

## UK Macro and Financials

## Risk premium re-establishing as carelessness comes home

Industry Overview

## Some of the historical premium is back

The UK suffered from high real rates for some decades ahead of 2008: Bank of England Bank Rate was typically 3% above inflation (Exhibit 2) and 2-4% points above Fed Funds or the Bundesbank (Exhibit 3). Market pricing recently re-established a 1.75%-2% international premium, as it sees the US and EU cutting rates and the UK continuing to raise (Exhibit 4). Far from being an opportunity, we see this as exposing other fragilities in the UK economy and government debt stack. A 1.5% points per annum higher budget deficit out to 2027 (Exhibit 10) is one immediate result.

## The UK debt stack is highly sensitive

The UK theoretically has more than a decade in duration on its Gilts. Exhibit 5 shows the pain of higher inflation passed to holders of long-dated, low fixed-coupon paper – the 2061 Gilt trades at just 30p. But in reality, the majority of Gilts are highly sensitive to recent developments. The £800bn that the Bank of England now owns (Exhibit 6) are effectively funded at the overnight rate and the BOE sits on a £200bn mark-to-market loss. And on the £400bn inflation-linked debt the UK issued – almost all in the era of ultra-low inflation, now gone – there's a £200bn shock already experienced (Exhibit 7).

## The banks are robust to the challenge

We discussed in UK Banks: Attractive returns, unappealing backdrop 23 June 2023 and UK Banks: Teens is the new 10% for a sterling bank 21 June 2023 how banks are robust to the risks. Cash rich, highly capitalised and with less credit risk than for generations, the UK can be relaxed about this one area at least. They are set to enjoy £18 billion of revenues from hedge roll overs by 2025, keeping profitability into the teens percent, a minimum likely acceptable in the now higher-risk UK.

## 8% of GDP to issue this year

The UK runs a high budget deficit: at 4.6% 2024-25, planned on lower rates. Together with higher coupons to be financed and Gilts to be sold by the BOE, we see the UK needing buyers for 8% points of GDP in Gilts in the coming year, an historical high.

## The banks can be part of the solution: at higher yields

The banks are a natural answer the question of who will buy all these Gilts. Holding just 2% of assets in Gilts, compared with a peak above 50% (Exhibit 13) and cash-rich, there is scope for larger holdings. Hurdles are significant though: Gilts yield less than swaps; given the leverage capital ratio, they need to yield more to be appealing. That's a further 80bp yield pickup required from here (Exhibit 15, Exhibit 16). Banks only ever really bought short-duration Gilts (Exhibit 18). And the current regulatory discussion over the Liquidity Coverage Ratio is most unhelpful: while Gilts will always be liquid, there is price risk even in relatively short-dated Gilts in periods of volatility such as now. Gilts may not be a close substitute for cash, unless bank regulators choose to make them so.

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Timestamp: 28 June 2023 12:00AM EDT

28 June 2023

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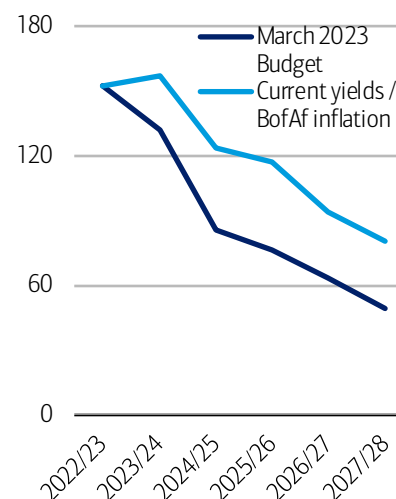
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### Exhibit 1: UK borrowing £30-40bn higher per year than Office for Budget Responsibility forecasts

UK Public Sector Net Borrowing Requirement, 2022-27 (£ bn)



