The Macroeconomic Policy Outlook

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The UK is experiencing high levels of inflation not encountered for 41 years, reaching 11.1 per cent in October. But what matters most for both people and policy makers is how persistent this inflation is, which will influence how long the cost of living crisis will last. This inflation has been driven by global and domestic forces, with as much as three quarters of the increase since April 2021 coming from components with internationally set prices. This edition of the MPO explores the international drivers of inflation and finds grounds for optimism that the UK could see stronger-than-anticipated global disinflationary pressures.

In the wake of the pandemic, three major global headwinds have been driving up UK prices: higher global demand, supply chain disruptions and European energy prices. But all three are now showing signs of easing, or even reversing, their impact on inflation and it is possible that the impact of these unwindings could materialise more quickly or be more significant in scale than currently expected. Although US goods demand is 6.4 per cent above its pre-pandemic path, with huge growth in recreational and goods and vehicles expenditure compared to pre-pandemic path of 21.2 per cent, this demand growth has already flatlined, and could fall over the next couple of years (indeed, real goods imports to the US have already fallen 5.2 per cent from their peak in March). Supply chain disruption decreased rapidly over the six months to November and looks to have now stabilised, across multiple measures, including shipping prices. Finally, although the conflict in Ukraine remains uncertain, European gas supply chains have adjusted, and gas demand is estimated to be 24 per cent below its previous 5-year average. It is therefore unsurprising that the price premium on European gas has fallen from 3.8 times US gas to 3.2 times, and 5 times Japan LNG to just 2.3 times in just three months.

When it comes to the prices of tradable goods and services, there are UK-specific factors that could push against global deflationary pressures. First, implementing Brexit has had a clear impact on UK prices by making it more difficult to import from the EU; food prices, for example, increased by 6 per cent in 2020-21 due to an increase in UK-EU trade barriers. Second, sterling has devalued by 4 per cent compared with its traded currency basket since the beginning of 2022. However, although there are some aspects of Brexit left to implement (including the Northern Ireland Protocol and import checks), and these higher prices are here to stay, it is likely that most of the Brexit inflation has already materialised. Moreover, the scale and rate of the recent currency devaluation pales in comparison to what happened after the financial crisis and Brexit referendum.

The current spike in UK inflation has been driven by global pressures which makes the country poorer overall, and leaves workers and firms at odds over who should bear the pain. But there are good reasons for thinking that the imported inflation will ease over the next 18 months, allowing the Bank of England to focus on inflationary pressures in the domestic economy, which is where monetary policy levers bite.

1 We are grateful for comments and contributions from others at the Resolution Foundation, including: Torsten Bell, Mike Brewer, Jack Leslie, Jonny Marshall, Louise Murphy, Greg Thwaites & Krishan Shah, although any errors are the authors' own.

Prospects for global inflation are key to how long the UK's cost of living crisis will last

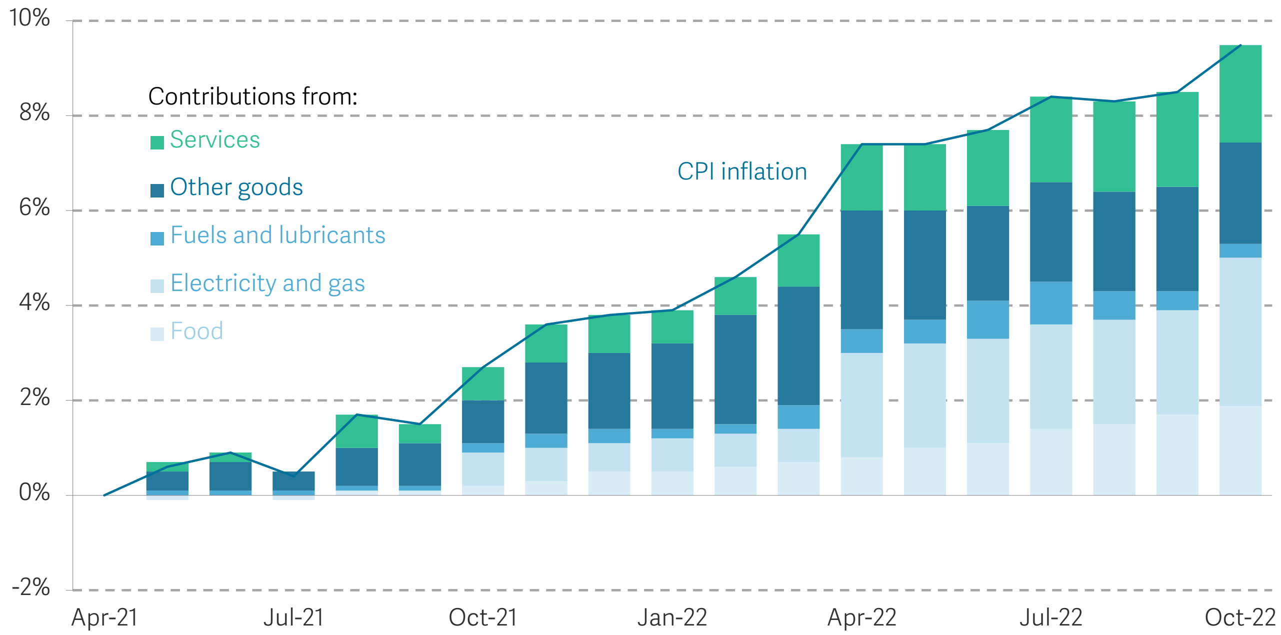
CPI inflation was 11.1 per cent in October, the highest inflation the UK has faced in 41 years, and the effects on living standards are already becoming clear. Inflation has been above the 2 per cent target since May 2021, and how quickly inflation is expected to fall back to normal levels will affect the outlook for living standards over the next few years. Both the Bank of England and the OBR expect high inflation to be relatively long lasting, falling to 2 per cent in 2024. This is harming households, with the OBR forecasts from November suggesting that inflation-adjusted pay won't return to 2008 levels until 2027. This would amount to 19 years of lost cumulative growth.

