# Monetary and financial stability and the invasion of Ukraine – speech by Jon Cunliffe

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### Speech

Over the past 2 years, the UK has seen three economic and financial shocks: the final stage of Brexit, the Covid pandemic and most recently, the Russian invasion of Ukraine, which the Bank of England has made clear it condemns.<sup>1</sup>

I want to talk today about the impact on the UK economy and on UK financial stability of the last of these. We do not of course know the outcome of Russia's aggression in Ukraine; there are many courses the conflict could take. And it may be many years before we know whether this will be a structural, long lasting change in what is now essentially an integrated global economy. But I think it is possible now to see at least some of the channels through which it is affecting the UK and broadly, the scale and direction of the impacts in the near term.

Starting points matter. The UK economy entered 2022 still affected by two major impacts of the path out of Covid – very high imported inflation, and a very tight labour market with strong pay growth.

### Imported UK inflation

Imported inflation has been the primary driver of the sharp increases in inflation we have seen in the UK, reflected in both goods and energy (**chart 1**).<sup>2</sup> Goods prices have risen because of supply side frictions<sup>3</sup> generated by the rapid reopening of much of the global economy, the rotation of demand from services to goods, and because of the fact that, once past the initial phase of the pandemic, demand in advanced economies was strong relative to economic activity – primarily as a result of policy support. For example, **chart 2** shows that UK household incomes did not fall as much as GDP.

The initial phase of the pandemic was disinflationary. But as economies recovered in fits and starts over the course of last year, supply, itself damaged by the pandemic, could not keep pace with demand. This has been the underlying driver of global goods prices and, until the prospect grew of a Russian invasion of Ukraine, of the rise in global energy

My colleague at the Bank of England gave his take on these shocks in a recent speech (Ramsden 2022).
Externally-generated inflation – linked to global export prices and the exchange rate – have been important drivers of UK inflation historically. See Forbes et al. (2017) for a discussion. See Panetta (2022) for a discussion of the Euro Area, which is currently facing very similar developments to the UK.
The New York Fed's global supply chain index shows that supply frictions are still high, although they have begun to ease. Much of the increase in global goods demand has been driven by the US.

prices. Over half of the shortfall in European gas storage in 2021 was accounted for by higher LNG demand in Asia.<sup>4</sup>

UK goods prices, including food and energy, are now considerably above their pre-Covid trend and inflation is high (**chart 3**). Services prices, which better reflect domestic costs<sup>5</sup>, have still to regain their pre-Covid trend. Services inflation has risen but is currently at 3.5%, which is only slightly above its long-run average.

### The UK labour market

The domestic labour market has also been buffeted by large changes in supply and demand as we have emerged from the pandemic.

Labour supply has been hit by a drop in participation in the labour force and lower net migration. There has been little recovery of participation in the UK, in spite of the recovery in economic activity and employment (**chart 4**). It is still around 1% (around 350,000 people) below its pre-Covid level. It is possible that some of this weakness will prove to be structural rather than cyclical, the result of changes in work and life preferences as a result of the pandemic.

Lower participation has been compounded by lower migration either as a result of the pandemic or Brexit. It is difficult to be precise about the impact of either or how temporary the effect will prove to be. Migration data over the past two years are unreliable given the disruption of the pandemic.<sup>6</sup> But we can probably get an indication of the scale and direction of travel from experimental statistics, which suggest that net migration to the UK fell to around 35,000 in 2020, compared to more than 250,000 in 2019.<sup>7</sup>

On the demand side there is evidence that the pandemic increased the demand for labour in some sectors, particularly health. The number of employees on payrolls is now some 700,000 higher than before Covid, half of which are in health, social work, education or public administration.<sup>8</sup> Some of this reflects a shift away from self-employment. But some of this demand might be expected to wane as we move away from the pandemic. Indeed,

<sup>4</sup> The increase in European gas prices before the invasion has been linked to a few other supply-side factors. This includes a reduction in domestic European production and lower pipeline flows from Russia as they responded to cold weather by filling up their own storage and only meeting pre-agreed contracts with Europe.

<sup>5</sup> Goods prices have an average import intensity of around 34%, whilst services prices have an average import intensity of just 11%.

