



Institute for Fiscal Studies

IFS Green Budget 2020: Chapter 3

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The cost of adjustment: emerging challenges for the UK economy



3. The cost of adjustment: emerging challenges for the UK economy

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Key findings

- 1 Brexit remains a substantial economic challenge for the UK. The options currently on the table appear to be restricted to only a thin trade deal or a no-deal exit. **We anticipate that the former case would leave the UK economy 2.1% smaller in 2021 than in a counterfactual where the transition period continues indefinitely;** a no-deal exit could see output depressed by an additional 0.5–1.0%.
- 2 The path that Brexit-related economic impacts take over the next 12–24 months will depend on when changes associated with the UK's exit from the Single Market and Customs Union begin to materialise, and the extent to which firms have already acted to improve their resilience. We think **the majority of Brexit-related adjustment lies ahead.** Weak sterling since 2016 has provided an incentive for many firms to maintain UK operations where they can, even if now unviable in the longer term. Low investment to date may reflect some long-term adjustment, but also reduces overseas firms' economic ties to the UK. Brexit-related adjustments could now therefore prove more front loaded.

- 3 **Both COVID and Brexit are likely to result in medium-term economic reconfiguration, as well as near-term disruption.** The UK labour market, in particular, has shown itself better able to adjust during previous downturns than other countries. Even so, the ‘double whammy’ of COVID and Brexit will make adjusting to the new normal a huge challenge.
- 4 **Adjustment to a post-COVID, post-Brexit new normal will have economic costs that last into the long term.** A rebalancing away from the consumer services sector (COVID) and some parts of manufacturing and financial/ business services (Brexit) would make much of the accumulated capital and skills in these sectors less valuable. For workers, the longer they remain unemployed, the worse their prospects in the labour market. This can have consequences that last for decades.
- 5 The economic response to COVID-19 has seen monetary and fiscal policy complement each other, as the Bank of England and the government both seek to support the economy. However, this complementarity is less assured in the medium term: **upward pressure on inflation (and particularly inflation expectations) could lead to the Bank tightening monetary policy even if fiscal policy still needs to remain loose.** The UK’s dependence on foreign credit remains a notable additional vulnerability. More fiscal support will likely be needed in the near term. But getting the public finances on a sustainable trajectory in the medium term is also now a key challenge.

3.1 Introduction

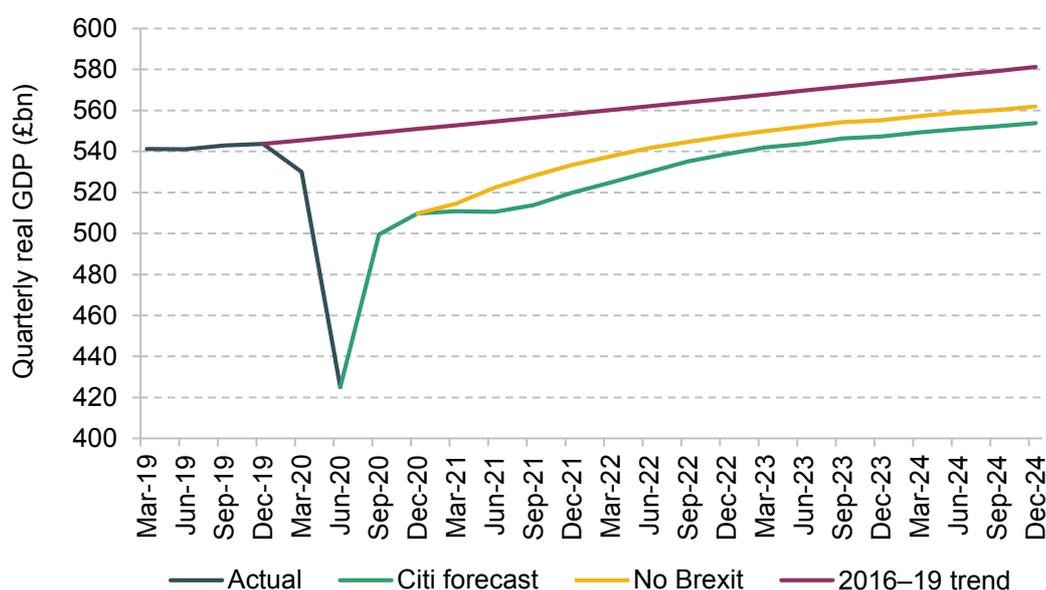
All indications are that the UK and the EU are on track to agree only a ‘thin’ trade deal (if any). This sort of agreement is unlikely to avert most of the adverse consequences for UK–EU trade associated with Brexit. Deal or no deal, the UK is therefore on track for substantial economic disruption after the end of the transition period on 31 December 2020.

By and large, the consequences of Brexit will be felt in different parts of the economy from the consequences of the pandemic. However, we think impairments associated with COVID are still likely to compound the near-term economic consequences of Brexit – weighing on both public and private preparedness as well as firm resilience. We expect additional Brexit-related disruption to leave output 2.1% lower in 2021 compared with a counterfactual scenario in which the UK remained in the Single Market and Customs Union. In a normal year, this would be sufficient to push the UK economy into a recession. While we expect some of these losses to be recovered over subsequent years, some permanent losses are also likely.

Both Brexit and COVID imply significant structural reconfiguration in the UK economy in the years to come. Brexit is likely to imply persistently lower trade volumes, even with additional trade agreements. The implication is that some of the sectors where the UK specialises (where exports make up a large share of economic activity) will become smaller, with an associated reduction in economic capacity. While at this stage only a matter of judgement, we also expect COVID to have similar – and indeed larger – long-term ramifications. We expect some permanent reductions in consumer services demand in the wake of the pandemic, for example, as more choose to work from home and cause a more permanent move of economic activity outside of major city centres. This would also imply a permanent write-down to certain, specific, capacity.

We expect output to remain 4.5–5.0% below its 2016–19 trajectory in 2024. We expect this gap to persist thereafter. As Figure 3.1 shows, this is equivalent to an annualised GDP loss of £109 billion in 2016 prices. Roughly 1–1.5 percentage points (ppt) of this effect is the result of permanent reconfiguration and additional write-offs associated with the UK's exit from the EU Single Market and Customs Union. While Brexit uncertainty has (as we noted last year) likely weighed on UK growth between 2016 and 2019, the additional impact from here reflects the confirmation of a more distant relationship with the EU than might have been previously expected and (as we discuss below) our view that most of the associated economic costs still likely lie ahead. The remaining 3–3.5ppt is the result of more permanent reconfiguration in the aftermath of COVID-19.

Figure 3.1. UK real quarterly GDP in various policy scenarios (2016 prices)



Note: GDP is calculated as a chained value measure. The OBR-EFO reference scenario is derived from tables 2.3 and 2.7 from the March 2020 Economic and Fiscal Outlook.

Source: ONS, OBR and Citi Research.