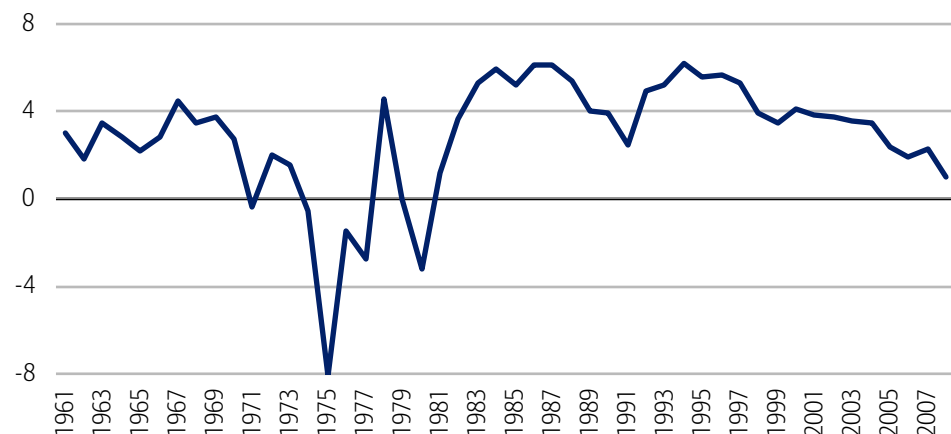
Source: BofA Global Research estimates, OBR  
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## History rhymes, notably in the UK

The UK traditionally saw relatively high real rates – defined as Bank Rate less inflation. As shown in Exhibit 2, the median Bank Rate compared with inflation was 3.5% higher and the average 2.9%.

### Exhibit 2: Bank Rate averaged 2.9% above inflation from 1961-2008

Bank of England Bank Rate less CPI (%) 1961-2008



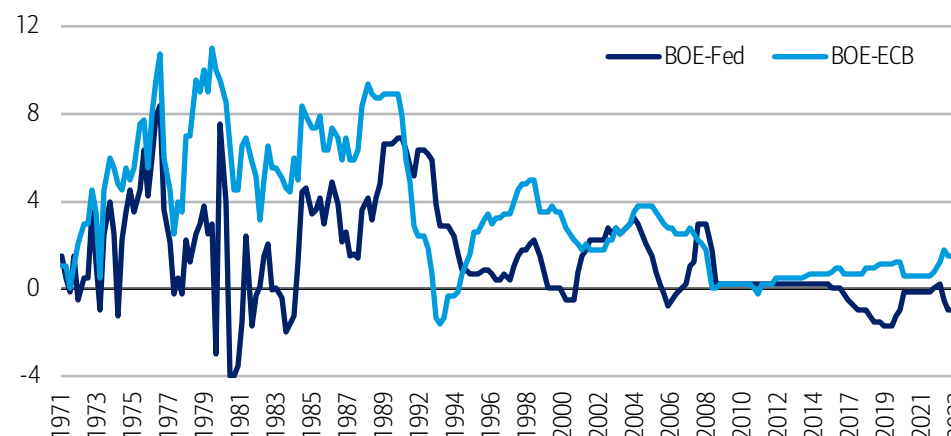
Source: BofA Global Research estimates, Bank of England

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From 1971 to 2008, the UK averaged a policy rate 2.1% above that of the Federal Reserve and 4.4% above that of the Bundesbank/ECB, shown in Exhibit 3.

### Exhibit 3: UK policy rates traditionally 2-4% above the US and Germany

Bank of England rate less Fed Funds or Bundesbank, 1971-2023 (% points)



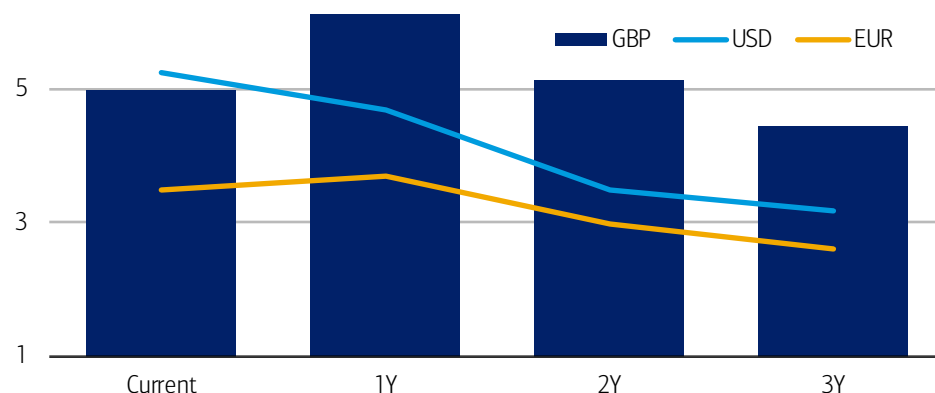
Source: BofA Global Research, Bloomberg

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The pre-1992 period included a long time where the UK macro framework lacked credibility; soon after the 1992 devaluation and introduction of inflation targeting, risk premia fell. Credibility is highly significant in this light. Recent weeks have seen the UK priced to return to a premium policy rate to peers once more, re-establishing the historical pattern.

