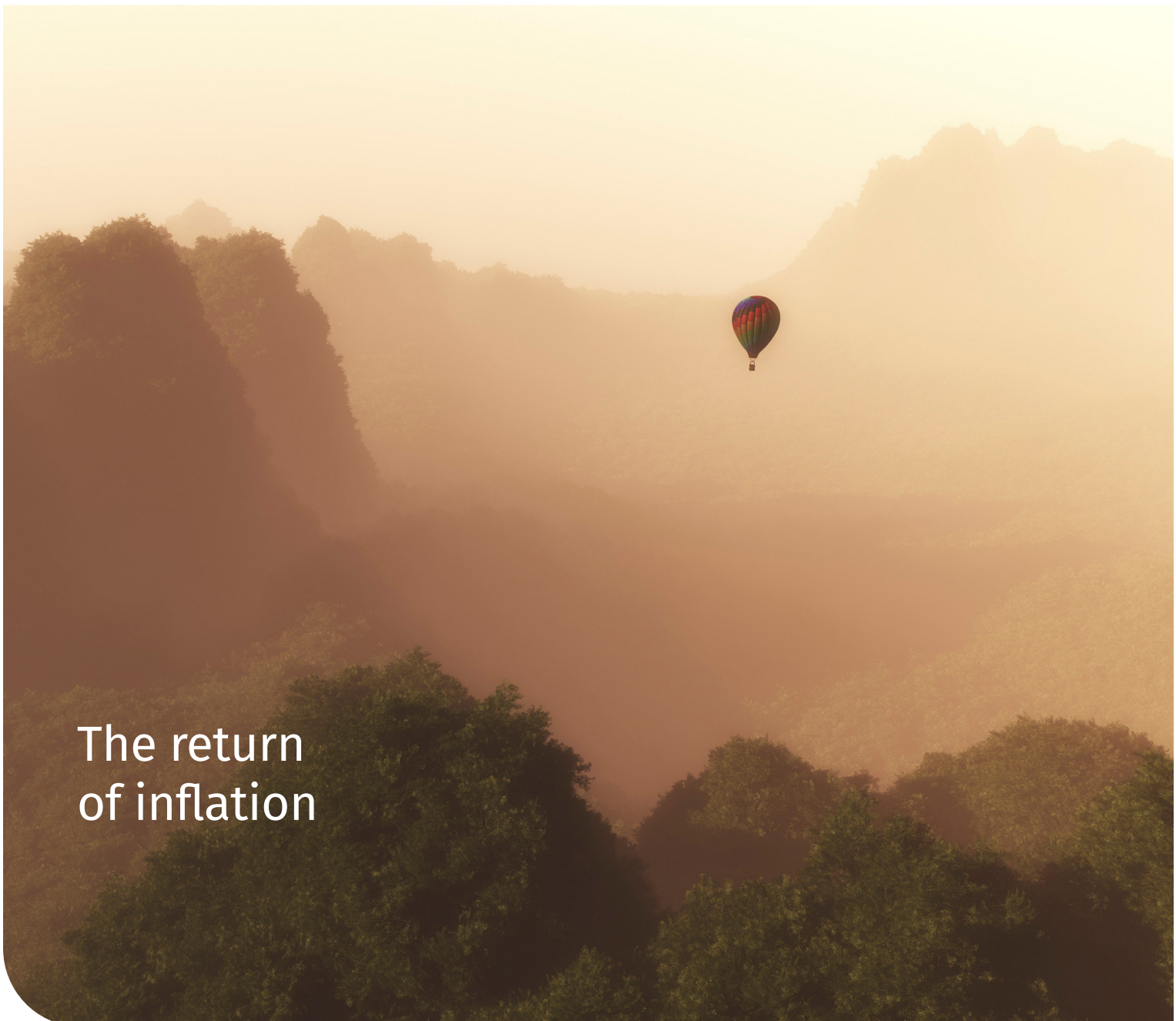


INSIGHT

QUARTERLY MARKET REVIEW

Q2 2022



The return of inflation

OVERVIEW

Russia-Ukraine, global growth and inflation

US

Hot labour market, high inflation

EMERGING MARKETS

Three BRICs, three trends

SPECIAL FOCUS

How reliable are inflation expectations?

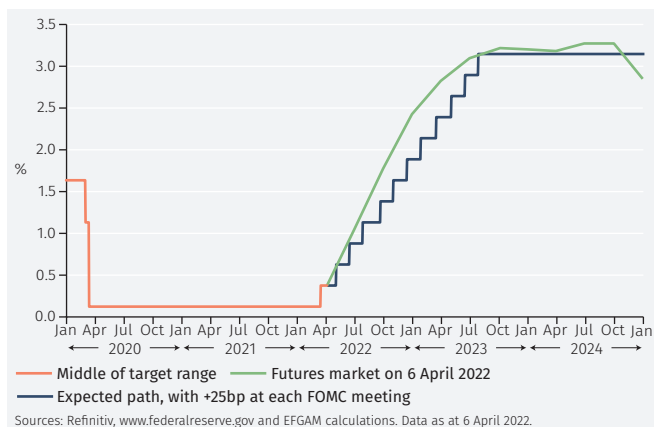
OVERVIEW

The Russia-Ukraine war, the impact on commodity prices and a new Covid outbreak in China are among the key uncertainties facing the global economy. Higher inflation is a universal concern, but the policy reaction is far from uniform.

US rates: heading higher

US interest rates are heading higher. Futures markets show the Fed Funds rate above 2% by the end of 2022 and levelling out at 3.25% in mid-2023 (see Figure 1). To reach that terminal level, the Fed would need to raise the rate by 25bp at each of the next 11 policy meetings. That progression would be slower than the market expects, leading some to suggest that one or more of the rate increases could be 50 not 25 basis points.¹

1. Fed Funds rate: actual and expected paths



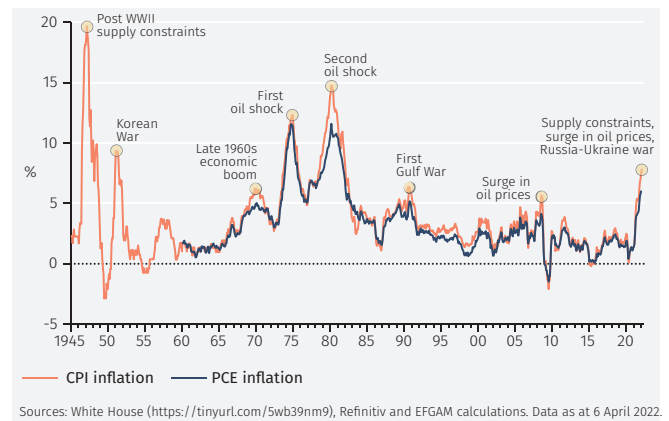
The main reason for the expected rise is that US inflation has already risen sharply and could well rise further. Consumer price inflation was 7.9% in February, the highest rate since 1982, and will likely be pushed higher as a result of recent energy and commodity price rises.

