

# **Expert Report for the UK Covid-19 Public Inquiry**

## **Module 9 – Economic response**

### **The Response to Covid-19: Macroeconomic Policy and the Public Finances**

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**Author statement:**

I confirm that this is my own work and that the facts stated in the report are within my own knowledge. I understand my duty to provide independent evidence and have complied with that duty. I confirm that I have made clear which facts and matters referred to in this report are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.

James Smith

September 2025

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# Preamble

## About the author

1. James Smith is a Research Director at the Resolution Foundation, a non-partisan research institute based in Westminster. He joined the Foundation in October 2018. Prior to this he worked in a range of roles at the Bank of England and in the Civil Service, leading analysis of macroeconomic issues for policy. He also works extensively on issues related to wealth, debt and housing, net zero and trade.

## Relevant Research

2. During the pandemic, I led work on numerous reports relating to the economic policy choices facing the government. These included:
  - [A Budget action plan: The economic response to the coronavirus](#), Resolution Foundation, March 2020;
  - [Helicopters on standby? With rates at all-time lows, the Bank of England needs a different playbook for this crisis](#), Resolution Foundation, March 2020;
  - [Doing more of what it takes: Next steps in the economic response to coronavirus](#), Resolution Foundation, April 2020;
  - [Optimism in a time of coronavirus](#), Resolution Foundation, May 2020;
  - [The Macroeconomic Policy Outlook Q2 2020](#), Resolution Foundation, May 2020;
  - [Easing does it: Economic policy beyond the lockdown](#), Resolution Foundation, July 2020;
  - [Macroeconomic Policy Outlook Q3 2020](#), Resolution Foundation, September 2020;
  - [The Winter \(Economy Plan\) is coming: Chancellor ramps economic support back up, but avoidable design flaws will limit its success in stemming the Autumn rise in unemployment](#), Resolution Foundation, November 2020;
  - [Unhealthy finances: How to support the economy today and repair the public finances tomorrow](#), Resolution Foundation, November 2020;
  - [The Covid state: Analysis of the economy and public finances ahead of the 2020 Spending Review](#), Resolution Foundation, November 2020;
  - [Here today, gone tomorrow: Putting Spending Review 2020 into context](#), Resolution Foundation, November 2020;
  - [Macroeconomic Policy Outlook Q4 2020](#), Resolution Foundation, December 2020;
  - [On firm ground: The impact of Covid-19 on firms and what policy makers should do in response](#), Resolution Foundation, February 2021; and
  - [How to throw good money after good: Budget 2021 and the challenge of delivering a rapid recovery from Covid-19](#), Resolution Foundation, February 2021.

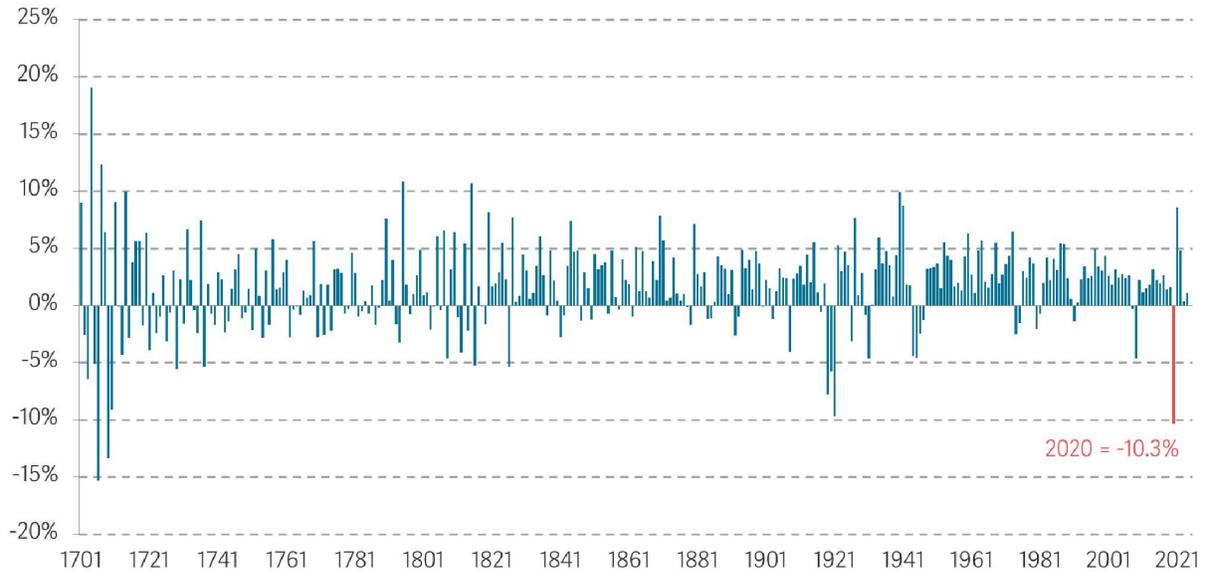
## Introduction

3. The Covid-19 pandemic inflicted a huge and highly uneven shock on the UK economy. It was – first and foremost – a health crisis that profoundly affected the lives of many. But it was also a time of great economic upheaval, with the virus and the social-distancing restrictions that came with it preventing the normal functioning of the economy. Unsurprisingly, such a fundamental shock to the economy unleashed an unprecedented economic fallout. As shown by very long-run data on Gross Domestic Product (or GDP, a key measure of the value of goods and services produced by a country) taken from Thomas and Dimsdale (2017), the 10.3% decline in output in 2020 was the largest fall in economic output for a single year in over three centuries. And more than five years on, the lasting effects on the economy remain clear to see.
4. In this report I focus on the macroeconomic policy response – that is, the high-level economic-policy approach taken by the UK authorities to dealing with the huge impact of the pandemic – and the toll that has taken on the public finances.
5. To that end, the rest of this report is structured as follows. I start by discussing the nature of the shock from Covid-19. This is crucial to understanding the approach taken by policymakers in responding to the pandemic. I then go on to describe that response, discussing the shortcomings of policy decisions taken during this period. I then discuss how the UK response compared to that of other countries before finishing with some conclusions about the overall performance of policy and the lessons for future pandemics.

## The macroeconomic shock from Covid-19

6. The impact of Covid-19 on the UK economy was unprecedented in its speed and scale. Unlike 'normal' economic downturns, triggered by financial crises or global economic crises, such as oil shocks, this was fundamentally a health crisis. The economic damage was severe, but that reflected not just the direct impact of the virus itself, but also the response to that crisis.
7. Even before the full effects of the pandemic were clear, historical experience pointed to the idea that Covid-19 would have a profound impact on the economy. As discussed in Hughes et al (2020), there are three broad ways in which a pandemic affects economic activity: the direct economic losses from additional mortality and morbidity; the impact of social-distancing and other non-pharmaceutical interventions designed to contain the spread of the virus; and the knock-on effects, including falling incomes, heightened uncertainty, and disruption to labour and product markets. All of this can have a long-term effect on the economy, including by reducing the effective labour force and reducing investment and productivity.
8. Evidence from past pandemics suggested that the direct health effects only tend to account for a small share of the overall economic damage. A typical finding (see Hughes et al, 2020a and references therein) is that less than a fifth of the economic impact of pandemics is associated with additional deaths and illness. Instead, the overwhelming majority of the impact arises from the direct or indirect disruption to economic activity resulting from mandatory or voluntary measures to avoid transmission. In a historical context, although Covid-19 was – even in the early stages – less deadly to people than past viruses (such as the 1918-1920 flu pandemic, SARS, or Ebola), the infection rate was higher. A high infection rate creates pressure for tighter mandated health restrictions, leading to a larger economic impact.
9. When Covid-19 hit the UK, what followed was the sudden shutdown of large swathes of the economy – creating a situation in which any area of household spending which was tied to face-to-face interaction collapsed. Put another way, the fallout on the 'demand' side of the economy – that related to spending by firms and households, including those located abroad – was huge. Meanwhile, the way in which many businesses operate was also temporarily halted by social-distancing restrictions too. As shown in Figure 1, the result was a precipitous fall in economic activity following the arrival of the virus in March 2020, as measured by GDP.

**Figure 1: Calendar year real GDP growth: UK**

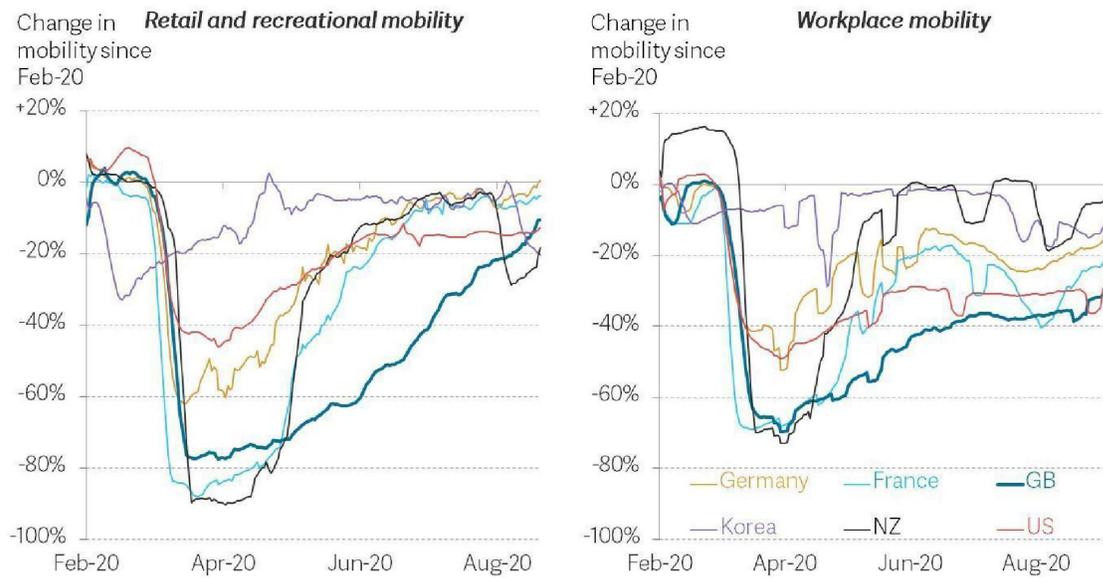


Notes: From 1949 to 2020 the data are official ONS data, prior to that they are taken from Bank of England, A Millennium of UK Data.

