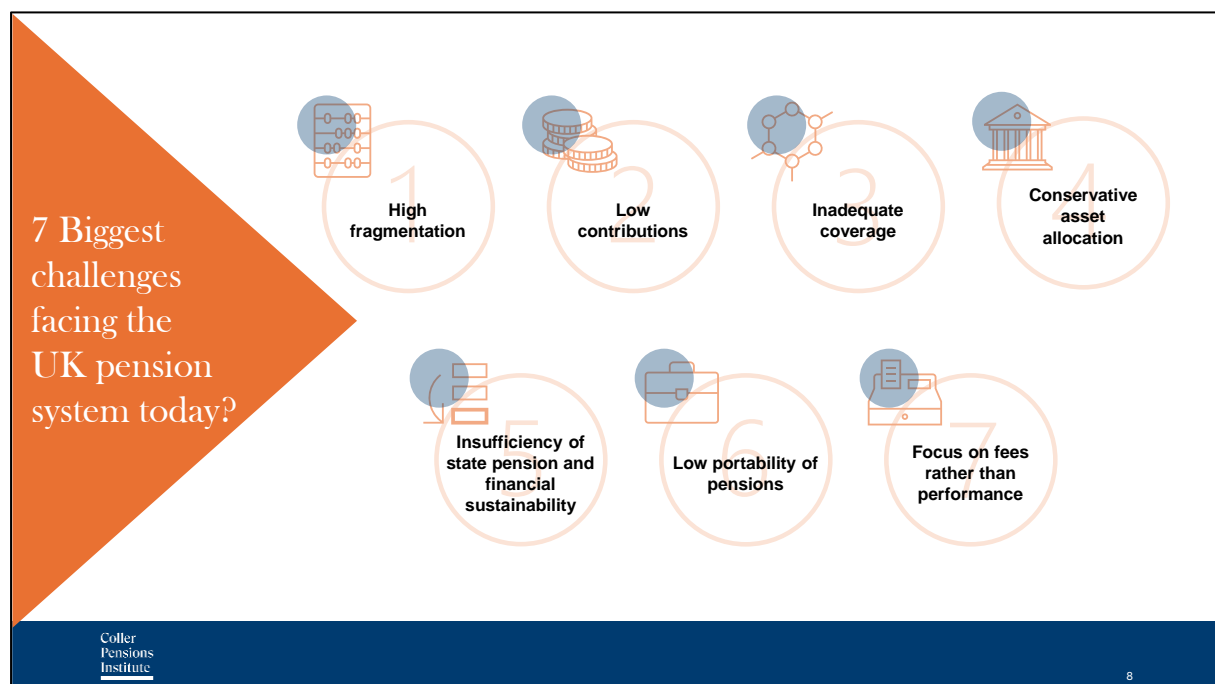
the impacts of global financial crises, the pension landscape has continually evolved. And as some of the difficulties of old get sorted, novel challenges emerge. In the next sections we explore these challenges and provide recommendations to address them

2. Challenges: our perspective on the biggest issues with the UK’s pension market

The UK workplace pension system plays a crucial role in the financial security of millions of workers, offering a way to save for retirement through employer-sponsored schemes. Despite its importance, the system has significant challenges that threaten its effectiveness and importantly the adequacy of retirement incomes for millions of UK workers. These challenges range from high fragmentation, low contribution levels, and inadequate state pensions, poor coverage for specific demographic groups, gender disparities, a lack of a clear system purpose, and inadequate portability. In addition, there has been a lack of investment by UK pension funds in infrastructure in the UK and other nation building projects that would benefit the UK economy and pension savers by providing long- term returns.

When compared to other pension systems globally, an analysis and ranking of 47 pension systems around the world undertaken by The Mercer CFA Institute Global Pension Index in 2023 gave the UK system a ‘B ranking’ along with Norway, Sweden, Switzerland, Canada, Ireland, Chile, Uruguay, Belgium, New Zealand, Portugal and Germany. The UK’s overall score was 73.0/100.00 sitting well behind Australia, Finland, Singapore, The Netherlands, Iceland, Denmark and Israel [SOURCE].

This section examines these challenges in detail, providing an analysis of their causes and impacts.



