UK Viewpoint

Strong housing credit quality vs entrenched inflation = higher for longer

Entrenched inflation problem

The UK has an entrenched inflation problem in our view. Capacity pressures are high because the supply side of the economy has been hit by four shocks: energy, supply chain disruptions, workforce sickness and Brexit. These shocks mean weak demand bumps up against even weaker supply. Additionally, in our view inflation expectations have modestly deanchored.

Means extended period of weak growth

Unless none of current inflation reflects capacity pressures or deanchored expectations, bringing inflation to target sustainably will require the central bank to generate a margin of spare capacity. To do that the economy will need to grow slower than its potential, which we peg at 1% a year. We expect UK growth of 0.4% in 2023 and 0.3% in 2024.

And extended period of restrictive interest rates

To deliver that growth outlook the central bank will in our view need to keep interest rates restrictive for an extended period. Improving growth in recent months seems to us inconsistent with rates being restrictive enough yet. So ,we assume three more 25bp hikes to 5.25% terminal and one cut in 2024, leaving Bank Rate at 5.0% at end-2024. Uncertainty is high, risks two sided.

Pressure on the housing market

Most UK mortgagors have a 2-5 year fixed rate. In our view this delays and cuts the impact of Bank Rate hikes on consumer spending, so the BoE likely has to hike rates to 5% and above to slow the economy enough. Crucially though, while fixed interest rates mean current mortgagors are only gradually exposed to higher payments, new buyers are exposed immediately. That has driven mortgage approvals to low levels and house prices to fall. We expect both to continue, though house prices falls will likely remain gradual as long as unemployment remains low.

Time is expensive when inflation is high

Banks are stronger; mortgages less risky; and rates far more fixed. We detail the changes in this report: borrower stress in housing is sharply lower, shown through lower paydowns (Exhibit 21, Exhibit 22); lower loan to value (Exhibit 24, Exhibit 25, Exhibit 26), and lower arrears (Exhibit 28, Exhibit 29). This sharply reduces housing stress. With the collapse in floating rate loans from 69% to 19% (Exhibit 14), tightening takes still longer to have an impact and indeed had no effect on fixed rates in its first year (Exhibit 15). And with banks having tripled capital (Exhibit 30) and improved loans/deposits by 45% points (Exhibit 31), they remain expansionary. With inflation expectations adaptive, this means higher inflation for longer as the housing channel is both weakened and delayed.

09 June 2023

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Exhibit 1: 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

BofA GLOBAL RESEARCH

FSA: Financial Services Authority

FCA: Financial Conduct Authority

RICS: institution of chartered surveyors

Timestamp: 09 June 2023 01:30AM EDT

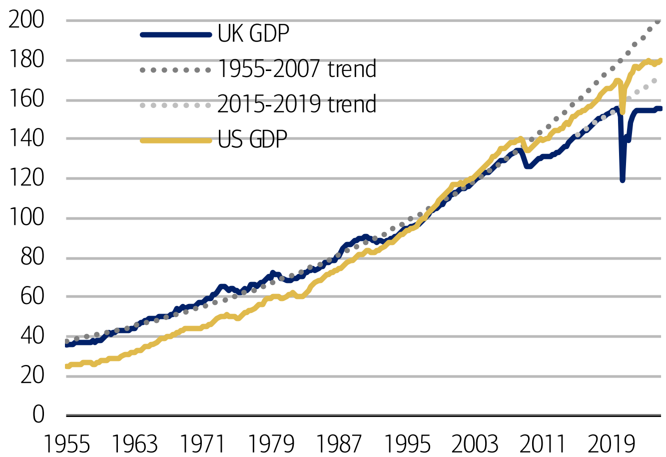
Entrenched inflation problem

Driven by weak potential supply growth

The UK has an entrenched inflation problem because weak demand is bumping up against even weaker supply. Unemployment is historically low and 6-month annualised services inflation runs at nearly 9% despite the economy not growing since 2019 (Exhibit 2, Exhibit 3). Supply growth has by implication not grown either.

Exhibit 2: UK and US GDP, BofAf

GDP below pre-Covid level, running well below previous trends...



Source: BofA Global Research, ONS, BEA

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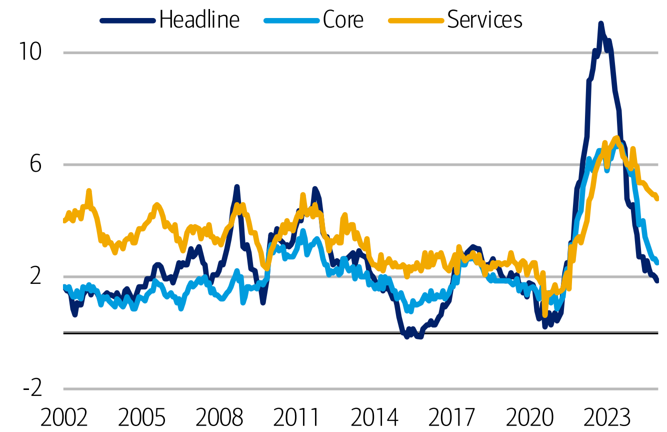
Exhibit 3: CPI inflation, BofAf

... While core, not just headline, inflation surged



Source: BofA Global Research, ONS

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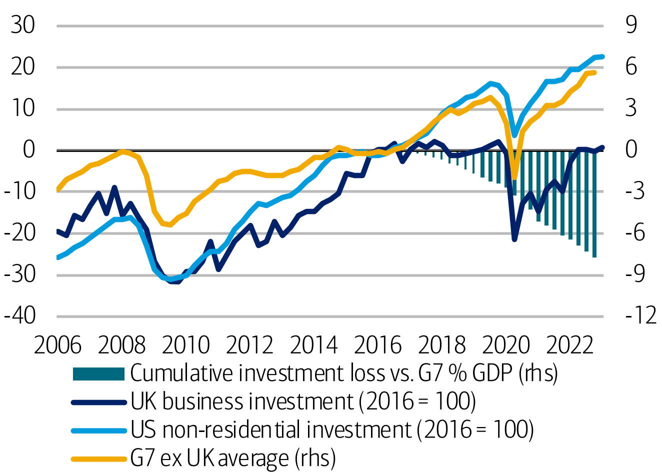
Weak potential supply to continue

We expect potential supply growth of around 1% a year, below the 2.5% potential growth rate the UK was able to achieve before the financial crisis.

In addition to the persistent drop in productivity growth since 2007 the UK has been hit by four new 'supply shocks': energy; supply chain disruptions; Brexit; rising workforce sickness. Two of those have faded– energy and supply chain disruptions. Two remain: Brexit and workforce sickness. This leaves potential growth about 1% a year in our view.