Of course, it is hard to reconcile a 2% policy interest rate and an inflation rate nearing 10%. Policymakers, not just in the US, but around the world have explained this apparently anomalous situation by describing high inflation as likely to be temporary or transient. We have sympathy with that view, but there is no doubt that inflation has remained at an elevated level for much longer than many expected. Temporarily higher inflation after extraordinary events (see Figure 2) has been a feature of the past. Inflation does not generally rise to a new, higher level and stay there: it tends to subside quite quickly.

A return to 1970s-style inflation?

However, two aspects distinguish the current US inflation experience. First, inflation in the US is higher than in other developed economies. One explanation is that this is due to a much stronger fiscal response to Covid in the US than in other economies.² Others see excess US money growth as the fundamental reason.

2. US inflation since 1945



Second, it has arisen as the confluence of all three of the main pressures that have driven inflation higher in the past. Pent-up demand as consumer spending has recovered, similar to the inflation which followed World War 2; global supply chain difficulties, often as a result of war; and now higher oil and commodity prices, similar to the oil shocks of the 1970s.

Those oil shocks were also accompanied by stagnant growth – stagflation. There is clearly a risk of that recurring but the likelihood and severity are hard to gauge. Much depends on the Russia-Ukraine war: whether it is protracted, if a speedy conclusion can be reached or, indeed, whether there is a further escalation. One broad scenario we have considered³ is that there is a shock to global supply which reduces GDP growth and raises CPI inflation in the OECD area, both by about 2%.

Divergent vulnerabilities

That scenario is similar to one recently suggested by the OECD itself. Their work also draws attention to the varying responses in different regions and economies.⁴ They suggest that the biggest impact on economic growth will be in Europe, almost twice as large as the hit to the US (see Figure 3). This reflects the fact that the direct effects on economic activity in Russia and Ukraine and trade with them is more important for Europe. However, the impact of higher oil and other commodity prices hits all economies. The OECD's assumption is that, for a full year, these remain at the levels seen shortly after the war started: most importantly the oil price averages USD 111/barrel. As a consequence, overall OECD inflation is expected to rise by around two percentage points (see Figure 4) in Europe, a little less in the US. Clearly, if correct, that could

¹ There were 17 consecutive 25bp increases in 2004-2006; and 9 in 2005-2019.

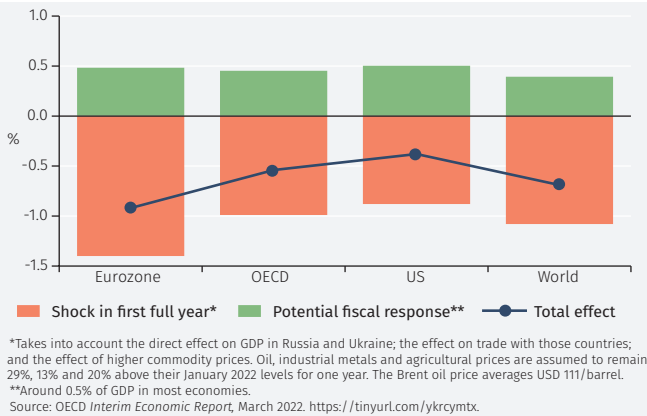
² 'Why Is U.S. Inflation Higher than in Other Countries?', FRBSF Economic Letter, 28 March 2022.

³ See our March 2022 Infocus: 'Is the global economy at risk of stagflation?'

⁴ OECD Interim Economic Report March 2022. <https://tinyurl.com/ykrcymtx>

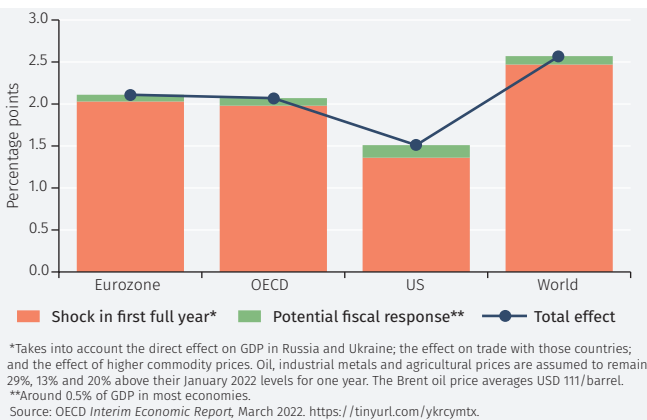
OVERVIEW

3. Effects of Russia-Ukraine war on GDP



take inflation rates in the economies where inflation is already at a high level up towards 10%.

4. Effects of Russia-Ukraine war on inflation

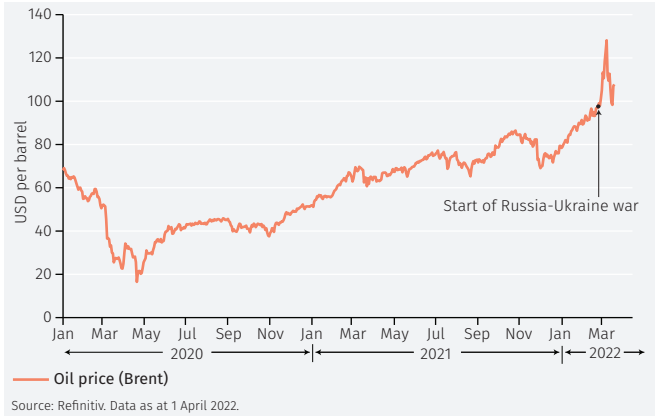


Oil and commodity prices

That assumption of oil and commodity prices remaining elevated for as long as a year may, of course, not materialise. Although oil prices are notoriously volatile (see Figure 5) and difficult to forecast we do not see them remaining so high. Weaker demand as global growth slows and a supply response should ease the pressure on prices.⁵ A quite rapid fall in oil prices is implied by the futures market.