Domestic inflation– in particular, that driven by wage-setting in the labour market or by increased profits – is what risks inflation becoming embedded. Our Q3 2022 Macroeconomic Policy Outlook argued that the risks of high *and lasting* inflation has so far been relatively contained.

But, as shown in Figure 1, three-quarters of the rise in inflation since April 2021 is accounted for by just three components: energy (almost entirely gas and oil-related prices), food and other goods. These tend to be highly import-intensive, with prices set on international markets, meaning that the prospects for inflation are to a large extent driven by global developments.

FIGURE 1: **Three-quarters of the rise in inflation comes from three components where prices are largely set internationally**

Contributions to the rise in CPI inflation since April 2021: UK



SOURCE: Bank of England, Monetary Policy Report; ONS, Consumer price inflation.

Three headwinds have been pushing up global inflation, but that is set to change

Three major, and related, headwinds have been pushing up global inflation: growth in global goods demand, supply chain disruptions, and the invasion of Ukraine that caused a supply shock to energy markets, particularly in Europe. These three headwinds have caused inflation in the UK, but for each the peak of the inflationary pressure may now be behind us.

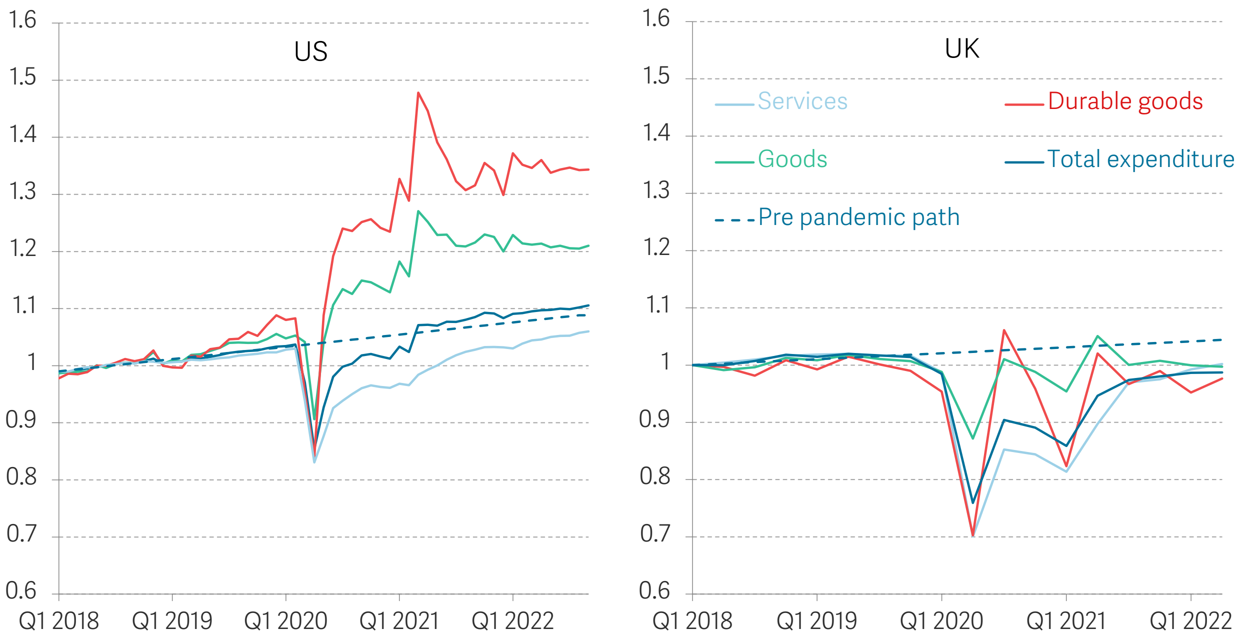
US goods demand is lingering well above its pre-pandemic path