Exhibit 4: Business investment, change since 2016

Weak business investment due to Brexit cuts potential growth



Source: BofA Global Research, BEA, Eurostat, ONS

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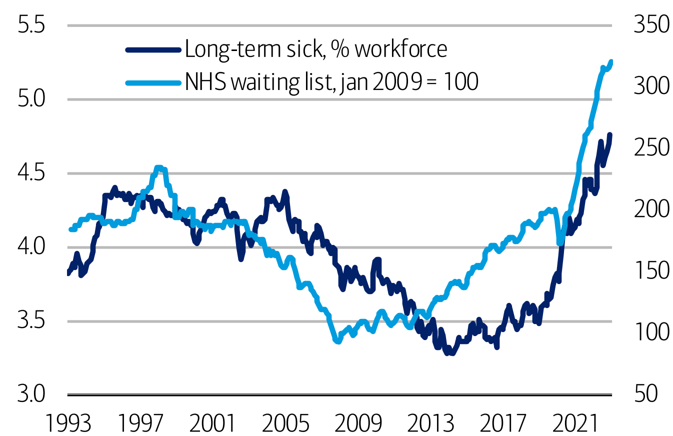
Exhibit 5: % population not looking for a job due to long-term sickness

Rocketing long-term sickness cut the workforce



Waiting list series splices monthly and quarterly data on different definitions, treat with caution.

Source: BofA Global Research, ONS

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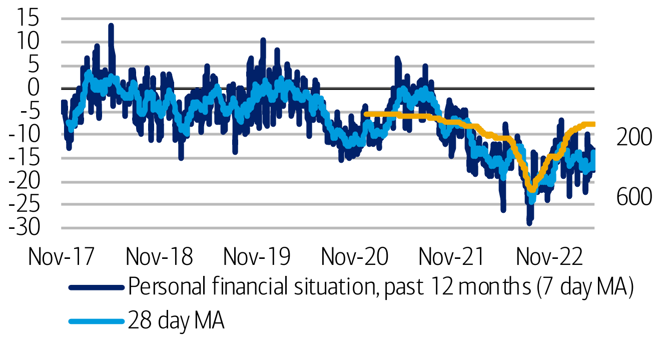
Growth has improved as energy prices fallen

Surging energy costs last year meant the UK had seemed likely to suffer a recession about as deep as the 1990s. Had natural gas prices remained at their level from last August, and the government had not capped bills, household utility bills would be more than double their current level. So as energy costs have fallen the growth outlook as improved. Surveys now point to growth of 0.2%-0.5% a quarter. We assume growth averages 0.2% a quarter in the remainder of 2023.

Exhibit 6: Consumer confidence in personal financial situation and gas prices, BofA proprietary consumer confidence survey

Fall in energy prices boosted consumer confidence late last year



See note for indicator details UK Viewpoint: Consumer Whisperer: weak but hawkish 16 May 2023. **Source:** BofA Global Research, Bloomberg.

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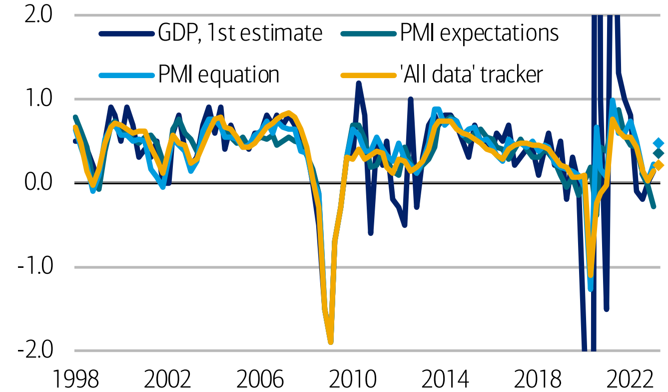
Exhibit 7: GDP growth qoq and survey-based trackers

Surveys suggest UK will avoid recession



Source: BofA Global Research, S&P global, ONS

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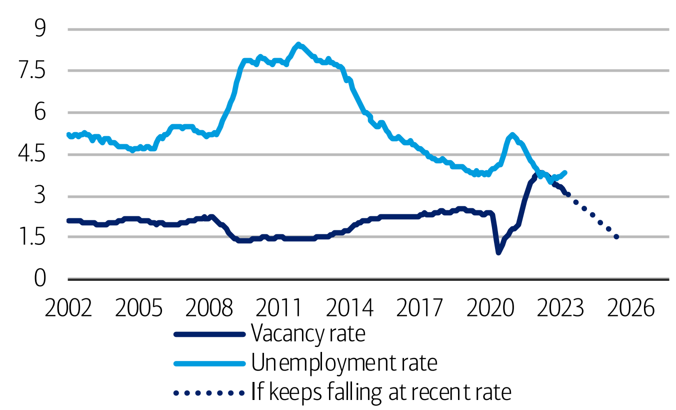
Fixing inflation requires an economy close to recession

Unless all UK inflation has nothing to do with domestic capacity pressure and leaves no persistence in the form of deanchored inflation expectations the Bank of England (BoE) can return inflation to target only by creating an output gap. The BoE indeed assumes an output gap close to zero currently and that most inflation is due to supply shocks rather than domestic capacity pressures. So growth does not need to undershoot potential much to correct inflation. Risks to that seem skewed to us.

Recruitment difficulties have eased but remain high. Vacancies are still well above a normal level and may have stopped falling (Exhibit 8, Exhibit 9). Current modest growth seems to us too strong to ease capacity pressures. If excess demand is just 1% of GDP and potential growth 1% it would take a year of zero growth to stop the upward pressure on inflation, let alone create an output gap large enough to cut inflation.

Exhibit 8: Vacancy and unemployment rate

Will not return to pre-Covid level until 2Q 2024 if keeps falling at recent pace



Source: BofA Global Research, ONS

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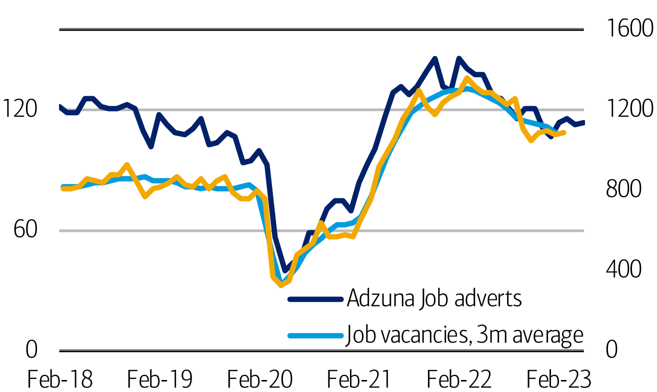
Exhibit 9: Vacancies and job adverts

But vacancies seem to have stopped falling



Source: BofA Global Research, ONS

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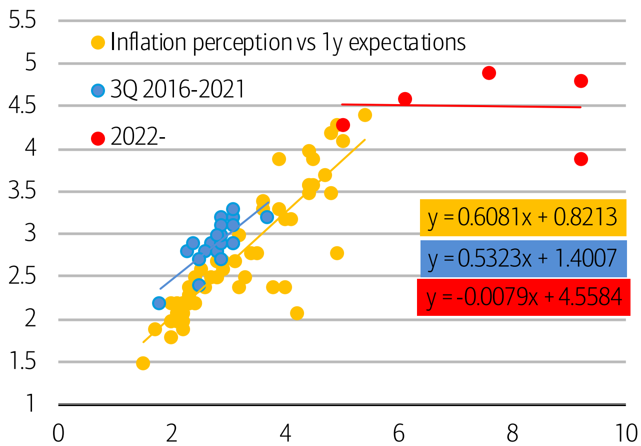
Inflation expectations modestly deanchored

Not only do capacity pressures seem considerable but, in our view, high inflation has left behind persistence in the form of deanchored inflation expectations. Inflation expectations rise and fall with spot inflation because many people use rules of thumb to forecast, like inflation tomorrow will be the same as today. Deanchoring is when those rules change, which they seem to have done. Inflation expectations have been consistently higher post-Brexit referendum for the same observed inflation (Exhibit 10, Exhibit 11). Markets concur, pricing UK inflation to run persistently above target. The UK appears to be the only major economy to have experienced this change in expectations. We discuss that in detail in Global Economic Weekly: Inflating worries 17 February 2023 and UK Viewpoint: Anchors aweigh 20 January 2023

Exhibit 10: Inflation perceptions vs expectations
UK inflation expectations modestly deanchored



Source: BofA Global Research, BoE.