**Exhibit 4: Bank Rate set to be 1.75% above Fed Funds in two years**

Market Implied Policy Rate (%), next 3 years (%)



Source: Bloomberg

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We discuss in this report how this premium passes through to the cost of government debt and, in turn, the deficit.

**Theoretically a long-dated debt stack**

The UK's government debt has an average maturity of 14 years and duration of 10.6 years. Holders of long-dated bonds have taken significant strain as a result of the return of inflation and a UK risk premium, shown in the price of a long-dated, low coupon Gilt issued at par in 2020 and now trading at 30p (Exhibit 5).

**Exhibit 5: UK 2061 ½% Gilt has fallen by 70p**

UK 2061 Gilt price (p)



Source: Bloomberg

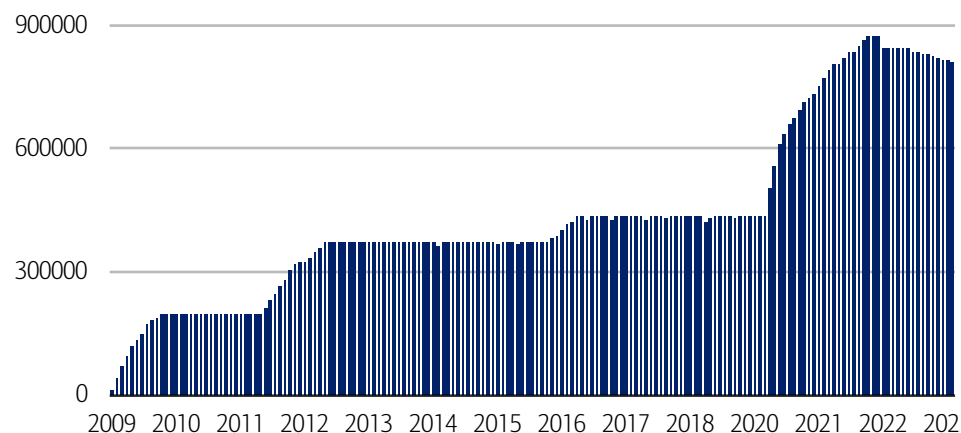
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**Quantitative Easing turned Gilts to overnight**

The UK's current struggle is that its actual debt stack is of far shorter duration. Key reason one: the Bank of England owns £800bn of Gilts (Exhibit 15). It financed their purchase through money creation, which sits back on the BOE balance sheet in the form of bank reserves. These are necessarily remunerated at Bank Rate – for a discussion on why, see [UK Macro and Financials: Deposit remuneration: £1 trillion can't be argued with 23 June 2022](#) (report link).

**Exhibit 6: the Bank of England converted £800bn long-term Gilts into overnight yields**

BOE Gilt holdings, £mn, 2009-23



Source: Bloomberg

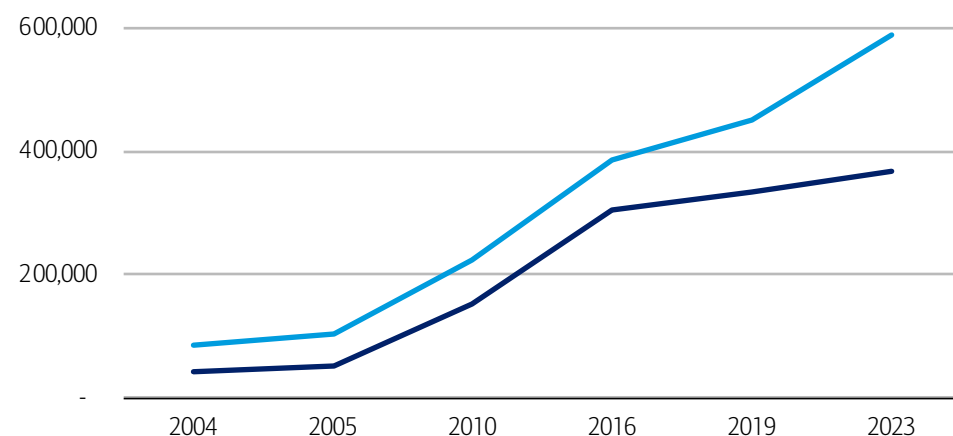
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**The UK issued inflation-linked heavily**

Key reason two: in its now-departed period of ultra-low inflation, the UK chose to issue inflation-linked debt heavily. This is proving an expensive choice and this very long-dated debt has now grown by over 50% relative to issue as inflation is added to the principal (Exhibit 7).