Increased US goods consumption has been fuelling global inflation. After an initial pandemic-induced slump, US goods demand grew rapidly, reaching well above its pre-pandemic path by the end of 2020. This demand growth was driven by households receiving government transfers such as stimulus checks, accumulating savings, and pivoting away from services spending. Given the size of the US market, global supply couldn't respond fast enough to this rising demand, creating global supply bottlenecks. The resulting higher prices were passed along to other countries' imports, including the UK, despite the same consumption patterns not being visible in the UK or Europe more generally.

This increased goods demand has now lingered for two years. In October, US goods demand was 6.4 per cent above its pre-pandemic path, causing total personal consumption expenditure to rise 1.7 per cent above its pre-pandemic path (Figure 2). Durable goods demand, in particular, continues to be 13.8 per cent above its pre-pandemic path; expenditure on recreational goods and vehicles, such as sporting equipment, which represents 40 per cent of durable goods, is 21.2 per cent above its pre-pandemic path. In contrast, while the UK saw some growth in goods demand during the pandemic, this has now largely unwound: household expenditure in Q2 2022 was 5.6 per cent below its pre-pandemic path, with durable goods and goods below their pre-pandemic paths by 2.7 per cent and 4 per cent respectively.

FIGURE 2: **US has had sustained high demand, but this should start to ease**

Index of personal consumption expenditure and personal household expenditure, chained volume measures, Q1 2018 = 1: US and UK



NOTES: Monthly personal consumption expenditure (US) and quarterly household final consumption expenditure (UK). Pre-pandemic path is regression of 2018-2019 consumption data for each of US and UK.
SOURCE: RF analysis of Bureau of Economic Analysis (BEA); and ONS, National Accounts.

In both the UK and the US, services expenditure has not recovered to the pre-pandemic paths, with services consumption down 5.6 per cent for the UK and 0.5 per cent for the US. Lockdowns ensured that people stayed home in 2020 and 2021, but continued social distancing by more than 10 per cent of Americans is still reportedly affecting their work decisions, even though most formal restrictions have now been removed.

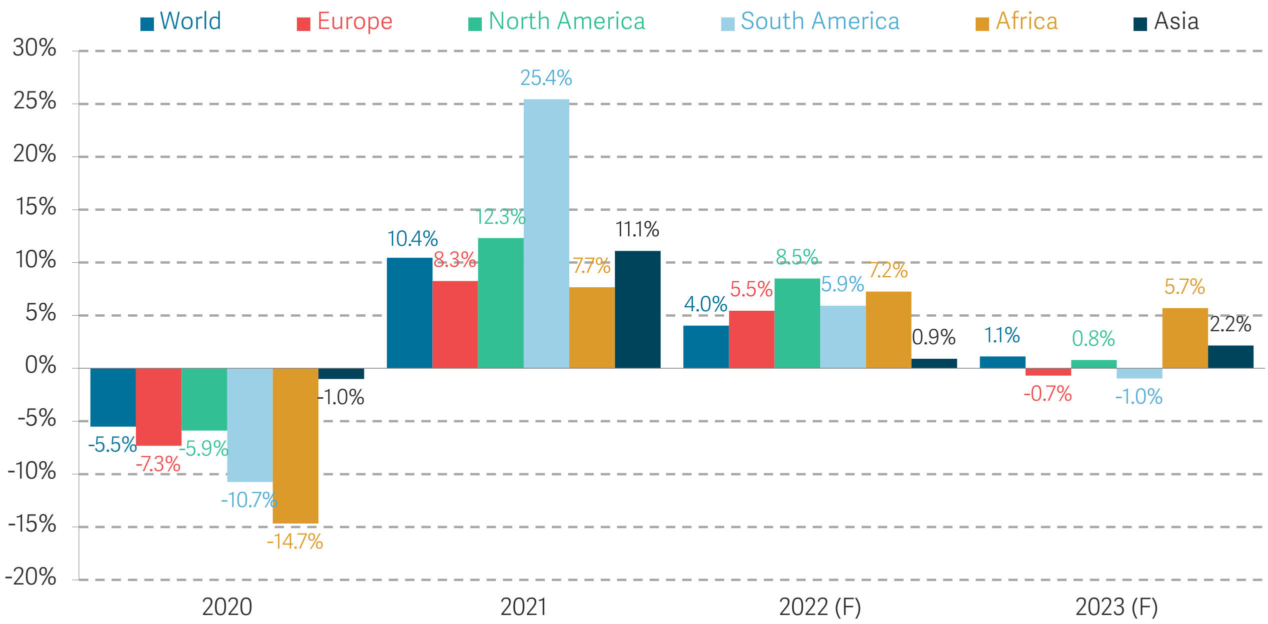
Further inflationary pressure from US goods demand is unlikely: demand has already flatlined, giving supply chains the chance to adjust. Indeed, as the US returns to pre-pandemic consumption patterns, there will be a deflationary pressure on global goods prices, particularly the price of durables. It is reasonable to expect that current high durables consumption is a temporary shock, driven by individuals increasing their stock of durables (e.g. buying a second car) while they are spending less on services, rather than a permanent shift in demand (which would be caused, for example, by consumers replacing their car every five years instead of every ten years). There are indicators suggesting that demand for goods, in particular demand for durable goods, will not continue to rise at the rates we have seen this year. In particular, US trade data shows import demand is starting to dampen, suggesting that US firms are expecting consumption in the coming months to slow (real goods imports are down 5.2 per cent in October from their peak in March).