<sup>&</sup>lt;sup>6</sup> The International Passenger Survey – historically the most important source of information on international migration for the UK – was **suspended** in March 2020 because of the pandemic.

<sup>&</sup>lt;sup>7</sup> According to these experimental statistics, net migration from the EU turned negative in 2020.

<sup>&</sup>lt;sup>8</sup> Health and social work on its own accounts for an increase of 220,000 employees since before Covid.

the number of workforce jobs in health and social work began to decline in the final quarter of 2021.

Interestingly, and perhaps because of policy support, the pandemic and associated economic impacts have not led to some of the scarring impacts that were forecast at the outset. Unemployment, including longer term unemployment, is low. Although vacancies have reached a record level, hiring has also been happening at a faster pace. There is no material evidence of sectoral mismatches in the labour market, which has remained highly flexible.<sup>9</sup>

Rather, what we have seen in the labour market coming out of Covid has very much been a story of weak labour supply and strong labour demand. But the effect has been powerful: the UK began the year with employment still below its pre-Covid level and GDP just above but with a record 1.3 million vacancies and an increasingly tight labour market.

This has been reflected in pay, which has been growing faster than pre pandemic rates since the final quarter of 2020. In the three months to January 2022 whole economy total pay grew at 4.8%, with private sector regular pay – perhaps a better measure of labour market strength – growing at over 4%. Our Agents' survey suggests that the majority of firms are likely to pass at least some of these increases into prices over the coming year, which will add to inflationary pressure.<sup>10</sup>

### The Monetary Policy Committee's February forecast

The Monetary Policy Committee (hereafter 'MPC') forecast in February 2022, which was conditioned on market interest rates at the time, was characterised by the two consequences of the pandemic that I have discussed – high imported inflation and a very tight labour market. Inflation was forecast to peak at over 7% in the second quarter of the year, driven principally but not exclusively by a gas and electricity price increase of around 50% that was confirmed on the same day as the MPC's policy decision in February.<sup>11</sup>

The resulting squeeze on household incomes later this year and into next year was forecast at around a 2% reduction in disposable income. To put that into context, it would

<sup>&</sup>lt;sup>9</sup> The rate of job to job flows has reached a level higher than at any point since before the Global Financial Crisis. Estimates of sectoral mismatch are similar to their levels before Covid.

<sup>&</sup>lt;sup>10</sup> See the latest Bank of England Agents' <u>summary of business conditions</u> for evidence on cost pass through in practice. My colleague on the MPC also provided an in depth discussion in a recent speech (Mann 2022).

<sup>&</sup>lt;sup>11</sup> Ofgem set the energy price cap for retail customers based on 6-month ahead forward energy prices. For the **April 2022 price cap** this means they took into account forward prices from August 2021 to February 2022. The next price cap in October 2022 will take into account forward prices from February 2022 to August 2022.

be the biggest annual average reduction in household incomes for around three decades and would return the total to late-2018 levels.

The impact of higher energy prices will not be felt evenly. Energy spending accounted for around 6% of disposable income for the average UK household before Covid. For those in the bottom 10% of the income distribution it was more than double that (**chart 5**). These households have the lowest saving rates and tend to have lower stocks of savings to draw on than those with higher incomes, which limits their ability to smooth consumption.<sup>12</sup> So these households tend to cut consumption more than higher income households for a given fall in income.<sup>13</sup> These factors could amplify the hit to aggregate demand.

As a consequence of this hit to demand, growth in economic activity was forecast to fall back materially, in the second half of this year.

The rate of inflation was forecast to begin to fall back later this year and next as the increase in energy prices dropped out of the annual inflation rate and the disinflationary impact of the drop in demand took hold. Inflation ended the forecast well below target.

At the same time the labour market was forecast to remain tight in the near term with unemployment continuing to fall until the middle of this year and pay continuing to grow above 4% annually until the autumn, before the effect of the income squeeze on activity and employment kicked in to offset the pressure in the labour market.

### The impact of Russia's invasion of Ukraine

How then are the Russian invasion of Ukraine and the consequent economic sanctions likely to change the picture in the MPC's February forecast?