This degree of economic pain implies that policy support is likely to remain necessary well into 2022. With monetary policy constrained, fiscal policy will continue to carry the primary burden. For now, fiscal and monetary policy are working in harmony to support the economy: as Chapter 5 discusses, the prospect of low inflation for some time to come means that the Bank of England is expected to keep monetary policy loose for the next few years. But in the medium term, such support is clearly not guaranteed: despite the subdued outlook for overall growth, broader economic reconfiguration could put upward pressure on inflation expectations in particular. This could risk a tightening of monetary policy, even before the economy has recovered to potential.

In the longer term, both COVID and Brexit constitute risks not just to the level of output, but to potential growth rates. Weak productivity has been the UK economy's 'Achilles heel' since the financial crisis. Labour productivity in the UK is already estimated to be 20% below its pre-financial crisis trend, an economic collapse not seen for at least 250 years (Crafts and Mills, 2020). However, we think it could get even worse. Lower levels of economic openness now pose additional downside risks, since the UK will be less exposed to competition from international

firms. Similarly, agglomeration economies in major urban centres tend to boost not just the level of productivity, but also the rate of productivity growth. These too may now prove less potent in a post-COVID world. However, potentially the largest impact could come via lower rates of immigration and reductions in hours worked. We expect net immigration rates to fall substantially over the coming years as the government implements its new ‘points-based’ immigration regime. This, we think, risks weighing further on potential growth.

The persistent economic impact of the current crisis means that the UK will at some point almost certainly need fiscal consolidation in the form of tax rises or spending cuts to bring down its deficit and prevent debt from growing unsustainably (see Chapter 4). Downside risks to potential growth make this even more urgent as they could increase the risk that fiscal policy is deemed to be on an unsustainable path. The UK’s relatively large dependency on foreign capital increases the risk here, especially in the event of another crisis. This could make it harder for the Bank of England to loosen policy and (indirectly) protect fiscal space in the process.

Below, we begin in Section 3.2 by discussing the outlook for the economy as the UK leaves the EU Single Market and Customs Union at the start of 2021. In Section 3.3, we discuss the outlook for UK output in the medium term as the structural consequences of both Brexit and COVID materialise. In Section 3.4, we provide some tentative initial thoughts on how both Brexit and COVID may impact growth in the longer term, before turning to the outlook for monetary and fiscal policy in Section 3.5.

3.2 Brexit: economic adjustment still lies ahead

Four years and two general elections have passed since the 2016 EU referendum. However, little in the rules governing the UK’s economic relationship with the EU has actually changed. As the UK leaves the Single Market and Customs Union at the end of 2020, Brexit will – economically speaking – ‘go live’. In principle, workers and businesses have had several years to adjust their business models in anticipation. But in practice, as in the experience of New Zealand when the UK

joined the European Economic Community in 1973,¹ we think the UK economy has actually adjusted relatively little to the new economic relationship with the EU. The UK economy therefore faces another sharp economic adjustment at the start of 2021, even as the wider economic impacts of COVID continue to materialise.

What can be agreed?

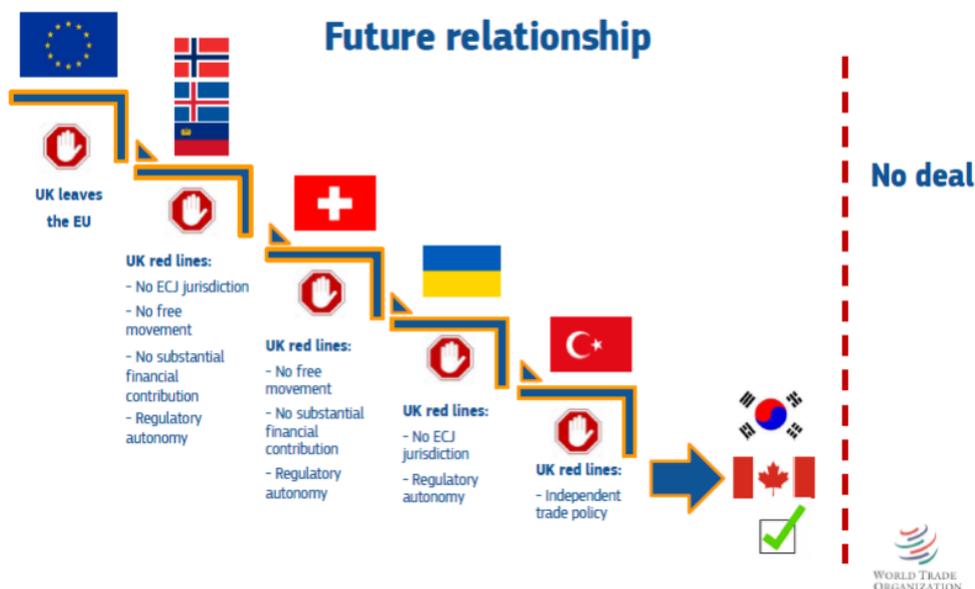
Deal or no deal, substantial economic disruption in early 2021 is now likely unavoidable. Most of the costs associated with Brexit are the result of ‘non-tariff barriers’. These fall outside of the scope of conventional trade agreements (unlike the EU Single Market). However, since the 2019 general election, any more ambitious relationship has been ruled out. The amended political declaration (October 2019) dropped previous suggestions of a ‘single customs territory’, ‘regulatory alignment’ and a deal on trade in goods that was ‘as close as possible’ (Owen, 2020). Instead, these were replaced by the aspiration of an ‘ambitious free trade agreement’. Even the best-case scenario has therefore become firmly anchored at the bottom of the set of ‘stairs’ that EU chief negotiator Michel Barnier outlined in 2017 (see Figure 3.2).

Developments since have further compressed the range of potential economic outcomes. Two factors have been key here. The first was the rejection over the summer of any kind of extension to the transition period. The subsequent tight negotiation timetable precluded a broader change of heart as well as a closer agreement. It also undermined hopes of meaningful talks in a range of ancillary areas, such as customs facilitation or equivalence, that could have alleviated near-term disruption associated with a deal.

Second, and more significant, was the UK’s rejection of widespread ‘level playing field’ requirements set out by the EU at the beginning of the negotiations. The political declaration required the UK sign up to commitments ‘commensurate with the scope and depth of the future relationship’. The EU’s initial negotiating mandate set out demands for so-called ‘dynamic alignment’ in a range of areas such as labour and environmental standards, as well as state aid. This would have

¹ Commonwealth countries lost their preferential access to UK markets in 1973 following the UK’s entry into the EEC. New Zealand offers a case study. See box 2C of Bank of England (2018).

Figure 3.2. Trade-offs between access and continued alignment in a potential Brexit deal



Source: European Commission: slide presented by Michel Barnier to the Heads of State and Government at the European Council (Article 50) on 15 December 2017.

committed the UK to ensure its own regulation remained in lockstep with the EU in future across these areas.