Supply chain disruptions are unwinding

The surge in goods demand was one major contributor to supply disruptions, causing increased shipping costs. Over 80 per cent of goods traded globally travel by sea, and at its peak, the Baltic Dry Index, which measures shipping costs globally, reached 7 times pre-pandemic levels triggering further inflationary pressures. However, these shipping costs have fallen back to just 1.6 times pre-pandemic levels in November, with other shipping indices following a similar pattern (Figure 4). Pre-pandemic these indices were close to long run averages, last diverging substantially during the financial crisis period.

Growth in trade capacity is now expected to outpace demand in 2022, with an increased global fleet and falling congestion at ports both contributing to lower shipping costs. In 2023, trade is expected to flatline, as GDP growth slows and recessions arrive in key economies, suggesting that shipping costs are unlikely to move higher once again. Indeed, European and North American imports are expected to fall by 1 per cent and grow by just 1 per cent respectively in 2023 (Figure 3).

FIGURE 3: **World trade, particularly in Europe and the Americas, will slow next year**
Year-on-year change in merchandise import volume



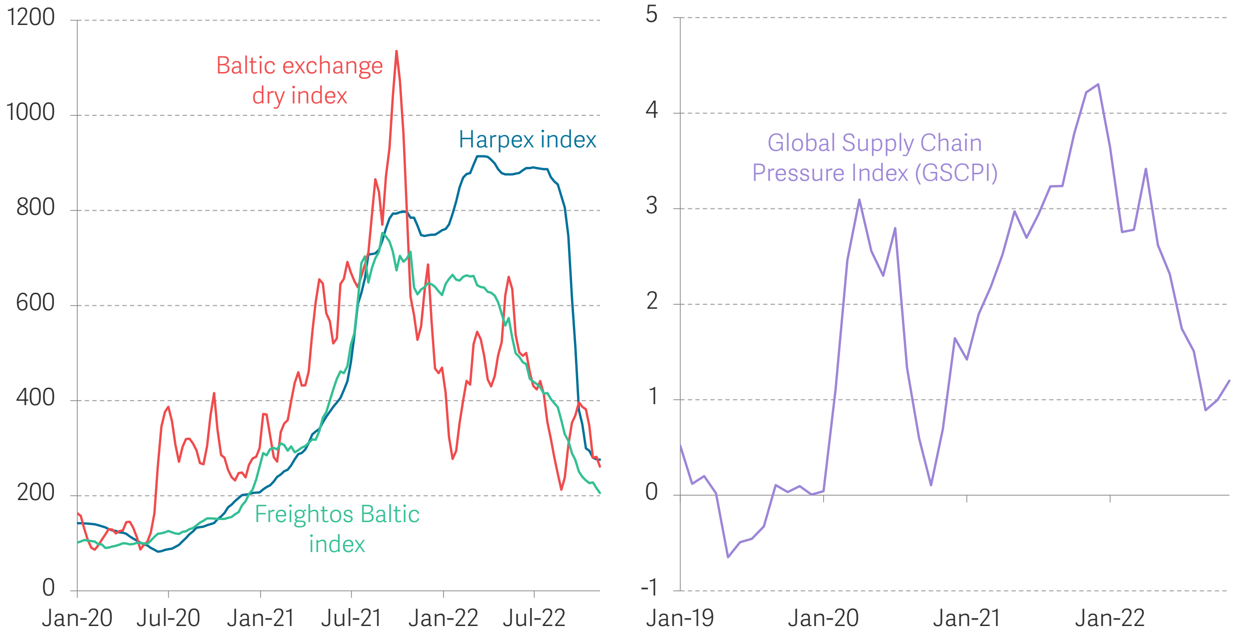
SOURCE: World Trade Organisation, 2022.