Source: Analysis of ONS; Bank of England, A Millennium of UK Data.

10. The extent to which the economy shut down was only apparent in the hard data (official statistics produced by the Office for National Statistics from large surveys and administrative data) with a long lag, however. For policymakers trying to take decisions, at pace, in the face of a rapidly deteriorating situation, it was necessary to monitor the extent of the disruption from the pandemic in a range of higher-frequency 'proxy' data. These included, for example, claims for Universal Credit (UC) and business surveys (such as those from the Confederation of British Industry (CBI) and British Chambers of Commerce (BCC), as well as purchasing managers' indices, which are survey-measures of fluctuations in industrial output. This data was already used to gauge the underlying position of the economy, but a range of more novel data on the services sector were also important. For example, data on online restaurant bookings, footfall in retail outlets, and the number of people taking bus and train journeys all became important proxy measures of the economic impact of the pandemic. Data on 'mobility' trends – information taken from tracking the movements of mobile phones were particularly important - and were used to keep tabs in real time on the uneven nature of the shock. As shown in Figure 2, both retail and recreational mobility and workplace mobility fell sharply across countries as the pandemic hit and social-distancing restrictions were introduced. The chart also points to Great Britain being one of the slowest countries to introduce restrictions, but with restrictions continuing for longer than elsewhere – as shown by Great Britain appearing at the bottom of the pack toward the right of the charts.

**Figure 2: Change in google mobility trends for places of work: selected countries, since February 17, 2020: selected countries**



Note: The chart displays aggregated, anonymised data to chart movement trends over time by geography, across different high-level categories of places such as retail and recreation, groceries and pharmacies, parks, transit stations, workplaces, and residential. Location accuracy and the understanding of categorized places varies from region to region. Google recommends not using the data to compare places with different characteristics. The baseline is the median value, for the corresponding day of the week, during the 5- week period 3 January – 6 February 2020.

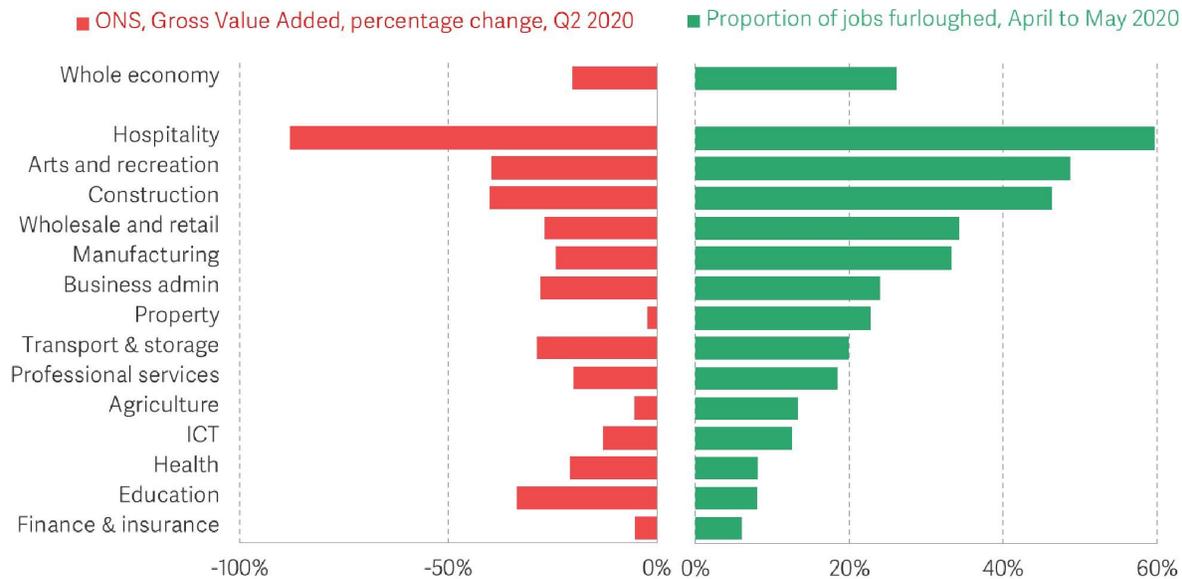
Source: Resolution Foundation analysis of Google, Community Mobility Reports.

### The distribution of the economic impact of Covid-19

11. Because this huge economic shock was focussed on sectors reliant on face-to-face interaction it was highly uneven. Labour-intensive, consumer-facing industries like hospitality, retail, and the arts – which together account for around a fifth of economic output – experienced the most severe disruptions. Indeed, as shown in Figure 3, the picture that emerges from both official data on economic output, and the data on the furlough scheme, is one of a very uneven economic impact across different sectors of the economy. The largest falls in output were in the hospitality sector, and that is also where the most workers were furloughed. Here the key point is that the extent to which activity in a particular sector was affected depended heavily on the extent and severity of the health restrictions that were in place as well as the dependence of that industry on face-to-face interaction.
12. The concentration of the economic shock on sectors of the economy reliant on social interaction meant that there was significant age and income skew to the impact on the labour market. As discussed in Hughes et al (2020b), sectors heavily affected by public-health restrictions, including social distancing, had typical weekly pay of £320 in 2019, compared with £455 for the economy as whole. So the impact of the pandemic was concentrated on low earners. Meanwhile roughly 80% of social housing tenants worked in parts of the economy worst-affected by social distancing – that is, jobs that could not be performed from

home – or are caring for school-aged children. Indeed, fewer than one-in-ten low earners reported that they could work from home if needed, compared to half of those on the highest earnings. Younger people also tended to work in the worst-affected industries.

**Figure 3: Actual change in gross value added and proportion of jobs furloughed: UK**



Notes: Chart shows data available during the pandemic.

Source: RF analysis of HMRC; and ONS, GDP output approach – low-level aggregates.

13. Another relevant consideration for policymakers was the level of financial vulnerability coming into the crisis. According to DWP data, around 55% of adults in low-to-middle income families had no savings at all<sup>1</sup>. This proportion had risen from closer to 40% since the 2008 financial crisis, with the sluggish recovery in incomes over the preceding decade limiting the ability of families to build up savings. Indeed, around four million workers in the hospitality and retail sectors were furloughed towards the start of the pandemic. These are two of the lowest-paying parts of the economy, with typical employee pay in 2019 just £231 a week in hospitality, and £323 in retail.
14. Pre-pandemic vulnerabilities were important for understanding the way in which policies were targeted, but they were also relevant for the overall scale of the macroeconomic support that was needed. If people on lower incomes are disproportionately affected by the crisis, the economic impact will be larger as such people tend to have smaller financial buffers, and so there is a stronger case for a large-scale policy response.
15. As discussed in Bangham and Leslie (2020) and Brewer and Gardiner (2020), there was also a stark difference in the impact on the finances of families between lower- and higher-income families. Richer families were unable to continue previous consumption patterns which meant

<sup>1</sup> Source: DWP, Households Below Average Income.

that families in this group accumulated savings.<sup>2</sup> These can be viewed, at least to some extent, as ‘enforced’ savings – imposed on families by the inability to spend in the way they would normally. Survey evidence during the pandemic suggested that over one-third of the richest fifth of households saw their savings increase in the early months of the crisis. By contrast, as discussed in Brewer and Patrick (2021), those at the bottom of the income spectrum were far more likely to have seen the amount they save each month fall during lockdowns, and more likely to take on debt to cope (because some essential activities became more expensive during lockdowns or periods with social-distancing restrictions). This was linked to increased use of higher-cost products like credit cards and overdrafts for lower-income families. Such families also turned to informal loans and gifts from friends and family to make ends meet, which in many cases was not a sustainable income source.

16. Despite such a huge and uneven shock to the economy, widespread unemployment was not an issue during the pandemic. This was because of government intervention, particularly the Coronavirus Job Retention Scheme (CJRS), which covered up to 80% of wages for millions of workers. As we discuss below, this support softened the economic impact of the pandemic but was expensive in terms of government spending, and arguably made it harder for the economy to adjust to the new economic reality of the pandemic.
17. Overall, the pandemic profoundly disrupted the normal functioning of the economy, but the impact on household incomes was cushioned by the policy response.

#### **Conceptual issues relating to the macroeconomic shock of Covid-19**

18. There are two important conceptual issues that informed the macroeconomic policy response.
19. The first is the extent to which demand- versus supply-side factors dominated during the pandemic. This is important because demand-side drivers are normally ones which fiscal policy (that is, decisions taken by the government on tax and spending) and monetary policy (decisions taken by the Bank of England which influence the cost of borrowing for families, firms and financial markets) can address. That is because such policies operate primarily through the demand side of the economy – either by adding a new source of spending to that from the private sector in the case of fiscal policy, or by inducing families and firms to bring forward spending in the case of cutting interest rates. Supply shocks, by contrast, tend to be thought of as ones which such policies can do far less to influence.
20. In a ‘normal’ recession, designing a *macroeconomic* policy response boils down to assessing the hit to demand and using policy (normally monetary policy in the first instance) to provide a carefully-calibrated boost. But the effects of a pandemic can be thought of as affecting the supply side in the first instance. Most obviously, with many sectors of the economy forced to shut, large numbers of workers are unable to work. Even as the economy opens up, many sectors will be able to produce less than they did previously. For example, restaurants and bars were not able to serve as many customers because of social-distancing rules. This will also affect demand, for example through the lower incomes of furloughed workers, or those who lost their jobs, but the initial impact of the pandemic comes through supply.

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<sup>2</sup> According to the ONS’s Living Costs and Food Survey, higher-income households spend a larger proportion of their income on the most affected services, such as on restaurants and hotels.