**Exhibit 7: UK exposed to inflation-linked debt dynamics**

UK inflation-linked government debt, as issued and including inflation uplift, £ mn, 2004-2023



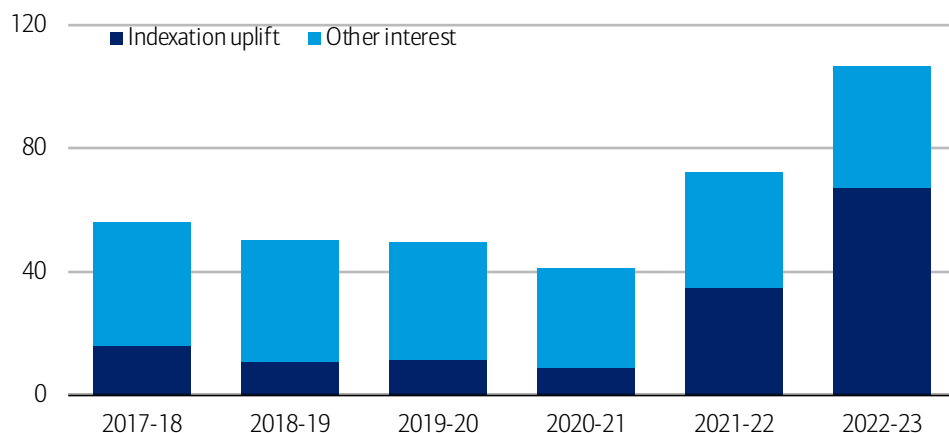
Source: DMO

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Looked at another way, the increase in what the government owes on its inflation-linked debt was larger than the total coupons on all its other debt in the last two years (Exhibit 8).

**Exhibit 8: UK government debt interest and inflation indexation uplift (£ mn) 2017-23**

Coupons low on fixed-rate debt, but inflation more than doubled total interest cost



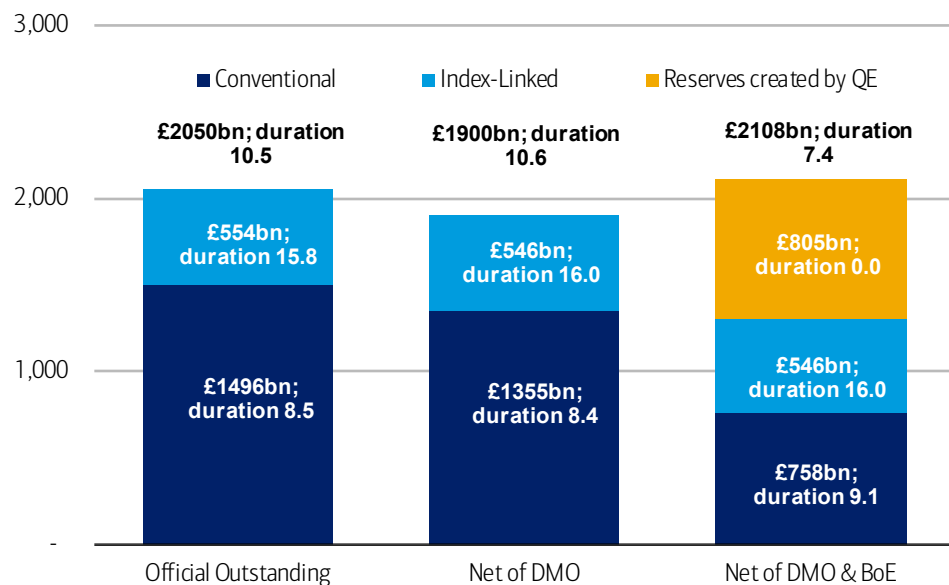
Source: BofA Global Research estimates, DMO

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In the round, the UK's debt is only one-third fixed rate – detailed in Exhibit 9.