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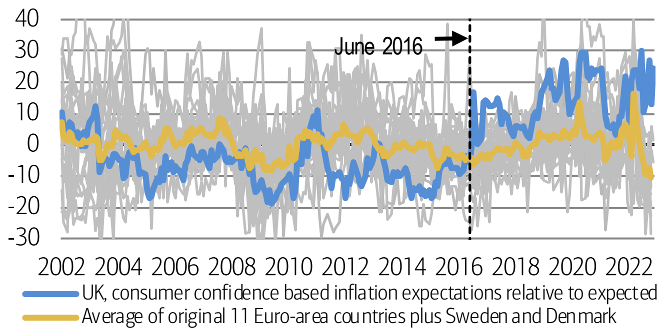
Exhibit 11: Consumer confidence based inflation expectations relative to expected
UK inflation expectations deanchored to the upside



Yellow line shows the fitted values from a regression of the net balance of consumers expecting prices to rise on the net balance of consumers saying prices rose over the past twelve months, the net balance of consumers expecting unemployment to rise, food and oil price inflation. EA 11 average excludes the Netherlands which is an outlier, seeing an extreme rise in expectations vs. predicted values. **Source:** BofA Global Research, GfK, EC.

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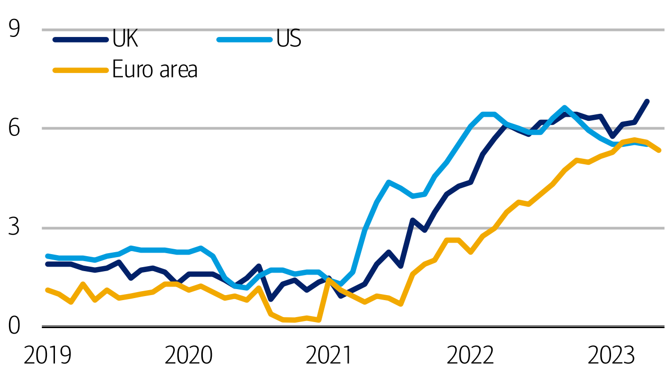
Policy not restrictive enough yet

With 440bp of hikes the UK avoided recession, growth accelerated this year and core inflation continues to rise (Exhibit 12). 6-month annualised core services inflation reached 8.8% in April (Exhibit 13). In our view, rates are not sufficiently restrictive yet.

We now turn to the details of mortgage rates, housing credit quality and bank financials. Collectively, these emphasise how different this cycle is to prior cycles that the BoE may have been using to model the impact of its rate hikes.

Exhibit 12: Core CPI inflation
Uk core inflation diverges from Euro area and US



Source: BofA Global Research, BLS, Eurostat

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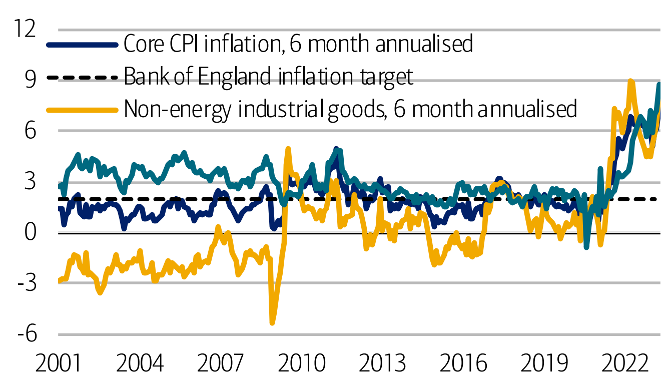
Exhibit 13: 6 month annualised seasonally adjusted inflation
6-month annualised core services inflation reaches 8.8%



Source: BofA Global Research, ONS

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The BOE is behind the housing curve

Three changes in the UK housing market mean that the impact of the Bank of England rate hike cycle was bound to be slow. When inflation rapidly proved not to be transient this left the impact of monetary policy potentially still ahead but the BOE needing to keep hiking. The long period of high inflation now experienced is in itself a credibility problem for the BoE in our view, demanding it risk weaker economic outcomes.

Higher rates feed through gradually to mortgage payments

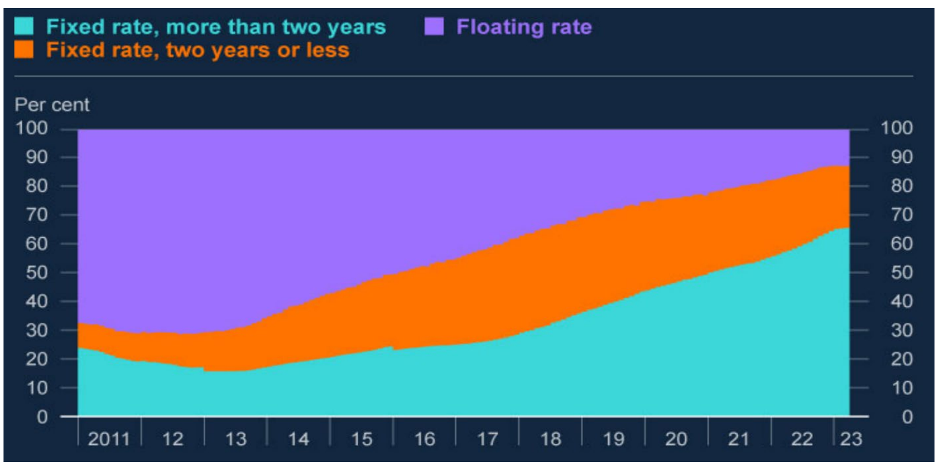
Changes in the mortgage market mean passthrough to mortgage payments has been more gradual in this rate cycle. We show in the coming exhibits, using BoE published data, how the effect of its interest rate hikes was bound to be slow to pass through.

From 69% floating to 19%

First, over the last decade, UK households moved from taking floating rate loans to loans with a period of initial fixation, shown in Exhibit 14. This dropped the share of immediately repricing loans from 69% to just 19% ahead of the start of this rate cycle.