I. High fragmentation

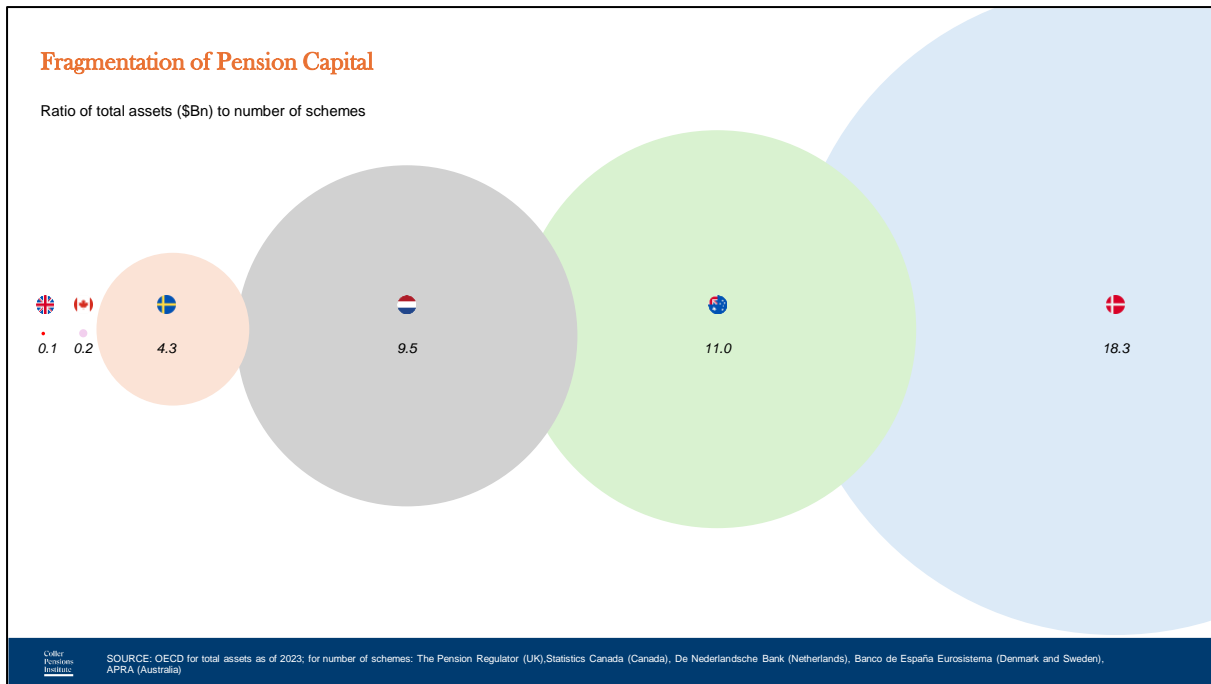
The fragmentation of the UK workplace pension system is a fundamental issue that has been widely recognised by policymakers, industry experts, and financial watchdogs. The existence of numerous small workplace pension plans, estimated to be in the tens of thousands, creates a landscape that is not only difficult to navigate but also inefficient and costly. This fragmentation leads to several adverse outcomes, including higher administrative costs, lower bargaining power, and ultimately, reduced net returns for pensioners.

Although the UK pension system is the third-largest retirement asset market by size, the largest UK pension fund, the USS, ranks only 36th largest fund globally (Thinking Ahead Institute & Pensions & Investments, 2023). One important reason is that historically most of the UK pension arrangements are single-employer schemes.

It is well documented that fragmentation of pension funds tends to yield worse economic outcomes for pensioners. Firstly, smaller pension funds are generally more expensive for pensioners. Research from the Pension Regulator shows that the average cost per member of funds with 99 or fewer members is almost 10 times higher than that of funds with 5,000 or more members¹⁴. Larger pension funds can spread their administrative and operational costs over a greater number of members, reducing the per-member cost achieving greater economies of scale¹⁵. Thus, fragmentation results in higher per-member administrative costs in smaller funds, which can diminish the overall efficiency and value delivered to members.

¹⁴ *DB scheme costs comparison tool*. Retrieved from The Pensions Regulator

¹⁵ Pensions Policy Institute (PPI). (2022). Navigating the complex landscape of workplace pensions.



Secondly, fragmentation negatively affects investment performance. Research from Canada and Australia shows a positive correlation between fund size and performance,^{16, 17} especially when comparing funds with millions versus billions in assets. Larger pension funds tend to have access to investment opportunities in alternative assets, such as real estate, infrastructure, or private debt and equity. Access to these products can boost returns and help pension funds diversify risk from public markets. While the positive correlation between size and performance can blur at the top end of the scale (i.e., hundreds of millions to billions), the performance gap between very small and very large funds due to access to high-yield investments is often stark.

Thirdly, regulation and governance add strain to the pension system. In countries like the UK, with tens of thousands of DC schemes and thousands of DB schemes, there is a need for rigorous oversight across a broad landscape to protect pensioners. For example, the Pension Protection Fund (PPF) primarily funds itself through levies on DB schemes based on size and risk. Although it plays a crucial role in a fragmented market where small pension funds may be at risk of insolvency (e.g., there are 799

¹⁶ Drivers of Performance: Insights from a Member Outcomes Perspective. (2023). Melbourne Money and Finance Conference.

¹⁷ Alexander Dyck, L. P. (2011). Is Bigger Better? Size and Performance in Pension Plan Management. Rotman School of Management.

schemes where total liabilities exceed total assets), these levies represent an additional outflow from pensions.

So, how severe is the fragmentation in the UK’s pension market, and how does it compare to other countries? The UK has over 32,000 occupational pension schemes, with roughly 85% being DC schemes (Figure 3). Fragmentation among DC schemes is driven by a high number of very small funds, with over 95% having fewer than 11 members. Consequently, assets are similarly fragmented. The Pension Regulator estimates that, excluding micro-funds, the average DC fund holds £5.4 million in assets, and the average account balance is £5,846, which amounts to approximately three months of minimum wage in the UK—certainly not enough to support individuals in retirement.

In comparison to other countries, the UK has significantly more pension schemes and a much lower ratio of assets to schemes, as shown in figure X. For instance, APRA, the Australian pension regulator, oversees 2,511 funds—ten times fewer than in the UK—holding approximately 80% of the UK’s total assets. Canada has 25% more assets but only half the number of pension funds, while Denmark, the Netherlands, and Sweden have significantly less fragmentation, with 50-200 pension funds and assets ranging from \$0.5 to \$1.5 trillion (Figure X).

Landscape of UK Occupational Pension schemes

As of 2023

Size (members)	Defined Contribution (DC)			Defined Benefit (DB)		
	Schemes (#)	Members (#; 000s)	Assets (\$Mn)	Schemes (#)	Members (#; 000s)	Assets (\$Mn)
2 to 11	25,210	-	-	1,882	80	14,800
12 to 99	590	22	336			
100 to 999	320	122	1,952	2,194	760	124,800
1,000 to 4,999	180	413	5,752	668	1,507	230,900
5,000+	130	25,449	134,985	319	6,583	1,033,800
Total	26,430	26,006	143,025	5,063	8,930	1,404,300

II. Low Contributions Rates

Low contribution rates to workplace pensions are another critical issue facing the UK pension system. While auto-enrolment has successfully increased the number of individuals participating in workplace pensions, the minimum contribution rates

remain insufficient for most workers to build a retirement fund that will provide them with an adequate income in retirement.

