

Box A: Implications of the transition from Defined Benefit to Defined Contribution pensions in the UK

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This box discusses the ongoing shift in the UK funded occupational pension landscape from Defined Benefit (DB) to Defined Contribution (DC) schemes, which carries significant implications for financial markets and the broader UK macroeconomic environment. Within the cyclical horizon, this transition is anticipated to result in a decline in real pension savings and a redirection of capital away from domestic use. The financial repercussions extend to funding pressures on the UK central government and to corporate sectors involved with infrastructure, such as utilities and housing. Additionally, it makes long-term interest rates more volatile and fosters a procyclical relationship with sterling. The key macroeconomic repercussion is an erosion of resources and willingness to invest domestically, from both private and public sources.

Recent policy attempts to induce domestic investment from private pension funds are well intentioned. The bigger opportunity for the UK Government to nurture investment lays with occupational pensions in the public sector.

UK funded occupational pensions to shrink

The size of the funded pensions balance sheet changes directly with the value of financial assets and inversely with interest rates. The decline in total assets in 2022 from £2.7 trillion to £2.1 trillion due to the sharp increase in interest rates was widely broadcast. However, the bulk of that loss has been recovered in 2023 as long-term interest rates have backed down.

The £5.4 billion net outflows in the UK funded occupational pensions sector observed in 2022 is far more indicative of the sector's health than any eye-catching headlines. These outflows are estimated as the difference between contributions into pension schemes for active and deferred members, and benefits paid out to retirees. The outflows first emerged in 2021 at £4.4 billion, reversing the inflows in previous years.

When we break the data down by type of scheme, we can see that DB schemes experienced net outflows of £28.7 billion whereas DC schemes experienced net inflows of £23.3 billion. The negative balance arises from the benefits that DB schemes pay to their 4.9 million retirees, which surpasses the contributions that DC and public sector schemes receive from their 13.75 million active and 20.64 million deferred members.¹

The outflow trend from excess benefits over contributions is expected to intensify over the next five years due to the demographics of pension membership. Furthermore, the total balance sheet size of funded UK DB pensions is expected to decline due to buy-in/out

1 Source: Own calculations based on ONS data.

transactions. In April 2023, the Bank of England stated that the UK life insurance industry is expected to absorb over £500 billion of pension liabilities and assets in the coming decade.

Why does this matter?

DB schemes are significant domestic lenders, while DC schemes are predominantly investors in foreign assets. DB schemes allocate almost 70 per cent of their investment portfolios to bonds, of which, 65 per cent is lent to the UK Government and 18 per cent to domestic corporations.² In DC schemes, sampling from the UK Government-sponsored National Employment Savings Trust (NEST, the country's largest DC workplace scheme with £33 billion assets under management), the estimated total exposure to UK assets is less than 30 per cent, in contrast with the largest exposure (44 per cent) in Global equities.

The UK Government relies heavily on DB schemes for long-term financing. The pensions and insurance industries own about 40 per cent of total UK government bonds. Corporations also benefit from the long-term capital provided by DB schemes and insurers, especially infrastructure owners. However, corporations typically benefit from a more diversified lender base than the Government, in which UK life insurers feature prominently.

Demand for duration in investments declines as the pension system matures and longevity gains diminish. DB scheme net outflows reduce the duration of liabilities by around 0.6 years per annum. Furthermore, ongoing declines in longevity gains could further reduce duration by 1.5 years, bringing the total down by 4 years through 2027.³ This has knock-on effects on demand for long-dated debt, which DB schemes typically use to hedge their 15-25 years of liability duration. Long-dated debt is often issued by the UK government and infrastructure-heavy corporates. Consequently, the financial stability that long-term borrowing provides will decline in the absence of a lender able to replace DB schemes in enabling such borrowing. This negative effect is likely to be more severe on the public finances than on corporate finances, as insurers are often willing lenders to the latter but less so to the former.

Financial implications

The result of the adverse dynamics in UK DB pensions explained above over the next 5 years is a cumulative outflow of £160 billion. This is approximately 6 per cent of current GDP, 12 per cent of total assets in private DB schemes, 13 per cent of the market value of nominal and index-linked Gilts (excluding Bank of England holdings through the Asset Purchase Facility as of the third quarter of 2023) or 30 per cent of sterling non-Gilts. The large size of the outflow has a two-fold negative impact: firstly, because liquidating existing investments, especially government bonds, will likely be needed to accommodate the outpayments; secondly, because retirees are unlikely to reinvest the funds received in long-term UK government or corporate debt, but, rather, to spend it.