The UK government has pushed back hard against such requirements. In its initial position paper in February 2020, the government noted it opposed ‘any obligations for our laws to be aligned with the EU’s’ (HM Government, 2020). Subsequent negotiations have seen the EU water down its demands. The EU is now reportedly seeking assurances on state aid only, as well as a handful of non-regression clauses in other areas. The issue is now reportedly whether the UK can agree to a shared ‘set of principles’ on subsidies, an associated domestic regulator with the power to enforce them, and a robust dispute resolution mechanism. This is substantially more limited than EU demands at the start of 2020.

These (EU) concessions have likely come at a cost of ruling out a more ambitious agreement and greater EU market access for the UK. We think the reduced scope of an agreement has been evident in EU communications since both sides agreed to this narrower approach on 15 June. For example, the European Commission communication on 9 July seems to rule out customs facilitation, as well as the mutual recognition of professional qualifications (European Commission, 2020).

Both were often assumed elements of a future trade deal. This more threadbare approach, in our view, also rules out other potentially important provisions within a free trade agreement itself. This includes provisions such as a so-called ‘model 4’ agreement on trade in services, which makes it easier for individuals to travel into another jurisdiction for the purpose of providing a service. Similarly, we also do not expect more accommodative provisions with respect to rules of origin² – this seemed to be confirmed in recent weeks when the EU rejected UK proposals to treat Japanese and Turkish intermediate imports as British for the purposes of UK exports to the EU.

This may have important implications for the prospect of any further future deals over the coming years. First, as the UK works to secure trade agreements with third countries, the future of UK institutions and regulation is likely to remain in flux. We think this will make the EU reluctant to grant much wider access in the absence of sweeping guarantees. Second, the loss of trust between the UK and the EU during the negotiations – not least as a result of the UK’s decision to contravene the Withdrawal Agreement – may also mean future negotiations take place in a climate of mutual suspicion. The focus on negotiating only one or two very specific commitments, compared with more sweeping regulatory alignment, also risks compounding the impact here, heightening EU suspicion. Third, and more fundamentally, the fact that the UK is looking to diverge from the EU, rather than converge, also means that some of the usual political imperatives resulting from growing interdependence apply less strongly. This, again, suggests the lack of material and sweeping commitments may have a more lasting impact.

At the time of writing, we continue to think a deal is more likely than not by the end of 2020. However, the important point for the economic outlook from here is that the range of potential outcomes associated with Brexit has narrowed significantly. Less-disruptive options such as a customs union and/or continued membership of a single market have been incrementally ruled out. The plausible deal that remains is

² Rules of origin are the criteria used to govern the national source of a product. They are important as they govern which goods exports (for example) by the UK to the EU are actually eligible for a tariff reduction under the terms of a free trade agreement. Most rules of origin requirements require that more than 50% of the value of that good has to have been produced in the country in question to be eligible. In the UK–EU deal, we expect similar conditions to apply. We expect some provisions on cumulation, meaning that intermediate goods imported from the EU to the UK and re-exported back to the bloc count as ‘British’ for these purposes. However, we do not expect such provisions to apply to goods imported from elsewhere, even when the country has a tariff-free agreement with the EU (as Japan does, for example).

– in a direct economic sense – now much closer to ‘no-deal’ than, say, former Prime Minister Theresa May’s ‘Chequers’ proposal in 2018.

The scale of potential non-tariff barriers

In the near term, the primary costs of Brexit are likely to come via an increase in non-tariff barriers and the resulting reductions in trade. In 2018, the Bank of England estimated around 80% of the total reduction in trade associated with Brexit would result from such restrictions (Bank of England, 2018). In total, we think additional barriers to UK trade with the EU are now likely to total 9% in tariff-equivalent terms even in the case of a deal. In the event of no-deal, we think the total impact could be as high as 13%. The additional 4 percentage point impact reflects first the impact of tariffs, but also some additional non-tariff barriers associated, in particular, with the transfer of personal data and equivalence processes for the financial sector.

But, deal or no deal, the vast majority of the associated trade frictions now seem likely to materialise. The flipside of this is that the UK is now also likely to enjoy most of the additional domestic policy freedoms that would be available under a ‘no-deal’ scenario – providing wider policy discretion in the longer term.

Our estimates for non-tariff barriers are a little higher now than the 2018 analysis conducted by the Treasury (see Table 3.1). This reflects two changes to any agreement compared with what was assumed then. First, as we noted above, we think UK service providers are now unlikely to benefit from a model 4 services agreement, inhibiting the ability of UK citizens to travel to the EU in order to provide a service. Second, UK-based professionals seem unlikely to benefit from

Note and source for Table 3.1

Note: All non-tariff barriers are denoted in tariff-equivalent (%TfE) terms. EU tariffs are from the bloc’s ‘most favoured nation’ schedule. More granular analysis suggests these costs may actually be a little higher (the Office for Budget Responsibility (OBR) has estimated costs of around 3.3%). Rudimentary deal and no-deal columns denote total new UK–EU trade frictions. Data for non-tariff barriers in the event of a Treasury free trade agreement (FTA) and no-deal are taken from the Treasury’s (2018) long-term Brexit analysis. For no-deal, we use our own * figure for the financial sector assuming a less accommodative approach to equivalence than initially assumed by the Treasury.

Source: ONS, HM Treasury (2018) and Citi Research.

Table 3.1. Sectoral exposure to a rudimentary Brexit deal

	GVA share (2017)	UK–EU trade	% of trade with EU	Non-tariff barriers			EU tariffs (%)	Rudimentary deal (%)	No-deal (%)
				Treasury FTA (%TfE)	No-deal (%TfE)	Citi 2020 FTA (%TfE)			
Manufactured goods	9%	£138bn	49%	8%	10%	8%	3%	8%	13%
Agri-food	2%	£17bn	74%	13%	15%	13%	20%	13%	35%
Non-financial services	60%	£265bn	51%	9%	12%	10%	0%	10%	12%
Financial services	7%	£35bn	38%	13%	15%*	13%	0%	13%	15%
Networks	8%	£68bn	49%	5%	9%	7%	1%	7%	10%
Dwellings	14%	-	-	-	-	-	-	-	-
Total			50%	9%	10%	9%	2%	9%	13%

Note and source: See previous page.

EU recognition of professional qualifications: an EU Commission communication on 9 July suggests that this is unlikely to be agreed, meaning UK nationals will have to ensure their qualifications are recognised by each respective member state (European Commission, 2020).

The timing of non-tariff barriers

Non-tariff barriers can be ‘at the border’ measures such as customs checks. These also include regulatory barriers, registrations and product standards (so-called ‘behind the border’ requirements). These costs may materialise at different speeds: while the cost of additional customs restrictions on UK exports to the EU, for example, will apply from day one, some other costs – such as regulatory divergences – will accumulate over time.