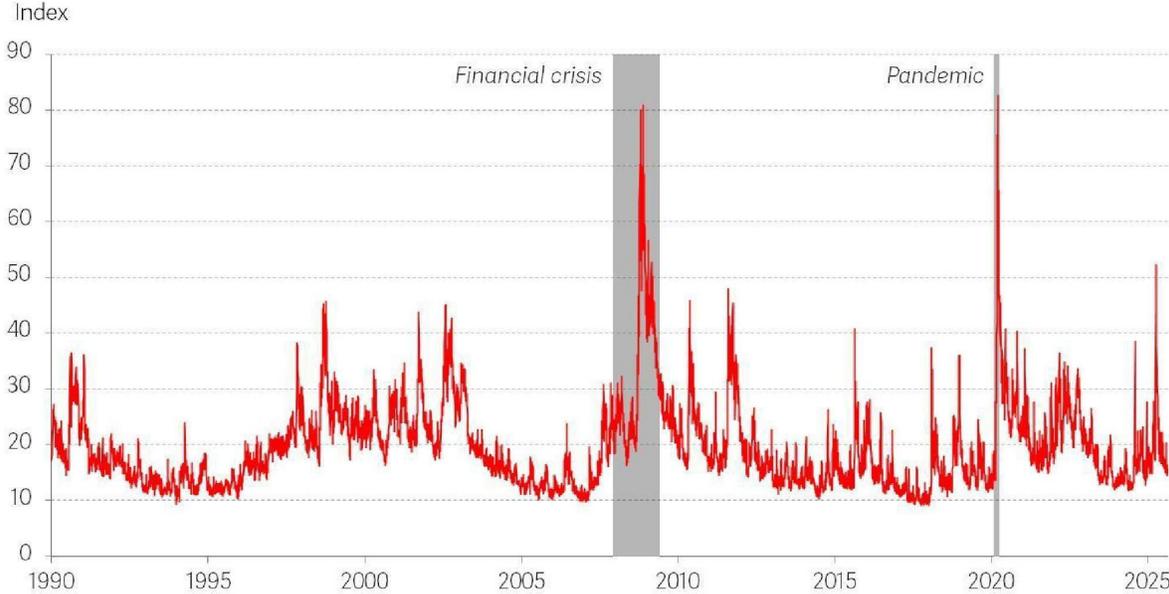
21. In designing a response to this crisis, then, policymakers needed to vary their interventions on the supply and demand sides of the economy. During lockdowns, for example, support must be targeted given different types of families, firms and regions affected (see: Guerrieri et al and Kaplan et al, 2022).
22. To the extent that the impact of the pandemic was concentrated on lower-income families, the more the impact was amplified. Those on lower incomes tend to spend a higher proportion of their income on consumption, saving less, and so respond to a larger extent to changes in incomes. That means that this group has a larger impact on changes in economy-wide spending (i.e. when individual incomes are added up, or aggregated, across families). Targeted support, then, reduces the hardship caused by the economic disruption caused by lockdowns and stops other sectors seeing demand fall as workers in those sectors directly affected by restrictions (most obviously those working in the hospitality sector) retrench by reducing spending.
23. A key contribution to our understanding of the nature of the supply and demand impacts of the pandemic came from Guerrieri et al (2022) who coined the idea that a negative supply shock – of the kind from shutting down specific sectors of the economy during the pandemic – not only reduces output in the directly affected sectors, but also leads to a disproportionate decline in aggregate *demand* (the sum of all spending on goods and services produced by a country). The authors argue that, when you take into account that the impact of the pandemic can vary across sectors of the economy, a shock to the supply side in one sector can significantly reduce income and consumption in that sector, thereby spilling over to lower demand in other sectors. This interconnectedness is crucial because it means that the initial supply disruption from Covid-19 can also have demand effects which should be addressed using macroeconomic tools such as fiscal and monetary policy.
24. The second key conceptual issue is the extent to which the downturns could be thought of as self-inflicted – that is driven entirely by lockdowns and other restrictions – or from the virus itself. Lockdowns can be viewed as a discretionary public health policy that comes with the ‘side effect’ of a weaker economy. But the reality was more nuanced, as the sources of the economic shock were intertwined. That is because, even absent lockdowns and other social-distancing restrictions, the risk of infection changes behaviour. This means that, it is likely that there would still have been large falls in GDP even without shutting the economy. Survey evidence suggests a high level of concern about the risk of contracting coronavirus and the impact that has on working patterns. For example, nearly half (44%) of UK workers reported that they were anxious about the prospect of going back to work because of the health risks posed by Covid-19, according to a survey undertaken by the Chartered Institute of Personnel and Development (CIPD, 2020). While it’s hard to know how this would translate into behavioural changes, as shown in Figure 2 above, it is striking that mobility fell nearly as much in Sweden, where there had not been a complete lockdown, as it did in Denmark, where there was.
25. Moreover, even in sectors not formally shut down, the pandemic disrupted the supply side, feeding back to reduced spending on consumption. For example, illness and caregiving responsibilities led to widespread employee absences. These effects were compounded by voluntary behavioural changes. Evidence suggests that individuals reduced mobility and consumption even in the absence of formal restrictions (Chetty et al, 2020), indicating that the virus itself – through perceived risk – was a key driver of economic slowdown.

26. This phenomenon is referred to as 'equilibrium social distancing' in research that seeks to incorporate economic behaviour into models of the transmission of health crises – so-called 'epi-macro' models (for a discussion, see: Toxvaerd, 2021 or Eichenbaum, Rebelo and Trabandt, 2021). That is, absent the virus being clearly under control, people will socially distance themselves with or without government instructions (although they probably wouldn't do enough to keep cases to a low level), leading to similar amounts of economic damage.
27. These behavioural effects can become entrenched, however, and extend well beyond the lockdown period. In the UK, demand for in-person services remained depressed long after health concerns receded, whereas sectors such as e-commerce, home delivery, and digital services experienced accelerated growth. The shift to remote work and online consumption is expected to have long-lasting implications for labour markets and productivity (for more on this, see: Barrero, Bloom and Davis, 2021).
28. This creates a risk of a pandemic having a more long-lasting impact – if people become accustomed to behaving as though health restrictions are in place. So an important risk for macroeconomic policymakers is to push against any 'hangover' from the pandemic that comes in the form of prolonged reluctance to return to economic behaviours dependent on social interaction as this will tend to exacerbate the risk that the pandemic has a long-lasting, or even permanent, impact on the size of the economy and wider economic prosperity.

#### **Risks in the pandemic**

29. A final point that is relevant to understanding the pandemic macroeconomic policy response is that there was reason to think that the economic shock could feed back into a severe financial crisis. As shown in Figure 4, measures of financial-market volatility reached very extreme levels – even higher than during the financial crisis – indicating large falls in asset prices. But after the first few months of the pandemic, there was a significant easing in financial conditions. It is striking that, during this period, the huge economic hit and the big swings in asset prices did not lead to the collapse of financial institutions or financial infrastructure. As discussed below, this was by no means assured before the crisis with the Bank of England repeatedly warning about risks in the financial system and low levels of liquidity since the financial crisis (see, for example, Bank of England, 2020).

**Figure 4: VIX volatility index**



Notes: the VIX index measures market expectations of near-term volatility conveyed by US equity options prices. Shaded areas show US recessions.

Source: RF analysis of Chicago Board Options Exchange, CBOE Volatility Index: VIX, retrieved from FRED, Federal Reserve Bank of St. Louis.

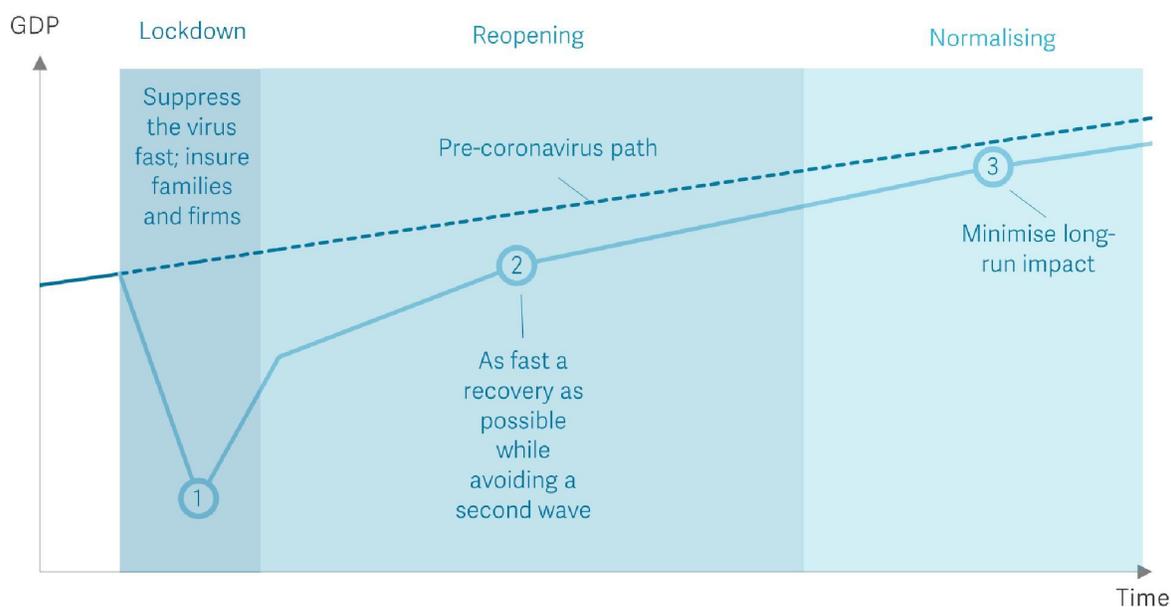
## Macroeconomic policy during the pandemic

30. In this section the role of macroeconomic policy in containing the economic impact from the pandemic is discussed, starting with the objectives of such policy, before moving on to a comparison of that with the policy debate during the pandemic itself. I finish this section by discussing the specific actions of policy makers during this period and how they were coordinated.

### The objectives of macroeconomic policy during the pandemic

31. In this context it is helpful to think of three phases of the economic policy response to the pandemic. These are depicted in Figure 5. First, is the 'lockdown' phase. During this period Governments faced with a dangerous pandemic that risked overwhelming health services without the technology to fight its spread (a vaccine, effective antivirals or even well-developed test, track, trace and isolate programs) had no choice but to lock down their economies to stop the spread of the virus. As discussed above, such an approach comes with profound impacts on the economy, including sharp falls in GDP.