More broadly, supply chain disruptions have been associated with supply slowdowns over the last couple of years, either through manufacturing disruptions, or specific events such as lockdowns in China, the largest global manufacturer. However, Purchasing Managers Index (PMIs) have been falling across multiple measures in major developed economies in the second half of 2022, including both manufacturing demand and average manufacturing supplier delivery times which fell to their lowest levels in the US, UK, Eurozone and Japan since January 2020, easing price pressures. The Global Supply Chain Pressure Index (GSCPI), which combines shipping indices as well as PMI surveys and the costs of US airfreight, has also fallen rapidly from a peak of more than 4 standard deviations above its long run average in the second half of 2022 (Figure 4).[2]

Although the GSCPI rose slightly in October and November, driven by UK backlogs and delivery times in Taiwan increasing, it continues to be just 1 standard deviation above its long run average. Going forward, while zero-Covid lockdowns in China have reportedly affected everything from manufacturing iPhones to cars in November, there are signs that restrictions might start to relax. However, the future of China's Covid policies and current political unrest are uncertain.

FIGURE 4: **Both shipping costs and wider supply chain pressures are easing**

Selected shipping price indices (left chart) and supply chain pressure index (right chart)



NOTES: GSCPI shows standard deviations from historical average. Harpex is a composite indicator of weekly container shipping prices in the time charter market for eight different classes of container ships; Baltic Exchange Dry Index is a composite indicator of global dry shipping, Freightos Baltic index is a composite indicator of container freight spot rates across twelve major global trade lanes.
SOURCE: RF analysis of OECD, GSCPI.

How this dramatic reduction in supply chain disruptions might influence prices going forward can be estimated by examining the relationship between world trade prices and the GSCPI. Over the pandemic, the total effect of rising supply chain disruption until its peak of 4.3 standard deviations above its long run average was a 9.3-percentage point increase in world prices, equivalent to a 3.1-percentage point increase in UK prices (reflecting the fact that the ratio of imports to household

[2] It includes PMI surveys from manufacturing across China, the euro area, Japan, South Korea, Taiwan, the United Kingdom, and the United States.

consumption is approximately one third, although this can be considered a lower bound).[3] But by the end of 2022 we estimate that the UK price effect has already unwound by 0.2 percentage points. Indeed, we estimate that supply chain disruptions now account for 1.2 percentage points of the increase in UK inflation since April 2021. Looking forward, the deflationary pressure from a decrease of the GSCPI from its peak to its current level of 1 standard deviation, would mean a 3.6 percentage point fall in world trade prices. This would amount to a 1.2 percentage point fall in UK prices due to easing supply chain pressures by autumn 2023.

Colossal European energy prices are falling from their peak, but the risk of future price hikes remains uncertain

Energy prices alone are directly contributing to almost one third of inflation in the UK (3.9 per cent in October 2022, as shown in Figure 1), starting in late 2021 and fuelled by the invasion of Ukraine in early 2022. Oil and gas prices spiked globally, but European gas prices were particularly affected by this disruption in supply, rising to almost four times the level of US gas prices and five times the level of Japan LNG prices at their peak in August (Figure 5). Much of Europe, including the UK, relies on gas for heating during the cold winter months (45 per cent of annual household gas use in the UK takes place in the first quarter of the year), and the UK relies on gas for 40 per cent of electricity generation, more than European peers.

European governments, including the UK, have partially shielded consumers from wholesale gas and electricity prices, through both measures directly affecting prices and income support. In the UK, the Energy Price Guarantee (currently set at £2,500 for a typical household's energy consumption, increasing to £3,000 for a typical household in April 2023) will save the typical household £630 in Q1 2023 alone compared with the Ofgem price cap of £4,279 in Q1 2023.