Much will depend on the course of the conflict and the evolution of sanctions. But in all probability, it will intensify and prolong the surge in inflation and tighten the squeeze on household incomes. The consequent drop in demand through household consumption and business investment will, to an extent not yet clear, be greater than we thought in February. And there are also likely to be additional impacts on the supply side of the economy.

<sup>&</sup>lt;sup>12</sup> The Living Costs and Food Survey suggests that before the pandemic the top 10% of households by income saved 30% of their incomes (including mortgage principal repayment) whilst the bottom 10% were not saving anything. The Wealth and Assets Survey suggests that a typical household in the top 10% had around 8x their monthly disposable income in savings. A typical household in the bottom 10% had around 3x, or even less if we exclude retirees. During Covid more households ran down their savings in the lowest three income deciles than built them up, whilst the average household with higher incomes built up their savings, according to the September 2021 NMG survey.

<sup>&</sup>lt;sup>13</sup> The marginal propensity to consume out of an inflation shock reported in the **September 2021 NMG survey** was over 0.8 for the bottom 10% of households by income and around 0.4 for the top 10%.

The impact, as we have seen over the past few months, will come primarily through commodity prices. The Russian economy itself is only a small part, around 3%, of the global economy. For UK trade, it accounts for less than 1% of the world market.<sup>14</sup> The Ukrainian economy is smaller still. Russia and Ukraine's financial links with the UK are relatively small.

But Russia accounts for a much larger share of global commodity supply. This is most apparent in energy – oil, gas and coal. It is true also for industrial metals, fertilisers and agricultural commodities. Ukraine is also a major supplier of the latter.

We have already started to see some of the effects on commodity prices, including for energy and food. Global oil prices have increased by 11% and UK wholesale gas prices have increased by 40% since the invasion (**charts 6** and **7**).<sup>15</sup> These prices have been extremely volatile, reflecting uncertainty about the course of the war and imposition of sanctions (**chart 8**).<sup>16</sup> Had I given this speech at the start of the last MPC round, the increases would have been 22% and 116% respectively. Had I given it two weeks later, when the decision was announced, they would have been 10% and 17%.

Volatile or not, however, UK wholesale gas prices have been around 40% higher on average since the invasion and this will be factored into the next setting of Ofgem's price cap. It will feed through into consumer prices in October of this year.<sup>17</sup>

It is impossible to predict with any confidence where commodity prices in general and energy prices in particular might go. Sanctions have not so far been imposed on Russia's commodity exports and Russia has not imposed any direct restrictions on delivery, though pipeline flows have been lower than in recent years.<sup>18</sup>

But commodity markets have been affected by more than the direct sanctions on Russia. The possibility of sanctions – and of Russian retaliation – has clearly driven much of the volatility in prices. Financial sanctions also appear to have had a 'chilling effect' on energy related transactions with Russia.<sup>19</sup> A discount has emerged in the price of Russian oil

<sup>&</sup>lt;sup>14</sup> This reflects the fact that Russia is less important for UK trade than its share of the world economy would imply.

 <sup>&</sup>lt;sup>15</sup> Beyond oil and gas, global wheat prices have increased by more than 20% since the invasion, corn prices have increased by more than 10%. Aluminium and steel prices have also increased by more than 10%.
<sup>16</sup> The New York Fed's <u>oil price model</u> attributes all of the increase in the oil price since the invasion to supply shocks. This is likely to primarily reflect developments in Russia.

<sup>&</sup>lt;sup>17</sup> In practice, Ofgem's October 2022 price cap takes into account forward prices from February 2022 to August 2022.

<sup>&</sup>lt;sup>18</sup> The UK phase-out of imports of Russian oil and the US ban on imports of Russian oil and gas are notable exceptions to this, although both countries are relatively small importers from Russia. The EU has also set out plans to cut its gas imports from Russia by around two thirds.

<sup>&</sup>lt;sup>19</sup> A 'chilling effect' deters legitimate business because economic agents are afraid of being caught up in the sanctions indirectly. See **here** for more on the effect.

relative to oil from other parts of the world (**chart 9**). And, irrespective of sanctions, Russian gas supplies to Europe have declined compared to this time last year and many Western companies have voluntarily stopped transacting with Russian entities.<sup>20</sup>

While we cannot predict with certainty how these markets will evolve, it is very probable that energy and other commodity prices will be higher for longer.<sup>21</sup> This would push up on inflation and down on GDP in advanced economies (**chart 10**).

