Resolution Foundation

Interesting times

Assessing the impact of rising interest rates on mortgagors' living standards

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Lindsay Judge, Jack Leslie & Krishan Shah[1]

R. I. P. low interest rates: the cost of borrowing is seriously on the rise. Inflationary pressures in the economy have been pushing interest rates up for some time, and events since the Government's mini-budget in September increased market expectations of how high interest rates will rise, and brought forward the date at which they are expected to peak. The effect of higher rates on living standards will be long term and diffuse (and, of course, will benefit some). But the 1.2 million households on flexible-rate mortgages in Britain will feel an immediate effect, and their ranks will be steadily swollen by the 6 million-plus additional households currently buying their home on a fixed-rate deal.

The future is hugely uncertain but as of 12 October 2022, we forecast that over 5 million currently mortgaged families – close to one-fifth of all households in Britain today – will be spending more on their housing costs by the end of 2024 than they were in Q3 2022, totalling more than £26 billion overall. In Q4 2024, for example, the average mortgagor will be paying £3,500 more a year than they were in Q3 2022. But the average hides much variation: we estimate the average London mortgagor will be paying £5,500 more in annual costs by the end of 2024, for example, almost two-and-a-half times more than their North East peers.

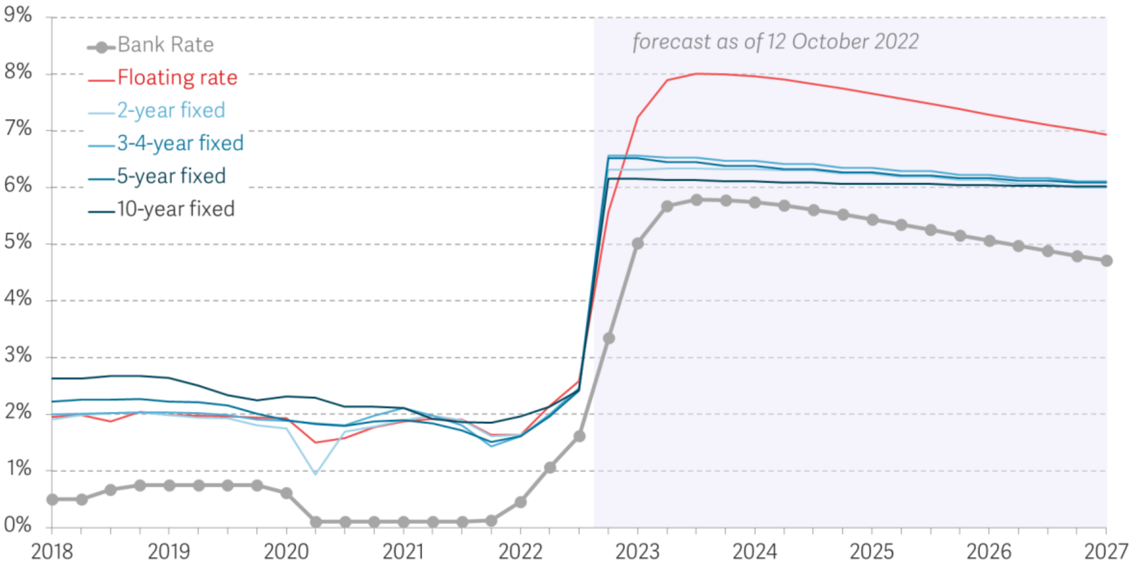
For some, the impact of higher interest rates is significant and immediate: we estimate that, by the end of 2024, more than 1.8 million mortgaged households will see housing costs absorb at least 10 per cent more of their household income than in Q3 2022. By the end of our forecast period (Q1 2027), practically no mortgaged household will be untouched by higher rates. This spells not just significant pain for households, but potentially for the Government too. Mortgaged households may make up a smaller share of the electorate today than they did in the past, but they remain a key constituency for the Conservatives, and an especially important one in vulnerable Red Wall seats.