With regard to commodity prices more broadly, both cyclical and structural factors determine the trend. Cyclically, slower growth in China – which is now very much in prospect as a result of a resurgence of Covid cases and the continuing problems in the property sector – will tend to dampen

5. Oil price volatility

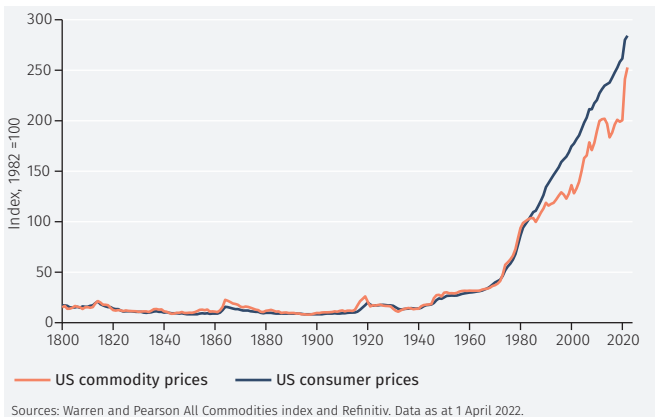


commodity prices (China accounts for half the global demand of many industrial commodities).⁶

Structurally, however, demand for many commodities (such as copper and cobalt) is expected to stay strong because of the green energy transition; there may well be shortages of key commodities as a result of the war; and sanctions on Russia may impede the supply of certain strategic commodities for some time.

Over very long periods, commodity prices and consumer prices have tended to move in tandem (partly because, in the nineteenth century, consumer prices were largely commodity prices). But one indication that commodity prices may, in general, have further upside, is that they have lagged consumer prices in recent years (see Figure 6).

6. Consumer and commodity prices



⁵ See our February 2022 *Infocus*: 'Oil market at a crossroads'

⁶ <https://tinyurl.com/3hvp4x4>

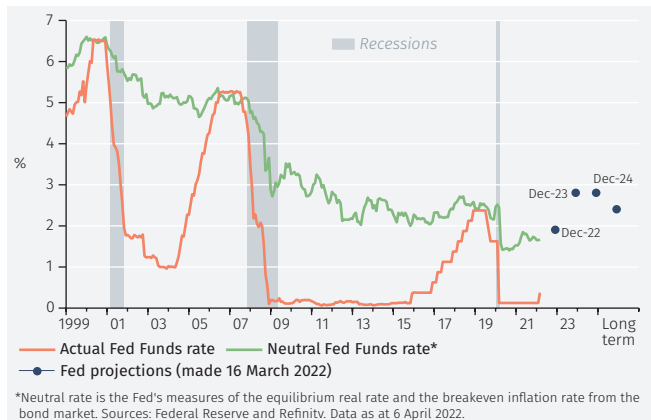
OVERVIEW

Is the Fed's interest rate path sustainable?

Given the various scenarios for the global economy and the inherent uncertainty in forecasting, there are three main risks to the path for US interest rates currently expected by the Fed and the market.

First, that the move to higher interest rates will, in itself, produce a recession. When the Fed Funds rate has reached its neutral level in the past – in 2001, 2007 and 2019 – a recession has quickly followed (see Figure 7). The neutral rate now is lower than in the past, around 2%. So, on this analysis, reaching that rate may prove to be the tipping point. Past experience suggests that would lead to a quick reversal in the interest rate trend.

7. Fed Funds rate: actual, projected and neutral rate



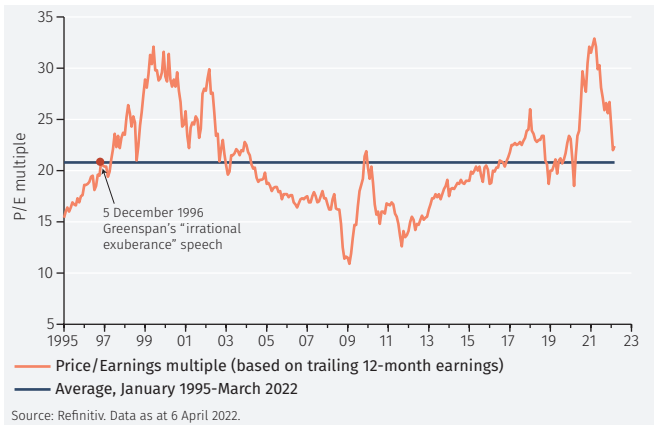
Second, there could be a dislocation in the global financial system that creates the need for easing moves by the Fed – adding liquidity and reducing interest rates. That happened in 1997/98, for example, when the Asian financial crisis was followed by Russia's default on its domestic debt and the collapse of LTCM, a hedge fund.

The third risk relates to domestic US financial markets. In the bond market, if the inflation rate is slow to fall back or rises further, 10-year government bond yields in the recent range of 2-2.75% would seem unsustainably low. Rising bond yields and inflation could undermine the equity market, where some see valuations as already stretched.

Rational exuberance

The current trailing price/earnings multiple on the S&P 500 index, at around 20 (see Figure 8), is, however, in line with its average since the mid-1990s. It is almost exactly the same as the multiple in December 1996 when then Fed chairman Alan

8. US S&P 500 price/earnings multiple

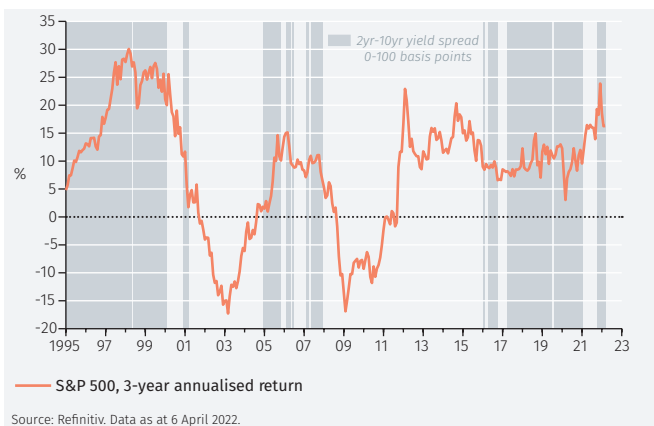


Greenspan gave his famous 'irrational exuberance' speech. After a brief setback, US equities performed strongly up until the end of that decade, led by technology stocks. It was the start of the dot com boom (and bust).

That period was one in which, as now, the yield curve was modestly upward sloping. Such a yield curve environment is generally benign for the equity market (see Figure 9). Concerns arise either if the yield curve is more steeply upward sloping – a sign that inflationary expectations have run ahead of policy rates; or if it is downward sloping – which has consistently been a signal of future recession.

In that context, the trend in the yield curve is an important key to prospects in the remainder of the year.