According to the Organisation for Economic Co-operation and Development, the UK's average contribution rate, which includes both employer and employee contributions, lags many other developed countries. The minimum contribution rate under auto-enrolment is currently set at 8% of qualifying earnings, with 3% from the employer and 5% from the employee. However, research suggests that to secure a comfortable retirement income, most individuals need to save closer to 15% of their earnings over their working life¹⁸.

The problem is compounded by the fact that many employees contribute only the minimum required amount. This is particularly concerning given that life expectancy is increasing, meaning that individuals will need to fund a longer retirement. The International Longevity Centre¹⁹ has warned that without higher contribution rates, many people will face a significant shortfall in retirement, forcing them to rely more heavily on the state pension or continue working into old age.

III. Gaps in Coverage and Gender Disparities

One of the key shortcomings of the current UK occupational pension system is its inadequate coverage for certain groups, particularly younger workers under the age of 22, informal sector workers, and the self-employed. These groups are often excluded from auto-enrolment, which means they do not benefit from the same level of pension savings as other workers.

Under current regulations, auto-enrolment applies only to employees aged 22 and over who earn more than £10,000 per year. This leaves a significant number of younger workers, particularly those in part-time or low-paid jobs, and those with multiple employers, without access to workplace pensions. The Department for Work and Pensions²⁰ has acknowledged that this is a gap in the system, but changes to lower the age threshold have yet to be implemented.

While overall participation in private sector workplace pensions is relatively high at 86% of eligible employees in 2021, there are significant differences between genders and income groups (Cribb et al, 2023a). In 2019, only 44% of those earning below the auto-enrolment threshold participated in a workplace pension. Regarding contributions, in 2019, 53% of all private sector employees who participated in a workplace pension had a total contribution rate of less than 8%, and that figure stood at around 70% for workers in either of the two lowest weekly

¹⁸ OECD. (2023). Pension Contribution Rates in OECD Countries.

¹⁹ International Longevity Centre. (2021). *Investment Strategies in UK Pension Funds*

²⁰ Department for Work and Pensions. (2023). Coverage gaps in the UK pension system.

earnings quintiles. This data shows that low participation and low contributions are particularly salient issues for lower-income workers.

The situation is even more challenging for informal sector workers and the self-employed, who are not automatically enrolled in any pension scheme. Unlike employees, self-employed individuals do not receive employer contributions, and many struggle to save for retirement due to irregular income and the lack of incentives. Research by the Institute for Fiscal Studies²¹ shows that only around 14% of the self-employed are saving into a pension, compared to over 70% of employees. The self-employed are far from a marginal group, representing 15% of the workforce²².

The government has explored various options to increase pension participation among the self-employed, including the use of nudges and incentives through tax policy, but progress has been slow. There is also a need for more tailored pension products that cater to the specific needs of the self-employed, offering flexibility and support for those with variable incomes.

The gender pension gap is another significant issue in the UK workplace pension system, with women generally retiring with much less savings than men, resulting in lower income in retirement. Several different measures and estimates of the gender pension gap exist for the UK. The Pensions Policy Institute (2024)²³ that women on average accumulate 38% less pension savings than men by age 57. The fact that women are more likely to take career breaks or work part-time due to care responsibilities is the single largest contributor to this gap, accounting for more than half of the difference.

This disparity is driven by several factors, including lower average earnings, and the fact that women are more likely to take career breaks or work part-time due to caring responsibilities, which reduces their ability to save. All these elements result in lower pension contributions. Women's lower earnings mean that they contribute less to their pensions over their working lives, resulting in smaller pension pots at retirement.

Additionally, the current pension system does not adequately account for these career patterns, leading to significant disparities in retirement outcomes.

While the introduction of auto-enrolment has increased pension participation among women, it has not fully addressed the underlying issues that contribute to the gender pension gap. Among employed women, 17% do not meet the eligibility

²¹ Institute of Fiscal Studies. (2022). Pension savings among the self-employed.

²² Cribb, J. K. (2024). Pensions: Five key decisions for the next government. IFS.

²³ <https://www.pensionspolicyinstitute.org.uk/media/ysgmnwtl/20240207-underpensioned-defining-the-gender-pension-gap-final.pdf>

criteria for auto-enrolment, compared to only 8% of men. The minimum earnings threshold is particularly important in limiting eligibility of women, with 79% of employees under this threshold being women (Pensions Policy Institute, 2024). The difference in pension participation among workers is driven by less participation by female private sector employees, and to a lesser extent by the female self-employed.²⁴

Addressing this gap requires targeted policy interventions, such as improving access to pensions for part-time workers, providing credits for periods of unpaid caring work, and promoting greater sharing of childcare responsibilities between men and women. The government's ongoing efforts to close the gender pay gap are also crucial in this context, as higher earnings for women would naturally lead to higher pension contributions and savings.