Low interest rates are no more. After more than a decade of savers bemoaning minimal returns and borrowers treating low rates as the norm, the cost of borrowing is on the up. Inflationary pressures have been building in the economy for more than a year, and have accelerated sharply as energy costs rose in response to the war in Ukraine. As a result, the Bank of England's Monetary Policy Committee (MPC) has raised Bank Rate each and every time it has met over the past ten months – a pattern that broadly reflects the approach in other advanced economies. More recently, however, Government actions have directly raised expectations of how quickly interest rates will rise and how high their peak will be. Even accounting for recent U-turns, it still intends to make unfunded tax cuts of £25 billion a year by 2026-27, and to spend £60 billion over the next six months supporting households and businesses with escalating energy costs.[2] It is now all but inevitable that the MPC will raise Bank Rate more sharply than previously anticipated at its 3 November meeting.

The move to a higher interest rate world, after more than a decade of being used to near zero rates, is a big change for the UK economy and households. After hovering around 2 per cent for several years, mortgage rates are on the rise and in this Spotlight we assess how these could feed through to existing mortgagor households in the coming months and years. Of course, the impact depends on the actual trajectory that mortgage rates take in both the short- and medium-term, and in Figure 1 we present our forecast of the rates for various mortgage types used in our subsequent analysis (we also show short-term historical rates to bring home the scale of the increases that mortgagors look set to face). These, of course, are subject to significant uncertainty and are based on data as of 12 October 2022, calculated in line with the method we set out in an endnote below.[3]

Figure 1 **Mortgage lenders have raised rates ahead of the MPC, and worse looks set to come**

Bank Rate and average mortgage rates, actual and forecast: UK



Notes: Based on market interest rates as of 11 October 2022. See endnotes for details of the estimation method.
Source: RF analysis of Bank of England, Bankstats and Yield Curve.

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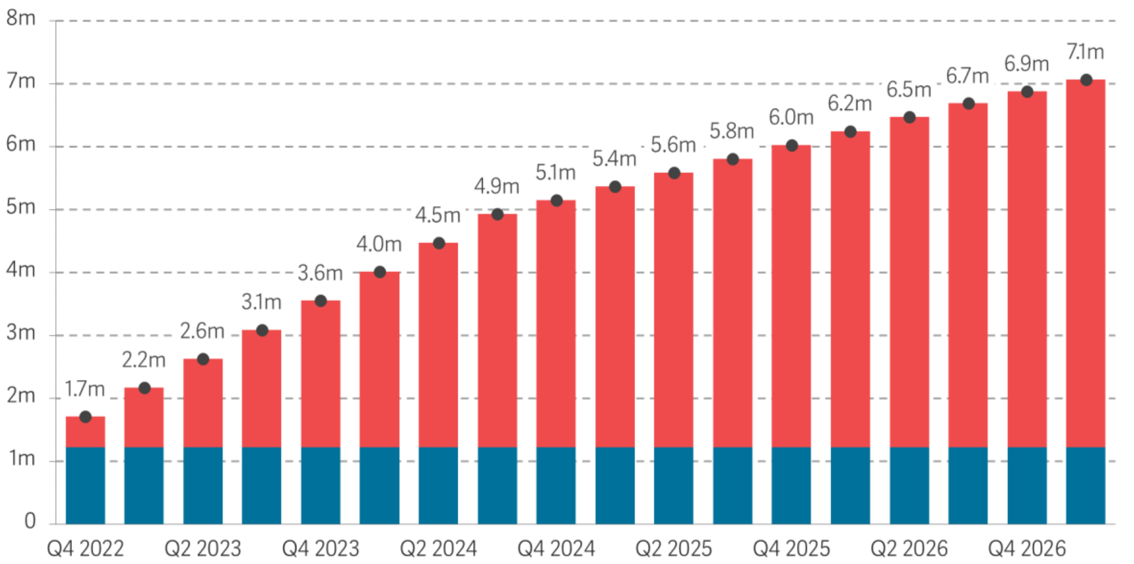
Higher interest rates look set to increase costs for more than 5 million mortgaged households by the end of 2024

A Bank Rate bump does not impact all mortgagors equally, however, for two reasons. First, although the 1.2 million households in Britain on flexible-rate mortgages will see their payments rise immediately, individual mortgage lenders have some discretion over how much they increase the cost of some of their products in response to a Bank Rate rise (Figure 1 proves the point, showing how floating rates have tracked, but not moved in perfect sync with, Bank Rate in recent years). Second, and far more materially, close to 6 million households (85 per cent of current mortgagors) are currently on fixed-rate deals. Higher interest rates make no difference to these households in the short run, but they will face bigger monthly payments when their fixed terms draw to a close.