9. S&P 500 returns and the yield curve environment



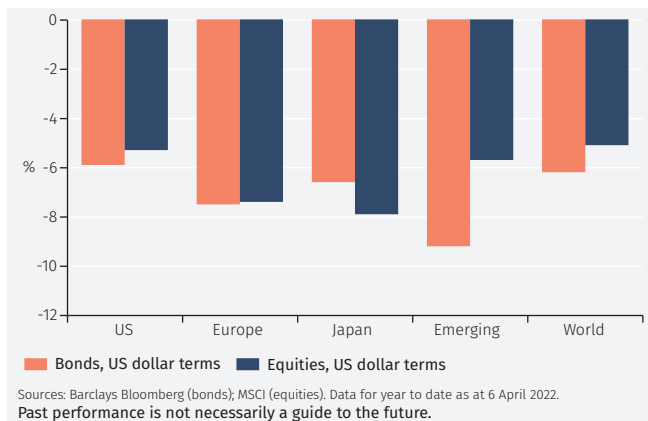
ASSET MARKET PERFORMANCE

As inflation and interest rates started to rise, the first quarter of 2022 saw poor returns from fixed income markets. The US dollar strengthened against most currencies. US equity market returns were marginally negative.

Asset market performance

After a volatile period, world equity markets registered modest losses in the first quarter of 2022 (see Figure 10) on the basis of the total return from the MSCI World Index in US dollar terms. Global bond market returns were also negative, at -6.2% on the basis of the Bloomberg Barclays Global Aggregate Index.⁷ In almost all markets (Australia being a notable exception) local currency returns were undermined, in US dollar terms, by currency depreciation.

10. Asset market performance

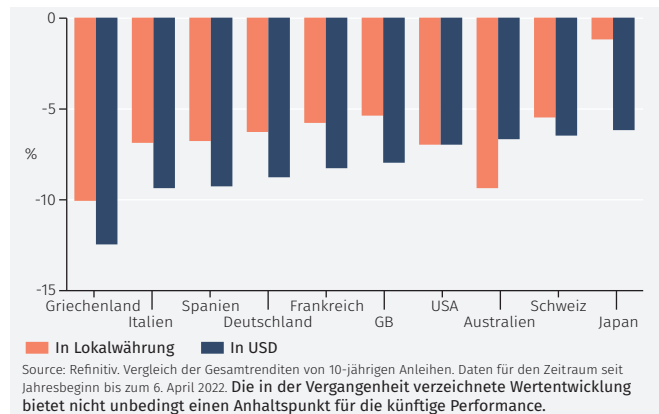


Bond markets

There was a general rise in longer-dated bond yields – and a consequent decline in prices – in the first quarter of 2022, continuing the general trend seen in 2021. 10-year yields rose by almost a full percentage point in the US, to 2.33%; and by 70 basis points in Germany, taking yields above zero for the first time since 2019. Australia saw one of the largest increases, with yields rising to nearly 3%. These increases were predominantly driven by concerns about rising inflation and future hikes in central bank policy interest rates. Consequently, all major bond markets registered negative total returns (see Figure 11).

The Japanese yen was particularly weak in the period, with the result that the modestly negative local currency bond market returns in yen terms translated into returns of -6.2% in US dollar terms. The weakness of the yen was a surprise in the sense that it is often seen as a ‘safe haven’ currency in terms of global uncertainty.

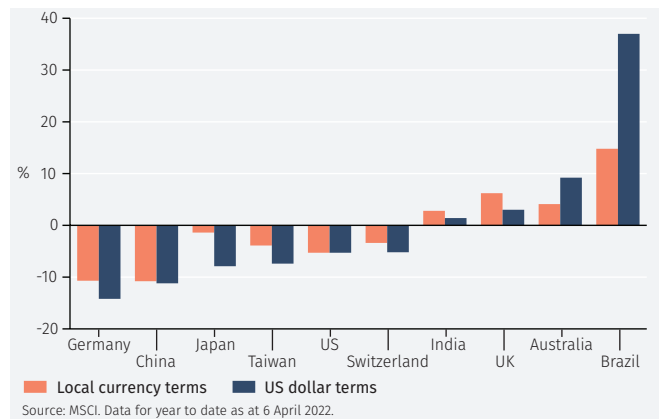
11. Bond market returns



Equity markets

In the major developed markets, UK equities produced the strongest returns: 6% in sterling terms but less in US dollar terms given sterling’s continued weakness against the US dollar. Brazil was by far the strongest of the main emerging equity markets, with local currency gains of 15% and a strengthening of the currency against the US dollar raising returns in US dollar terms to 37%. Brazil benefited, in particular, from rising commodity prices and currency inflows into the equity market. The Swiss equity market was stronger than other main European equity markets in local currency terms and the Swiss franc also strengthened against the euro. After strong performance last year, there was a modest setback in the Taiwanese equity market and the Taiwanese currency, reflecting geopolitical uncertainties and a softer trend in technology stocks.

12. Equity market returns



⁷ The Bloomberg Barclays Global Aggregate Bond Index is a benchmark of government and investment grade corporate debt from developed and emerging markets issuers in 24 countries.

UNITED STATES

The strength of the US recovery and a tight labour market, coupled with supply chain problems and higher energy prices have taken the US inflation rate to levels last seen in the 1980s.

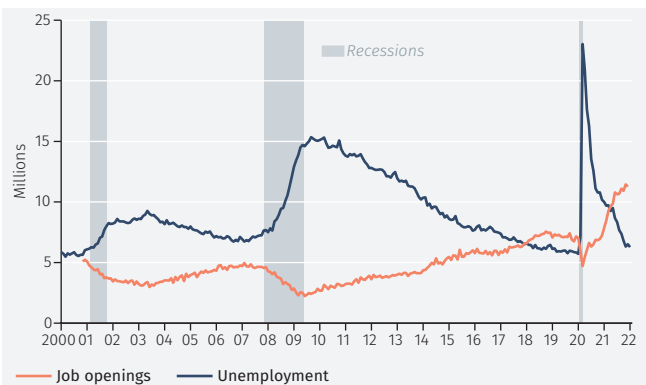
Fed's change of emphasis

When US Fed chair Powell announced, in August 2020, the results of the central bank's policy review, there was a change of emphasis. The Fed would seek to foster a strong labour market and risks could be taken, it was thought, with running the economy 'hot' so as to achieve maximum levels of employment. The caveat was that this should not risk generating too rapid a rate of inflation. However, a relaxed attitude to temporarily higher inflation was suggested by the move to 'flexible average inflation targeting' – that is, allowing inflation above 2% for a period to compensate for sub-2% inflation in the past.