Even with government interventions, the underlying inflationary effects of energy will be determined by wholesale prices. Between August and November, the European premium on gas has fallen from 3.8 times US gas to 3.2 times and from 5 times Japan LNG to just 2.3 times compared to pre-pandemic levels. This is because Continental Europe has transitioned to LNG from Russian gas, gas storage is above its previous five-year average, and demand-reduction initiatives have been implemented (for example, the EU agreed to reduce gas demand by 15 per cent this winter, and is estimated to have reduced demand by 24 per cent in each of October and November). In December, the G7 and the EU agreed a $60 pre barrel price cap on Russian seaborne oil at which price the G7 will ship and insure this oil while restricting Russian profits. The future of oil and gas prices is highly uncertain, and wholesale gas futures curves for the UK remain elevated in 2023 and 2024, before falling back to levels that wholesale prices were for the summer 2022 price cap (of £1,971) in summer 2025. There is a risk that UK businesses could be exposed to higher energy prices from April 2023 (depending on the final details of Government support) causing second-order effects of these higher prices, but the European gas premium should continue to fall.

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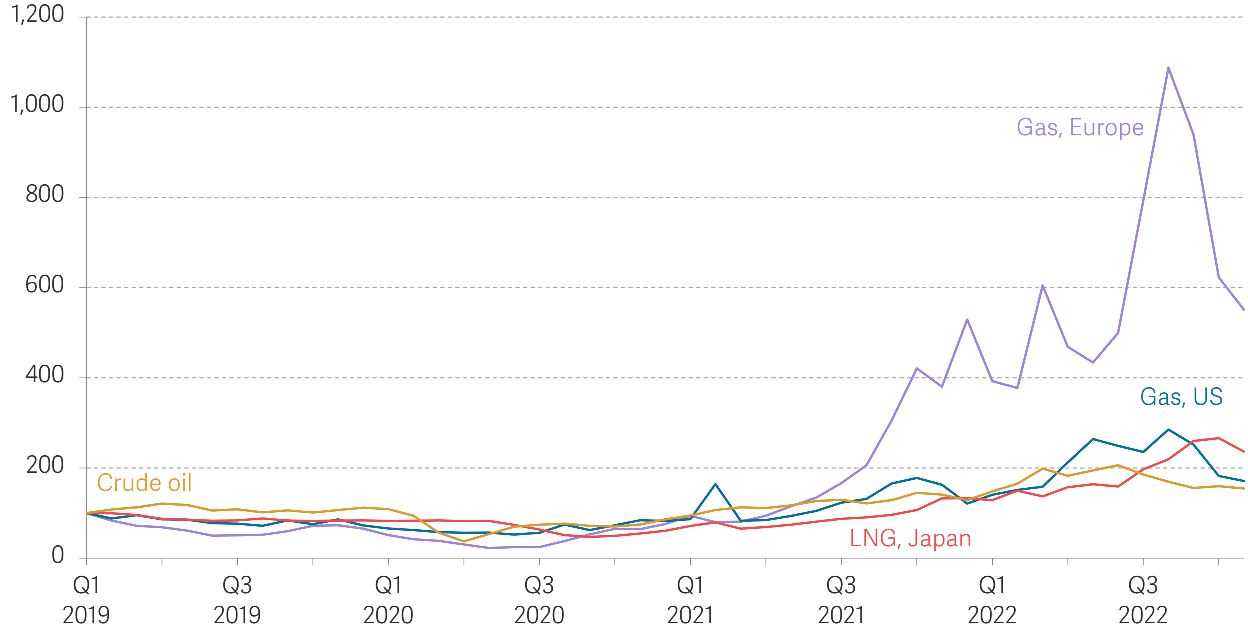
[3] The ratio of imports to household consumption was 35 per cent in 2021, ONS. Specification uses a simple vector autoregression method, where p is monthly world trade price data from the World Trade organisation 2005 to 2021, and GSCPI is GSCPI Index for the same period. Because import price data is not available for the most recent months, we use a univariate AR model to quantify shocks to GSCPI and combine this with the impulse response to get the most recent price effect.

$$d.\ln(p_t) = \beta_0 + \beta_1 d.\ln(p_{t-1}) + \beta_3 GSCPI_{t-1} + \varepsilon_{1t}$$

$$GSCPI_t = \alpha_0 + \alpha_1 GSCPI_{t-1} + \alpha_2 d.\ln(p_{t-1}) + \varepsilon_{2t}$$

FIGURE 5: **The premium for European gas is finally falling from a high peak**

Index of selected commodity prices (Jan 2019=100)



NOTES: European gas in Euros, LNG Japan in Yen, US gas and Crude oil in USD.
SOURCE: RF analysis of World Bank, FRED, Eurostat.