Exhibit 14: 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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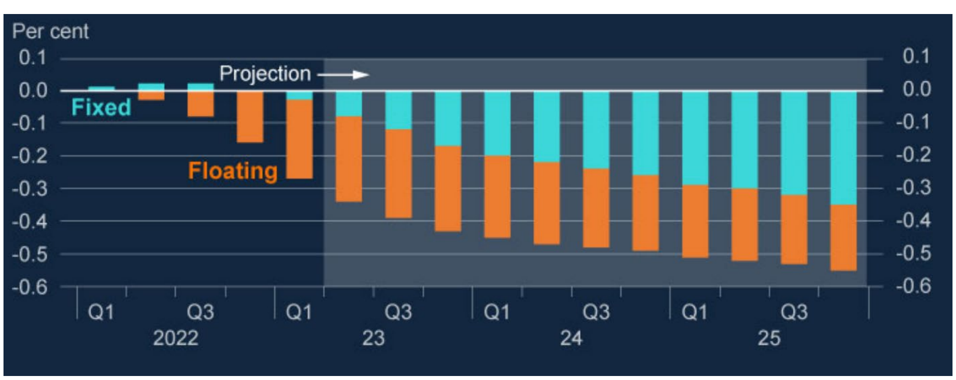
This meant that there would be very little impact on borrowers in actual cashflow terms in the first part of any rate hike cycle. Indeed, experience in Exhibit 15 is that the first three quarters of hiking still saw fixed rate borrowers rolling onto lower rates.

Exhibit 15: 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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The average duration of a household mortgage fixed interest period is around 3¾ years. So, mortgage holders will only gradually be exposed to higher mortgage interest rates, and likely more gradually than assumed in traditional policy multipliers.

We challenge the policy multiplier

Ben Broadbent, BoE Deputy Governor, argued last October that policy tightening would cut GDP in total between 4% and 5% (Exhibit 16). But as time passes and growth holds up we increasingly challenge the policy multiplier in the chart. According to the estimates monetary policy would cut growth approximately 1.5%-2% in 2023. We find that hard to square with surveys suggesting 0.2%-0.5% growth a quarter.

Exhibit 16: Effect of monetary tightening on level of GDP, BoEe
Most of the impact of cumulative tightening still to come

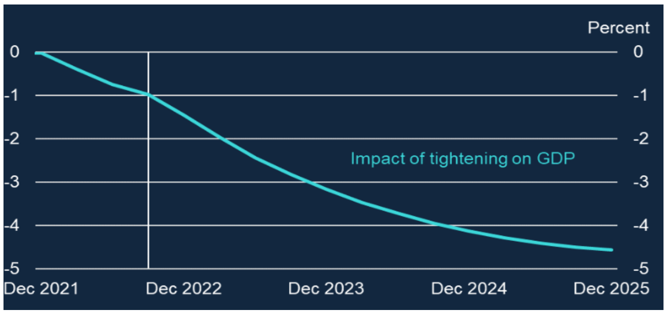

Chart shows estimated impact of policy tightening to date and as implied by forward market interest rates at close on 17 October, relative to a counterfactual in which Bank Rate is held constant at 0.1%. The exercise only considers the direct effects of tightening, and abstracts from any indirect effects via, for example, the exchange rate or incomplete pass-through. **Source:** Broadbent (2022).

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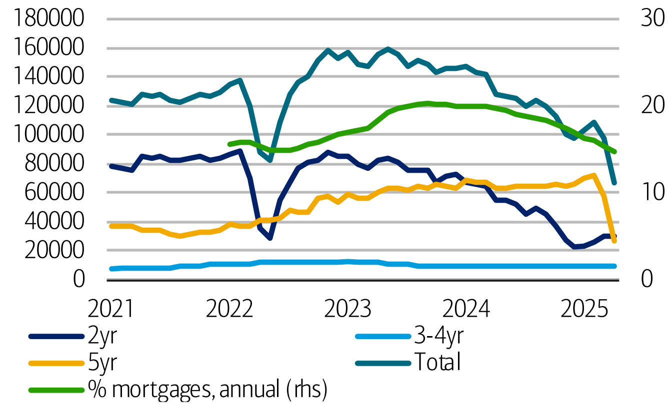
Exhibit 17: BofAe monthly number mortgages at end of fix
Around a fifth of mortgages will drop off a fixed interest rate in 2023



Source: BofA Global Research, UK Finance, BoE

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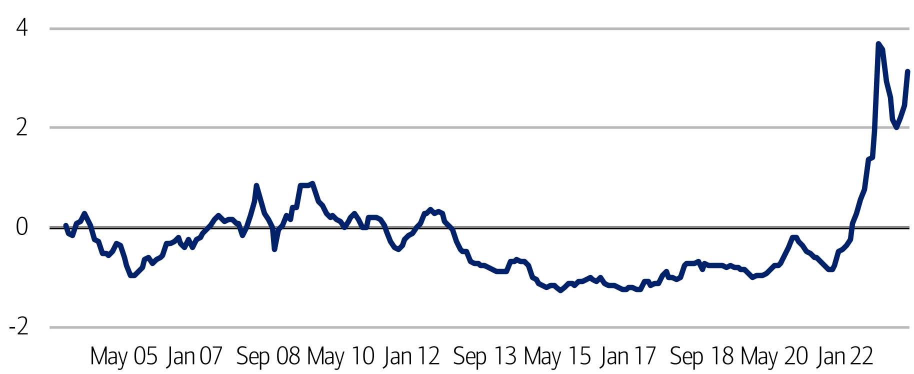
Cash flow effect smaller than in the past

Higher interest rates work through several channels but the one "... felt most acutely and directly by a significant number of individuals is that working through the interest rate charged on personal debt, especially mortgages, and the interest rate paid on their savings."[1] Higher nominal rates cut debtor's cash flow, resulting in lower consumption.

Its right that a dramatic repricing of loans is ahead as they roll over (Exhibit 18). We have updated published BoE figures for latest data. This is a challenging cashflow picture for the UK consumer with a mortgage- when the loan comes up for repricing. So perhaps it is still just a matter of (more) time for monetary policy to have an effect on growth. But in our view the impact of policy is much reduced. There are several reasons.

Exhibit 18: historically high gap between rate paid on mortgage stock and new business rate
Quoted rate on new 75% 2 year loan to value fixed rate loan and Rate on outstanding mortgages (%)



Source: BofA Global Research estimates, Bank of England

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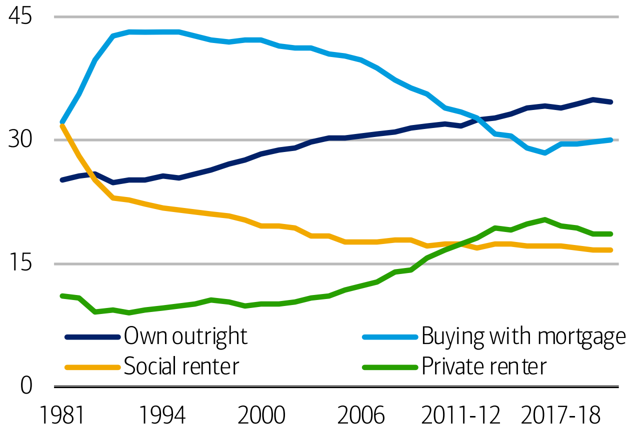
[1] 'The transmission mechanism of monetary policy' (1999), Bank Of England Quarterly Bulletin.