Hot labour market

Less than two years after the change of emphasis, the labour market is, indeed, very strong. In March 2022, there were almost twice as many job openings as there were unemployed people, a highly unusual situation (see Figure 13).

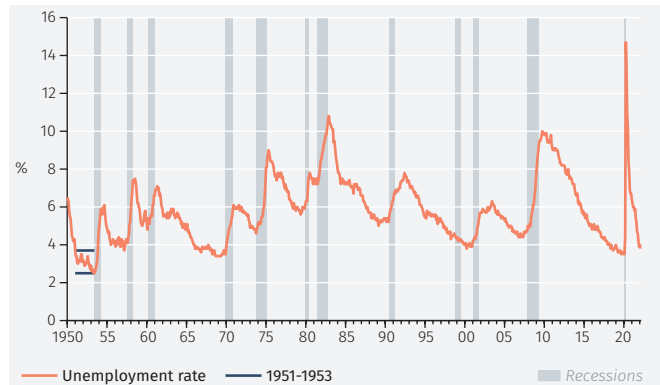
13. US: job openings and unemployment



The unemployment rate is only marginally above its pre-pandemic low (3.5%) and not far above the lowest-ever rates recorded in the early 1950s (see Figure 14). But inflation has risen sharply. Does this mean there was a misjudgement on the part of the Fed?

The tight labour market, at least for now, cannot be seen as the main cause of the recent rise in inflation. Wage costs have risen, to be sure, but so has productivity. The most comprehensive data, released on a quarterly basis, show that in the final quarter of 2021, hourly wages were 7.5% higher than the previous quarter – but productivity also rose strongly – by 6.6%. As a result, labour costs per unit of output – the most appropriate guide to underlying inflationary pressures – rose by less than 1%.

14. US unemployment rate

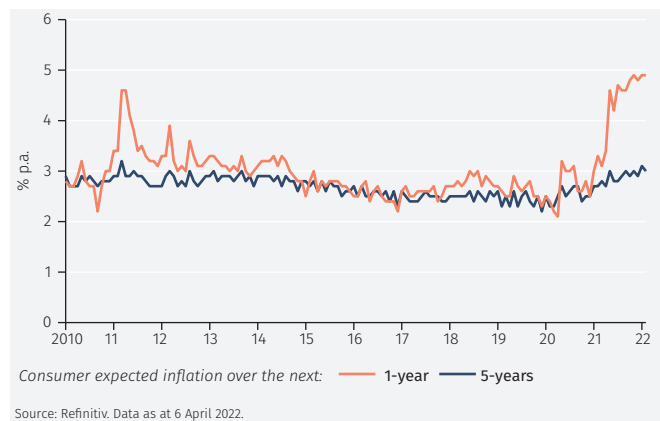


It seems most appropriate to view these developments as reflecting the re-opening of the economy, which led to a strong boost to output, rather than anything of greater concern. The US's flexible labour market means, we think, there is little concern about a 1970s-style wage-price spiral developing.

Consumer inflation expectations

High inflation is still being driven by supply shortages, higher housing costs and higher energy prices. Consumer expectations for inflation over the next year have risen (see Figure 15) but, encouragingly, five-year ahead inflation expectations are still well anchored. (The accuracy of inflation forecasts is the subject of our *Special Focus* section on page 11). The inflation rate will, eventually, subside but the return to a more normal rate may take longer than many initially expected.

15. Consumer inflation expectations



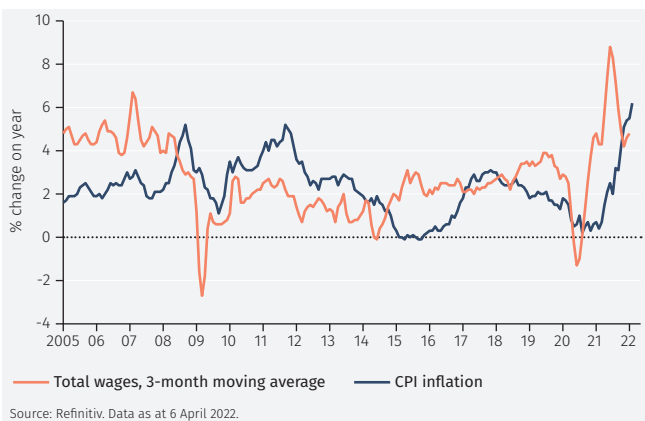
UNITED KINGDOM

Real wages are being squeezed although consumers still have the cushion of accumulated savings. The current account deficit remains a concern, but public finances have improved quickly.

UK wages and prices

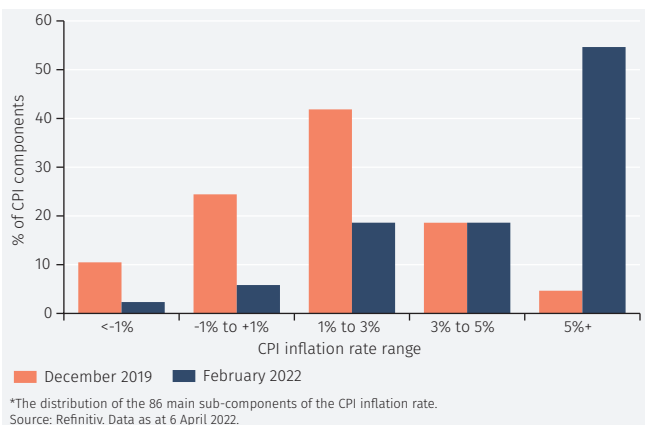
In contrast to the US, there is little upward pressure on UK wages. Indeed, wage growth this year looks set to lag well behind consumer price inflation (see Figure 16). Coupled with higher taxes, the UK's Office for Budget Responsibility recently estimated that 2022 will see the biggest fall in real household disposable income since the 1950s. That pressure, however, can be offset by running down the stock of accumulated savings, which stands at around £200bn.

16. UK wages and prices



The headline consumer price inflation rate reached 6.2% year-on-year in February. In itself that is a concern, but even more disturbing is the distribution of price increases. Pre-pandemic, the individual components of CPI inflation were centred around 2% (see Figure 17); now the majority of components are registering price increases above 5%. Fuel prices are 50% higher than a year ago.