So how could the current situation develop? Using data from the ONS's Wealth and Assets Survey, we estimate that 1.7 million households will see their mortgage payments rise in Q4 2022; an additional half a million will pay more in Q1 2023; and another 400,000 mortgaged households will be hit in Q2 2023 (see Figure 2).[4] Cumulatively, 5.1 million mortgaged families – close to one-fifth of households in Britain today – will be spending more on the interest rate element of their housing costs by the end of 2024 than they were in Q3 2022. (Of course, some households may be able to avoid these higher costs by, for example, using savings to reduce their mortgage, or moving home; we show estimates absent of behavioural effects such as these).

Figure 2 **More than 5 million households face higher mortgage payments by the end of 2024 compared to Q3 2022**

Estimated number of households facing rising mortgage payments, relative to Q3 2022: GB



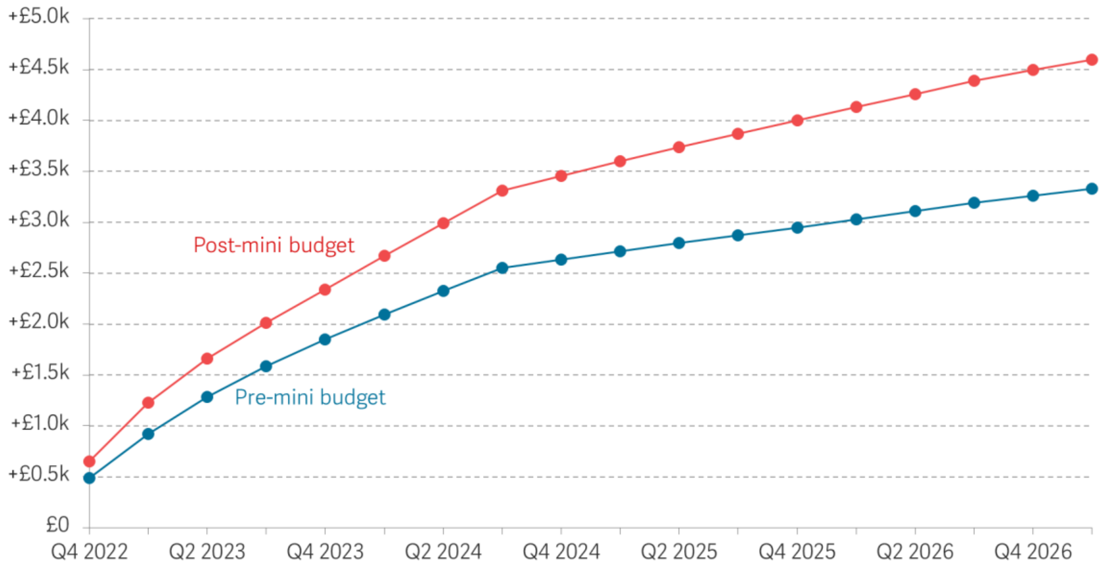
Notes: Only includes one owner occupier mortgage per household, additional mortgages (where applicable) are excluded. See endnotes for details of the estimation method.
Source: RF analysis of ONS, Wealth and Assets survey; Bank of England, Bankstats and Yield Curve.