First a third fewer households are buying a house with a mortgage now than in 1991 (Exhibit 19), reducing the proportion of households' whose cash flow is cut by higher interest rates. Only around 6% of households will see the mortgage rate for their primary residence change this year (20% of 30%). Second, the prevalence of fixed rate mortgages now means effective mortgage rates rise less than overnight Bank Rate if the market prices any future rate cuts (Exhibit 20). Economic models meanwhile will tend to be estimated over a period in which UK households overwhelmingly had variable rate mortgages.

Exhibit 19: English housing tenure, %

13% fewer households now have a mortgage than in 1991



Source: English Housing Survey

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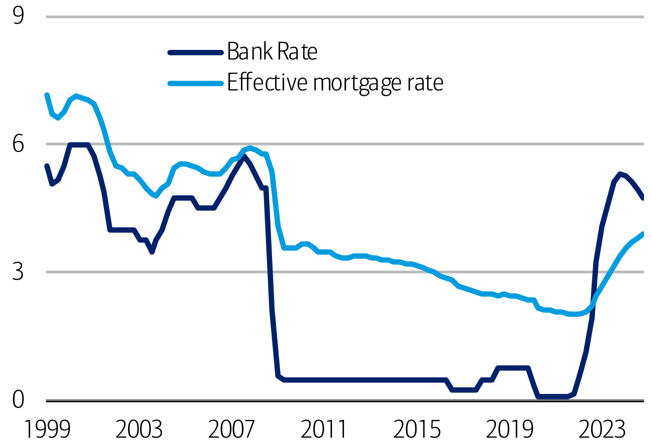
Exhibit 20: BofAe Bank Rate and effective mortgage rate

Mortgage rate rises less than Bank Rate



Based on market interest rate expectations on 5/6/23. **Source:** BofA Global Research estimates.

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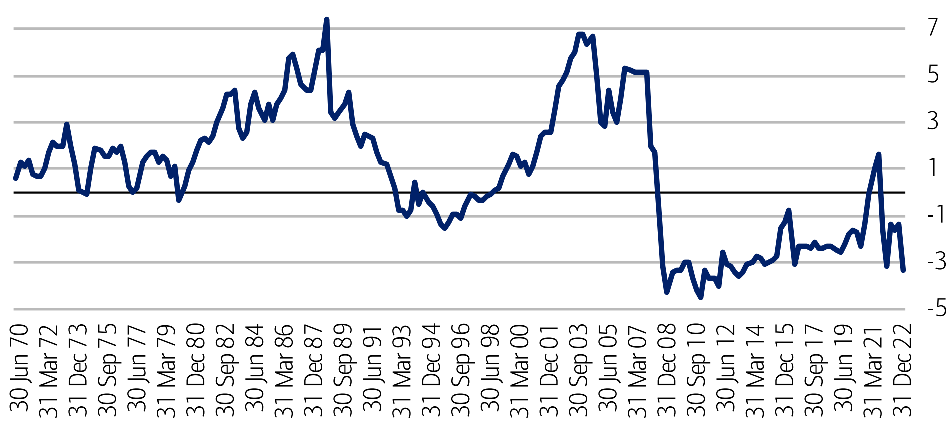
Third, consumers are much less geared than they were. Exhibit 21 shows that unlike the whole modern period since 1970, recent years saw a consistent early repayment of mortgage loans rather than the equity withdrawal historically associated with rising home prices.

Exhibit 21: households paid down mortgages ahead of contract since the financial crisis, a reversal of 40 years of UK experience

Housing equity withdrawal, % disposable income, 1970-2022



Source: Bank of England

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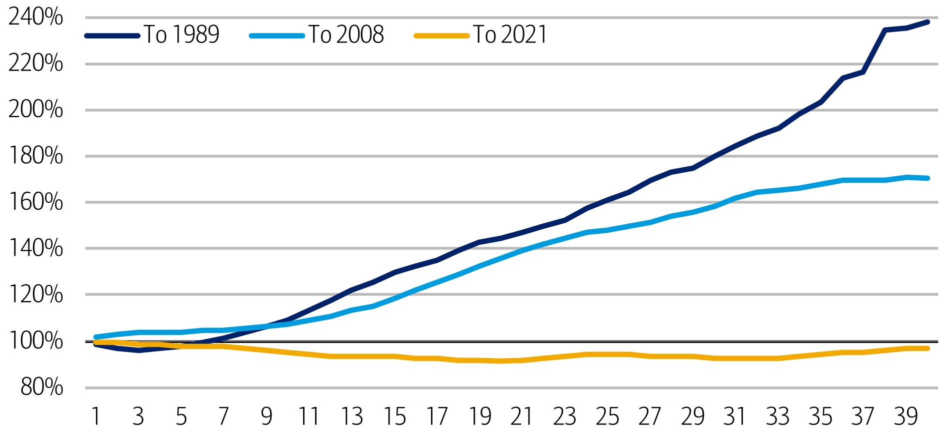
And overall, consumers did not take advantage of low rates to gear up, unlike prior cycles. Exhibit 22 shows debt to income in this and the two previous cycles. This debt picture is the counterpart to the fall in the proportion of households buying with a mortgage.

Exhibit 22: UK: change in mortgage debt to income, cumulative, 10 years (quarterly data)
No increase in mortgage debt to income in the 10 years to the start of this downturn



Source: BofA Global Research estimates, Bank of England. X axis is quarters

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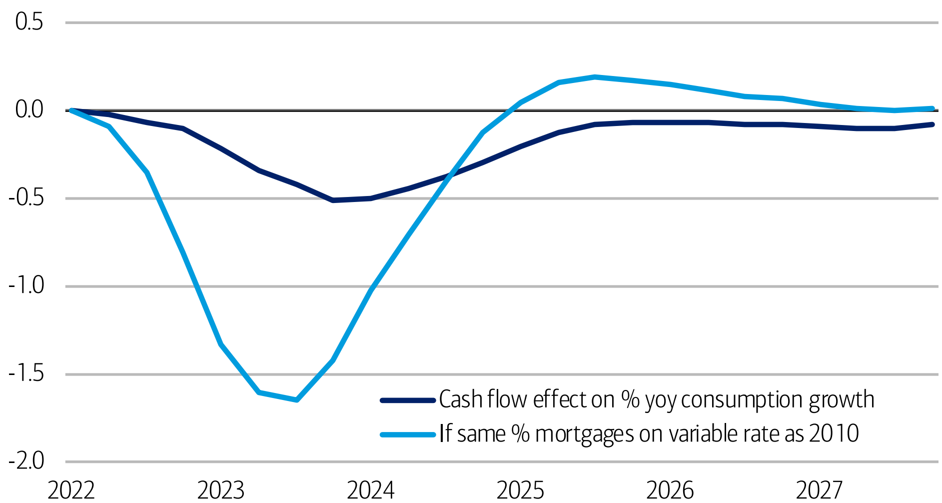
One third the impact of prior cycles

Overall we estimate that the peak impact of monetary tightening on consumption growth via cash flow effects is one-third the size of previous interest rate cycles (Exhibit 23). This may exaggerate the cash flow effects as we assume mortgagors' remortgage on the same product even if a cheaper alternative is available i.e. someone rolling off a 2 year fixed rate mortgage refinances to a new 2 year fix. There are more channels to monetary policy transmission than mortgage cash flow, so the overall impact of monetary policy tightening on growth will likely be larger than in Exhibit 23. Still in our view a (sharp) slowdown in growth is probably not just a matter of time..