**Exhibit 9: the Bank of England and inflation-linked debt approach £1.4 trillion**

UK government debt by nature, in market value terms, £ bn



Source: BofA Global Research estimates, DMO

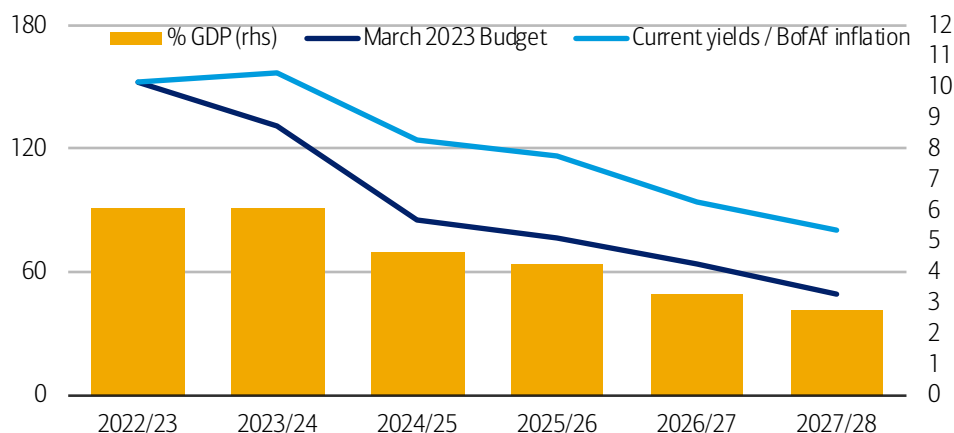
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**Adding £30-40bn a year to the deficit**

We see the UK likely to face a 1.5% point higher budget deficit than currently forecast by the Office for Budget Responsibility, shown in Exhibit 10.

**Exhibit 10: UK borrowing £30-40bn higher per year than Office for Budget Responsibility forecasts**

UK Public Sector Net Borrowing Requirement, 2022-27 (£ bn) and % GDP



Source: BofA Global Research estimates, OBR

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For this illustration, we have added to government borrowing changes in debt interest from higher yields and higher inflation and an assumption that the government does not raise fuel duty (frozen since 2010). Adjustments for growth would be incremental. Further out, the Office for Budget Responsibility assumes trend growth close to 2%; with 2.5% and 2.1% GDP growth in 2025 and 2026. We regard each of these as challenging assumptions. Further, we have not adjusted for benefit uprating (higher due to higher inflation) and public sector wages, although equally increased revenue from freezing tax thresholds, if sustained, would lift tax income.

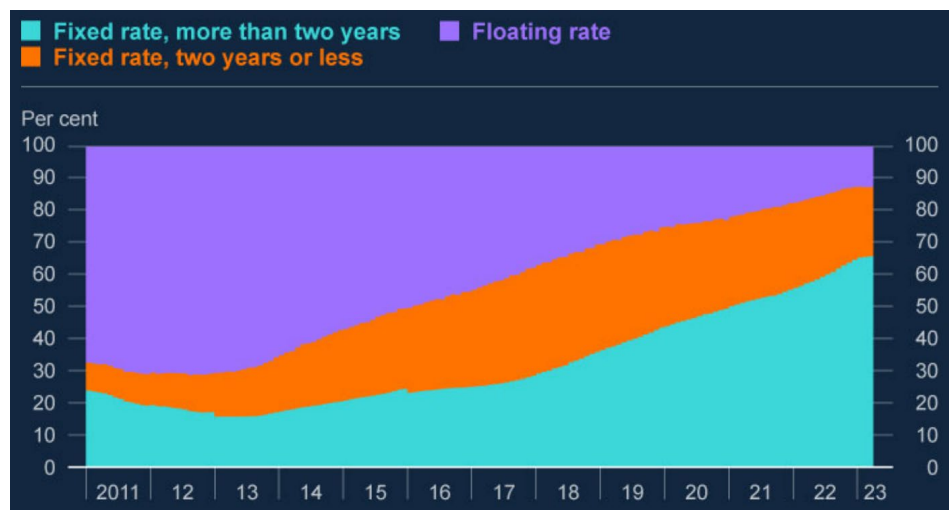
Absent change in policy, the government is borrowing > 4% GDP out to 2026/27. We believe a risk premium for a deficit this high for this long is quite reasonable to expect. The UK therefore faces a difficult interaction between inflation, growth and the deficit which it faced historically and over several decades was unable to quite solve for.

## A slow burn in the housing market

This risk premium will have a delayed impact on the economy as mortgages gradually reprice. Over the last decade, UK households moved from taking floating rate loans to loans with a period of initial fixation, shown in Exhibit 11. This dropped the share of immediately repricing loans from 69% to just 19% ahead of the start of this rate cycle.