There are likely to be other impacts on the UK economy from the Russian invasion of Ukraine. Higher and more volatile commodity prices and disruption of commodity supply chains will have an adverse impact on the supply side of the economy.<sup>22</sup> And the general increase in uncertainty will weigh on both household consumption and on business investment.

We are starting to see the prospect of weaker demand show up in household and business surveys. In March, UK consumer confidence fell to its lowest level since November 2020.<sup>23</sup> PMIs are still strong but the forward-looking components have begun to decline from very high levels.<sup>24</sup>

Relative to the MPC's February forecast, these impacts will lead to a higher and more protracted peak in inflation and intensify the squeeze on household incomes, as I have said. We can see relatively clearly the direct impact of energy, goods and food prices on CPI inflation. But forecasting the subsequent impact on household income and consumption is more complex, given it depends on the degree of substitution away from energy and the response of household saving, among other things.<sup>25</sup>

The MPC will not produce its next full forecast, which will work through these effects, until May. But ahead of then we can conduct some simple thought experiments to get an idea of the direction and scale of the energy impacts alone. If we use simple rules of thumb about the pass through from energy prices to CPI inflation, and the response of economic

<sup>&</sup>lt;sup>20</sup> For example, the oil major Shell **announced** that it would no longer purchase Russian hydrocarbons. <sup>21</sup> Oil futures curves for contracts that would deliver oil three years from now show prices that are still more than 5% higher than before the invasion. Gas futures curves converge on pre-invasion levels around one year from now. But note that futures are very illiquid beyond the next couple of years so should be interpreted with caution.

<sup>&</sup>lt;sup>22</sup> For example, there is **evidence** that volatility in oil prices reduces investment, regardless of the level of prices, which would reduce the supply capacity of the economy.

<sup>&</sup>lt;sup>23</sup> See the <u>GfK survey</u> for further details.

<sup>&</sup>lt;sup>24</sup> See the **PMI release** for further details. In addition, nearly half of all UK businesses that have responded to the Bank's ongoing **Decision Maker Panel survey** reported that the Russia-Ukraine war will negatively impact on sales.

<sup>&</sup>lt;sup>25</sup> There is material uncertainty around the degree of substitution away from energy that could take place in response to the current shock. See **here** for a discussion in the German context.

activity, we can illustrate the potential impacts from just the energy price moves.<sup>26</sup> The latest data on energy prices suggests an impact of around 2 percentage points on inflation and around 1% on the level of GDP relative to the February forecast (**table 1**). We should, of course, treat these numbers as illustrative and partial indications of the potential scale. The May MPC forecast is the next opportunity to undertake a full assessment of these impacts.

### Monetary policy implications

What implications does this have for monetary policy?

The first and most obvious point to make here is that, given the scale of the energy price increase and the lags in monetary policy, there is little monetary policy can do to offset the externally-generated pressures on prices and hence the very high inflation numbers we are certain to see over the coming quarters. Nor can monetary policy do much to offset the squeeze on household incomes that will result.<sup>27</sup>

What we can do is to ensure that when the current, extreme pressures pass, inflation returns to its 2% target. In my view, that will require balancing two very different risks. The first is ensuring that inflationary pressures do not become embedded in the domestic economy in a way that would keep inflation above target even once energy and other import prices have stopped increasing and possibly even start to decrease.

The risk here is that as we enter into a period of even higher inflation – higher than we have seen for 40 years – with a tight labour market and strong pay growth, expectations of permanently higher inflation begin to drive businesses' and workers' decisions – and crucially that these new norms became embedded deeply enough to withstand the contraction in economic activity and employment we are very likely to see set in around the end of this year.<sup>28</sup>

The risk on the other side is that we amplify the impact of the squeeze on incomes and, given the lags in monetary policy, that our actions bear down on the economy as the rate of growth in imported prices subsides, taking inflation well below our target at our policy horizon. The February MPC forecast, which in line with our standard convention assumed that Bank Rate followed the path implied by financial markets, had just such an outcome.