We think most of the costs associated with Brexit are likely to prove relatively front-loaded, implying greater economic disruption in 2021. Outside of manufacturing, most of the additional regulatory burdens we highlight in Table 3.1 apply from day one – for example, new rules on the recognition of professional qualifications, new licensing requirements, and limits on travel and selling services into the bloc.

Within manufacturing, some of the regulatory costs may accumulate gradually – for example, those associated with different regulatory regimes (around a third of the total). But even here, the majority of non-tariff barriers are likely to apply immediately. UK officials estimate the cost to UK companies of filling out customs declarations alone, for example, could come to £7 billion a year.³ Other immediate costs, such as the requirement to re-register as an authorised economic operator and to re-apply for the appropriate licences in order to export, will also be significant for many firms. Ciuriak et al. (2015) estimated administration costs alone could come to roughly 0.3% in tariff-equivalent terms. These are mostly one-off costs, but they are also likely to fall in 2021.

Lower levels of government preparedness in the wake of COVID risks compounding some of these near-term economic costs for firms. The management of and response to the pandemic have clearly – and rightly – occupied much of the

³ <https://www.ft.com/content/fbc6f191-6d69-4dcb-b374-0fa6e48a9a1e>.

government's time and attention over the past six months. But while this has been vital, it has inevitably detracted from the government's Brexit preparations. Even before the start of the outbreak in the UK, the Institute for Government noted that the government would find it practically challenging to get the necessary Brexit-related infrastructure in place quickly (Owen et al., 2020). The pandemic has made this harder still.

In response, the government is considering some measures to reduce the scale of the challenge. It is reportedly planning to revert to minimal checks on imports during the first six months of 2021 regardless of whether a deal is agreed (implementing a Transitional Simplified Procedure regime initially created for no-deal). Imports may be less severely affected than exports initially as a result – though this would actually worsen the impact on GDP (via net trade). However, soft-touch checks on imports will not be a silver bullet to avoid disruption: since much of the freight industry depends on two-way flows of goods, hold-ups to UK exports at the EU border will have an impact on UK imports as well. At the very least, this would imply a substantial increase in freight costs.

These knock-on effects of border disruption (such as traffic jams or hold-ups to lorries travelling back and forth) imply more general risks to trade at the start of 2021, and an associated increase in costs. The UK needs to significantly expand its own infrastructure to process customs exit declarations and clear consignments. There are challenges associated with 'roll-on-roll-off' trade in particular. The UK government is developing a new Border Operating Model ('BOM') IT system to manage these flows, but time is tight. Failure risks clogging up the border through the new year, resulting in larger delays and more costs for exporters and importers alike. The likelihood of some additional disruption in early 2021 also implies a somewhat front-loaded profile to the costs of the UK's exit from the Single Market and Customs Union. Some of these costs would likely ease subsequently.

There is still a risk that some barriers could materialise sooner than we expect. Recent commentary suggests growing risks for business and finance in particular. In the first case, data adequacy is a notable potential stumbling block: without 'data adequacy' status certifying that the UK's data protection rules are comparable to those in the EU, companies will not be able to freely pass personal information between the jurisdictions. In the latter case, it is not at all clear that the UK's financial sector will enjoy the sweeping equivalence-based access we currently assume (which could entail the EU accepting UK regulations as largely equivalent

to EU ones, meaning that businesses would not need to comply with the EU regulations to operate there). With some EU countries now viewing the UK as an ‘economic competitor’,⁴ barriers in more strategically sensitive areas could emerge somewhat faster, and prove larger, than we currently think. The challenge is that these are often sectors in which the UK also enjoys a comparative advantage.

The timing and scale of adaptation to come

A key question regarding the economic costs of Brexit is the extent to which UK businesses have used the time since the Brexit referendum to prepare themselves for a new, looser relationship with the EU. There are two questions here:

- First, to what degree have firms dialled down activity that could now be more expensive as a result of the UK’s exit from the Single Market and Customs Union?
- Second, to what degree have firms readied themselves for the additional administrative costs of operating outside of the EU?

Clearly, some businesses will have used the last four years to prepare. However, in both respects, we think substantial challenges lie ahead. Indeed, some of the trends since 2016 point to the economy becoming more susceptible to immediate disruption over the coming months. Specifically, we think many firms have not been able to brace themselves for the coming disruption owing to the effect of COVID. In addition, we think the weakness of sterling has meant many firms have chosen to keep activity open since 2016, even if it will become unviable after the UK leaves the EU Single Market and Customs Union.

The role of weak sterling

Since 2016, the 20% depreciation of sterling has boosted growth, and profitability, in economic sectors more exposed to Brexit. Across the UK economy, there are some goods and services that are considered ‘tradable’ (such as cars or some financial services) and others that are not (such as real estate activities). The distinguishing feature is whether the good or service could be provided by a firm in another jurisdiction. Among tradable groups, the ‘law of one price’ generally applies, in that there is a global price for the good or service in question. When the

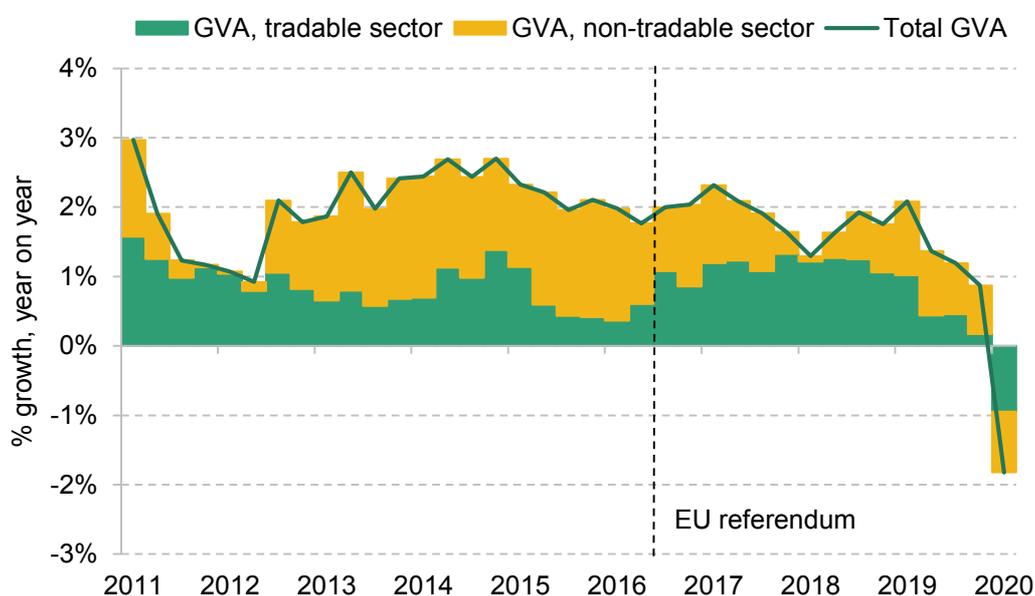
⁴ <https://www.politico.eu/article/uk-to-become-economic-competitor-after-brexit-merkel-warns/>.

currency depreciates, prices in this part of the economy subsequently increase (since it costs more in sterling to meet the global price). Domestic firms producing these goods and services suddenly enjoy an advantage, as the value of their goods and services (in sterling terms) increases.