The disruption in the wake of September's mini-budget has made a bad situation worse

The additional sums that the average household will need to find to cover these higher mortgage payments are far from negligible. In Figure 3 we estimate the cash increase that the average mortgagor household will incur in the months and years ahead. Over the winter months (Q1 2023), for example, the average mortgagor can expect to pay around £1,200 more a year than they were in Q3 2022, a figure that rises to £3,500 by Q4 2024 and then to £4,600 by the end of our forecast period (Q1 2027) (these figures are driven of course in part by more mortgaged households feeling the pain over time). When we look just at the sub-group of households on flexible-rate mortgages and those who have rolled off their fixed-rate deals, the figures are even more stark. For example, we estimate that the 5 million-plus mortgagors hit by higher interest rates by Q4 2024 will be paying on average £5,100 more a year than they could have expected in Q3 2022, totalling over £26 billion overall.

Figure 3 **On average, mortgaged households will be £3,500 worse off by the end of 2024**

Estimated cash increase in average annual mortgage cost since Q3 2022: GB



Notes: Only includes one owner occupier mortgage per household, additional mortgages (where applicable) are excluded. Based on market interest rates as of 11 October 2022 and pre-mini budget refers to interest rates as of 22 September 2022. See endnotes for details of the estimation method.
Source: RF analysis of ONS, Wealth and Assets survey; Bank of England, Bankstats and Yield Curve.

As the chart makes plain, these cash increases are largely driven by factors that were present before the mini-budget on 23 September, but changing expectations since the Chancellor's mini-budget have had a clear additional effect. By Q4 2024, we estimate that the average mortgaged household's payments will be over £800 a year higher as a result of the change in interest rate expectations since the mini-budget, almost one-quarter (24 per cent) of the total increase. The figures are more striking when we exclude households who will still be on low fixed-rate deals at that point in time. Those households already hit by rate rises by

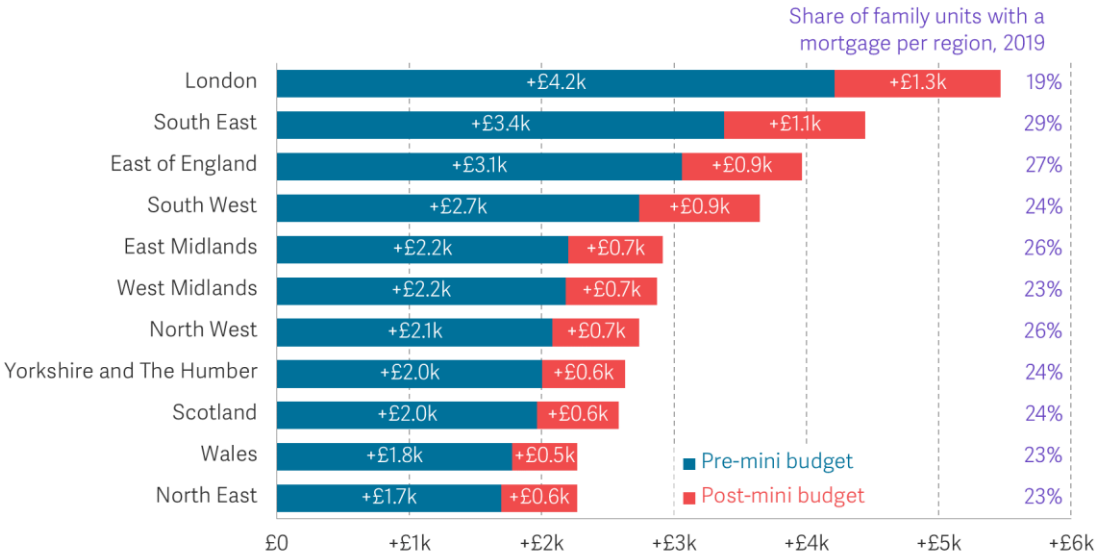
Q4 2024 will being paying an additional £1,200 a year over and above what they could have expected before the mini-budget. (These estimates are, of course, very sensitive to fiscal and monetary policy developments in the months ahead).