<sup>&</sup>lt;sup>26</sup> Note that the modelling infrastructure the MPC uses to put together its forecasts will take into account a broader range of channels and will therefore be more comprehensive.

 <sup>&</sup>lt;sup>27</sup> My colleagues on the MPC have discussed this issue in some detail in speeches over the past year (Broadbent 2021, Tenreyro 2022). The scale of the issue has increased since both of those speeches.
<sup>28</sup> Note that there is some evidence that oil shocks push up on both inflation and inflation expectations but that second-round effects are limited in the US, especially since the 1990s (Wong 2015). Aastveit et al. (2022) suggest that this result depends on the source of the underlying shock, with supply shocks generating more limited second-round effects.

All else equal the invasion of Ukraine will have made such an undershoot more pronounced.

At the last MPC meeting, shortly after the invasion, I voted against increasing rates. This was not because I take the first risk lightly. As the oldest member of the MPC (by some way) I remember very well indeed the extreme manifestation of such an inflation psychology, which characterised the 1970s. I remember also the cost of correcting it.

But I do not think we are yet seeing a psychology of persistently higher inflation emerge. The predominant driver of the growth we have seen in pay has been the tightness of the labour market. There may also now be some element of catching up with inflation that has already happened.<sup>29</sup>

Several measures of household and business inflation expectations have risen.<sup>30</sup> We should by no means ignore this but we should treat them with caution. As my colleague Silvana Tenreyro has pointed out, there is some evidence that household inflation expectations simply lag prices, particularly large increases in salient prices like petrol and food.<sup>31</sup> There is also large dispersion, which suggests people form expectations in very different ways and this adds uncertainty. And it is those that might have the least wage bargaining power that have the most volatile expectations.

However, households' and businesses' norms are about to be tested by a period of even higher inflation, after the social and economic upheaval of the pandemic which may also have affected attitudes and norms more generally. And firms say to our Agents that they are more willing to pass cost increases into prices and, though this is more marked for goods than services, it is a noticeable departure from the pre-Covid period.<sup>32</sup>

But although the 1970s remains a salutary lesson in what can happen, we should not talk ourselves into believing we are inevitably heading for a repeat performance. UK inflation had been high for several years prior to the great supply shocks 50 years ago. The institutional framework for monetary policy in the UK was very different then as were labour and product markets. Labour market reforms, open markets and greater competition mean firms and workers do not have the same pricing power.<sup>33</sup> It is by no

 <sup>&</sup>lt;sup>29</sup> The Bank's <u>Agents</u> report that higher inflation will put upwards pressure on wage growth this year but that this will not persist beyond then. See the February 2022 <u>Monetary Policy Report</u> for more on this.
<sup>30</sup> The Bank's latest <u>Inflation Attitudes Survey</u> households' one year inflation expectations were similar to their late-2011 levels, when CPI inflation was last above 5%, although comparisons are complicated by a change in survey method in 2020. The household measures produced by Citi reached record highs in March. The business measures produced by the CBI were above their 2010-19 average.

<sup>&</sup>lt;sup>31</sup> See <u>Tenreyro (2019)</u> for UK evidence and <u>Coibion and Gorodnichenko (2015)</u> for the US.

<sup>&</sup>lt;sup>32</sup> See the latest Bank of England Agents' **summary of business conditions** for a high level summary. <sup>33</sup> For example, there is **evidence** that UK real wages were more sensitive to unemployment in the 2000s compared to previous decades. My former MPC colleague Andy Haldane discussed this (**Haldane 2017**, **Haldane 2018**).

means clear that, even with a period of high inflation, we would today see similar price and pay increases in a period of subdued economic activity and higher unemployment.

So while I recognise the risk of second-round effects and that further tightening of monetary policy might be necessary, I am not at present convinced that we will inevitably have to lean heavily and constantly against an embedding of an inflationary psychology as we progress through this challenging period and as the impact of higher commodity prices on real household incomes depresses activity. Rather, we will need carefully to judge the risks on both sides, weighing the evidence on the evolution of domestic prices, wages, activity and employment as it emerges. The MPC's next forecast will be the first opportunity since the invasion to do that.