Since 2016, the 20% depreciation in sterling has significantly boosted prices in the tradable sector. However, this change in the exchange rate has not been accompanied by any of the actual changes in the UK's external relationships (and associated costs) that the exchange rate shift was supposed to reflect and offset. The net result has been a notable jump in profitability in the tradable part of the economy. This has boosted growth. Figure 3.3 shows that, since 2016, the tradable sector has subsequently driven a disproportionate share of growth in the economy.

Different parts of the tradable sector have both positive and negative exposures to Brexit. Theory predicts that higher post-Brexit barriers will hurt some companies

Figure 3.3. Year-on-year growth in gross value added (GVA) of the tradable and non-tradable sectors



Note: Tradable and non-tradable sectors derived using ONS supply and use tables across two-digit SIC industrial classifications. The total imports plus exports are divided by the sector's GVA to obtain a traded share for each sector for 2015. A 10% threshold is then used to delineate between tradable and non-tradable sectors (Betts and Kehoe, 2006; Broadbent et al., 2019).

Source: ONS and Citi Research.

and sectors in some parts of the tradable sector (where the UK has a comparative advantage relative to the EU) but could help others (where domestic firms had been struggling to compete with European companies). In the latter case, there is evidence of higher growth since 2016 as a result of sterling's depreciation. Year-on-year growth in food manufacturing, for example, was above the average across the whole economy in all but one quarter between 2016 Q2 and 2019 Q1. This could indeed reflect some of the positive economic impacts from Brexit beginning to materialise, with weaker sterling providing these firms with a cost advantage over their EU (and indeed other global) competitors.

However, these effects also seem to have boosted profitability and growth in areas that are now likely to be adversely affected by Brexit. In these areas, the substantial depreciation in sterling compared with the Euro has generated a significant cost incentive to keep activity in the UK as long as EU market access has remained unchanged. Given the transitory nature of the boost, firms may still have avoided new investment and other long-term commitments, but we think these incentives have stopped firms from divesting, precluding anticipatory adjustments and in some cases potentially driving additional hiring too.

Looking forward, this means that, while depreciating sterling may have already delivered some of the potential growth *benefits* associated with Brexit, we do not think it has done the same for the larger set of *costs*. Instead, we think many of the associated divestments and losses still likely lie ahead.

Uncertainty, investment and the rate of adjustment

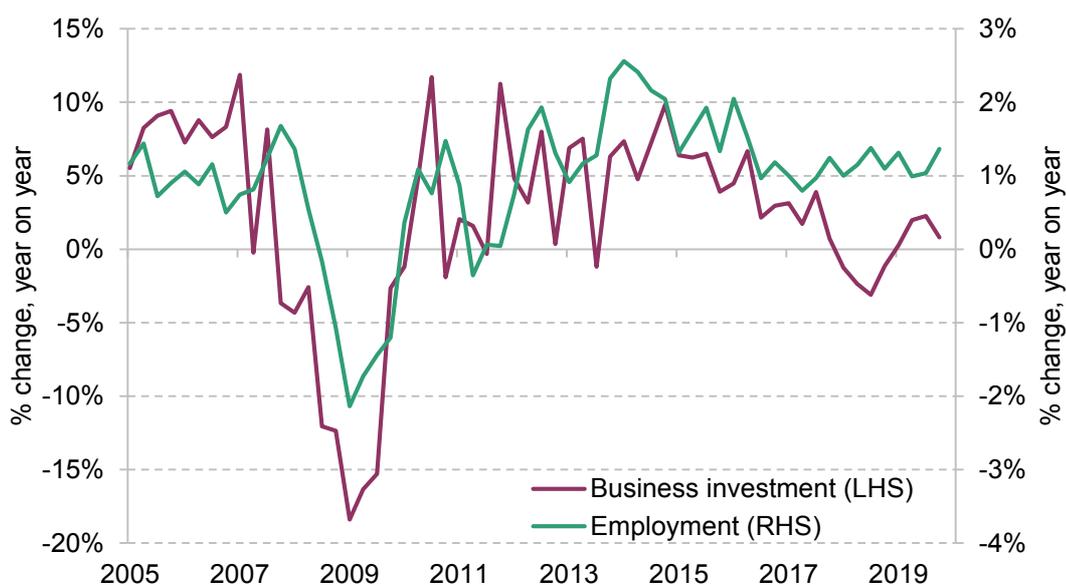
As we noted in last year's Green Budget, high levels of uncertainty have weighed significantly on business investment in the UK since 2016 (Nabarro and Schulz, 2019). These effects have generally been concentrated in some of these tradable sectors – and particularly those at the greatest risk of being adversely affected by Brexit. Data from the Bank of England Decision Maker Panel survey, for example, have shown that weak investment has been concentrated in those areas of the economy that are likely to be more adversely affected by Brexit (Bloom et al., 2019). In this sense, some of the longer-term adjustments in capacity may have begun to materialise (though by no means all).

However, for the near-term outlook, the decision to delay or cancel physical investments in the UK also increases the risk that businesses now respond quickly to the new trading relationship once the transition period has ended. The lack of

spending on physical investment has the effect of loosening the economic ties between firms exporting to the EU and the UK economy itself. If firms maintain significant investments in the UK associated with exports to the EU, they would likely take longer to respond to the new trading relationship – instead seeking to make the most of their existing sunk costs. The fact that firms have now dialled down such investment could mean a more sudden adjustment. For the near-term outlook, this now increases the risk of more sudden divestments.

Some of these risks may be particularly marked for the labour market. In response to higher levels of uncertainty, many of the most-exposed sectors seem to have focused on hiring in lieu of investment (see Figure 3.4). As discussed in last year’s Green Budget, there are fewer irreversible costs associated with hiring than with physical investments, so the former is preferable in a context of high uncertainty (Nabarro and Schulz, 2019). But the end result is that some of the sectors that might be most exposed to Brexit-related disruption have been boosting employment over the last few years, leaving more workers potentially exposed to sudden changes as the transition period ends. The UK labour market is likely to be weakened as a result of the pandemic. These dynamics suggest another significant additional risk. We expect unemployment to peak at 8–8.5% in 2021 Q2 (see Chapter 2).