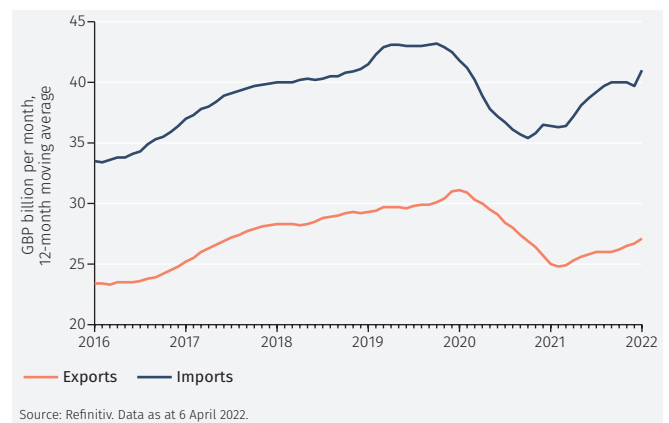
17. UK CPI inflation rate distribution*



Twin deficits

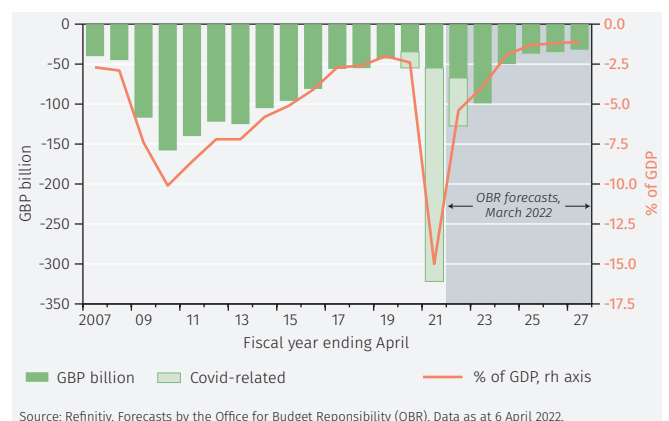
Two deficits – on trade and public finances have long been weak spots for the UK. They still remain so. The UK has become a less open economy since Brexit⁸ but, whereas exports remain subdued, imports have regained (in nominal terms) their pre-pandemic level (see Figure 18). The current account deficit looks set to exceed 3% of GDP in 2022, making the UK still reliant on “the kindness of strangers” for its financing.⁹

18. UK exports and imports



Public finances are in better shape but remain vulnerable. The reduction in the deficit in the last fiscal year was due to lower than expected spending and resilient tax receipts (especially from high earners). An increase in the tax burden in coming years means the deficit is expected to continue falling (see Figure 19). Fiscal plans can, of course, quickly be derailed by unforeseen events; and there is a concern that the planned tax increases are potentially unsustainable in the face of pressure on household finances.

19. UK public sector borrowing



⁸ Source: Office for Budget Responsibility, *Economic and Financial Outlook*, March 2022.

⁹ The phrase used by Mark Carney, former Bank of England governor.

EUROPE

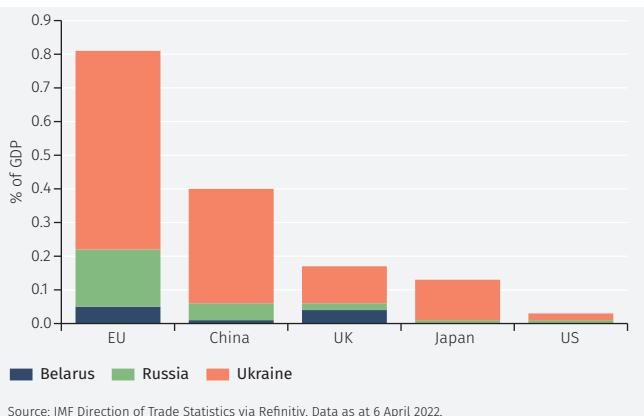
Europe will be hit hard by the war in Ukraine. Growth will be lower and inflation higher. The ECB's policy response has to weigh these considerations. We think they will err on the side of caution, keeping interest rates negative.

Reliance on Russia

When assessing the impact of the Russia-Ukraine war on Europe, its reliance on Russian gas is often cited as the main vulnerability. Almost half of German gas came from Russia in 2020; and for Finland, Estonia and Latvia the share was even higher (94%, 93% and 79%, respectively).

Less well known is the importance of Russia, Ukraine and Belarus as markets for EU exports. They accounted for 0.8% of EU GDP in 2020 (see Figure 20), a much larger share than for the US and UK, for example. The importance of Ukraine for China is also significant: China has been important in Ukrainian construction projects (the Kyiv metro and telecoms infrastructure, for example); Ukraine exports oil and grains to China; and Ukraine, Russia, Belarus and Poland are strategically important for China in the construction of its Belt and Road rail system.

20. Exports to Belarus, Ukraine and Russia



As well as these direct effects on European trade, the indirect effects are likely to be substantial. Higher oil and commodity prices will, effectively, act as a tax on consumers and businesses, raising prices and depressing spending.

A reduction or elimination of dependence on Russian gas could have far-reaching consequences. For Germany, it could lead to a GDP decline in the range of 0.5% to 3%, according to one estimate.¹⁰

ECB dilemma

The policy choice for the ECB is either to tighten in order to limit the inflation impact of these developments; or to ease to support growth, but at the risk of creating higher inflation. It seems clear that policy tightening in Europe will not be as marked as in the US. Indeed, we think the ECB is likely to

21. Germany: inflation expectations



maintain a negative key policy rate for much of 2022 and maybe even into 2023. This likelihood has been reflected in two areas of the financial markets.

Inflation expectations and the euro

First, in inflation expectations. Two measures of longer-run German inflation expectations, shown in Figure 21, show them both above 2%. While the absolute level might not appear too much of a concern, the speed of the increase is clearly a worry for some.

Second, the euro has weakened against the US dollar and the Swiss franc (see Figure 22). The weakness against the US dollar is, we think, primarily a reflection of the expected trend in interest rates. Against the Swiss franc, the euro's weakness reflects a combination of Switzerland's safe haven status coupled with the fact that Switzerland is much less vulnerable to higher oil and gas prices. Swiss companies' costs

22. Euro: weaker trend



¹⁰ 'The Economic Effects for Germany of a Stop of Energy Imports from Russia', *ECONtribute Policy Brief* No. 028.