### **Financial stability**

I want now to look briefly, and through the same lenses, at the impacts of the Russian invasion of Ukraine on financial stability – the Bank of England's other primary objective.

Again, the starting point matters. The UK banking system has emerged from the Covid pandemic so far in a strong position.<sup>34</sup> This reflects the fact that it went into the pandemic with strong capital and liquidity positions, the result of the post financial crisis reforms which included stress testing the major banks to ensure that they could withstand an extreme but plausible stress scenario. They were thus able to maintain credit to the real economy at the onset of the pandemic.

Subsequent fiscal support to the economy meant that the banking system did not need to call on the buffers of capital and liquidity that had been built up. But extensive and repeated stress testing during the pandemic gave us confidence that the banking system could withstand further severe waves of the pandemic even if fiscal support to the economy was absent.

The UK banking system exposure to Russia and Ukraine is small.<sup>35</sup> It is, of course, indirectly exposed through relationships with banks in other jurisdictions, but though some banks in other jurisdictions have larger exposures, the aggregate risks do not appear to be high.<sup>36</sup>

<sup>&</sup>lt;sup>34</sup> The aggregate CET1 ratio for the major UK banks was 16.3% at end-2021. As a result of regulatory changes implemented in early 2022 the ratio has reduced to around 15%, but it remains above the level it was before the pandemic (it was 14.8% at end-2019). Major UK banks hold around £1 trillion of high-quality liquid assets. They continue to comfortably exceed regulatory liquidity guidelines.

 <sup>&</sup>lt;sup>35</sup> UK banks' direct exposures to Russia, Belarus and Ukraine comprise much less than 1% of CET1 capital.
<sup>36</sup> Some EU countries' banks have large headline exposures to Russia: for example in 2021 Q3,

consolidated claims on Russia were around 5%, 10% and 20% of CET1 capital for banks from France, Italy and Austria, respectively. However, most of the claims of the banks from these three EU countries were via their locally funded Russian subsidiaries, limiting the potential losses to the parent institutions.

The impacts on the banking system are more likely to come through two channels. First, and most directly, the impact of higher and more volatile commodity prices on the financing of commodity trading and supply. And second, and more indirectly, through the general impact of higher inflation and lower economic activity on banks' balance sheets.

I will discuss the commodity channel later. On the general economic impact, the current high levels of capital and liquidity provide substantial resilience. The Bank of England's annual stress test in 2019, which tested the system against a scenario of weak economic growth and relatively high inflation, also provides assurance here.<sup>37</sup>

The starting position of non-bank finance, the universe of investment funds, insurance companies and pension funds and the financial markets that serve and connect them, is more complex. The non-bank financial system experienced major and very disruptive liquidity stress at the onset of the Covid crisis in March 2020. This run – the so called 'dash for cash' – was only broken by massive injections of liquidity into the system by central banks.<sup>38</sup>

The non-bank ecosystem as a result has emerged from Covid with greater liquidity, which will help to cushion liquidity stress. At the same time, however, investment portfolios have begun to shift away from riskier assets as inflation has begun to rise and monetary policy in many advanced economies has started tightening, not just after the Covid related policy support, but after a decade of low rates and substantial QE.

The uncertainty and disruption, including of financial sanctions, generated by the invasion of Ukraine, will make this shift more difficult to manage and, depending on the evolution of the conflict, more extreme investor 'flights to safety' cannot be ruled out. Moreover, although there has been substantial work to identify the causes of the 'dash for cash', the underlying liquidity fragilities have not yet been addressed.

So far, however, and despite some large moves<sup>39</sup>, financial markets have in general managed the additional pressures related to the invasion in an orderly manner.

However, the impact has been far more pronounced commodity markets. The supply and trading of commodities involves a complex system which includes producers, brokers, trading houses, speculators and end users. It is financed by banks and non-banks and makes extensive use of market platforms and clearing houses as well as over the counter trading and hedging. It is tied together by a fabric of derivatives and physical supply

<sup>38</sup> See **Cunliffe (2022)** for more on the 'dash for cash'.