Diminishing structural demand for government bonds creates government financing challenges and headwinds to the Bank of England's quantitative tightening plans. Private DB schemes are expected to sell £40 billion of UK government bonds over the next five

² Source: Own estimates based on Pension Protection Fund (2023 Purple Book)

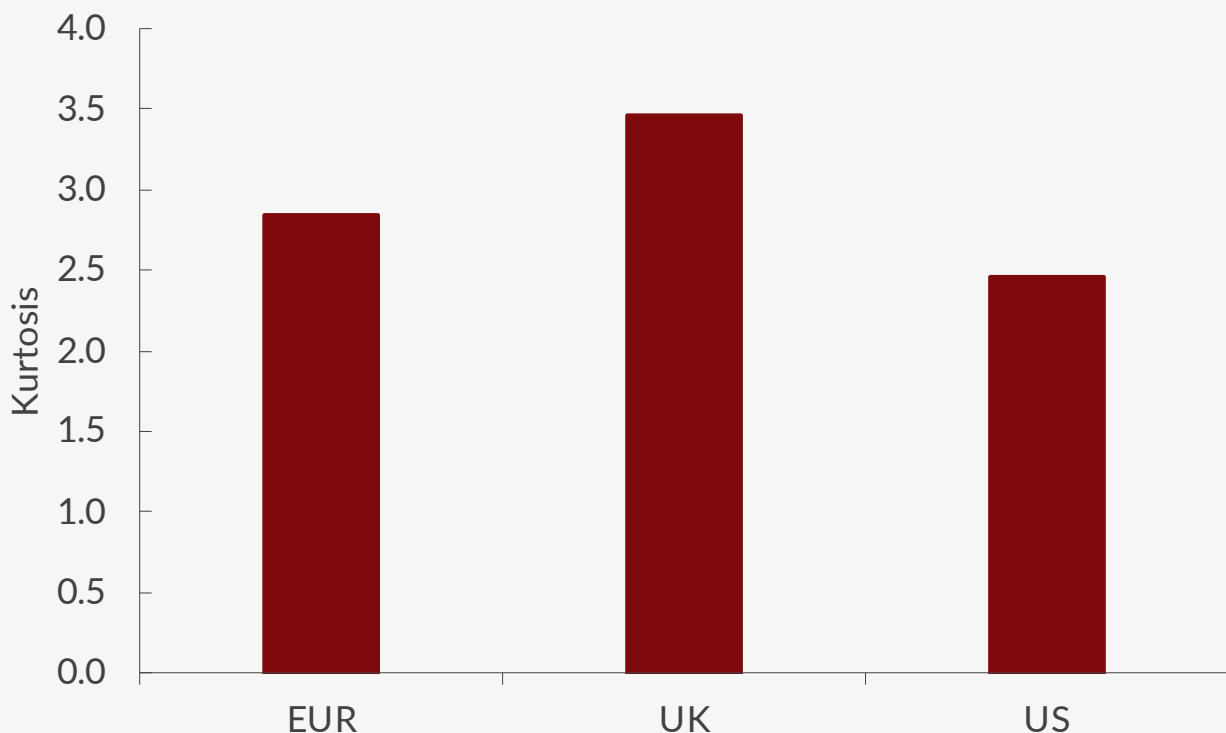
³ Source: Own calculations based on data from the Continuous Mortality Investigation, Institute & Faculty of Actuaries.

years to accommodate outflows. Annualised, this is about 10 per cent of the planned long-term nominal and index-linked Gilt issuance in 2023-24 as reported in HM Treasury (2023), and 8 per cent of the expected sales from the Bank of England’s unwinding of the Asset Purchase Facility over 12 months as reported in Bank of England (2023). Paired with weak economic growth and a lower inflation environment, these events make it reasonable to expect the Gilt curve to steepen.