Higher-income mortgagors will be hardest hit in cash terms, but lower-income households with mortgages will see living standards fall the most

Of course, these average figures hide the multitude of experiences that different mortgaged households will encounter in the brave new world of higher interest rates. Clearly, those with large outstanding balances on their mortgages will suffer the highest cash increases (absent their reducing the principal in some other way). The size of mortgage is closely related to the initial purchase price of the property, and so it is no surprise that we estimate that the average mortgaged London household will be paying £5,500 more in annual costs by the end of 2024 (see Figure 4) – a figure that rises to over £8,000 when we look at only those households affected at that date. This is almost two-and-a-half times as much as their peers in the North East, who will on average will have to spend £2,300 more a year servicing their mortgage by Q4 2024, £600 of which stems from events of the last few weeks. (It is worth noting, however, that a smaller share of families – 19 per cent – are mortgagors in London than in the North East – 23 per cent).

Figure 4 **The average London mortgagor will be paying £5,500 a year more in interest costs by the end of 2024**

Forecast estimated cash increase in average annual mortgage cost since Q3 2022, by region/nation: GB, Q4 2024

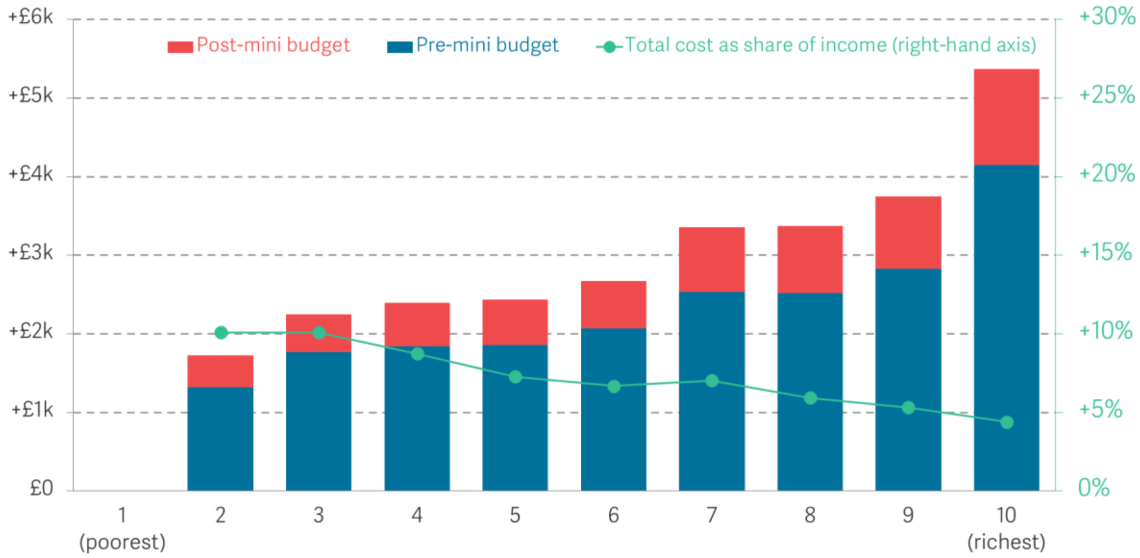


Notes: Only includes one owner occupier mortgage per household, additional mortgages (where applicable) are excluded. Based on market interest rates as of 11 October 2022 and pre-mini budget refers to interest rates as of 22 September 2022. See endnotes for details of the estimation method. Figures for share of family units with a mortgage are for 2019. A family unit is a single adult or a couple living together (plus any dependent children).
Source: RF analysis of ONS, Wealth and Assets survey; Bank of England, Bankstats and Yield Curve; ONS Labour Force Survey.

Likewise, Figure 5 shows how the size of losses varies across the income distribution. The average mortgagor household in the second bottom income decile looks set to pay around £1,700 more a year for the privilege of buying their home by the end of 2024 than anticipated just a few months ago (£400 of that is the result of changed expectations since the mini-budget). In contrast, mortgagors in the highest income decile can expect their annual mortgage costs to increase on average by £5,400 by that point in time (including a £1,200 post-mini-budget penalty). These patterns are clearly driven by the fact that higher-income households will have been able to afford to buy more expensive properties and take out larger mortgages. But when we express those cash losses as a share of income, it is plain that lower-income households will experience the biggest living standards hit: by Q4 2024, households in the second income decile will be spending the equivalent of 10 per cent more of their income on their housing costs, for example, compared to 4 per cent for households in the highest income bracket.