<sup>&</sup>lt;sup>37</sup> The 2019 Annual Cyclical Scenario showed that the UK banking system is resilient to deep simultaneous recessions in the UK and global economies, with a material pickup in inflation in the UK. <sup>38</sup> See Cuplifie (2022) for more on the 'dash for each'

<sup>&</sup>lt;sup>39</sup> The 1-year 1-year forward GBP OIS rate – a measure of medium-term interest rate expectations – moved up from around 0.5% in the autumn of 2021 to around 2% before the invasion. The FTSE 250 UK share price index fell by more than 10% in value over that period.

contracts that enable the real economy participants – producers and end users – to have certainty about future prices.

The extreme volatility and price increases in a wide range of commodities that I described earlier (**chart 11**) has severely stressed this complex system. This stress has been crystallised for many participants by the extra collateral, or margin, they need to put up – either to CCP clearing houses or bilaterally to other market participants – when risks increase and prices move against them.

By requiring parties to a derivative contract to put up more collateral as risk increases, and requiring them to exchange gains and losses daily rather than letting them build up, margin call protects the contract and limits counterparty credit risk. The financial crisis 15 years ago demonstrated what can happen when participants lose confidence in the ability of their counterparties to fulfil their contracts and when the derivative contracts that are intended to protect against risk fail.

While the commodities supply and trading system has been severely stressed by some of the consequences of the Russian invasion, we have not so far seen major disruption. With the exception of one episode, markets have continued to operate. Market participants have been able to meet margin calls, albeit with difficulty in some cases. Banks have continued to finance the market. These markets are relatively small compared to financial markets in general. However, their opacity makes it more difficult to monitor risks, and given the interconnections with the financial system it is possible that feedback loops and other mechanisms could amplify disruption, which might in turn impact both on the financial system more generally and on the real economy. We need to be very vigilant to these risks, as the Financial Policy Committee of the Bank has emphasised.

The episode I referred to earlier is the suspension of the market for nickel, at the London Metals Exchange for a number of days after the market price quadrupled over two days. These extreme market moves were very much greater than the moves seen in the market for other industrial metals affected by the Russian invasion and clearly reflected other factors.

The FCA and the Bank have announced reviews of the events at the market and the clearing house respectively. There will, I am sure, be lessons to be learned, including around the transparency and the operation of the market overall – i.e. both the public and the over the counter market – and the resilience of participants. More generally, given the role they play in the real economy and the links to the financial system, we may want, when the dust has settled, to reflect on the resilience under stress of the commodity supply system, including the financial services that support it.

### Conclusion

I started this speech with the global economic recovery from Covid and have ended it talking about the price of nickel. If there is a theme here it is that monetary and financial stability, the Bank's twin objectives, are sometimes buffeted violently by exogenous events – a pandemic or, tragically as we see from the pictures emerging from Ukraine, by the unprovoked aggression of one country against a peaceful neighbour. The Bank cannot control or shape such events. What we can do, and what you can have confidence that we will do, is to use our tools carefully and flexibly as these shocks pass through the economy and through the financial system to deliver those objectives of monetary and financial stability.

The views expressed here are not necessarily those of the Bank of England, the Monetary Policy Committee or the Financial Policy Committee. I would like to thank Marilena Angeli, Clare Ashton, Shaheen Bhikhu, David Curry, Oliver Davies, Chris Ford, Julia Giese, David Glanville, Doug Rendle, Marek Rojicek, Andrea Rosen, Catherine Shaw, Brad Speigner, Cormac Sullivan, Luc Tucker, Danny Walker, Charlie Warburton and Nora Wegner for their help in preparing the text. I would like to thank Andrew Bailey, Colette Bowe, Sarah Breeden, Huw Pill, Michael Saunders, Christina Segal-Knowles and Silvana Tenreyro for their helpful comments.

## Chart 1: Goods and services with high import intensity have inflation rates in the UK that are high by historical standards

UK CPI inflation by component <sup>(a)</sup>



### Source: ONS

(a) The chart shows contributions to annual CPI inflation split by the import intensity of the underlying category, taking into account direct and indirect import content.



### Source: ONS

(a) The chart shows differences in real terms relative to 2019 Q4, the last quarter before the onset of the Covid pandemic in the UK.