Exhibit 23: Impact of rate hikes on consumption via cash flow
Monetary policy has two-thirds lower peak impact on growth via cash flow



Source: BofA Global Research estimates.

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'Tipping point' still some way off

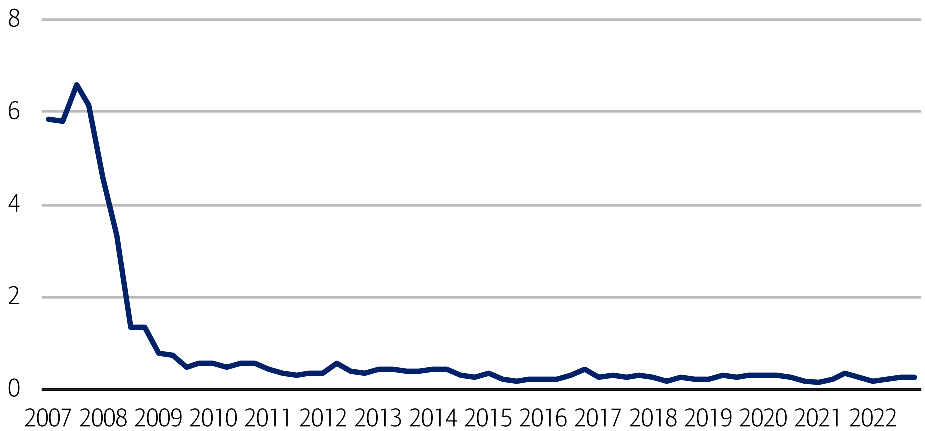
The impact of higher interest rates on household spending will likely be linear and predictable until it pushes the most vulnerable households into mortgage distress, which can cause more severe changes in consumption. We can think of this as the 'tipping point' that investors are often trying to spot.

Consumers with greater cushions potentially behave in a more considered way. Certainly, it was predictable that rates would likely move behaviours by less and more slowly than in prior cycles.

Credit stress is hard to find

When looking into potentially stressed borrowers, this is emphasised. Exhibit 24 shows that in 2007, 6% of new loans were made at above a 95% loan to value. This fell by 90% since then, reducing the pool of potentially stressed individuals.

Exhibit 24: lending above 95% loan to value to householders never picked up after the financial crisis
Lending above 95% loan to value, % mortgages extended, 2007-22



Source: Bank of England

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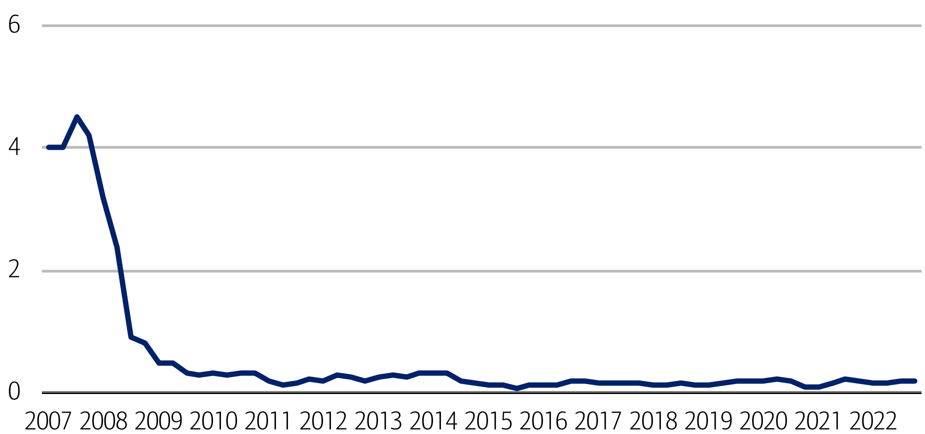
For the borrowers receiving both high LTV and high loan-to-income, the picture is even more stark, in Exhibit 25. There were almost no such loans in recent years.

Exhibit 25: lending to householders above 95% loan to value and at high loan-to-income became vanishingly small
Lending above 95% loan to value and high loan to value, % mortgages extended, 2007-22



Source: Bank of England

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The extreme contrast with the last significant interest rate cycle – the early 1990s – is emphasised in Exhibit 26.

Exhibit 26: Loan to Value ratios for first time buyers in 1989 (%)
58% of loans made at 95%+

Loan to value	Share of total
< 50	7.1
50–59	4.7
60–69	4.4
70–79	5.6
80–89	9.5
90–94	10.7
95–99	22.2
100 +	35.8

Source: Bank of England

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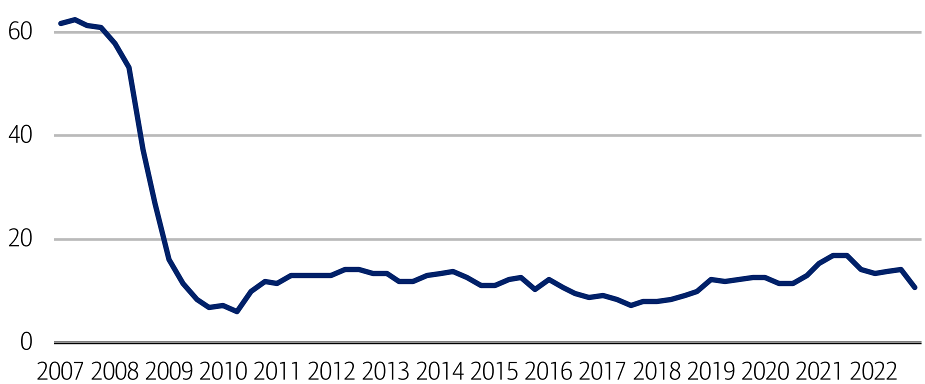
In the Buy to Let market, a significant source of conduction of stress in 2008-09, the higher Loan to Value bucket is down by three quarters (Exhibit 27).