Figure 3.4. Change in employment and business investment growth (% year on year)

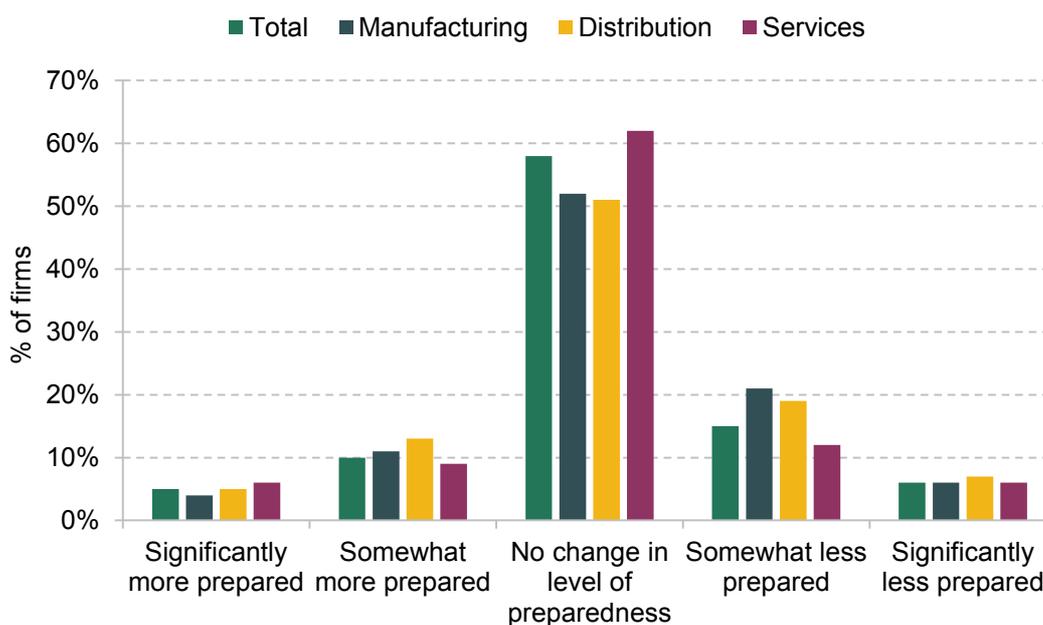


Source: ONS and Citi Research.

The complication of COVID-19

We think the pandemic is also likely to have weighed on business preparedness, risking greater economic disruption and potentially more firm failures in early 2021. Recent survey evidence, summarised in Figure 3.5, suggests stalling progress on Brexit preparations over 2020 as managerial time and capital have been dedicated towards managing the COVID outbreak. A survey from the Institute of Directors in mid–late June found that only 24% of firms claim that they are fully prepared, 19% saying they are somewhat prepared but intend to do more, and another 45% saying either they remained fully focused on the COVID-19 pandemic for now or planned only to address Brexit once the future relationship was clearer.⁵ The Bank of England’s Decision Maker Panel survey also suggests little progress

Figure 3.5. Firms’ level of Brexit preparedness in summer compared with January 2020



Note: The CBI’s July surveys were conducted between 25 June and 15 July 2020. 752 businesses responded.

Source: CBI and Citi Research.

⁵ <https://www.iod.com/news/news/articles/IOD-figures-on-firms-Brexit-readiness>.

on average over the summer months, likely well behind what might have been hoped given the imminent end of the transition period.⁶

Forecasts for the economic impacts of Brexit

From here, we expect Brexit to provide something of an economic boost in 2020 Q4. Imports and inventories on both sides of the Channel are likely to pick up as firms stockpile key resources in the run-up to the end of the transition period. In the process, these trends may boost UK industrial production and GDP growth.

However, we expect these effects to prove somewhat more muted this time than they were before the last Brexit deadline in October 2019. For one, inventory levels in the UK are already relatively high – providing some existing protection against trade disruption.⁷ The costs of stockpiling are likely to be higher than, for example, in 2019 Q1 or Q3 (before the previous two Brexit deadlines) owing to limited warehouse space in the run-up to Christmas. Dramatic increases in volumes of online shopping in the wake of the pandemic suggest these effects may be even more severe than in 2018 or 2019 (Marshall, Jack and Etherington, 2020). Some EU firms may have also already reconfigured their supply chains away from the UK since 2019, meaning that they will have less of an incentive to stock up on UK goods and so reducing any potential export (and GDP) boost. Finally, Brexit preparations have previously tended to eat into working capital (Bank of England, 2019). In the aftermath of COVID, with revenues depressed and debt elevated, some businesses might now be constrained in their ability to finance higher inventories.

We expect the new barriers between the UK and the EU to subsequently weigh sharply on trade in 2021 Q1.⁸ Exports, we think, will likely be more severely

⁶ <https://www.bankofengland.co.uk/decision-maker-panel/2020/august-2020>.

⁷ CBI's Industrial Trends Survey.

⁸ As discussed above, we expect much of the disruption to be felt immediately after the end of the transition period. While the benefits of joining a trading area emerge over roughly a five-year period, we expect the costs of leaving one to be felt much more quickly. Lower trade barriers are a necessary but not sufficient ingredient for higher trade volumes; while firms might be slower to build the new supply chains needed to take advantage of lower trade barriers, higher trade barriers will weigh on their decision-making much more quickly. Our view that the impacts of leaving a trading area are felt more quickly is also consistent with (albeit limited) international evidence, such as the divergence in trading relationships between the UK and New Zealand in 1973. In the UK's case, these effects are compounded by front-loaded costs, lower investment and lower firm resilience – as we discuss above.

affected than imports initially. This primarily reflects the UK's decision temporarily to take a more light-touch approach to customs barriers to imports than the EU. The disproportionate hit to exports is likely to weigh on the trade balance and GDP in 2021, though some of these imbalances may be unwound over subsequent years as UK barriers to imports are gradually implemented. We currently expect net trade to deduct 1.5ppt from growth in 2021, but add 0.6ppt in 2022. These effects come in the context of severely depressed import and export volumes in 2020 (which mean that net trade accounts for a smaller share of GDP). We expect exports and imports to lag their 2018 level respectively by 7.4% and 7.0% below in 2021.

We expect the reduction in export volumes to have two additional impacts on the economy. First, as we noted above, we expect a small but significant hit to employment, and a further hit to consumption. Second, we expect a substantial write-off to capacity specific to EU value chains. We expect this latter effect to be concentrated within the manufacturing and business services sectors in particular. While gross business investment may pick up in 2021, we think a substantial increase in write-offs will mean that net investment (which is what contributes to GDP) will remain relatively subdued. After falling by 16.5% in 2020, we expect business investment to grow by just 4.1% in 2021 before recovering more strongly in 2022 and 2023.

COVID further risks compounding these losses in 2021. While the most severe effects of the pandemic will be felt in different sectors from those most affected by Brexit, no part of the economy has emerged unscathed from COVID (see Chapter 2). With solvency deteriorating, firms are now more vulnerable to additional cash-flow disruption. Alongside lower preparedness (see above), this leaves firms more vulnerable. Those sectors of the economy more exposed to Brexit – such as manufacturing – also tend to have lower levels of cash reserves compared with their usual level of turnover (Saunders, 2020). In 2019, credit conditions also seemed to tighten somewhat among those firms more exposed to the fallout of Brexit (Bank of England, 2019). If repeated, these factors could risk a significant number of firm failures.