### Chart 3: UK CPI inflation has been driven much higher by energy, goods and food prices in recent months

UK CPI inflation by component <sup>(a)</sup>



#### Source: ONS

(a) The chart shows contributions to annual CPI inflation split by category.

### Chart 4: UK labour force participation is still yet to recover fully from the Covid pandemic

UK labour force participation, employment and real GDP (a)



### Source: ONS

(a) The chart shows differences relative to 2019 Q4, the last quarter before the onset of the Covid pandemic in the UK.



Source: Living Costs and Food Survey, ONS

(a) Illustrative Bank staff analysis showing weekly spending on fuel (petrol, diesel and other motor oil), electricity, gas and other fuels and food and non-alcoholic beverages as a share of households' weekly disposable income, for each gross household income decile, as well as the proportion of income saved each week. The survey data covers the 2019-20 financial year. Mortgage principal repayments are included in the measure of savings.

\*On average, households in the lowest income decile reported spending more than their income each week which may indicate they are running down savings (e.g. during retirement or a temporary period of unemployment) or borrowing, but may also be a result of some misreporting.

### Chart 6: Global oil prices have risen by 50% since the start of this year and by 20% since the Russian invasion

Brent crude oil prices in 2022 (a)



#### Source: Bloomberg

(a) The chart shows the percentage change in the Brent crude oil price per barrel in dollars since the first trading day of 2022. Key events labelled. Latest data close 31 March.



### Source: Bloomberg

(a) The chart shows the percentage change in the spot UK natural gas price per therm in pounds sterling since the first trading day of 2022. Key events labelled. Latest data close 31 March.

### Chart 8: The volatility of oil and gas prices has picked up materially since the Russian invasion

Brent crude oil and UK natural gas prices in 2022 (a)



#### Source: Bloomberg

(a) The chart shows the 5-day trailing standard deviation of the daily percentage change in the Brent crude oil price and spot UK natural gas price since the first trading day of 2022. Key events labelled. Latest data close 31 March.



Source: Bloomberg

(a) The chart shows the Brent crude oil price per barrel in dollars since the first trading day of 2022 vs the Russian Urals oil price. Key events labelled. Latest data close 31 March.



Source: Bloomberg, national statistics agencies, Bank calculations

(a) These ready reckoners are partial and are aimed at capturing the impact of rising oil and gas prices on the level of consumer prices through (i) direct energy impacts (petrol and utility prices) and (ii) indirect effects through firms' costs. We also provide partial estimates of the impact on the level of GDP, by assuming that increases in consumer prices feed through one-for-one into lower real incomes and lower consumption. We assume no impact on the US from gas prices.



### Chart 11: Many commodity prices have risen since the Russian invasion of Ukraine

Source: Bloomberg

(a) The chart shows the changes in unit prices in dollars. Latest data close 31 March.

Relative to February forecast	Latest energy prices (31 March)			March MPC announcement (17 March)			Start of March MPC round (4 March)		
	UK	Euro Area	US	UK	Euro Area	US	UK	Euro Area	US
CPI (peak impact, pp)	+2.0	+2.3	+0.6	+2.1	+2.3	+0.5	+5.2	+5.3	+0.8
GDP (peak impact, %)	-1.3	-1.2	-0.3	-1.3	-1.3	-0.2	-3.4	-2.9	-0.3

Table 1: Illustrative impacts of recent energy price moves on CPI inflation and GDP based on rules of thumb for advanced economies <sup>(a)</sup>

Source: Bloomberg, national statistics agencies, Bank calculations

(a) These ready reckoners are partial and are aimed at capturing the impact of rising oil and gas prices on the level of consumer prices through (i) direct energy impacts (petrol and utility prices) and (ii) indirect effects through firms' costs. We also provide partial estimates of the impact on the level of GDP, by assuming that increases in consumer prices feed through one-for-one into lower real incomes and lower consumption. We calculate the change in energy prices since the February MPR by comparing movements in the futures curve. For gas, we average the next 6 months of the curve (April-Sept 2022); and for oil, we average May-Sept 2022. We assume no impact on the US from gas prices. The estimates should be interpreted as indicative only and do not reflect the MPC's forecast.