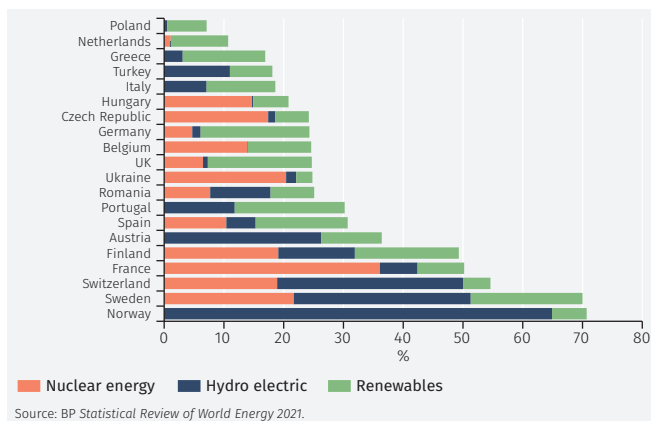
EUROPE

(measured by the producer price index) are up 2.3% since January 2020; in the eurozone, costs are up 31%. That has given Switzerland quite a substantial improvement in its relative price competitiveness over the period. Swiss consumer price inflation seems unlikely to rise much above 2.5%, whereas eurozone inflation, 7.5% in March, is likely to rise further.

Renewable energy and defence spending

The fact that over half of Switzerland's domestic energy consumption comes from renewables, hydroelectric and nuclear sources (see Figure 23) gives another dimension to its safe haven status.

23. Energy consumption from non-fossil fuels



Clearly, across Europe, increasing reliance on renewable sources will now take on an even greater importance, but it will inevitably take many years. It will be facilitated by the EU's Recovery and Resilience Facility, established to assist the recovery from the pandemic but now clearly of even wider importance. It provides grants and loans to member states, totalling up to EUR 730bn, with around 40% being directed to green investment projects. Only Spain has suggested a timescale for its investment spending rollout – spread over five years – but on a more realistic assessment (say, 10 years for the full implementation) the plan could produce a slow-burn increase in EU GDP growth, by as much as 0.5% p.a.

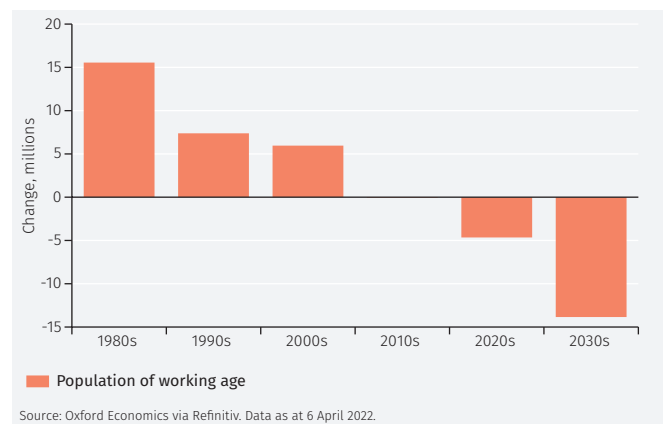
Germany's commitment to increase its defence spending (it is a Nato member but has so far spent less than 2% per annum of GDP, as required by that organisation) will bring another boost to growth. Its example is likely to be followed by other EU Nato members that also lag the spending commitment (Denmark, Italy, the Netherlands and Spain currently spend around 1.5% of GDP on defence, similar to the German rate). Finland, an EU

country but not a member of Nato is also reconsidering membership and its spending could also increase.

Demographics

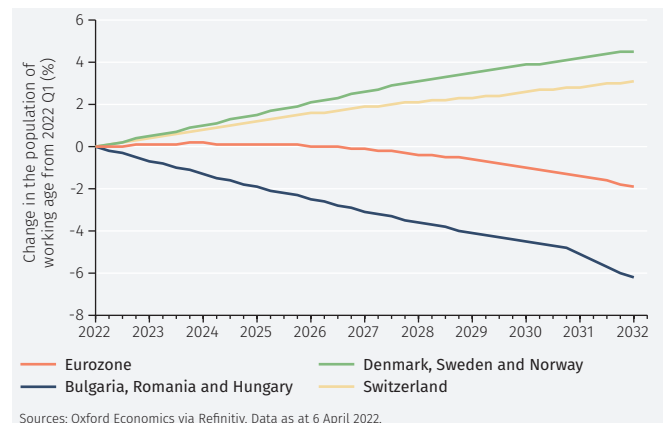
While these capital spending plans will help boost growth, longer-term growth prospects for the EU remain hampered by a shrinking of the population of working age (see Figure 24).

24. European Union: population of working age



This is already underway and is set to accelerate in the 2030s. Scandinavian countries and Switzerland run counter to that EU trend (see Figure 25); but the decline in some eastern European countries looks set to be particularly marked.

25. European demographic projections



The Russia-Ukraine war, superimposed on these perennial challenges, provides a challenging backdrop to the outlook for Europe.

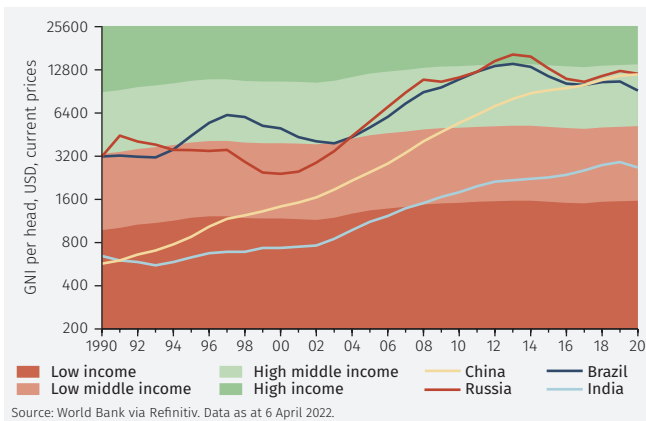
EMERGING MARKETS

The perceived attractions of emerging markets with investors have ebbed and flowed in recent years. What are prospects for three of them – Brazil, Russia and China – now, given oil and commodity market uncertainties and the Russia-Ukraine war?

Three BRICs

Russia, China and Brazil are all classed as ‘high middle income countries’ by the World Bank. All three had similar levels of gross national income per head in 2020 (see Figure 26). China, in 1990, was a low income country and hardly integrated into the global economy. Its progress has been rapid. Russia and Brazil, in contrast, already had high middle income status thirty years ago. They have not broken through to achieve high income status. They have been stuck in the middle income trap.