**Figure 5: Stylised depiction of economic activity (or level of GDP) during the three phases of the impact of Covid-19**



Source: Resolution Foundation analysis.

32. In a sense, policy in the lockdown phase is relatively straightforward. With health considerations dominating, the aim of the government's economic policy (in particular, its decisions on fiscal policy) must be to avoid mass hardship by providing large-scale social insurance to families and firms, by reducing income losses. As we will discuss below, these objectives justified the unprecedented scale and nature of the response of governments around the world to the pandemic. But even if governments take this approach, precipitous falls in GDP are inevitable (denoted by Point 1 in Figure 5). This is because the underlying

economic impacts of the pandemic – making people more cautious in their behaviour and spending habits – will outweigh any response a government can put in place.

33. The second phase can be termed the ‘reopening phase’ during which lockdown measures are eased. At this point, denoted by Point 2 in Figure 5, the economy starts to rebound, initially very quickly, but GDP remains far below normal levels because some parts of the economy continue to be affected by concerns about the virus and associated social-distancing restrictions.
34. During this phase the government’s public health and economic objectives are much more complex. On the one hand, ending the lockdown prematurely could lead not only to more deaths, but also to a need for a re-imposition of even stricter and longer-lasting restrictions, feeding back into an even larger economic hit and more damage to the public finances (by increasing the amount it has to spend insuring the population economically from the effects of the pandemic). In the case of Covid-19, there was also an issue in terms of the lasting effects of the virus itself, most obviously through ‘Long Covid’ (Reuschke and Houston, 2022). On the other hand, keeping lockdown measures in place for a protracted period means continuing high levels of spending, increasing the burden on the public finances. Such an approach would also entail significant financial hardship for those whom the government’s schemes inevitably fail to reach, encouraging them to find ways of circumventing restrictions to resume some level of economic activity, however unsafe.
35. A key uncertainty during this period concerned progress in suppressing the virus. Allowing the spread to increase risks a rapid return to lockdown. There were two options for governments looking to ameliorate such risk: first, by choosing economic policies now that continue to work in the event of a ‘second wave’, or at least would not be wasted in that case; and second, by preparing their economic policy response to a second wave in advance of its implementation.
36. The sectoral concentration of the impact of the pandemic remained important as the economy reopened. This is because any economic activity that was reliant on face-to-face contact was still affected by ongoing social-distancing restrictions. Although some sectors adapted – for example, by working remotely (see Barrero, Bloom and Davis, 2021) – others were more constrained. An obvious example of the latter category is the hospitality sector, where restrictions on physical proximity limited the services that firms in that sector were able to provide. The job for policymakers, therefore, was to get the economy operating as close to its maximum possible level, with restrictions on some sectors in place to control the spread of the virus.
37. In the third (‘normalising’) phase of the policy response the health emergency has passed, and the economy moves back towards its long-run path. The key to such a normalisation is a technological solution to the virus – most obviously the vaccine. A vaccine allows the economy to return to operating somewhere near to its pre-crisis path (Point 3 in Figure 5). As discussed below, even with an effective vaccine, though, there was (for the UK, as with many other countries) clear evidence of economic scarring. And as set out in Smith et al (2019), such shortfalls are relatively common and experience suggests that they become less likely to be recovered, leading to a permanent fall in the productive capacity of the economy relative to its previous path (for reasons discussed, for example, in Blanchard and Summers, 1987). The lasting effects of Covid-19 on health, including through Long Covid, provide

another reason for a lasting economic effect (see, for example, Reuschke and Houston, 2022).

### **The extent to which key policy-design issues were recognised in real time**

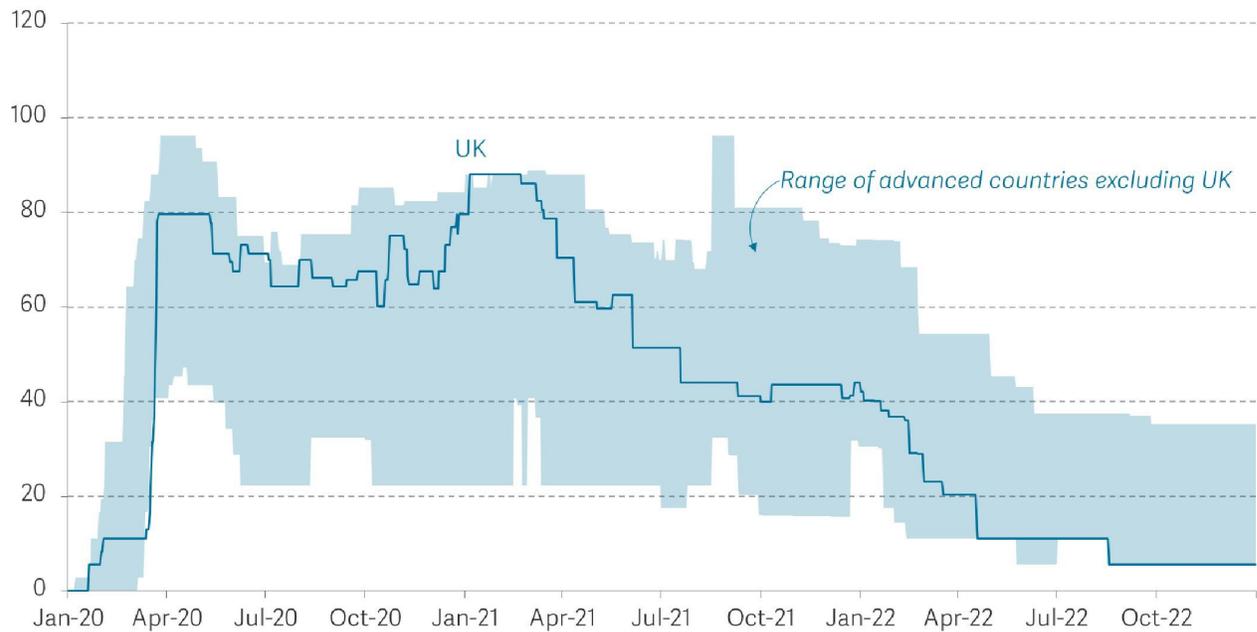
38. As discussed above, a key insight of the epi-macro literature is that the trade-offs between the government's public health objectives, and those of its economic and fiscal policy, were easy to overstate.
39. The key reason for this is that effective public-health policy is also often conducive to better long-run economic and fiscal outcomes. Specifically, rapid containment of the virus through social distancing and the rollout of an effective vaccine allows a safe return to work. This reduces the length and severity of the economic downturn. It is also important to recognise that both public health and economic policy responses are not binary, but scalable, and can be calibrated to changing circumstances and the balance of risks. Public health restrictions can be partly loosened as health service capacity and knowledge of how to treat those with the disease improves. This could allow those at lower risk (primarily younger people) and those who have had the disease to return to work, while those at higher risk remain sheltered. But the most important point in this context is that, even if social distancing restrictions are lifted, many individuals would choose to continue to minimise social interaction in order to reduce the chances of becoming infected. To be clear, a rapid return to life and business as usual before the pandemic was over was simply not available as a policy choice.
40. There is evidence that the extent of trade-offs between health and economic objectives were not well understood in real time. This is set out in some detail in Tetlow and Bartrum (2023). It includes public pronouncements and speeches in which the impact on the economy was used as an argument against adopting health restrictions.<sup>3</sup> But it also comes across in the minutes of key meetings on decisions about lockdowns. For example, the Scientific Advisory Group for Emergencies (SAGE) committee appears to have weighed economic considerations as a key reason for not adopting new restrictions in September 2020, instead waiting until the end of October to implement them – see SAGE (2020).
41. There is also evidence that subsequent restrictions were tighter in the UK than in other countries. Figure 6 shows a cross-country measure of the stringency of lockdown restrictions across countries. It shows that the UK was slower to return to lockdown than other advanced countries in 2020 and, when imposed, those restrictions were tighter than in peer countries. This is consistent with the idea that those countries which moved faster to implement restrictions were able to operate with less strict lockdown rules, and so allow more economic activity.
42. In practice, the stylised description of policy objectives shown in Figure 5 above was complicated significantly by changes in the transmission of the virus. As can be seen by the fact that the UK economy slowed sharply again in early 2021, there were, in fact, periods during which restrictions need to be reintroduced in order to contain the spread of the virus.

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<sup>3</sup> One particularly obvious example, highlighted by Tetlow and Bartrum (2023), was Rishi Sunak's confirmation that he opposed September 'circuit breaker' Covid lockdown on economic grounds, see for example: [www.itv.com/news/2021-03-31/rishi-sunak-admits-he-opposed-septembercircuit-breaker-covid-lockdown-but-ultimate-decision-was-boris-johnsons](https://www.itv.com/news/2021-03-31/rishi-sunak-admits-he-opposed-septembercircuit-breaker-covid-lockdown-but-ultimate-decision-was-boris-johnsons).

This meant the economic response was shifting in terms of phases between lockdown and reopening.

**Figure 6: Oxford Coronavirus Government Response Tracker Stringency Index: selected advanced countries**



Notes: The Oxford Coronavirus Government Response Tracker Stringency Index is a composite measure of nine key non-pharmaceutical interventions. Advanced countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, South Korea, Spain, Sweden, Switzerland and US.

Source: T Hale et al., 2021, "A global panel database of pandemic policies (Oxford COVID-19 Government Response Tracker)", Nature Human Behaviour.

### **Fiscal policy actions taken during the pandemic**

43. Fiscal policy – that is tax and spending decisions made by the government – bore the brunt of the response to the pandemic. This should not come as a surprise: the evidence on past viral epidemics discussed above clearly pointed to such episodes placing enormous pressure on the public finances. This pressure stems from a combination of the direct impact of the contraction in economic activity discussed above on government revenue and expenditure, together with the cost of policy measures to mitigate the impact on individuals and firms.
44. While discussion of the specific design of these policies is, however, the focus of other evidence, below I set out some of the key policy interventions that made up the government's fiscal response.
45. The clear centrepiece to the policy package was the coronavirus job retention scheme (CJRS) which partially paid the wages of nearly 9 million people at its peak, hugely reducing

firms' wage bills at a cost of £68.9 billion.<sup>4</sup> Details of the scheme are set out in HMRC (2022), but, at a high level, it was designed for those ceasing some – or all – of their work with their employer. This scheme played a vital role in maintaining households' income but came at the risk of deepening the economic contraction by providing a strong incentive for workers to stop working altogether. In the context of the discussion about different phases of the government's policy response, the CJRS was the most important way in which policymakers provided social insurance against the impact of the pandemic on families.