Exhibit 27: high Loan to Value Buy to Let close to an all-time low
Buy to Let loans extended, % above 75% Loan to Value, 2007-22



Source: Bank of England

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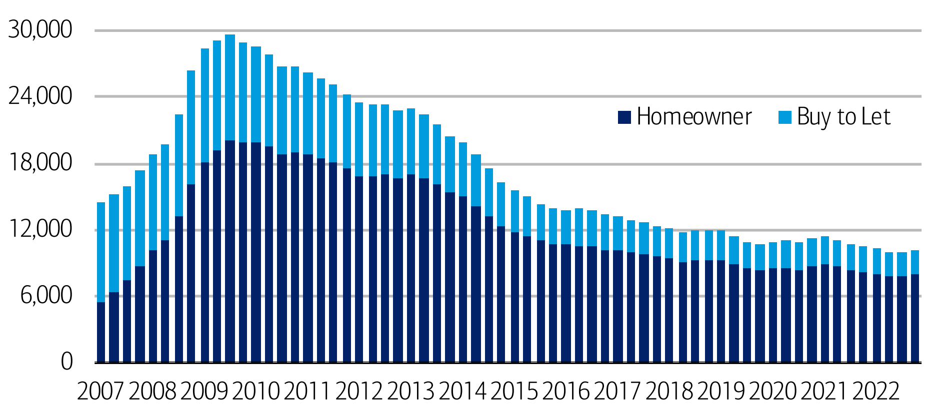
Looking at pre-existing arrears, always a significant source of transmission of stress, these are down by a half in absolute, nominal pounds (Exhibit 28).

Exhibit 28: arrears at end-2022 half of those pre-2008
Balance in arrears, £ mn, 2007-22



Source: Bank of England

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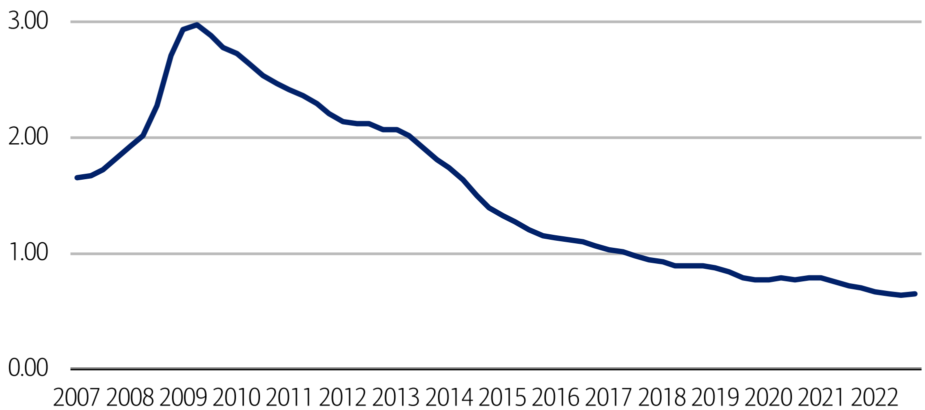
Relative to the mortgage market, they are down by two thirds (Exhibit 29). And this is, importantly, compared with 2007, pre-crisis.

Exhibit 29: arrears relative to balances just a third of the pre-2008 level
Balance in arrears, % mortgages, 2007-22



Source: Bank of England

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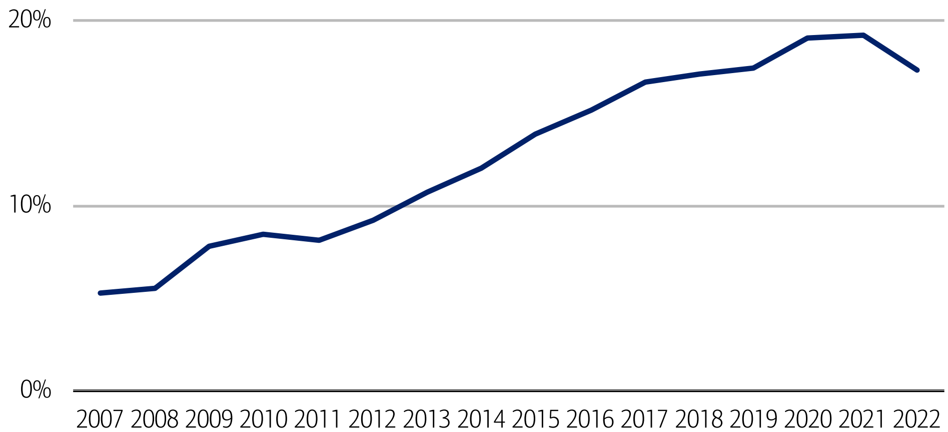
So the impact of higher rates to problem loans is bound to be substantially smaller, reducing the impact of any interest rate rise on the housing market. We then consider the third element, the strength of the banks themselves. Exhibit 30 shows that capital has trebled since the eve of the financial crisis.

Exhibit 30: tier one ratios more than trebled since 2007
UK Bank Tier 1 ratio (%) 2007-22



Source: Bank of England

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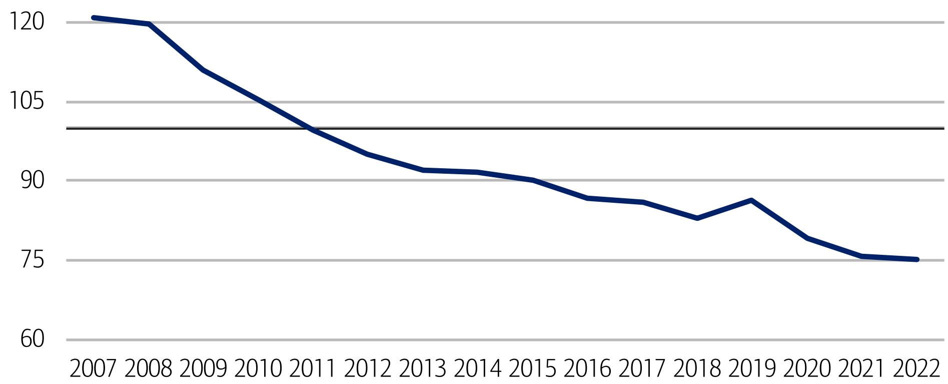
Exhibit 31 then shows that a UK banking system previously dependent on wholesale funding has moved into one with a large structural deposit surplus. This makes the banks better able to choose their volume appetite, further reducing the impact of higher interest rates on the system.

Exhibit 31: from a 20 point deposit shortfall to a 25 point deposit surplus
Loan to Deposit ratio, UK banks (%) 2007-22



Source: Bank of England

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Banks are stronger; mortgages less risky; rates far more fixed, and house buyers with a mortgage less numerous. This combination means the BoE's rate hikes have, in our view, a smaller impact on growth than traditional multipliers suggest. With inflation expectations adaptive, this means higher inflation for longer as the housing channel is both weakened and delayed

A cost-of-living analysis concurs

The BoE last year calculated that the proportion of people with cost-of-living adjusted debt service ratios at distressed levels would reach the financial crisis high if interest rates rise to 5%. 5% has therefore become something of a line in the sand when debating how much the BoE can hike. We would challenge that.

First, we should not assume that the same number of people reaching distressed debt service levels as in 2008 means a financial crisis sized change in consumption. In 2008 the flow of credit dropped dramatically across the whole economy, causing large spending changes from firms and households not beyond the threshold of financial distress as well as those who were most vulnerable. That is not happening now.