26. BRICs progress



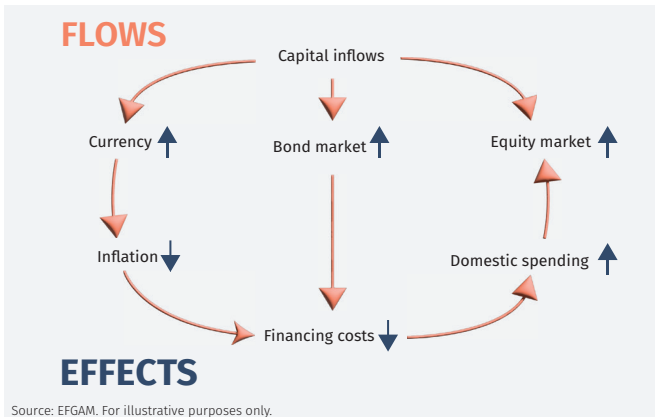
Three differences

The divergent paths reflect, we think, three main differences.

First, Russia and Brazil are predominantly commodity-orientated economies. Russia is “basically a big gas station” according to Jason Furman, Harvard economist and former advisor to President Barack Obama.¹¹ Brazil has a rich endowment of natural resources and is one of the world’s largest exporters of iron ore and many agricultural and food products. For both, being resource-based economies has been an impediment: they have suffered from the “Dutch disease” named after the poor growth of the Netherlands after it discovered natural gas. China’s growth, in contrast, has been driven by manufacturing.

Second, capital flows have amplified economic developments. Capital inflows to an emerging economy (Figure 27) can drive up currency values, thereby helping to curb inflationary pressures; they can put downward pressure on bond yields which facilitate lower domestic financing costs and thereby raise domestic spending; and put upward pressure on equity markets. These developments, often coupled with the development of domestic capital markets and the expansion

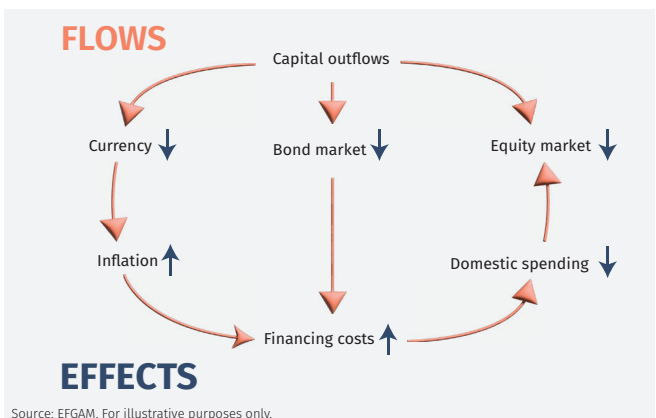
27. Emerging markets: Capital inflows



of credit availability, contribute to stronger domestic investment and consumer spending. Brazil, Russia and China have all benefited from that benign interaction, notably in the period after the Global Financial Crisis. Indeed, benign interaction seems an accurate description of current developments in Brazil.

However, those benign interactions can reverse, as capital inflows turn to outflows (see Figure 28). These trigger currency weakness, rising bond yields and weaker equity markets, pushing up inflation and leading to weaker growth. Russia’s recent developments, exaggerated by sanctions, fit that adverse pattern.

28. Capital outflows



Third, the quality of institutions, the ease of doing business and the perception of corruption are all important. On the latter measure, China ranks highest of the three (that is, the least corrupt), Brazil second and Russia trails far behind.¹²

¹¹ New York Times, 24 February 2022.

¹² Transparency International Corruption Perceptions Index, 2021. <https://www.transparency.org/en/cpi/2021>

SPECIAL FOCUS: INFLATION EXPECTATIONS

Inflation expectations have an important role to play in financial markets and in the setting of monetary policy. But how well do such expectations predict future inflation? And where do the best predictions come from?

Inflation expectations and outcomes since 1997

Two measures of US expected future inflation over a period of five years ahead and the actual outcome are shown in Figure 29.

29. Inflation expectations and outcomes since 1997



Source: University of Michigan Consumer survey via Refinitiv. Data as at 6 April 2022.

One measure is the University of Michigan's survey of consumers; the other is the breakeven inflation rate between conventional and inflation-protected Treasury bonds. The start date of 1997 is chosen because that was when inflation-protected Treasuries were first launched. We can assess the performance of those two measures against the actual inflation rate for the period up until 2017 (five years ago). Two conclusions are clear: consumer inflation expectations have been consistently too high (on average by 0.7% p.a.); the breakeven inflation rate has been a better predictor, being on average slightly too low (on average by 0.3% p.a.). However, the better average performance of the breakeven inflation rate in forecasting future inflation needs to be treated with some caution. Periodically, at times of stress in government

30. One-year expected inflation and outcome since 1978



Source: University of Michigan Consumer survey via Refinitiv. Data as at 6 April 2022.

bond markets (most notably in 2009) the breakeven rate has temporarily fallen to very low levels. The reason for that is inflation-protected securities tend to be less liquid than conventional Treasuries. So, in stressed market conditions, their prices tend to fall more sharply and yields rise more markedly than conventional bonds. This is the reason for the lower breakeven inflation reading.

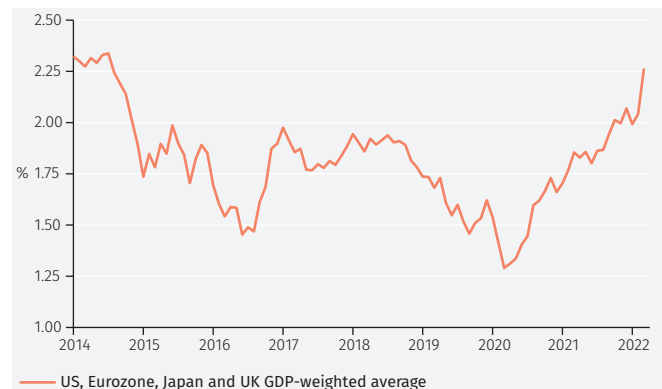
Of course, a five-year projection involves consumers and financial markets looking some way ahead. But on a one-year ahead projection, consumer inflation expectations are little better – again, they have tended to be too high.

A wider range of measures

There are other sources of inflation forecasts, including surveys of professional economists and businesses. An assessment of the full range of different forecasts by the Federal Reserve Bank of Cleveland¹³ found that professional economists have consistently had the best track record going back to the 1980s and consumers the worst, while market-implied inflation expectations had been a “rather poor predictor” of overall inflation since 2011.

That finding suggests that one of the most popular current expected inflation measures the five-year forward five-year inflation rate taken from the swap market (see Figure 31) should be treated with a good deal of scepticism. Given that the market is relatively new (data start in 2011), assessing its performance is not something that can be done just yet.

31. Expected inflation rates (5-year average, 5 years ahead)



Source: Refinitiv. Data as at 6 April 2022.

¹³ Whose Inflation Expectations Best Predict Inflation? <https://tinyurl.com/57jbd9k5>

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