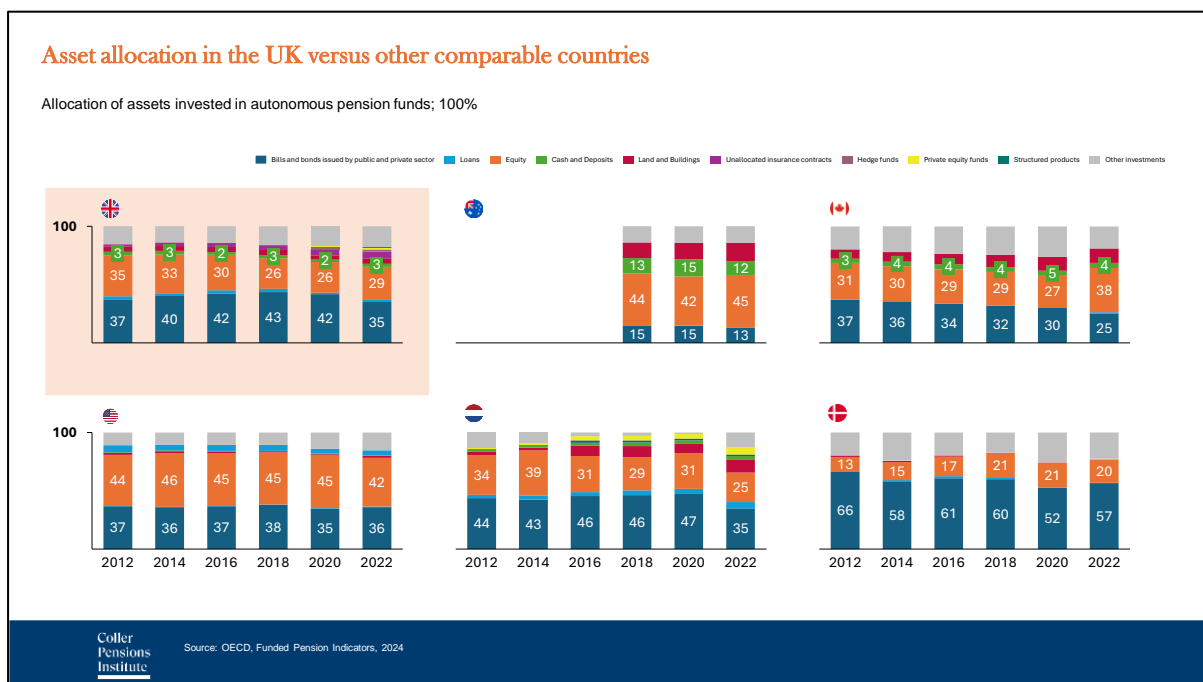
IV. Conservative asset allocation and low investment in the domestic economy

In terms of investment, UK pension funds tend to be conservative in their asset allocation, often favouring low-risk investments such as government bonds (one important root cause is the Liability-Driven Investment approach mentioned above). While this strategy minimizes the risk of capital loss, it also limits the potential for growth, especially in a low-interest-rate environment. As a result, the returns generated by many pension funds are not sufficient to significantly grow the retirement savings of their members. Furthermore, the conservative asset allocation limits the transformation of the large amount of pension savings into productive investments that can support economic growth in the UK.

At the end of 2023, UK pension funds had a relatively conservative asset allocation compared to other countries with large funded pension systems. On aggregate, they held 26% of their assets in equity, 58% in bonds, 2% in cash and 14% in real estate and other alternative assets (Thinking Ahead Institute, 2024). The allocation to bonds was particularly large and that to alternatives particularly low compared to most of its peers.

Concerning domestic equity investment, UK pension funds invested approximately 30% of their equity allocation domestically. While only Canada and Japan had a lower share among major markets, the UK has followed a trend of decreasing the domestic exposure in total equities that can be observed in all markets over the last decade. Then again, investing 30% of a total portfolio in a single market reflects a clear overweighting of the domestic market.

²⁴ Based on 2019 data. IFS (2023). The gender gap in pension saving.



The limited investment by UK pension funds in the domestic economy, particularly in alternative assets such as infrastructure, is a missed opportunity for both pensioners and the economy. Infrastructure projects, such as transport, energy, and housing, can offer long-term, stable returns that are well-suited to the long-term investment horizons of pension funds.²⁵ However, the fragmented nature of the UK pension system means that many smaller funds do not have the scale or expertise to invest in such projects.

The UK government has recognized the potential of pension funds to contribute to infrastructure development and has been encouraging greater investment in this area. However, progress has been slow. The focus on keeping fees low has led many funds to prioritize low-cost, low-risk investments over potentially higher-return infrastructure projects. The Financial Conduct Authority²⁶ has noted that while fee caps are important, they should not deter funds from making investments that could deliver better long-term returns.

In comparison, pension funds in other countries, such as Canada and Australia, have been more successful in investing in infrastructure. These countries have larger, more consolidated pension funds that can take on the complexity and scale of infrastructure investments. By contrast, the fragmented UK system often results

²⁵ It is important to note that the way pension funds invest in infrastructure (direct or through infrastructure funds), has important implications on the risk-return profile for investors. See Andonov et al. (2021). <https://academic.oup.com/rfs/article/34/8/3880/6239714>

²⁶ Financial Conduct Authority. (2023). Fee caps and their impact on pension investments.

in pension funds investing in safer, lower-yield assets, missing out on the potential benefits of infrastructure and other unlisted investment vehicles.

To address this issue, there has been discussion about the need for greater consolidation in the UK pension industry, creating larger funds that can take advantage of economies of scale and have the capacity to invest in major infrastructure projects. However, the UK pension market is highly fragmented, including public employee pension plans. The Local Government Pension Scheme (LGPS) groups the pension plans of employees from 15,000 public employers, but asset management is pooled to a very limited extent. More needs to be done to encourage widespread adoption and to overcome the barriers that smaller funds face in participating in such initiatives. While keeping an eye on fees is important, the focus should be on net-returns (returns after fees), rather than just on low-cost investment products, that may not deliver the same kind of long-term returns.