Figure 5 **Higher-income mortgagors can expect to pay over £5,400 more a year in interest costs by the end of 2024**

Estimated cash increase in average annual mortgage cost, by net household income decile, and as share of net household income, since Q3 2022: GB, Q4 2024



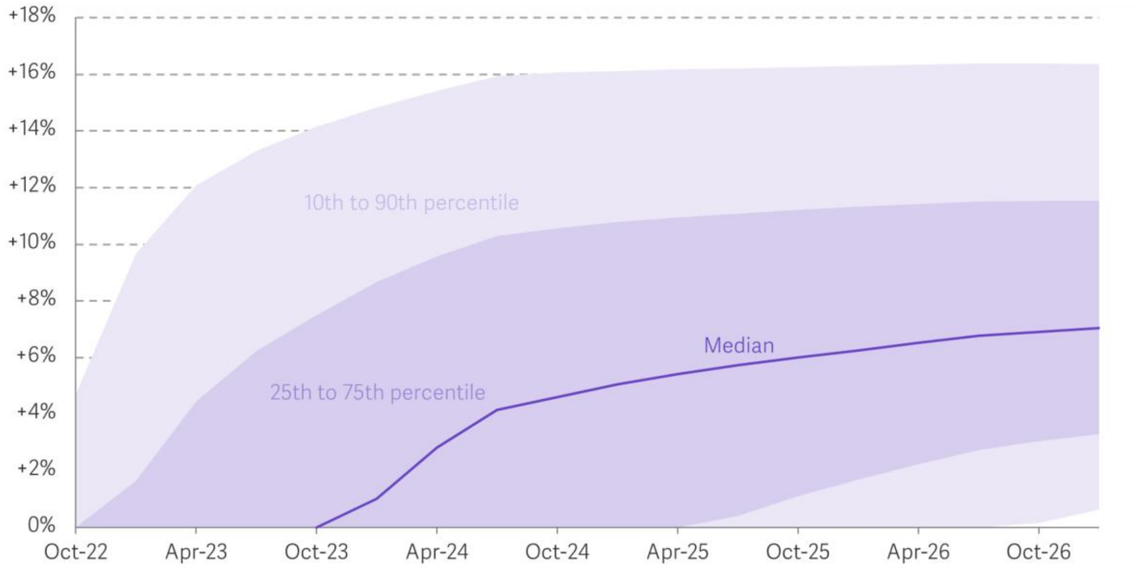
Notes: Only includes one owner occupier mortgage per household, additional mortgages (where applicable) are excluded. Based on market interest rates as of 11 October 2022 and pre-mini budget refers to interest rates as of 22 September 2022. See endnotes for details of the estimation method. Income deciles are for mortgaged households only. Income is defined as regular income measured net of taxes and before housing costs. We exclude results for decile 1 due to well-known concerns about the reliability of income data for those on the lowest incomes.
Source: RF analysis of ONS, Wealth and Assets survey; Bank of England, Bankstats and Yield Curve.

Rising rates will hit mortgagors' living standards across the board

The effect of higher interest rates is significant and immediate. Figure 6 proves this point by showing the estimated cash increase in household mortgage costs over the next four years as a share of net household income (income forecasts are derived from previous Resolution Foundation research). We estimate that one-quarter of all mortgaged households (around 1.8 million) will have lost more than 10 per cent of their household income to higher housing costs by Q4 2024. At the same point in time, the typical mortgagor will be spending an estimated 4.6 per cent more of their income on their housing costs than our benchmark quarter. And by the end of our forecast period, practically no mortgaged household will be untouched by higher rates.