46. The CJRS was, however, designed to support employees and so a separate scheme was needed for the self-employed. This was a complex issue given the absence of a track record of reliable income statements for the self-employed. As discussed in HMRC (2022), the government put in place a Self-Employed Income Support Scheme (SEISS) that used previous tax records to provide comparable levels of support to the self-employed to that received by employees.
47. It is important to stress that these schemes were entirely new for the pandemic and had to be put together at considerable cost and with a number of compromises needing to be made in their design. This meant that there were shortcomings with their design which resulted in support costing far more than if the government had had access to targeted tools. As discussed in Pittaway and Smith (2023), drawing on National Audit Office (2022), the lack of tools to effectively support the self-employed meant that support was much more expensive than the equivalent support for employees.
48. On top of that, the government provided significant support to firms. Deferred tax payments, cheap finance and grants were all aimed at supporting businesses, particularly smaller ones. All this provided a lifeline to many firms. There were three loans schemes put in place during the pandemic: the Coronavirus Business Interruption Loan Scheme (CBILS) which provided up to £5 million in loans to SMEs, government guaranteed, up to three-to-six year term; The Coronavirus Large Business Interruption Loan Scheme (CLBILS) which provided up to £200 million for in loans for businesses with turnover over £45 million, government guarantee, up to three year term; and 'Bounce back' loans of up to £50,000 with a full government guarantee with a term of up to six years (extended later up to ten years) with no repayments in first year. For more on the corporate response, see: Cominetti, Leslie and Smith (2021) and National Audit Office (2023) discusses losses associated with fraud.
49. The support for firms should be viewed as both complementary to that for workers and distinct from it. While the social insurance provided by the government applies to people rather than corporations, it would have been remiss to ignore the impact on firms. Particularly in directly affected sectors – and through the spillover to those sectors much less reliant on face-to-face contact – firms' revenue will have been negatively affected (see: Cominetti, Leslie and Smith, 2021). Most obviously, this could lead firms to go out of business altogether, destroying jobs and leading to the assets of those businesses to be scrapped. This would have increased the longer-term impact of the pandemic on the economy, making it harder for governments to drive a complete economic recovery. For this reason, support for the corporate sector was needed. But because firms indirectly benefit from employee support – through lower wage costs – and because it was difficult for government to truly identify which firms were in need of support, the assistance here took the form of loans rather than

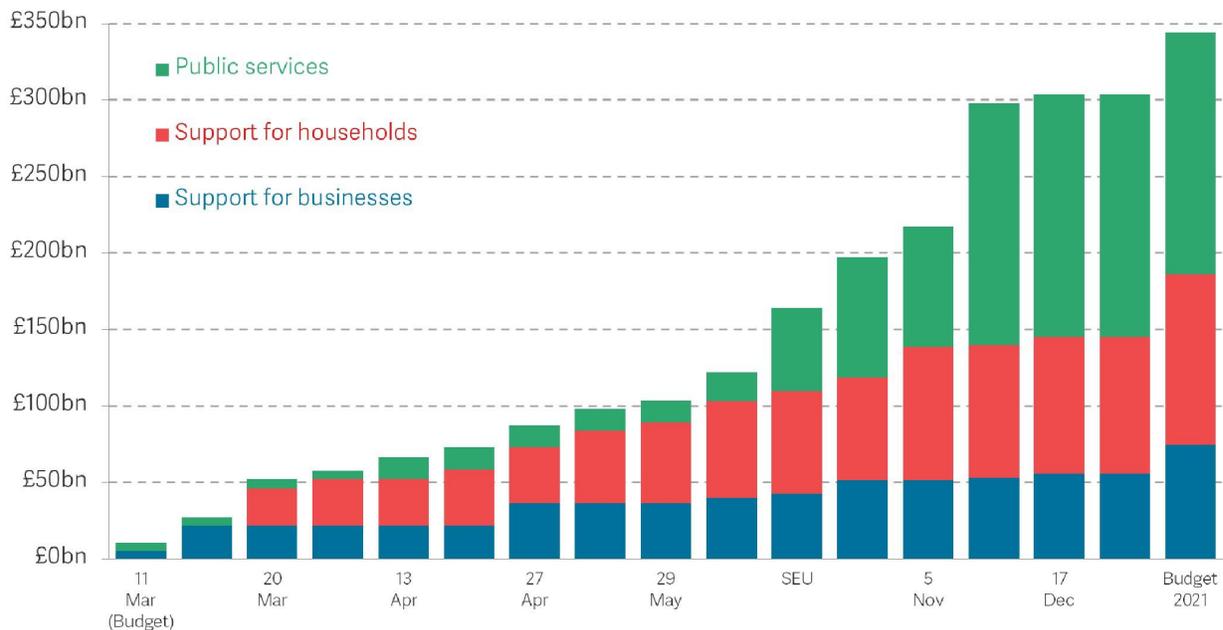
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<sup>4</sup> For a discussion of the overall costs, see National Audit Office (2022).

direct payments (or grants). At the margin, this made managers less likely to access support for fear of an overly large rise in debt, and so meant the support was less effective. In an attempt to expedite loans, it also meant that the government was exposed to fraudulent applications for those loans again making support costlier.

50. These measures, along with others, have proved very expensive. Indeed, as shown in Figure 7, even at the time these policies were announced, their cost was estimated to be nearly £350 billion – an unprecedented surge in spending. More recent estimates suggest that this total has increased further. In particular, HM Treasury (2023) estimates that the amount the government expects to spend once all the schemes come to an end is £373 billion. Changes in the ultimate cost of these schemes reflect more comprehensive estimates of amounts spent during the pandemic itself, as well as changes in the amount of write-offs expected from the various loans schemes.

**Figure 7: Real time estimates for the cumulative cost of the coronavirus policy response in 2020-21, by economic support category**



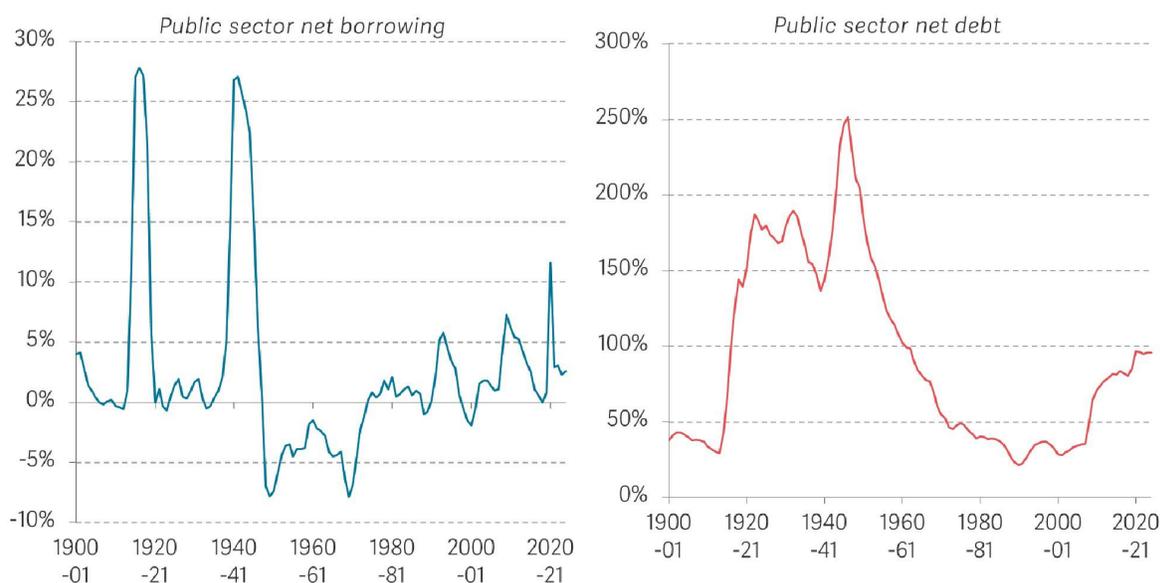
Notes: 11 March (Budget) figures based on announcements made by the Chancellor in the 2020 Spring Budget.. Other costs based on outturn and OBR March 2021 forecast estimates.

Source: Resolution Foundation analysis of OBR, Economic and Fiscal Outlook, March 2021.

51. It is important to understand that it was not just higher spending on pandemic support measures that affected the public finances. Lower revenues, due to the reduction in economic activity during lockdown, a falloff in tax compliance, and increases in tax reliefs all contributed to the deterioration in the public finances. There was also higher spending on the direct healthcare costs, higher claims for more generous unemployment and housing benefits – with the main out of work (and, indeed, in-work) benefit – Universal Credit (UC) – uplifted by £20 per week during the pandemic.

52. Taken together, this huge expansion in fiscal policy was funded through a massive rise in government borrowing. This meant that public debt – which as discussed in Smith et al (2019) had been on a sharply upward trajectory since the financial crisis – increased very sharply during the pandemic period. Figure 8 shows public-sector borrowing and public-sector net debt, two key measures of the public finances. The first measures the flow of new borrowing, the second, the cumulative impact in terms of the amount of debt the government has to issue to finance that borrowing. There was an unprecedented peace-time increase in borrowing during the pandemic that contributed to a near tripling of debt since the onset of the financial crisis.

**Figure 8: Public sector net borrowing (left panel) and public sector net debt (right panel) as proportion of GDP: UK**



Source: OBR, public sector finances databank.