V. The Basic State Pension, Poverty Among Low-Income Earners and Financial Sustainability

The UK's basic state pension, which serves as the foundation of retirement income for many, is often criticised for being too low, particularly for those who have had lower lifetime earnings. The current full state pension is just over £200 per week, which amounts to around £10,600 per year²⁷. For many retirees, particularly those that do not own their own home, this is not enough to cover basic living costs, leading to an increased risk of poverty. Furthermore, many retirees, particularly women that retired before 2010, do not received the full pension²⁸. According to a recent IFS report, relative pensioner poverty increased from 13% in 2011-2012 to 16% in 2022-2023²⁹. They state that a main reason for this is that the growth in the state pension has lead to a decrease in other means-tested benefits for low-income elderly. As a result, total benefit incomes only rose by 1% over the same period for pensioners in the lowest third of the income distribution.

Overall the UK has a lower 65+ poverty rate than the OECD average, but slightly higher than for many other western European Countries³⁰.

The situation is particularly dire for those who do not have significant workplace or private pensions to supplement their income. Low-income earners, especially those who have spent time out of the workforce due to caring responsibilities or health issues, often find themselves reliant on the state pension alone. The Joseph

²⁷ Department for Work and Pensions. (2023). Coverage gaps in the UK pension system.

²⁸ Cribb, J. E. (2023). The Future of the State Pension. IFS.

²⁹ Cribb, J. K. (2024). How have pensioner income and poverty changed in recent years? IFS.

³⁰ OECD. (2023). Pension Contribution Rates in OECD Countries.

Rowntree Foundation³¹ has highlighted that many older people in the UK are living in poverty, with the state pension providing only a minimal safety net.

Furthermore, the means-tested benefits that are supposed to top up the income of the poorest pensioners, such as Pension Credit, are often underclaimed. The Department for Work and Pensions³² estimates that around 1.4 million pensioners are eligible for Pension Credit but do not claim it, missing out on an average of £3,000 a year. This underclaiming exacerbates the issue of poverty among retirees, particularly among those who are most vulnerable.

In addition to the issues for savers, the financial sustainability of the state pension system should also be considered. In 2023-24, government spending on the state pension, pension credit and winter fuel subsidy is estimated to reach £132 billion, or 5.1% of national income. This is projected to further increase to 6.4% of national income by 2050-51³³. Two major factors drive this spending. The first is demographics, with the number of pensioners projected to increase by 25% by 2050. The second is how the pension benefits are indexed. The Labour government committed to maintain the ‘triple lock’, whereby the state pension is indexed each year to the highest of inflation, growth of average earnings, or 2.5%. This policy introduces significant uncertainty regarding future financial planning of pension spending. Moreover, Cribb et al., also estimated that the triple lock could cost between £5 billion and £40 billion (in 2023 terms) annually in 2050.

Considering these issues, there is a strong case for increasing the basic state pension to ensure that it provides a more adequate level of income, especially for those with limited other resources. Additionally, efforts should be made to improve the take-up of Pension Credit and other benefits to ensure that those who need them most are receiving the support they are entitled to.

VI. Inadequate Portability of Pension Benefits

The lack of portability in the UK pension system is a significant issue for workers who change jobs frequently, which is increasingly common in today’s labour market. While it is possible to move pension pots between different workplace schemes in the UK, many savers are not aware of this or are not doing so for other reasons.

The current system can result in individuals accumulating multiple small pension pots, which are often difficult to manage and can lead to lost or forgotten savings.

³¹ Joseph Rowntree Foundation. (2022). Poverty amongst pensioners in the UK.

³² Department for Work and Pensions. (2023). Coverage gaps in the UK pension system.

³³ Cribb, J. E. (2023). The Future of the State Pension. IFS.

The consequences are dramatic. According to NEST, there are more than £25 million in lost pension pots in the UK.³⁴ These are pension pots that savers are not aware of, mostly due to job changes and not having consolidated pensions when changing jobs.

Consolidating pension pots allows a better overview of savings, easier claiming of benefits, and avoiding paying management fees to multiple organisations. Better portability would also allow savers to only have one pension pot throughout their working life in the UK.

The Pension Dashboard initiative, which is currently under development, aims to address this issue by providing a centralized platform where individuals can view and manage all their pension pots in one place³⁵. This initiative has the potential to improve portability and help individuals consolidate their pension savings, but it is still several years away from full implementation. The free Pension Tracing Service is also at the disposal of individuals to help them identify their pension pots.

In the meantime, there is a need for interim measures to improve portability, such as making it easier to transfer pensions between schemes and encouraging providers to offer more flexible options for consolidation.

Improving portability is essential not only for the convenience of pension savers but also for ensuring that they can maximize their retirement savings. Small, fragmented pension pots often result in higher administrative fees and lower investment returns, which can significantly reduce the value of an individual's retirement savings over time.

VII. Focus on fee caps rather than net returns

The focus on fee caps, intended to protect members from excessive charges, can also have the unintended consequence of discouraging funds from pursuing higher-return investments, such as equities or infrastructure projects. While fee caps are crucial in preventing fund managers from eroding members' savings through high fees, there needs to be a balance that also encourages investments that can deliver higher net returns. The Financial Conduct Authority (FCA, 2023) has noted that a more flexible approach to fee structures, aligned with investment performance, could potentially lead to better outcomes for pensioners.

Link to these recommendations on retirement income: Much attention in UK DC pension policy is given to the accumulation phase. But ultimately, what matters for

³⁴ See <https://www.nestpensions.org.uk/schemeweb/next/about-pensions/identifying-your-pension-pots.html>.

³⁵ Pensions Dashboard Programme. (2023). Improving pension portability in the UK.

savers is how much income they will have in retirement. Therefore, we advocate an increased focus on the policies for a well-structured decumulation phase of DC pension plans. This issue is particularly important since DC pension plans are becoming more prevalent in the UK.