UK-specific factors are unlikely to outweigh falling global inflationary pressure

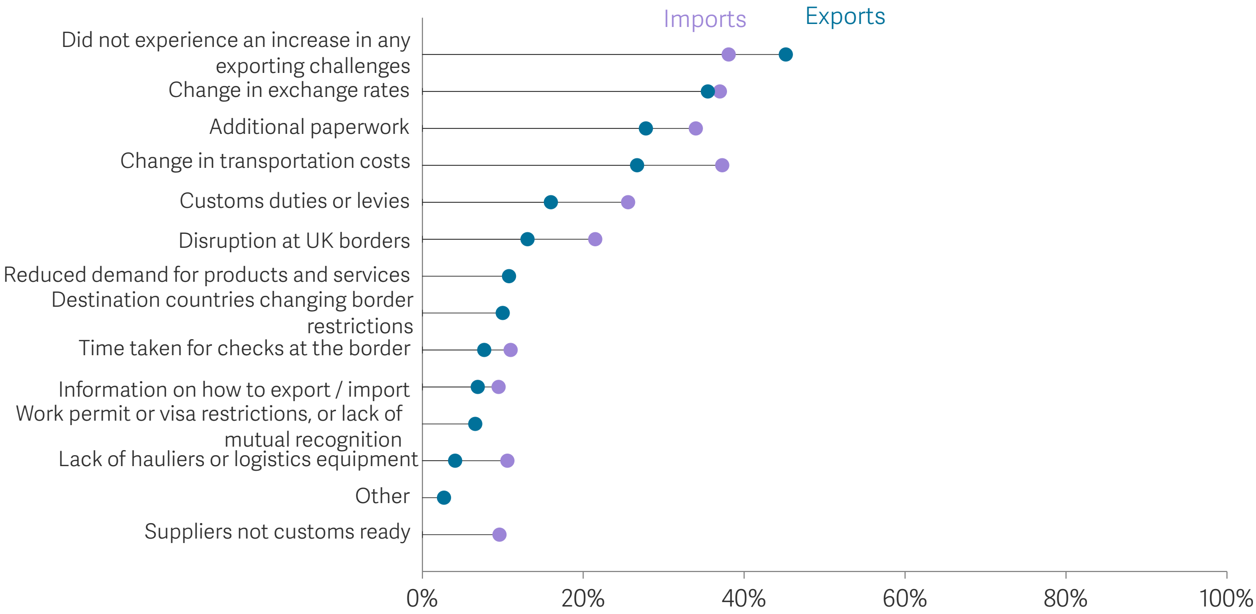
When it comes to the prices of tradable goods and services, there are UK-specific factors that could push against global deflationary pressures. First, Brexit has introduced new barriers, leading to an increase in the price of imports from Britain's largest trading partner (48 per cent of UK goods imports are from the EU). Research found that the UK's exit from the EU caused food prices to increase by 6 per cent between 2020 and 2021, driven by increased non-tariff barriers, such as new customs checks and sanitary measures for trade in animals and plants. This is supported by survey evidence of businesses reporting difficulties with trade: in September 2022, 61 per cent of importers and 53 per cent of exporters reported that 'the end of the transition period', or both Covid-19 and 'the end of the transition period', were the main drivers of export or import disruptions (see Figure 6). Furthermore, four-in-five UK businesses say Brexit caused the biggest supply chain disruption in the last 12 months, despite significant global disruption in the wake of the pandemic (discussed above).

More worryingly, 83 per cent fear the biggest disruption from Brexit is yet to come, suggesting there could be some further price adjustments on the horizon. The future of the Northern Ireland Protocol, which currently enables goods to be traded across the Irish land border without checks, is under discussion, and further checks at the British border are yet to be implemented.

However, although the higher price levels are likely here to stay, it is unlikely that Brexit will play a major role in rising inflation. Prices are able to respond relatively quickly to the new barriers but over time UK supply and demand will also adjust.

FIGURE 6: **Businesses are continuing to face importing and exporting challenges**

Proportion of businesses reporting and increase in various exporting or importing challenges in September 2022 compared with the previous calendar month



SOURCE: RF analysis of ONS, BICS.