### Monetary policy actions taken during the pandemic

53. We now turn to the policy response of the other key macroeconomic policy institution – the Bank of England. The Bank of England is charged with adjusting monetary policy – that is, decisions about its short-term policy interest rate (known as Bank Rate), and decisions about the size of its balance which can be expanded (or reduced) to bring down (or raise) longer-term interest rates. The Bank of England has operational independence in setting these policies, as set out in HMT (2024). The coordination of fiscal and monetary policy is discussed in the next section.
54. It is important to understand that during the pandemic the monetary policy response was constrained by the pre-existing environment of low interest rates prior to the pandemic. In the aftermath of the financial crisis, interest rates fell significantly reflecting an imbalance between the real demand for funds (that is, investment) relative to the supply of funds (that is, saving), as discussed in Rachel and Smith (2017). The low level of interest rates globally limits the ability of monetary policy to support the economy in times of recession because

policy rates cannot be cut much below zero (because charging a negative interest rate creates incentives to liquidate deposits in banks to move into cash). This meant that, in stark contrast to previous recessions, in which rates have been cut by more than five percentage points on average, accounting for the vast majority of the overall macroeconomic policy stimulus, monetary policy wasn't able to be the key tool through which the economy was supported during the pandemic.

55. The Bank of England's Monetary Policy Committee (MPC) – the independent committee charged with changing interest rates to hit the government-set target of 2% CPI inflation – quickly cut its main policy rate from 0.75% prior to the pandemic to an all-time low of just 0.1%. This made it cheaper for families and firms, for example, to borrow which increased spending in the near term, supporting aggregate demand.
56. When its policy rate hits a very low level (essentially zero), the Bank of England can use Quantitative Easing (QE) to bring down longer-term interest rates and so support the economy. The way in which this supports the economy is described in Benford et al (2009), but the key point is that by buying assets, increasing the size of its balance sheet, the Bank of England can affect longer-term interest rates. Specifically, by buying UK government debt (known as gilts) in the open market, it pushes up the price, reducing the interest rate (or yield). Because other assets are priced from government debt, the Bank of England can influence a range of longer-term interest rates, affecting the rate at which families and firms borrow.
57. In March 2020 the Bank of England increased QE by £200 billion, taking it to a total of £645 billion, with the vast majority of purchases comprising gilts. It then voted in June to increase that to £745 billion and subsequently to a total of £875 billion in November 2020.
58. It was clear from the Bank of England's regular monetary policy communications – that is, the minutes of the MPC meetings and its quarterly Monetary Policy Reports – that this policy response was informed by high-frequency data of the types discussed above (see paragraph 10). And, in its evidence session before Parliament it was also clear that decisions were informed by the insights of advances in macroeconomic modelling of pandemics – so called 'epi-macro'.
59. The nature of the shock to the economy and the constraints on monetary policy meant that the role of the Bank of England during the pandemic was a supporting, or enabling, one. As already mentioned, the low prevailing level of interest rates in the run up to – and early stages of – the pandemic also put a limit on the extent of policy rate cuts. But this also limits the traction that QE can get in bringing down interest rates (for more on this, see Smith and Yates, 2020a). Also, the nature of the pandemic shock – highly uneven and affecting the supply side (as well as demand) of the economy – meant that monetary policy was not the right tool for providing targeted support in the lockdown and reopening phase. That is because monetary policy works by providing a broad boost to the demand side of the economy. All the monetary-policy tools available to the Bank of England have this property (i.e. changing official interest rates or undertaking asset purchases).
60. All this does not mean, however, that the Bank of England did not have an important role. Its QE purchases acted to cushion falls in financial asset prices, reducing the extent to which the pandemic was amplified by disruption to financial markets (of the type that was widespread during the financial crisis). In this way, the Bank of England was effectively making it cheaper

for the government to borrow for its support measures, by reducing the effective borrowing rate on the government's debt.

61. The huge increase in QE implemented during the pandemic has been subsequently criticised as an inappropriate policy response. A key element of this criticism is that the nature of the pandemic – specifically its impact on the supply side of the economy – was not recognised in real time.<sup>5</sup> Supply side disruptions to the economy cannot be directly addressed through changes in monetary policy, which primarily affects the demand side of the economy.
62. While it is fair to say that QE is not the right tool to address all the macroeconomic effects of the pandemic, it does not necessarily follow that the Bank of England was wrong to extend its asset purchases. As discussed in Bailey (2022), asset purchases can be viewed as a key tool for reducing the risk that the impact of the pandemic is amplified by financial crises. Such an argument does, however, suggest that a more contained and temporary expansion of asset purchases than those made by the Bank of England during the pandemic might have been warranted. In particular, undertaking asset purchases during the period in which financial-market functioning was impaired (sometimes referred to as 'market maker of last resort' – see Tucker, 2009), and then unwinding purchases soon afterwards, is one approach to addressing such short-term market-functioning issues without a sustained change in the Bank of England's balance sheet. In fact, this is the approach that the Bank of England adopted during the 'LDI crisis' in 2022 when gilt-market functioning was adversely affected by impairment to the normal trading of some pension providers (Bailey, 2022; and Hauser, 2023). An even more nuanced argument is that the Bank was responding to the risk of a much worse downturn. Such a 'risk management' approach to setting monetary policy is explained by Evans (2015). The idea is that large future risks require a particularly aggressive monetary-policy response. It is certainly possible to view the Bank of England's response in that light, indeed such an approach was mentioned by policy makers during that period (see, for example, Saunders, 2020).
63. In short, monetary policy quickly reached its limits during the pandemic as it bumped up against constraints from low interest rates. That did not mean that the Bank of England was powerless to provide economic support, but it reduced its role to a secondary one, certainly relative to fiscal policy. Decisions taken by the Bank of England during this period have largely stood the test of time but there is an argument that it extended QE by too much and for too long, particularly given the supply driven nature of the impact of the pandemic.

### **Policy coordination**

64. A key question for the authorities was how to coordinate such a massive policy response – how did the Bank of England and Treasury combine to ensure that response was right and that fiscal and monetary policy were working together?
65. In normal circumstances, outside of major crises, independent monetary policy delegated to the Bank of England, and fiscal policy, undertaken by the government, is coordinated implicitly. This is achieved by taking fiscal policy decisions infrequently, with monetary policy – which needs to respond quickly to changes in the outlook – set taking fiscal policy as given.

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<sup>5</sup> This criticism has come from a number of sources, including a previous Bank of England Governor, see for example: <https://www.bloomberg.com/news/articles/2024-05-02/boe-s-pandemic-stimulus-to-blame-for-115-billion-in-qe-losses>.

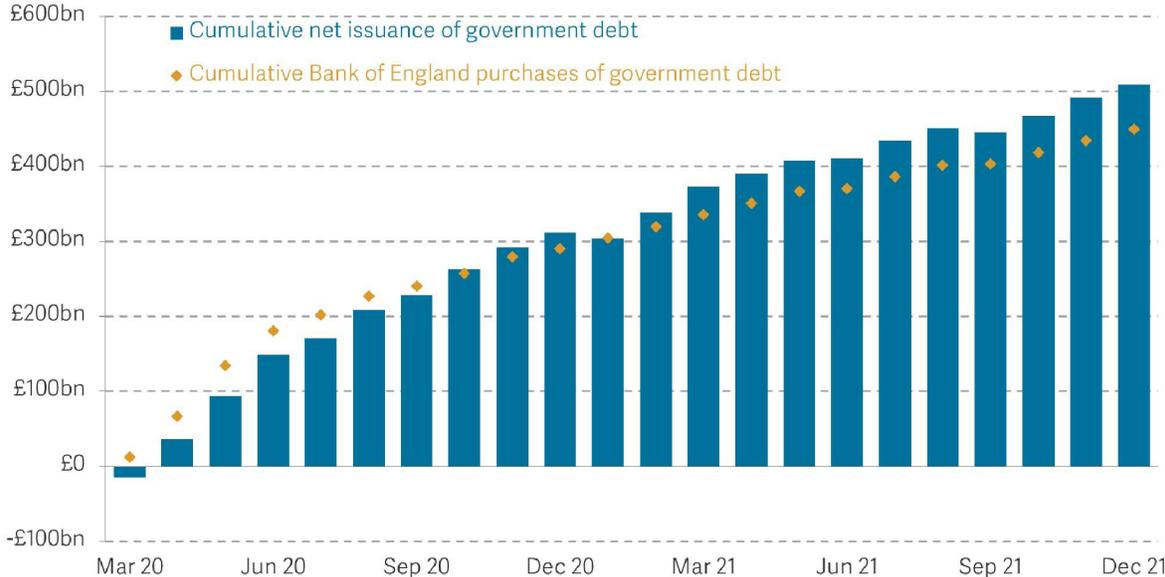
Fiscal policy, then, can be set knowing that the MPC will adjust its policy response accordingly. The resulting policy can be thought of as a tacit equilibrium between both monetary and fiscal policy makers.<sup>6</sup>

66. But in exceptional times, such as during the pandemic, this approach breaks down. Indeed, as discussed above, the Bank of England's role during the pandemic was a secondary one, supporting the government's fiscal response without jeopardising its independence or undermining its mandate (to deliver inflation at 2%, as set out in: HMT, 2020; HMT, 2021b; and HMT, 2021c). In previous recessions, monetary policy has taken the lead in supporting the economy (see Smith et al, 2019). But fiscal policy played the lead role during the pandemic by providing large-scale support to households and firms, given the sectorally differentiated shock to both supply and demand. The Bank meanwhile supported indirectly by helping the government to meet its temporary large financing needs in several ways. Most obviously, by maintaining an accommodative stance of monetary policy by keeping interest rates at their all-time low levels and continuing QE operations, consistent with its monetary policy remit. Indeed, as shown in Figure 9, the Bank's QE purchases ended up being of a similar order of magnitude to the government's sales of debt over the period as a whole, although there was a difference in timing. So while the Bank was not buying assets directly from the government (which would be monetary financing), it ended up acting in such a way that the net increase in debt issuance, that otherwise would have been bought by the private sector, was very small. At the same time the Bank was prepared to play the role of market maker of last resort if market functioning deteriorates, consistent with its financial-stability objectives, although in practice large-scale QE purchases made this unnecessary. And it also provided support to the government's debt management operations by providing temporary financing directly to the government in the event that the primary debt market is unable to mobilise the necessary liquidity quickly, for example through the 'Ways and Means' facility (for example of how this was used during the pandemic, see: Bank of England, 2020b).
67. In practice these policies were aligned by reversing the approach to coordination outside of such crises. In particular, fiscal policy effectively became the 'leader', with decisions taken frequently in response to changes in the circumstances presented by the pandemic. Meanwhile, monetary policy decisions effectively became a 'follower' as decisions were taken less frequently than usual (i.e. the target for asset purchases readjusted periodically during 2020, as discussed above). This institutional coordination was certainly reinforced by working-level information sharing between the Treasury and Bank of England (for an example, see: HM Government, 2020; for a discussion see: Tetlow and Bartrum, 2023).
68. While these two interventions are consistent with the Bank's core objectives, and so should pose relatively few risks to central bank independence, direct monetary financing – that is using money created by the Bank of England to fund fiscal policy – would have been both novel (at least in this century) and would have carried a perceived risk of a reduction in Bank of England independence. But such a situation never arose, although the Bank of England played a key role in ensuring that the government was able to finance spending as Figure 9 shows.