The ‘pension freedoms’ reform in 2015 abolished the mandatory purchase of an annuity with personal DC pension savings upon retirement (Cribb et al, 2024a). As a result, individuals are faced with complex financial decisions that they might not be prepared for. The IFS (Cribb et al, 2024a) suggests that the government needs to design services to help people in these decisions and also proposes a default payout option. We support these recommendations. Payout options should combine the purchase of an annuity and lump-sum payments to allow for partial longevity risk pooling.

3. Reform Proposals

This section sets out a series of recommendations to address the challenges described in the previous section. In addition to the responses to specific challenges set out in the previous section, we see two overarching issues for the UK pension system that all pension reform efforts should strive to address.

First, pension policy in the UK does not have a clearly defined purpose. The Pensions Commission³⁶ has argued that the UK pension system needs a more purpose-driven approach, where all elements of the system, state pensions, workplace pensions, and private savings are aligned towards a common objective.

Currently, the system is a patchwork of different schemes and policies, with no overarching framework that ensures all individuals can achieve a decent standard of living in retirement. Without a clear goal, such as ensuring that individuals retire with a pension income equivalent to two-thirds of their final salary, it is difficult to design a system that effectively meets the needs of retirees.

A clearer purpose would help guide policy decisions, such as setting appropriate contribution rates, designing investment incentives, and determining the level of state support. It would also provide a benchmark against which the success of the pension system could be measured, ensuring that it delivers on its promises to future retirees. A clear goal would also promote a more holistic approach to pension reform by allowing each reform proposal to be evaluated regarding its contribution to this goal.

The idea of a three-pillar approach, where the state pension is focused on poverty alleviation, the workplace pension on income replacement, and personal savings on

³⁶ The Pensions Commission. (2021). Toward a purpose-driven system.

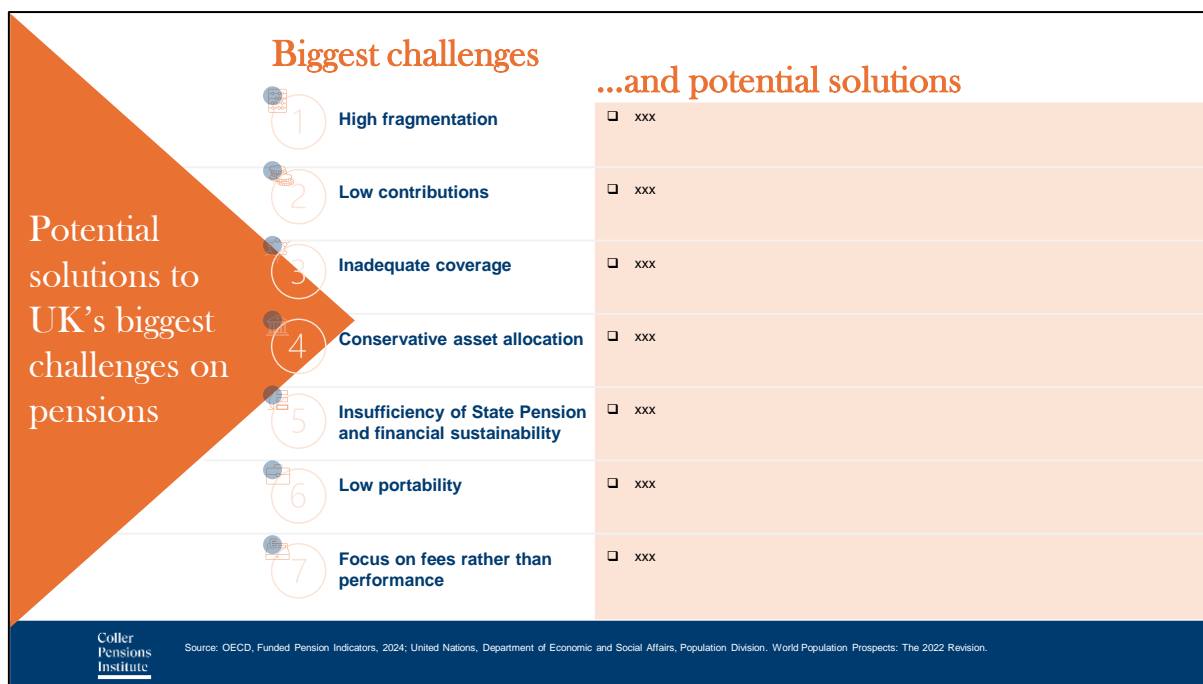
additional security, could provide a useful framework for this purpose. By clearly defining the role of each pillar, the UK could create a more coherent and effective pension system that ensures all individuals can retire with financial security. Second, the UK pension system should move from a patchwork of single-employer pension schemes towards a system of large multi-employer pension plans seen for example in Australia, the Netherlands and Denmark. As will become clear in this section, consolidation of the UK pension market can help address several of the challenges we have described. A multi-employer system would simplify pension matters for employers, employees and retirees.

The UK workplace pension system is facing numerous challenges that undermine its ability to provide financial security for retirees. High fragmentation, low contribution rates, inadequate state pensions, limited investment in infrastructure, poor coverage for certain demographics, gender disparities, lack of a clear system purpose, and inadequate portability are all significant issues that require urgent attention. To address these challenges, comprehensive reforms are needed, guided by a clear purpose and informed by international best practices. Ideas for improving the system, and making it world-class are explored in the next section.

The overall aim of UK pension policy should be to move from the current mostly single-employer model to a multi-employer model seen in many other countries with well-performing pension systems.

I. Consolidate the pension market

Several countries with leading pension systems have experienced a wave of consolidation of pension schemes in recent years, for example in Australia and the Netherlands. Research has found that the size of pension funds matters. Large pension funds achieve lower costs, have access to better funds and also achieve lower fees for external asset managers (De Vries et al, 2024; Begenau and Siriwardane, 2024). Larger funds also set up more in-house teams that reduce costs. Barr (2022) stresses that pension systems where individual workers are faced with many competing pension providers are inefficient, because contrary to classic competition theory the workers cannot generally be assumed to be well-informed and move to better providers. Competition should instead be between asset managers that compete for the contracts with pension providers.