**Exhibit 11: Before the rate cycle started, floating rate loans were down from 69% of loans to just 19%**

UK mortgage stock by interest rate type, 2011-23 (%)



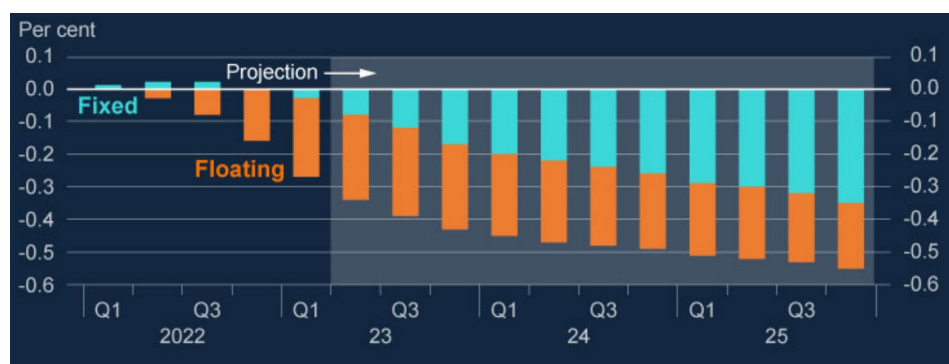
Source: Bank of England

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This meant that there would be very little impact on borrowers in actual cashflow terms in the first part of any rate hikes cycle. Indeed, experience in Exhibit 12 is that the first three quarters of hiking still saw fixed rate borrowers rolling onto lower rates. The large impact of higher-for-longer lies ahead.

**Exhibit 12: A very slow impact of higher rates was baked in; indeed, it was a year before any impact on fixed rate loans at all**

Cashflow impact of higher rates, through mortgage interest payments % consumption



Source: Bank of England

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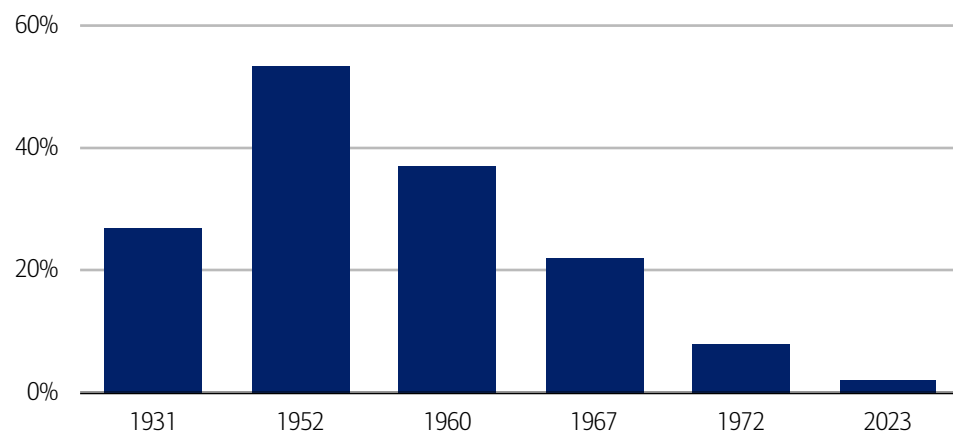
We discuss these issues in more detail in [UK Viewpoint: Strong housing credit quality vs entrenched inflation = higher for longer 09 June 2023](#) (report link). Sticking with the banks though, can they address the UK's funding needs? With caveats, we think so.

## Will the banks buy the Gilts? Yes, but...

Banks have never owned fewer Gilts than today – shown in Exhibit 13 looking back almost a century. From a post-World War II peak at over 50% of assets, they have fallen to a current 2%.