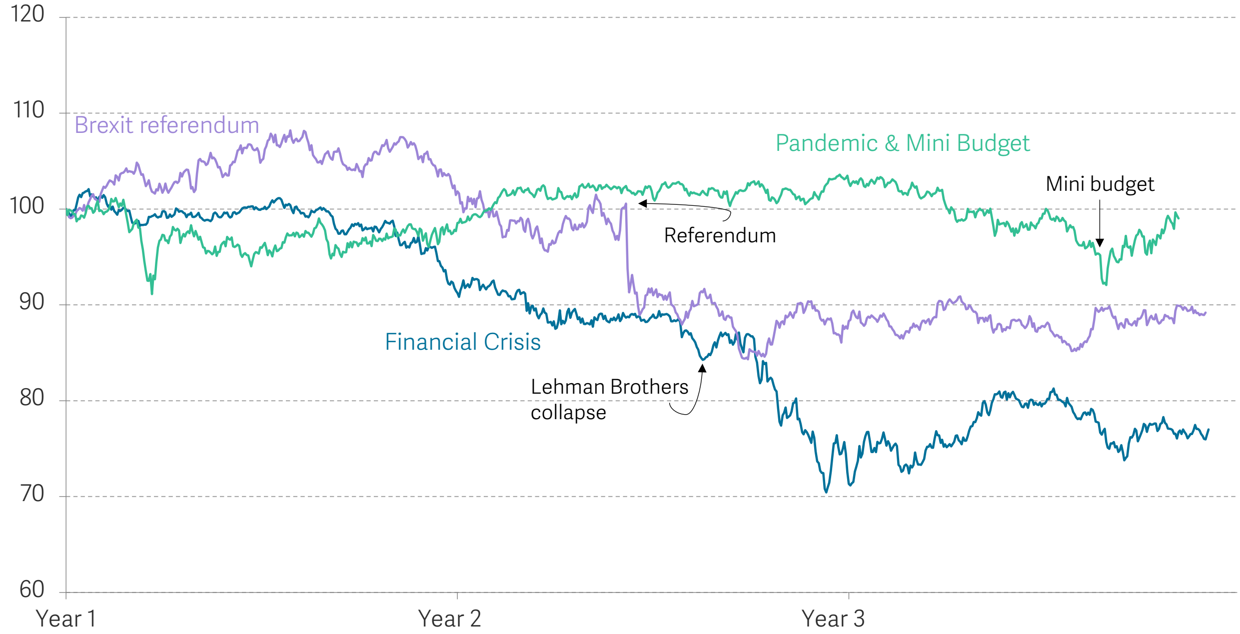
Second, sterling has depreciated against a trade-weighted currency basket throughout 2022, with a rapid fall at the time of the 'mini budget' in September, although this has mostly unwound. In total, sterling has depreciated 4 per cent against import currencies, and the depreciation against the dollar has been the most pronounced. But roughly half of the fall relative to the dollar is due to dollar strength, meaning only half is due to changes in the UK-specific risk premia, according to Bank of England MPC Member Catherine Mann. Overall, a depreciation of 4 per cent could add as much as 1.7 per cent to UK inflation over the coming years.[4]

However, sterling still trades within bounds seen over the past six years. Indeed, the depreciation following the financial crisis and following the Brexit referendum (the latter increased consumer prices by 2.9 percentage points) were much more stark than the recent depreciation (see Figure 7). Furthermore, any inflationary impact from a depreciation would materialise over three to four years, according to previous Bank of England Governor, Mark Carney.

4 1.7 per cent is one third of a 4 per cent depreciation.

FIGURE 7: **The sterling depreciation in 2022 is far smaller than previous episodes**

Index of sterling broad effective interest rate: UK, 3 years from Jan 2007=100; Jan 2015=100; Jan 2020=100



NOTES: Three-year periods indexed to January of for each of the Financial crisis (2007), the Brexit referendum (2015) and the Covid-19 pandemic and mini budget (2020).
SOURCE: RF Analysis of Bank of England.

Easing of global inflationary pressures could leave the UK in a very different macroeconomic context sooner that we expect

The current spike in UK inflation has been driven by global pressures which make the country poorer overall, and leave workers and firms at odds over who should bear the pain. Indeed, three quarters of the rise in inflation is driven by import-intensive energy, food and other goods – these costs have increased by approximately 7.4 percentage points since April 2021 (Figure 1). Since April 2021, supply disruptions added 1.2 percentage points to UK inflation, energy prices directly contribute 3.4 percentage points to the increase (although this excludes indirect effects of energy), and therefore up to 3 percentage points of the increase in inflation could be from global demand imbalances. But, as we look to the new year, these forces which have been pushing up inflation look set to go into reverse.

And, although UK-specific pressures on the prices of tradable goods and services could offset some of the disinflationary pressure from the global fall in prices, this is likely to be relatively small. Trade costs created by Brexit are likely to have already been passed through to prices, and, although the devaluation of sterling this year is significant, it trades within bounds seen over the past 6 years, and any further inflationary impact would materialise over several years. So, if these downward pressures on global inflation are realised, imported inflation could start falling back even faster than expected. This in turn would allow the Bank of England to focus on inflationary pressures in the domestic economy, which is where monetary policy levers bite.

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