Arguments against consolidation include the complexity of the consolidation process and the associated costs, loss of member influence, potential difficulty in accounting for a wider diversity of member interests and profiles under a consolidated structure, legal barriers and a risk of too little competition (OECD, 2022).

While there is no consensus about the dominance of benefits or costs of pension consolidation, research predominantly finds that fund size is positively correlated with financial returns and lower costs. The very high number of small pension funds in the UK seems indeed inefficient. Therefore, we recommend consolidation with a focus on fund performance and fees.

Consolidation is high on the pension policy agenda of the new Labour government.³⁷ The FCA's proposed value for money framework also suggests that underperforming funds should be merged with other funds (FCA, 2024).

On the DB side, an obvious place to push consolidation is the LGPS, which oversees the pension of 6.1 million public employees.³⁸ Despite some shared infrastructure, assets of the different government authorities are still managed by 86 separate entities. If all assets were pooled, it would be one of the very largest pension funds globally. In 2015 the national government initiated the setup of asset management pools for the assets managed by the various local authorities. The outcome of a 2023 government consultation (Department for Levelling Up, Housing & Communities, 2023) noted limited progress in asset pooling in the LGPS. As of

³⁷ See <https://www.ftadviser.com/pensions/2024/08/19/pension-review-to-start-with-consolidation-of-dc-market/>

³⁸ See <https://www.ft.com/content/8c23da17-36bb-43c0-a1de-f2d56a57aa35>

March 2022, 39% of total assets had been transferred to eight of these funds. The resulting proposal of deadlines for asset transfers to larger pools should be picked up by the new government and formalised.

On the DC side, the role of NEST should be expanded or similar structures to it should be set up to pool the assets of smaller schemes. A minimum standard for plan size and performance should be defined with plans failing to meet this standard having to explore consolidation options. A transition period should also be set.

Examples in other countries including Australia, the Netherlands and Denmark show that it is possible to pool the assets of workers in various professions in a way that delivers returns for savers and a sound governance structure. Therefore, we welcome the fact that the first phase of the pension review announced by the government will focus on DC consolidation and the LGPS.³⁹

Aside from performance, consolidation will also make easier the implementation of default options, the development of tailored investment solutions, and will reduce the administrative burden on employers. Consolidation will also work towards significant other goals described in the remainder of this section

II. Raise the minimum contribution rate in auto-enrolment

Another lever the government should evaluate is the minimum default contribution rate in auto-enrolment. The current rate of 8% of salary combined from employer and employee is low compared to some of the best pension systems in the world. In Denmark and the Netherlands for example, total contributions for private sector employees are 12% and 18.6% respectively. In Australia, it is 10.5% (OECD, 2023). In all three countries, the employer also contributes more than the employee, contrary to the minimum contribution rates in the UK. Setting minimum contributions rates is important, as research shows that most workers that started to save because of auto-enrolment save around these minimum thresholds.⁴⁰

In addition to minimum contribution rates, default contribution rates play an important role in occupational pensions. Currently, employers must set a default rate, but they can choose it freely above the mandatory minimum levels. Wide-spread inertia in pension decisions suggests that most employees will stay at the

³⁹ See <https://www.gov.uk/government/news/chancellor-vows-big-bang-on-growth-to-boost-investment-and-savings>

⁴⁰ See <https://ifs.org.uk/articles/roll-first-decade-automatic-enrolment-workplace-pensions>.

default rate. However, the effects of simply increasing the default contribution rate are not straightforward. In a recent experiment, Beshears et al. (2023) observed the behaviour of employees of a UK company after the introduction of a plan with automatic enrolment and a 12% default contribution rate. The employer matched only the 6% above this threshold, making the plan likely suboptimal. After one year, 75% of participants had opted into a lower contribution rate. Those with relatively lower income remained at the high default rate for longer, suggesting that inertia is particularly prevalent for lower-income earners. They might face higher barriers to active decision-making. Therefore, setting high default rates might particularly impact lower earners.

We recommend three reforms to contributions in workplace pensions. First, increase the minimum default contribution rate. This can be done in a gradual manner. Second, we recommend that pension contributions should be levied on the entire salary, instead of only earnings above £6,240 annually as is currently the case, and that every pound entitles the worker to employer contributions.

Lastly, the government should explore personalized default contribution rates and possible auto-escalation of such rates, meaning that the contribution rates automatically adjust. Adjustments could for example be made on age. As workers grow older, they are nudged to contribute more through higher contribution rates.

III. Reduce age and income thresholds for auto-enrolment and develop a strategy for the self-employed as well as targeted measures for women

To expand coverage of workplace pensions, we suggest lowering the minimum age for auto-enrolment to 18 years, as is already under way. Starting to save early is a powerful tool to grow pension savings. £1,000 saved at age 20 with an annual rate of return of 5% will have more than doubled by age 35 and more than quadrupled before turning 50.

We also suggest considerably lowering the minimum income to fall under auto-enrolment. The current lower limit of £10,000 results in many workers not being covered if they have no single source of income with revenues above this threshold. Workers with multiple smaller jobs may be able to save, but not covered due to these thresholds. It is possible for public authorities to identify such individuals. They should mandatorily open an account in NEST.

Another key issue is developing a strategy for the self-employed (Cribb et al, 2024a). We recommend that the self-employed should also mandatorily be affiliated with a NEST pension plan. Monthly or quarterly contributions could be estimated on past income and adjusted at the end of the year. Furthermore, when transitioning from

employment to self-employment, the individual should be able to continue saving in the same pension plan as before, and that could even be made the default option.