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<sup>6</sup> This type of coordination can be thought of as a repeated 'game' with two players: a leader (fiscal policy makers) and a follower (monetary policy makers). Such a game is analogous to a Stackelberg game – a setting in which two firms compete on quantity by making decisions sequentially (following the work of von Stackelberg, 1934).

**Figure 9: Cumulative monthly net issuance of government debt and net Bank of England purchases of government debt, March 2020 to December 2021: UK**



Source: Resolution Foundation analysis of DMO, Bank of England.

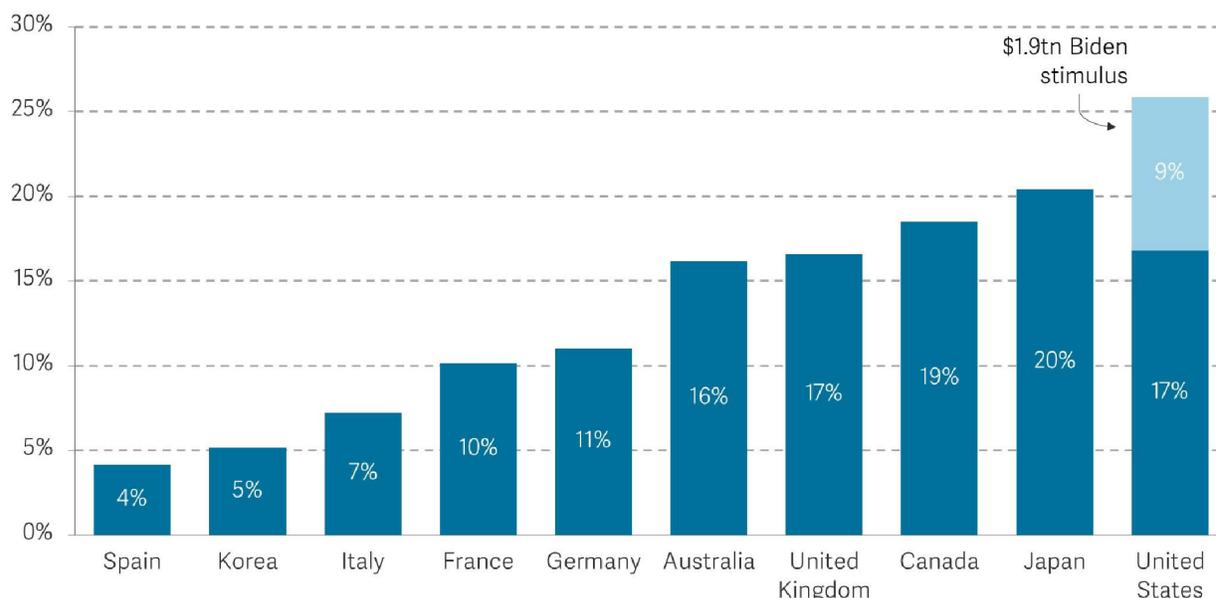
## Comparing the UK macroeconomic policy response to the pandemic with that in other countries

69. In this section I focus on what we can learn about the UK experience of the pandemic by looking at the experience in other countries. In doing so I make three key observations. First, while the UK's monetary policy response was similar to those elsewhere, the UK spent relatively more on fiscal support measures than peer (rich) countries. Second, despite that, the UK withdrew fiscal support earlier than elsewhere. And third, despite a strong initial recovery from the pandemic, the UK recovery has been incomplete, with the increase in GDP since the pandemic being smaller than in some peer countries.
70. The approach taken below is to compare measures of the policy actions taken during the pandemic across countries and their impact. The size of the policy response, its timing, and the relative size and duration of the hit to the economy from the pandemic are all discussed. In doing so, it's important to keep in mind that such a comparison is inherently dependent on the comparability of international data, which will inevitably not be total. Also, it is important to keep in mind the feedback from policy to economic outcomes. So, for example, it might be tempting to conclude that a country with relatively high pandemic spending but a good recovery did 'too much'. But such a conclusion would miss the extent to which policy prevented a much more severe outcome.

### **The UK's monetary policy response was similar to that in other rich countries, the fiscal policy was relatively large, although by no means the largest**

71. A key question in understanding the impact of the policies put in place during the pandemic is how the scale of the policy response compared with that elsewhere. That is relatively straightforward on the monetary policy side. Other major central banks also cut interest rates as far as possible, and expanded asset purchases to similar degrees. As discussed above, the low level of interest rates prevailing before the pandemic, and the nature of the crisis meant that the role for monetary policy was limited, playing a secondary role by supporting fiscal policy.
72. It is, however, more instructive to look at the fiscal-policy response. As shown in Figure 10, rich countries spent a considerable proportion of their national income on support measures. The measures in this chart lump together both spending and tax measures (to give total fiscal support) and are produced nationally by individual governments and so it is inevitably difficult to make exact comparisons. Nonetheless, the UK was towards the top end of rich countries that the International Monetary Fund (IMF) provides data for, although by no means the largest. Strikingly, UK spending was much higher than other European countries. The US stands out here with a very aggressive fiscal-policy which, as discussed below, continued long after other countries have started to retrench.

**Figure 10: Estimates of the size of fiscal support measures put in place during the Covid-19 pandemic as proportion of GDP: selected countries March 2020 to March 2022**



Notes: Only reflects 'Above the line measures' including additional spending or foregone revenues, but excluding loans, or contingent liabilities incurred as part of the policy response. Policy response as of December 2020, other than the proposed Biden stimulus package.

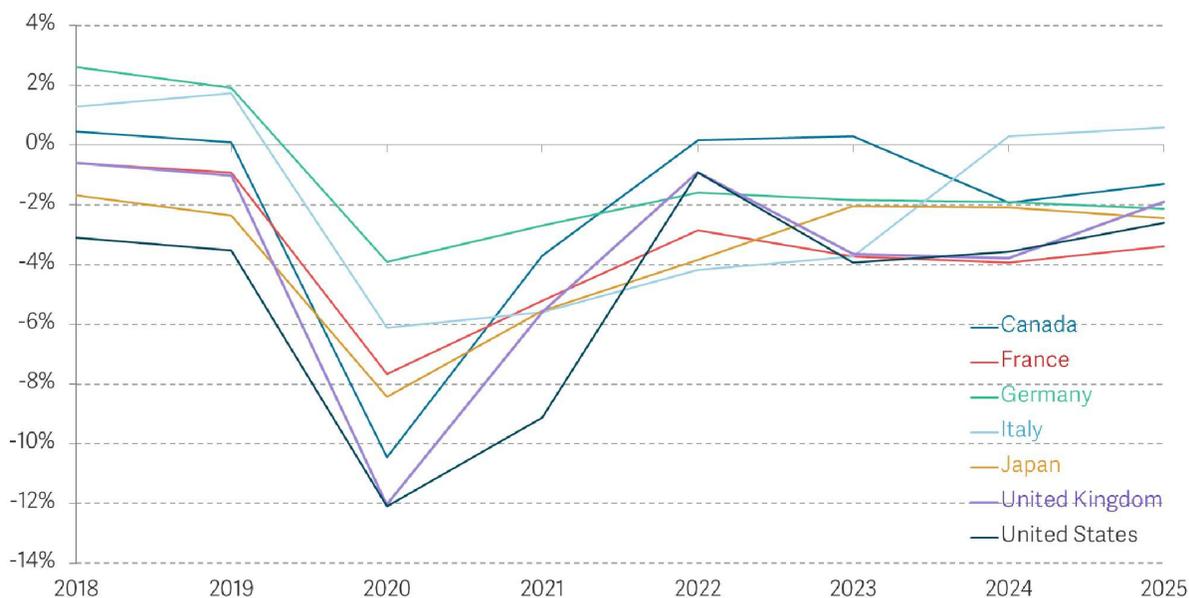
Source: IMF, Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic, January 2021.

73. There are a number of factors that pushed up the amount that the UK had to spend on its fiscal-policy response. As discussed in Hughes et al (2020b), high population density, relatively high reliance on consumer-facing services mean that we should expect the UK to have had a larger policy response. But, as set out above, there is evidence that lockdowns arrived later and were more stringent and more long-lasting than in other countries. This was the case during the initial lockdown in spring 2020, but it was also evident during subsequent lockdowns, for example in autumn of 2020. This seems likely to be at least partly conceptual: a failure to recognise that the source of the economic hit to the economy from the pandemic reflected the pandemic itself, rather than simply the social-distancing restrictions that were put in place as a response.
74. The other factor contributing to a relatively high cost of the UK policy response was shortcomings in our policy tools. As discussed in the previous section (and in Pittaway and Smith, 2023), limitations in the policy tools available at the time meant that support was more expensive than it needed to be. Most obviously, the self-employed were particularly difficult to support, meaning the government erred on the side of over-supporting that group, making it more expensive, and the fraud in the Covid corporate loans also added significantly to its cost.