**Exhibit 13: bank holdings of Gilts never lower relative to assets**

Percentage of UK bank balance sheets held in UK government securities 1931-2023



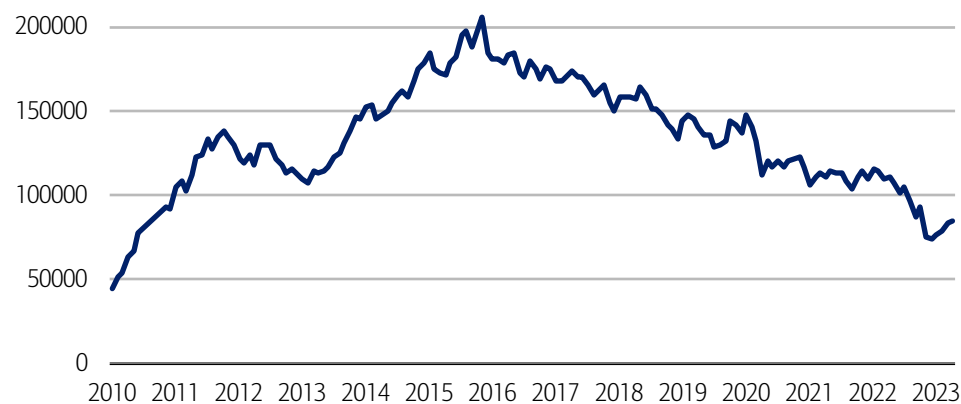
Source: BofA Global Research estimates, Bank of England, company data

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Even in the recent past, their holdings halved (Exhibit 14). This was perhaps a natural response to the collapse in yields, although we highlight no recovery since the upward move in yields.

**Exhibit 14: UK banks halved their Gilt holdings since 2016**

UK bank holdings of UK government securities, £ mn, 2010-23



Source: Bloomberg

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**Gilts yield less than swaps. Needs to be 80bp the other way**

This in part reflects that Gilt yields are below those on swaps, shown in Exhibit 15. This will in any event drive banks to prefer a swap to a Gilt.



**Exhibit 15: Swaps at a 34bp premium to 5Y Gilt yields**

Swap spread to Gilts, 2019-23



Source: BofA Global Research, Bloomberg

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It may be that Gilt yields need to be higher still than just closing the gap to swaps. This is because in the leverage ratio, cash is excluded but Gilts included. A cash plus swap position is leverage-capital free, while an equivalent Gilt uses capital. Even assuming a low 3% allocated capital hurdle, to deliver a 10% Return on Equity, the Gilt may need to yield 46bp more than a swap to be appealing. (Exhibit 16).

**Exhibit 16: Gilts need 46bp higher yield than swaps from a leverage perspective**

Gilt purchases consume leverage capital. Illustrative 3% requirement demands a 46bp income to deliver an 11% ROE

Leverage ratio	3%
Tax	27%
Required ROE	12%
Required pre-tax ROE	15%
Required ROA	0.46%

Source: BofA Global Research estimates, company report

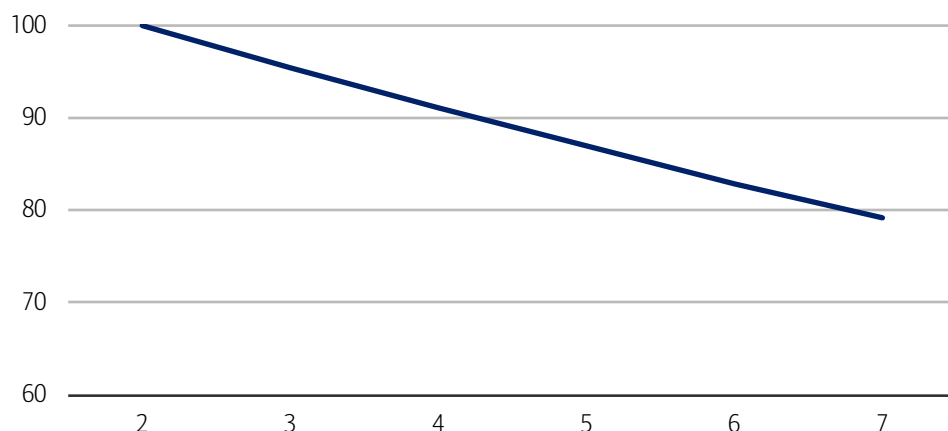
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**Liquidity certain, pricing not**

Liquidity in Gilts is certain: the BOE demonstrated once again in October 2022 that it will always keep the market liquid. Its Lender of Last Resort function means it will fund a bank's Gilt portfolio in any event. However, Gilts can trade below par – see Exhibit 17. Given the open debate currently being had by regulators about how to consider Liquidity Coverage Ratios, we believe banks will keep duration short. Cash will always have 100p/£ High Quality Liquid Asset value; Gilts with more than a few months' duration may not in future bank regulatory environments.