Figure 6 **The typical mortgagor will see higher housing costs absorb almost 5 per cent of their income by the end of 2024**

Estimated increase in household mortgage costs as a share of net household income, since Q3 2022: GB

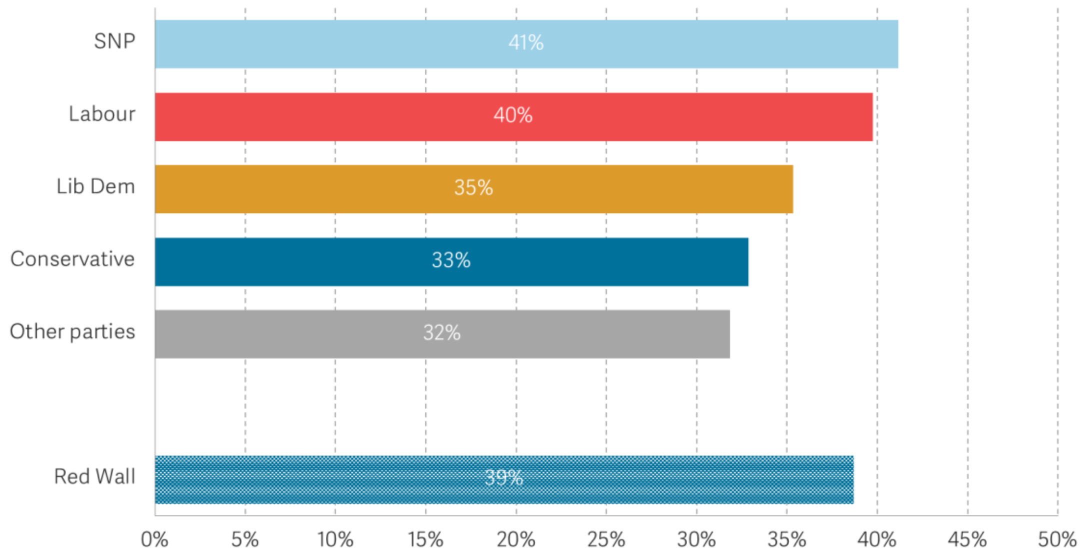


Notes: Only includes one owner occupier mortgage per household, additional mortgages (where applicable) are excluded. Based on market interest rates as of 11 October 2022. Income is defined as regular income measured net of taxes and before housing costs. Income is based on data from the Wealth and Assets survey Round 7 sample period which covers Q2 2018 to Q1 2020, projected forward in line with method in T Bell et al, Blowing the budget: Assessing the implications of the September 2022 fiscal statement, Resolution Foundation, September 2022.
Source: RF analysis of ONS, Wealth and Assets survey; Bank of England, Bankstats and Yield Curve.

There is likely to be significant political fallout from higher interest rates

The forecasts we present in this Spotlight rely on a number of assumptions (not least that there will be no behavioural response from mortgagors to these higher rates) and are highly sensitive to further interventions and events. But, regardless of how the future unfolds, it is fair to assume that higher interest rates will not only cause (often serious) problems for a very large number of households, but have significant political ramifications as well. It is true that mortgaged households make up a smaller share of the electorate today than they did in the past: 43 per cent of households were in the process of buying their home with a mortgage in 1992, for example, compared to just 28 per cent in 2020.[5] Moreover, as Figure 7 shows, they made up a smaller share of those voting Conservative in the 2019 election than they did for the other main political parties.[6] However, close to four-in-ten voters in Red Wall seats at the last election were mortgaged homeowners, suggesting the Government may not want to entirely ignore those households affected by rising interest rates.

Figure 7 **Four-in-ten voters in Red Wall seats had a mortgage in 2019**
Proportion of voters in 2019 General Election who owned their home with a mortgage, by voting type: GB



Notes: Red Wall seats constitute those in the North and Midlands that have traditionally been Labour but voted Conservative in the 2019 election.
Source: RF analysis of University of Manchester & Nuffield College Oxford, British Election Survey 2019.

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[1] The authors are grateful to James Tatch of UK Finance for suggestions on data sources and comments on this spotlight. We also thank colleagues Mike Brewer, Adam Corlett and James Smith for their support and advice throughout. Any errors are, of course, the authors' own.