**Despite this, the withdrawal of UK policy support started earlier than elsewhere**

- 75. It is not just the size of the macroeconomic policy response that matters, but also its timing. Again, on the monetary policy side, there was little to choose between either the policy rate timing, or that on asset purchase policy. Having cut rates rapidly in spring 2020, the Bank of England started to raise interest rates in December 2021. This timing is very similar to that of other major central banks, including the Federal Reserve and the European Central Bank.
- 76. On fiscal policy, the UK appears to have withdrawn support somewhat more quickly than in other countries. As discussed above, concerns about the impact of support measures on the public finances appears to have been a factor in decisions on health restrictions despite the trade offs between such health measures and the economy being overstated. So, there is a sense that the UK government was worried about the deteriorating fiscal position. This was also evident in measures taken to tighten fiscal policy. For example, at the Autumn Budget in 2021, tax increases were announced (see HM Treasury, 2021). And, as shown in Figure 11, the tightening in the stance of fiscal policy was quicker than for other countries. The UK moved from a general government (i.e. central government plus local authority spending) deficit of 12% of national income in 2020, the largest in the G7, before moving to a deficit of less than 2% of national income in 2022, the smallest in the G7 apart from Canada. While the US tightening followed a similar path, that is masked by the impact of the cost-of-living crisis on UK spending. Absent that, the stance of UK policy would have tightened much more quickly than any other G7 country in the aftermath of the pandemic based on the government’s plans at that time. This larger consolidation is likely to have weighed on growth over this period.

**Figure 11: General government primary borrowing as a proportion of national income: selected countries**

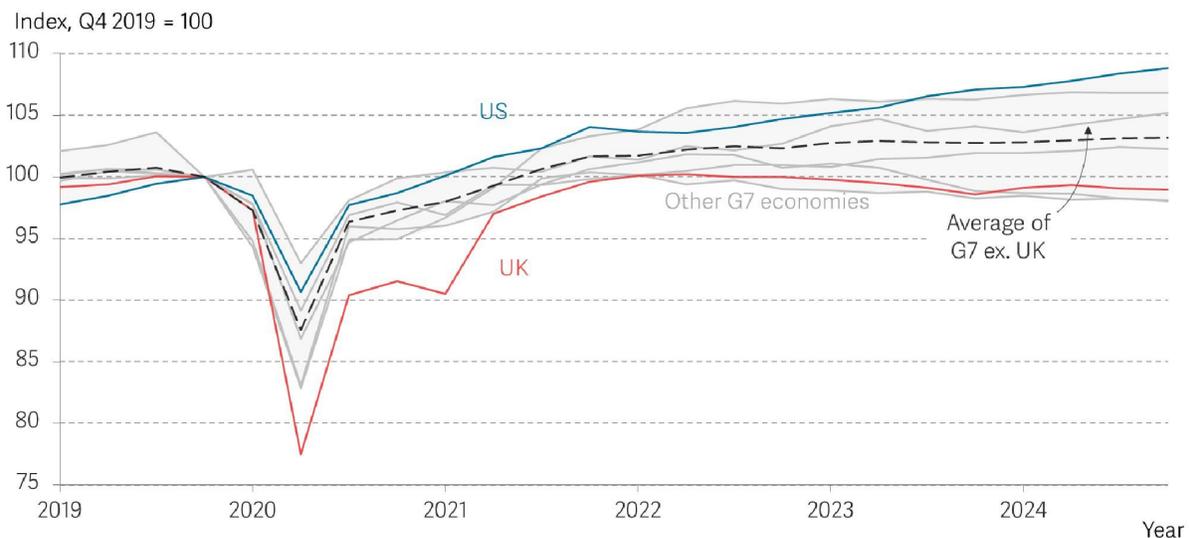


Source: IMF, World Economic Outlook database, April 2025.

**Despite a strong initial recovery, the UK has fared worse than other rich countries in terms of returning the economy to its pre-pandemic path**

77. In the context of assessing the macroeconomic policy response to the pandemic, it is helpful to consider our three policy phases: lockdown; reopening; normalising. As shown in Figure 12, the UK suffered the largest hit to headline GDP during this period during the second quarter of 2020, with the level of GDP falling by more than any other G7 country. Despite another sharp slowing in output following the return to lockdown in the autumn and winter of 2020, the subsequent recovery was among the quickest in the G7 with the level of GDP returning much closer to other countries in that group. Since then, however, the recovery has stalled with GDP remaining towards the bottom of the G7 pack and performance since 2019 comparable only to Germany and Italy, the other countries hit hardest during the period. The strength of the recovery of the US suggests that this was not an inevitable outcome, although it's important to bear in mind the impact of the huge rise in energy prices following Russia's invasion of Ukraine.

**Figure 12: Real GDP per capita since the pandemic (Q4 2019 = 100): G7 economies**



Note: For Canada, France, Italy and Germany, Q4 2024 population is estimated based on the previous quarter's growth rate; for Japan, Q4 2024 GDP is estimated based on the consensus forecast for GDP growth compiled by Bloomberg.

Source: Resolution Foundation analysis of OECD, Quarterly population and employment & Quarterly GDP and components; ONS, National Accounts; Bloomberg, Economic Calendar.

78. As mentioned above, the size of the initial economic hit can be rationalised to some degree by the UK's inherent vulnerabilities to the pandemic, but also by longer and more stringent lockdowns.
79. But the inability of policy to return the economy to anything close to a continuation of the path it was on before the pandemic suggests macroeconomic policy could have done a better job in driving a full recovery. Indeed, as discussed in Aref-Adib et al (2024), GDP was around 5% below its pre-pandemic path by the end of 2024. As set out above, the job for the

'normalising' phase of policy was to drive as rapid and complete a recovery as possible. Monetary and fiscal tools were available to policy makers to support families and firms throughout this period. It would have been possible to cut interest rates (or at least raise them by less), or to set a looser fiscal policy either through fewer tax rises or higher spending. That said, it is important to recognise that rising inflation during this period made this task substantially harder. Indeed, measures to support the real economy would have meant even higher inflation, making such a strategy difficult to implement. In that case, measures to support the desirable full recovery from the pandemic may have been postponed rather than neglected entirely.

## Conclusions and lessons from the UK's macroeconomic policy response to Covid-19

80. Macroeconomic policy in a pandemic like Covid-19 is quite different to that in 'normal' recessions. And the extreme challenges faced by policy makers during that period should certainly be taken into account: unprecedented times meant unprecedented policy was necessary. In that context, it is vital that we learn the lessons from this period and improve how policy is set during future pandemics.
81. But there is reason for thinking that macroeconomic policy could have done better during this period. The fact that the UK suffered larger falls in economic activity than comparable countries at the start of the pandemic, as well as our relatively weak recovery, at least suggest that there were several aspects of macroeconomic policy that could have been improved upon.
82. There is evidence that policymakers misjudged – at least to some degree – the nature of the economic hit from the pandemic. The relatively late, more long-lasting and severe lockdowns suggest that the trade-offs between health and economic outcomes were not completely understood in real time. That said, some of the criticism along these lines of the Bank of England's asset purchases during the pandemic is overdone as the Bank was clearly also concerned about the risks of financial instability in its decisions.
83. But while fiscal policy makers were prepared to spend large amounts supporting the economy, that has not translated into a complete economic recovery. The UK was among the largest spenders on pandemic support, although by no means the largest. But, despite that, the UK had the largest economic hit at the start of the pandemic. And even though the UK's recovery was initially among the fastest of comparable economies, this is partly a reflection of the larger falls in economic activity towards the start of the pandemic (and the severity of the lockdowns put in place). This can be rationalised by having some specific UK vulnerabilities. That said, the relatively weak recovery, particularly compared with the US, is disappointing and suggests that policy support was withdrawn too early, repeating mistakes made following the financial crisis.
84. This disconnect between high levels of spending and a relatively weak recovery can partly be explained by inadequacies in the fiscal tools available which limited the policy reaction and raised the cost of the response. The tools to provide *direct* support to firms and families – for example through direct payments – were simply not available. Moreover, the government lacked the policy tools to target support to the self employed directly, meaning that more needed to be spent there. That meant that ad-hoc tools needed to be developed – at pace – in order to support workers and provide lending to firms. The latter seems to have reflected the need for the government to come up with a way of trying to identify long-term viable businesses from information supplied by creditors (mainly banks). Eventually the government realised that the difficulties of doing this effectively meant that support would not reach struggling firms until it was too late. This led to the introduction of blanket support, opening the government up to large scale costs and, indeed, fraudulent claims, raising the cost. All this suggests that significant work should be done ahead of a future pandemic to make sure more targeted policies are available to policy makers in future economic crises. Fiscal policy tightening was put in place as early as Autumn Budget 2021. This was somewhat earlier than

in other countries with measures showing that fiscal-policy tightening during this period was the quickest in the G7. One reason for that appears to have been concerns about the state of the public finances.

85. Meanwhile some commentators have argued that the Bank of England was overly aggressive in its expansion of QE towards the start of the pandemic. The claim here is that this policy response fundamentally failed to recognise that the source of the fall in economic activity was coming from the supply side of the economy. And that the rise in longer-term interest rates and market dysfunction that created a risk of a substantial tightening in financial conditions necessitated a different sort of intervention – one that focused on providing ‘market maker of last resort’ services – a much more short-term and targeted intervention.
86. While more work is needed on this issue, it is important to recognise that temporary disruption to the supply side of the economy will also have important effects on demand. Given that, and the widely recognised failure of macroeconomic policy in withdrawing support in the aftermath of the financial crisis, makes the approach taken understandable. The risk in this context is that low levels of demand become entrenched in the recovery phase. And while QE policies are clearly an imperfect substitute for more conventional monetary policy (i.e. using short-term policy rates to influence other interest rates used by families, firms and financial markets), they are an important monetary policy tool when interest rates are close to zero and so cannot be cut any further.
87. Overall, the economic impact of Covid-19 was both unprecedented during the pandemic itself and has cast a longer shadow over subsequent economic performance than policymakers would have been hoping. It has revealed structural weaknesses in the UK’s labour market, social safety net, and public health infrastructure - and has reinforced the case for long-term investment in social and economic resilience. The challenge now is not only to recover, but to ensure that we are resilient to future shocks on that scale.

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