All combined, transport, distributed services and manufacturing appear more exposed; as Table 3.2 shows, these sectors have a greater share of EU exports, but lower levels of preparedness and smaller cash buffers. Overall, in the event of a thin trade deal, we expect output in 2021 to be roughly 2.1% below where it would have been if the UK had instead chosen to remain in the Single Market and Customs

Union; even by the end of the forecast horizon (2024 Q4), we expect a substantial gap of 1.4% to remain.

We expect a thin trade deal would push up inflation slightly over the coming years. Around 13% of the CPI basket is imported directly; another 7% is indirectly imported. In the event of a deal, we expect import prices to increase by around

Table 3.2. Indicators of Brexit exposure by broad sector group

	GVA share (2017)	% trade with EU (2017)	Rudimentary deal: new barriers (%TfE)	% 'very concerned' about the end of transition	Corporate cash deposits (divided by turnover)
Manufactured goods	9%	49%	8%	36%	3.1
Agri-food	2%	74%	13%	-	-
Non-financial services	60%	51%	10%	35%	3.7
Financial services	7%	38%	13%	-	-
Networks	8%	49%	7%	26%	1.7
Dwellings	14%	-	-	-	-
Total		50%	9%		

Note: '% "very concerned" about the end of transition' taken from CBI survey of non-financial firms (conducted 25 June and 15 July; n=752). 'New barriers' reflect Citi estimates of non-tariff barriers in the event of a rudimentary deal – expressed in 'tariff equivalent' terms (see Table 3.1). 'Corporate cash deposits (divided by turnover)' taken from Saunders (2020). Transport is included in non-financial services.

Source: CBI, ONS, Saunders (2020) and Citi Research.

3.5% over 2021.⁹ Traditional rules of thumb would imply inflation (as measured by the Consumer Prices Index, CPI) to increase by around 1–1.5% cumulatively over the subsequent three years.

The additional costs of a ‘no-deal’ Brexit

As we noted above, we think most of the direct economic costs associated with Brexit are likely to materialise whether the UK leaves with a thin trade deal or with no deal at all. But leaving the EU without any deal at all would still impose additional costs, mostly via sentiment. For the economy as a whole, additional uncertainty and expectations of a more acrimonious medium-term UK–EU relationship would both likely weigh. A no-deal exit could also impose substantial additional direct costs in some sectors too. For example, the automotive manufacturing sector would likely face much higher tariffs under no-deal than it would even with a thin trade agreement. Some additional non-tariff barriers with respect to financial equivalence or data adequacy (for example) would also be likely to weigh on output. These effects could amount to 0.5–1.0% of GDP. In this scenario, food and goods inflation could increase more sharply in 2021 owing to more acute border disruption. However, the larger impact in this scenario would likely be via additional sterling depreciation.

3.3 Scarring and the outlook in the medium term

The long-term outlook in the wake of both COVID and Brexit depends both on how different the new economic ‘normal’ looks from the prior one, and on how easily the UK economy can adjust to it. In recent decades, the UK’s economic institutions have shown themselves to be somewhat nimbler than those in some continental European countries – especially within the labour market (Broadbent, 2012). However, the UK now faces a unique ‘double whammy’ of structural changes in the form of both COVID and Brexit. A period of sizeable economic adjustment is likely to follow. Chapter 2 sets out that this implies a weaker near-term recovery. However, below we explain that this is also likely to imply a lower level of output

⁹ This is based on a 10.7% increase in costs of exporting into the UK, which applies to 50% of all imports. We assume that 60–70% of this is then passed through over 12 months.

in the longer term. A more protracted adjustment process risks compounding the impact, with additional adverse labour market consequences.

COVID and Brexit: the cost of adjustment

We currently expect output in 2024 to lag the OBR's March 2020 trajectory by 4.5% in the fiscal year 2024–25. This reflects more permanent changes in the structure of the UK economy owing to the impact of both COVID (–3.2ppt) and Brexit (–1.3ppt). This is considerably larger than the 1.5% impact forecast by the Bank of England. This primarily reflects differing assessments of the scale and costs associated with economic reconfiguration in the aftermath of both shocks.

The key drivers behind our more pessimistic forecast are a greater number of firm bankruptcies and the associated write-down of capacity. Here, there are two sets of factors at play:

- A prolonged period of elevated virus concerns will see many firms go out of business (especially within the UK consumer services sector). This will have longer-term effects as their 'firm-specific capital' (for example, specific machines, trained workers or branding) cannot be easily repurposed.
- Persistent economic reconfiguration associated with both COVID and Brexit will also see some sectors and geographies hit hard. This in turn will reduce the economic value of the skills and capital specific to that sector or location, also weighing on long-term capacity.

In both cases, we expect both COVID and Brexit to play a notable role. As we noted above, the impact of COVID on both demand and costs is highly asymmetric, with the impact disproportionately falling on the consumer services sector. Over the coming months, we expect this to result in a substantial number of failures among firms that, absent the virus, would have remained viable. Firms in these sectors often contain a relatively large share of so-called 'intangible capital' in comparison with their total asset base – though not as large as some other sectors (for example, ICT).¹⁰ This capital tends to be inherently firm-specific – for example, buyer–supplier relationships, brands and so on (Haskel and Westlake, 2017). This means that much of this capacity will be lost when firms go out of business. While we expect that bankruptcies will hit the least productive firms the hardest, overall these

¹⁰ See Corrado et al. (2016) and INTAN-Invest data.

changes are still likely to weigh on long-run capacity (Andrews, Adalet McGowan and Millot, 2017).

Even after the direct impact of the virus has died down, some of the behavioural changes developed during lockdown may also likely persist, implying a permanent shock to preferences and economic structure. This may prove partly geographical as well as sectoral (see Chapter 7), with more economic activity moving out of major urban agglomerations in the UK. Already, over the summer, it is striking how many households seem to have chosen to move out of major cities.¹¹ Given the fixed costs involved in moving home, this implies a persistent underlying shift in preferences. A shift to working from home and the related changes in consumer services demand would also imply an associated change in where (as well as what) capacity is needed. Recent data from the Institute of Directors suggest half of all firms are intending to shift further towards home working on a more permanent basis.¹² This could see some existing types of capital – for example, a shop or cafe in central London – being written down. These trends seem unlikely to reverse fully even after a vaccine is available. We think this will drive the write-down of some associated capacity, weighing on output in the longer term (Kozlowski, Veldkamp and Venkateswaran, 2020).