Designing effective and attractive savings products with a higher level of flexibility is particularly important for informal workers and the self-employed, as they suffer from more income volatility. Emergency savings products trialled by NEST show promise in motivating people to save. Research also shows that those with higher savings are more likely to start saving for retirement.

Targeted measures to reduce the gender pension gap are also needed. Women bear the overwhelming majority of caring responsibilities and are more prone to experience periods outside of the labour force or in part-time work. While much of the focus has been laid on childcare and maternity leave periods, demographic trends will lead to a surge in elderly in need of care. As things stand, women are likely to bear the brunt of these increasing responsibilities, adding pressure on female labour force participation.

Policies specifically aiming to mitigate negative effects on female labour supply and to reduce the gender pay gap will be crucial in counteracting an increase in the gender pension gap. However, policy makers should also devise pension-specific instruments. In the state pension system, the government fills gaps in contribution years due to caring responsibilities through the Carer's Credit.

Given the rising importance of private pensions in retirement income in the UK, there is a strong case for a similar initiative for workplace pensions. The PPI (2024) proposes a family carer top-up to fill contribution gaps during periods of reduced labour supply due to caring responsibilities, financed by employee and employer contributions as well as public spending. Since more low-income earners are women, policies need to be carefully designed to strike a balance between strengthening retirement savings without reducing current income of households too much. Employee contributions could be reduced or replaced by public spending during times of care for low-income earners, for example.

IV. Foster national investments through incentives and consolidation

Much attention in recent pension reform discussions in the UK has focused on leveraging the large pool of domestic pension savings to invest in the domestic economy. The underlying question is how can funded pensions support domestic economic growth. As Nicholas Barr (2021) puts it, future output needs to be high enough to satisfy the consumption of a higher number of pensioners in the future.

Funded pensions only support economic growth if these savings are invested in *productive assets*.

The question is how to promote this.

Pension assets should be seen as one element in the larger financial system with a particular aspect: they are long-term savings and therefore a particularly good match for long-term investments. However, the primary purpose of pension funds should remain to ensure safe and adequate retirement income, and not to fund domestic growth. Therefore, legislation limiting asset allocation freedom, for example quotas on domestic investment, can be problematic and lead to sub-optimal outcomes for the savers. The focus should not be on forcibly channelling pension savings into the domestic economy, but incentivising investment in productive assets. Tax incentives maybe? 1-2 papers on negative effects of financial repression?

Nevertheless, we believe that some other reforms will, as a by-product, lead to more domestic investment by UK pension funds. The consolidation of pension funds will notably lead to more pension funds having the scale to build in-house investment teams and invest in alternative assets. Especially allocations to unlisted equity and infrastructure could grow, as these asset classes require more specialized investment teams. A small percentage of investment into venture capital and high-growth companies, as envisioned under the Mansion House Compact, could also make an important difference for these asset classes given the scale of the potential capital to be invested.

V. Formulate a clear long-term plan for the state pension and focus on the effects of changes to the total income of low-income elderly

The state pension should have a clearly defined goal: to prevent poverty in old age. Therefore, it should be aligned with other support programmes and should be strictly focused on retirement income. This would give it a clearer profile and strategic role in the policy sphere.

Cribb et al. (2023b) suggest a pension guarantee based on four points for the future of the state pension. First, the government should define a long-term target level for the new state pension, as a share of median full-time earnings in the country. Second, before and after the target level is reached, the state pension should rise each year at least at the level of inflation. Therefore, annual growth will at least maintain the real value of the state pension, and rise with average earnings if wage evolution exceeds inflation. Third, the state pension should continue to not be means-tested. Fourth, the state pension age should only rise if longevity in later life

increases, and the statutory age should rise by less than longevity. The state pension age should also be locked in for individuals ten years before reaching it.

These suggestions would allow for a clearer long-term planning horizon for the system, while making sure that real income of state pensioners does not decrease excessively during recessions and benefits from wage growth in times of economic growth. Additionally, we suggest that the old-age benefit system should be simplified and the government should carefully evaluate how an increase in the state pension will affect the total income and benefits of lower-income pensioners through the interaction with other, means-tested benefits. Furthermore, linking the increase in retirement age to longevity will avoid politically difficult reforms of the statutory retirement age.

VI. Portability of workplace pensions

The government has several options to nudge savers to consolidate pension pots upon a job change. First, it should prohibit any pension provider from charging fees for the transfer in or out of a savings pot. Second, it should mandate providers to ask a member about their desire to consolidate pensions, and offer this service to customers. Third, it should run more communications campaigns to make people aware of the Pension Dashboard and the Pension Tracing Service. Consolidation of the pension fund market and a transition to multi-employer plans will naturally make portability easier

VII. Focus on performance instead of fees

Much attention by policy makers and regulators has been given to minimizing the fees that pension providers charge to savers. We argue that more attention should be given to what ultimately matters for savers: net returns on their pension savings. A more flexible approach that focuses on performance could however lead to higher returns for savers. A recent FCA (2024) consultation paper for the value-for-money framework for pension funds proposes such efforts coupled with transparent disclosures of fees and performance.

Dyck et al. (2022) find that the fear of public outrage about higher compensation at public pension funds leads trustees to hire lower-skilled managers and eventually to lower returns on investment in riskier asset classes (alternatives and public equities). Lu et al. (2023) show that pension funds with higher-paid CIOs experience better future returns in the long-term. This evidence suggests that compensation at pension funds can have an important effect on investment returns, and therefore

member benefits. More flexible compensation could also allow more investment in alternative and risky asset classes, including domestically.

Conclusion

[To be updated]

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