**Exhibit 17: A 2% coupon, 5-year bond could trade below 80p if yields rise to 7%**

Illustrative pricing of a 2% coupon bond with 5 years duration (p/£) at different prevailing yields



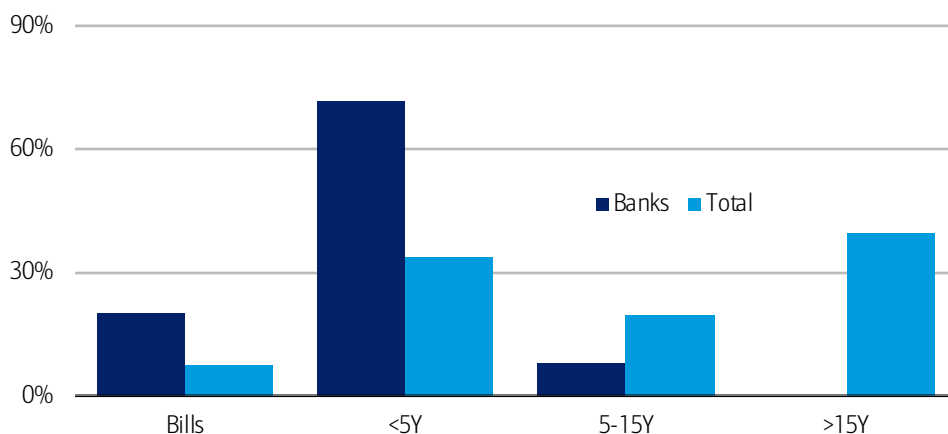
Source: BofA Global Research estimates

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As an example of bank preferences: at the end of the 1970s, when banks owned a lot of Gilts, it was almost exclusively in sub-5-year bonds (Exhibit 18).

**Exhibit 18: Gilt duration 1979: by bank ownership and total**

The UK government had issued mainly short-dated Gilts, as that what banks would buy (£ mn)



Source: Bank of England

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## Bank returns acceptable, not high

In this complex and tail-risk heavy environment, we estimate that a Return on Equity of 13% is a required minimum for UK banks – calculated as shown in Exhibit 19.

**Exhibit 19: We build a 13% Cost of Equity for the UK banks**

High Gilt yields drive a high Cost of Equity 2023E

10Y Gilt	4.3%
Equity Risk Premium	6.5%
Implied UK Cost of Equity	10.8%
Bank Beta	1.2
Implied UK Bank Cost of Equity	13.0%

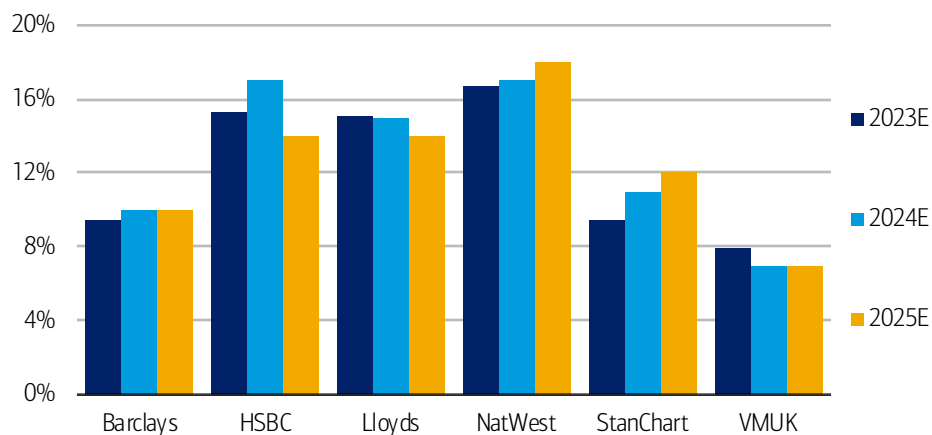
Source: BofA Global Research estimates

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Perhaps our 10% illustrative required ROE for banks to buy Gilts is even too low in this light. In any event, the returns banks are set to make (Exhibit 20) are high by recent historical standards, but do not look in any way excessive.

**Exhibit 20: Lloyds and NatWest domestic banks with ROEs in the teens**

Return on Tangible Equity (%) 2023-25E



Source: BofA Global Research estimates

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Moreover, any government intervention to cap bank returns, such as through additional taxes, impacts the capital generation banks need to expand their Gilt holdings while continuing to supply the private sector with credit. A higher rate of return for banks is an essential part of funding a higher-inflation, high-risk premium, higher-deficit UK, we think.

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