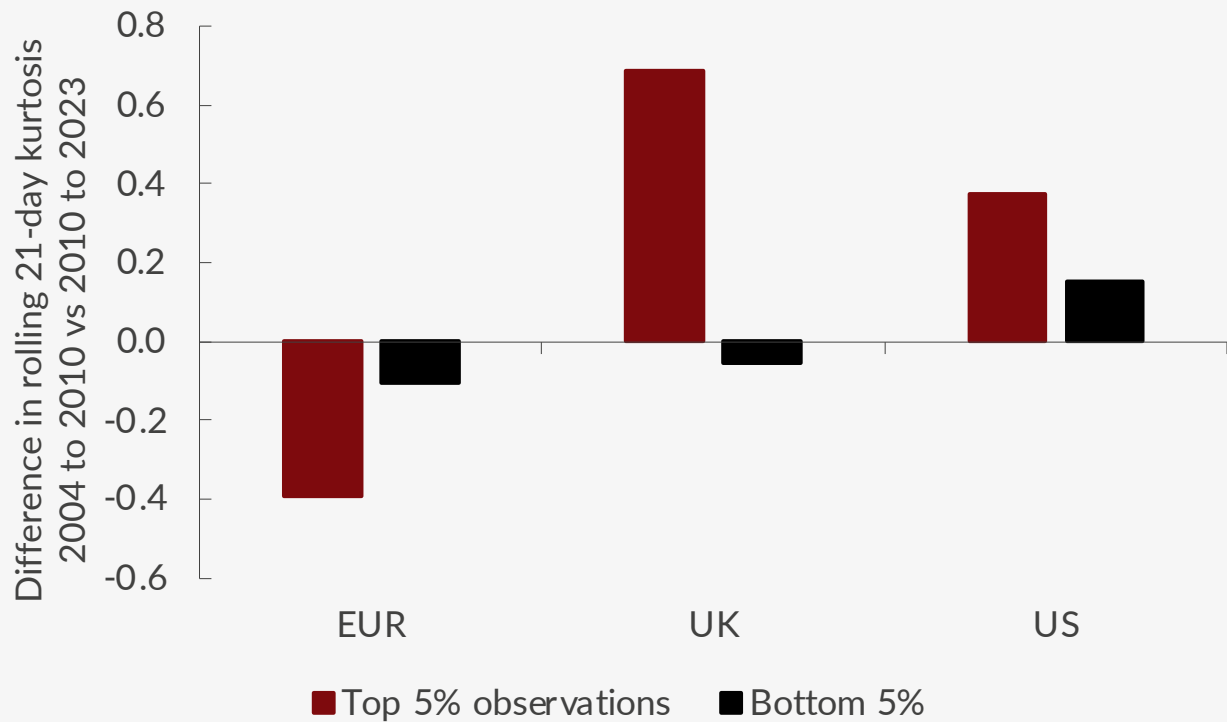
Elevated probability of large shifts in long-term rates. In the 2000s, the structural internal demand for long-dated UK government bonds from DB schemes helped stabilise yields and reduced the probability of large shifts in long-term interest rates. The decline in internal demand for government bonds in the 2020s, alongside the weakened position of the United Kingdom as a net recipient and a funnel of foreign investment, increase the probability of large movements in long-term rates.

Figure A1 shows that, in the case of large changes in long-term yields, the abruptness of such changes among UK bonds, as measured by the kurtosis in long-term yields, has become larger than in comparable US or euro-area bonds. And figure A2 shows that kurtosis in long-term UK government bond yields has also increased more over the past 13 years than that of US or euro-area AAA-rated government bonds.

Figure A1 Kurtosis in 20-year bond yields (2017 – October 2023)



Source: Author’s calculations based on yield curve data from the ECB, Bank of England and Federal Reserve Economic Data.

Figure A2 Change in kurtosis in 20-year Government bonds between 2004-2010 and 2017-Oct 2023

Source: Author's calculations based on yield curve data from the ECB, Bank of England and Federal Reserve Economic Data.

Reinforcement of the relationship between long-term yields and sterling. Historically, the relationship between sterling and long-term rates was weak because investors in long-dated UK government bonds were largely domestic. As DB pensions run off, in the absence of other significant domestic buyers, the gap between the demand and supply of long-term debt must be filled by (more price-sensitive) foreign investors. This leads to reinforcing relationships between sterling and long-term government bonds: as foreign investors flock to UK bonds, long-term rates decline and buying pressure on sterling grows, and vice versa.

The LDI crisis of 2022 was partly due to this phenomenon and can serve as a template for future shocks, which may become more frequent.

Macroeconomic and policy implications

The shrinking pool of domestic long-term investment capital negatively affects government financing, expenditure, and public capital formation. Furthermore, growing uncertainty from the financial implications described here hampers private investment projects and investor willingness to put capital to work in the United Kingdom. Both effects combined dampen both current economic growth and potential future growth.

The government's proposed policies in the Autumn Statement Pensions Reform 2023 aim to redirect investment capital from foreign to domestic uses but fail to address the root causes of the lack of domestic capital, including demographic changes and the transition from DB to DC schemes.

Policies around occupational pensions could be better utilised by policymakers to strengthen domestic investment. For example, the Government could consider migrating unfunded state pensions to a partly funded status, potentially strengthening domestic investment, which could even be directed towards public services like healthcare and education.

References

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