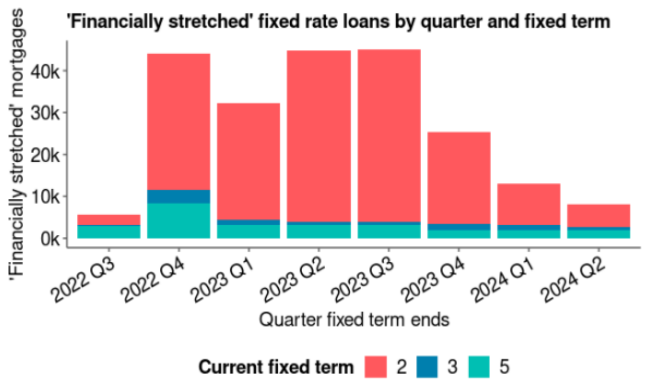
The Financial Services Authority (FSA) estimated that an extra 300,000 households would face 'financial stretch' (a mortgage service to income ratio above 30%) if interest rates followed market expectations from February. While rate expectations are higher now the FSA assumed a 10% fall in real gross incomes between July 2022-2024 which is too pessimistic in our view given falls in wholesale energy costs. A large chunk of the rise in financial stretch would, on the FSA's estimates, have already happened and consumption growth continues to hold up (Exhibit 32).

Mortgage regulations may explain the resilience of consumption. The FSA argues "Since 2014, many prospective mortgage borrowers have been stress tested on their ability to meet mortgage repayments at higher interest rates to those at the time of application, under FCA rules and FPC Recommendation (withdrawn 1 August 2022). This means that many households in the UK mortgage market will have been stress tested at interest rates comparable to current rates and further increases. This may, in part, explain why the majority of mortgages that are exposed to interest rate rises by the end of June 2024 (around 90%) are not expected to go into financial stretch." This is important for the comparison with mortgage distress in the financial crisis. Because of stress testing, the FSA notes that most of the people in 'stretch' would be only a little beyond the threshold the FSA uses to define that. During the financial crisis its likely that people in distress were well above the threshold.

Bottom line, we find it hard to pinpoint a 'tipping point'. Most likely it would be at Bank Rate some way above 5% in our view.

Exhibit 32: Number of mortgagors becoming financially stretched, FSA estimates

Increase in 'financially stretched' households likely well under way



Source: FSA

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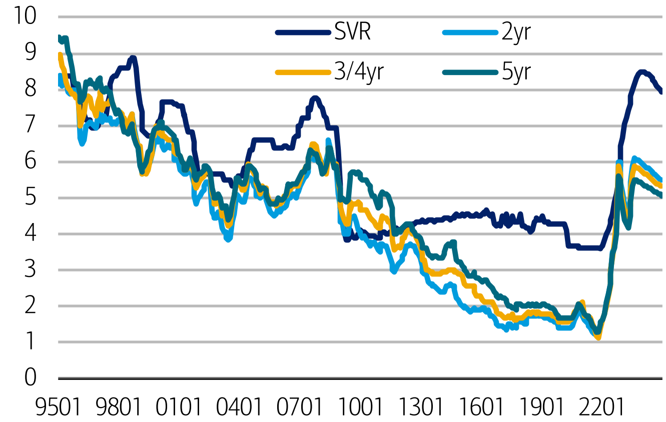
Exhibit 33: BofAe mortgage interest rates

2 2-year fixed rate likely to peak around 6%, 5y at 5.5%



Source: BofA Global Research, Bank of England

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Housing market will remain weak

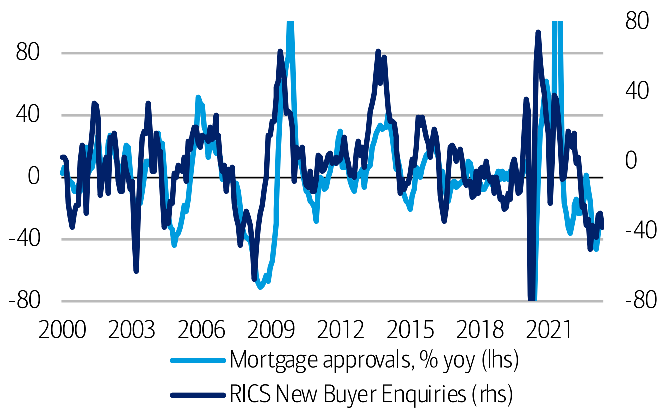
A relatively small impact of changing mortgage rates on consumption does not mean a small impact on the housing market. Although current mortgage holders are gradually exposed to higher rates, house buyers are exposed to them immediately.

The change in affordability will be large as we showed above. The mortgage rate shock for someone refinancing a 2yr fixed rate mortgage later this year would, on a 25-year repayment mortgage, increase monthly mortgage payments around 60%.

Reaching a position where housing volumes can recover requires affordability improving through house prices falls, interest rate falls, and income improvements. Nominal house price falls are usually only gradual if unemployment remains low. Households are averse to taking nominal losses on their house, and transactions costs are high limiting liquidity, so prices tend to fall sharply only if forced sales rise. We suspect interest rate falls are not an imminent prospect either. With inflation slowing now it would take some time for inflation to erode real house prices enough to return the market to balance. In short, the housing market is likely to remain in hibernation, with weak transactions and mildly falling prices, for an extended period in our view.

Exhibit 34: Mortgage approvals % yoy and RICS new buyer enquiries

Mortgage approvals likely to remain weak as buyer interest falls



Source: BofA Global Research, Bank of England, RICS

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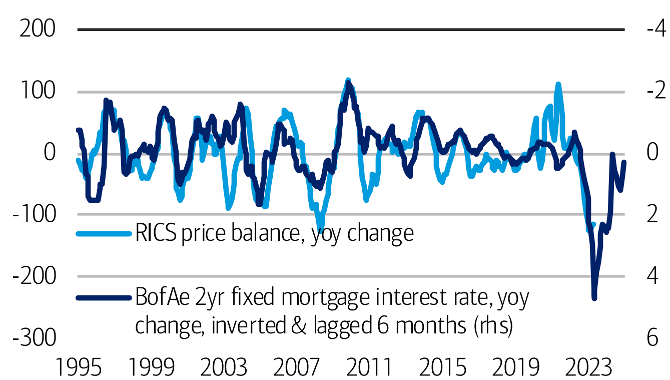
Exhibit 35: Mortgage interest rate and RICS prices balance, change

Full impact of higher mortgage rates yet to be felt, house price falls likely to accelerate



Source: BofA Global Research, RICS, BoE

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Watch the fiscal risk

Households are not the only sector of the economy facing rising debt interest payments. Government debt has risen to 99% of GDP. Around £800bn, 32% of GDP, is funded at overnight rates on the BoE balance sheet. Government debt interest costs are, therefore, sensitive to interest rates. We estimate the market repricing since the March Budget would add around £10bn to government debt interest costs this year, rising to £14bn in 2027/28. That compares to a £6.5bn margin the Chancellor met his fiscal rule by in the last Budget.

Recent reports, however, suggest the government wants to cut taxes ahead of a potential 2024 election. To meet the fiscal rules any near-term tax cuts would need to be balanced by tax hikes or further spending restraint later. But current Budget forecasts not only assume stronger growth than other forecasters they also incorporate historically weak public spending growth from 2025, which we think will be hard to deliver (UK Watch: Budget review: optimistic 15 March 2023).

The market may be content to down-weight the medium-term fiscal risks given a potential election in 2024, which could alter the fiscal outlook. But we think this fiscal position will remain a continued challenge.

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