[2] The tax cuts announced at the Government's 'mini-budget' on 23 September 2022 were initially expected to cost £45 billion by 2026-27. However, the subsequent decision not to scrap the additional rate of Income Tax reduced that figure to £43 billion, and the decision on 14 October to proceed with the previous Government's plans to increase Corporation Tax to 25 per cent now reduces that figure to £25 billion.

[3] We create separate forecasts for interest rates for floating rates – as a broad category including standard variable rate and tracker mortgages – and fixed rate of varying lengths. These mortgage rates are pinned to market expectations as embodied in the OIS curves published by the Bank of England. Specifically, we assume floating-rate mortgages will move in line with the OIS forward curve, reflecting the historic (and contractual) close relationship between mortgage rates and Bank Rate. The forecast includes maintaining the average spread between Bank Rate and mortgage rates between 2018 and 2022. Fixed-rate mortgages are linked to the relevant point of the latest OIS spot curve (for example a two-year fixed rate mortgage is linked to the two-year

OIS spot rate) plus the average spread from 2018 to 2022 for that type of mortgage. We then make an adjustment to household-level mortgage rates by adjusting the individual mortgage rate by the observed spread in the 2018-20 period to the average mortgage rate for that type of product. This may over-estimate the variability of mortgage rates, given the lack of granularity in our data on mortgage product type, but we expect any effect here to be small. We do not include an uplift to mortgage rates to reflect higher credit risk from rising loan to value levels for existing mortgages were property prices to fall, nor from the additional interest rate risk inherent in the current level of economic uncertainty. This could mean that we underestimate the average level of future interest payments, but we currently do not have data to calibrate any other assumption.

[4] To project mortgage costs, we start with the ONS' Wealth and Assets survey, which provides a granular, large-sample snapshot of household mortgages, including characteristics of the households holding mortgages. The advantage of this data is that it provides crucial details such as whether households have fixed- or floating-rate mortgages, the distribution of mortgage rates, and on the value of recent mortgage payments. The disadvantage of the data is that the latest available data covers April 2018 to March 2020. In particular, a key trend in the housing market has been a shift towards mortgages being fixed rate and, within that, for fixed-rate mortgages to have longer fixed-rate periods. For example, at the start of 2016, roughly half of secured household lending was done on a floating rate; by the middle of 2022, it was around 15 per cent [source: Bank of England, Bankstats]. Households with fixed-rate mortgages will be protected from rising interest rates as long as the fixed-rate period lasts, so it is crucial to take this trend into account. To do this, we randomly assign some households on variable-rate mortgages in our dataset to having shifted to a fixed-rate mortgage since 2018-20, and simulate calculations until the final results converge to the average. Having assigned all mortgagor households to either fixed- or floating-rate, we then assign fixed-rate households into groups so as to match the share of households with fixed-rate mortgages of different length (for example, in the latest data from the Bank of England, 61 per cent of outstanding secured loan balances to households are secured for five-year terms). This is done linearly; for example, we assume that an eighth of households on two-year fixes will remortgage each quarter. In practice, households will be skewed towards the earlier period of the mortgage due to house moves, early remortgages and the recent higher flow towards fixed-rate mortgages. This means we slightly overestimate the pace at which higher interest rates will affect households. To simplify this exercise, we choose not to model the origination of new mortgages for those moving from rental accommodation, nor do we allow for households paying off mortgages directly or upsizing/downsizing. This effectively takes the stock of lending as fixed. Given the uncertainties inherent in the behavioural effects of higher interest rates (and any knock-on impact on house prices), this should provide a clearer result on how mortgage costs will evolve as a result of direct interest cost changes. Thus, taking this together, we can estimate the numbers of households facing higher interest, either effectively immediately for those on floating-rate mortgages, or over time, as households with fixed-rate mortgages come to remortgage (or flow onto the reversion rate period of the mortgage).

[5] Source: RF analysis of ONS, Labour Force Survey.

[6] In the British Election Survey 2019, 35 per cent of households have a mortgage indicating that those in this tenure are more likely than average to have voted in 2019.