As in the case of COVID, Brexit is also likely to require substantial economic reconfiguration. Growth in the UK in recent decades has, in large part, been driven by the cultivation of comparative advantages in areas such as business services and finance. Given the close geographic proximity and the size of the EU, membership and development of EU institutions has played an important part in this process. The UK has developed a large surplus in services with the bloc, alongside a large goods deficit. With the UK set to leave both the Single Market and the Customs Union at the end of 2020, some of these developments will now likely go into reverse. This also likely implies write-downs to associated capacity.

The question for capacity is twofold. First, to what degree can trade currently with the EU be diverted to other jurisdictions? Here we think possibilities are very limited. Much of the additional trade between the UK and Europe caused by

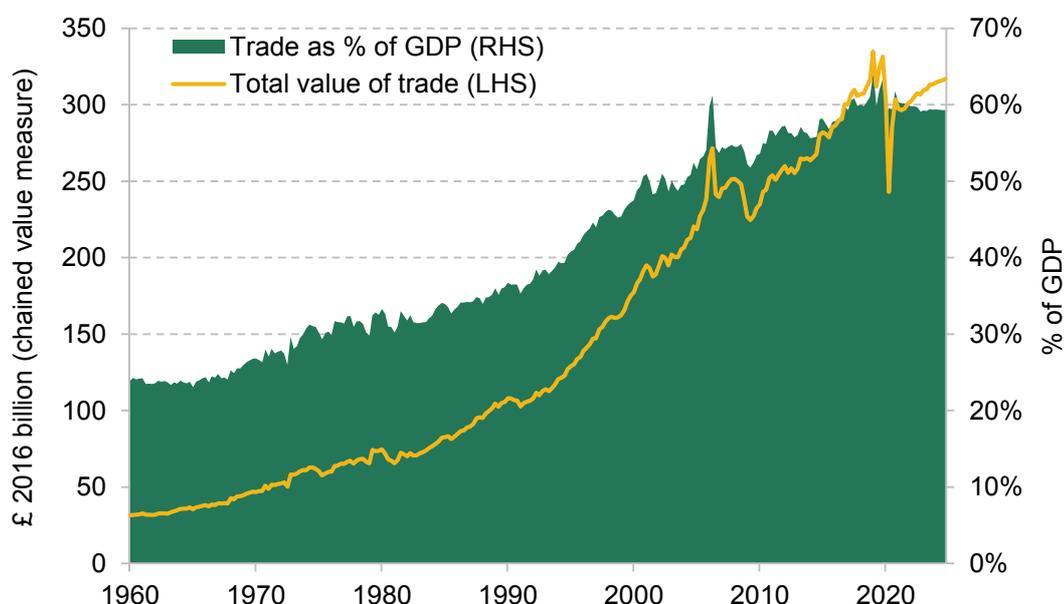
¹¹ A range of soft data has indicated very robust demand for larger homes outside of major urban agglomerations. See the RICS Residential Market Survey, August 2020.

¹² <https://www.iod.com/news/news/articles/Home-working-here-to-stay-new-IoD-figures-suggest>.

membership of the EU is likely to be relatively specific to the two partners. Within the manufacturing sector, for example, this reflects close integration with transnational value chains. Services are generally excluded from conventional trade agreements (the EU Single Market is a notable exception). This suggests only limited opportunities to redirect existing exports elsewhere, even if the UK succeeds in striking trade agreements with countries further afield. Instead, we expect aggregate trade to lag for some time to come (see Figure 3.6).

If trade losses cannot be prevented, the second question is how much of the associated capacity can be re-applied within the domestic economy. Trade tends to boost productivity by facilitating economies of both scale and scope. Usually this would mean that, even if this capital can be re-applied, its productivity would be lower. Estimates of the impact of trade on productivity levels range from 0.16–0.25 (based on the closure of the Suez Canal between 1967 and 1975; Feyrer, 2009) to 0.42–0.6 (Feyrer, 2019) to 0.74 (Felbermayr and Groeschl, 2013) – based on recent natural disasters. These suggest that a 1% drop in trade implies anything between a 0.16% and a 0.74% drop in national income per head. These are big effects, and estimates that are more recent tend to be somewhat larger.

Figure 3.6. Real UK trade (adjusted for the export of non-monetary gold)



Note: Non-monetary gold is excluded from these data, as trade in this is overall neutral for GDP.

Source: ONS and Citi Research.

In our forecast, we assume a relatively low elasticity of 0.25 – for every 1% drop in trade, GDP per capita falls by 0.25%. However, some write-offs to firm- and sector-specific capital are likely in the face of the current shock. More rapid adjustments and higher rates of firm failures increase these risks. The risks may therefore be skewed towards larger write-downs.

Labour market scarring

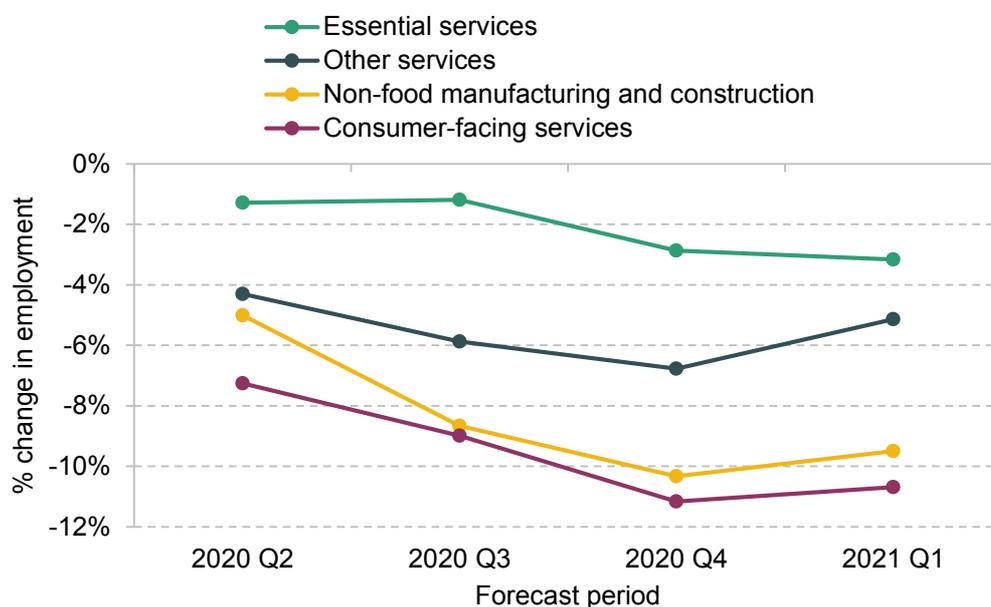
While our central forecast is more pessimistic than others, there remain real risks that the outcome for the economy could be yet worse, if there are significant long-run impacts ('scarring') on the labour market.

Broadly, there are two forms of economic scarring associated with higher unemployment. The first is the loss of so-called 'matching capital' associated with specific relationships between workers and employers (Quintini and Venn, 2013). This is precisely what the Coronavirus Job Retention Scheme was designed to prevent. Losing this capital by being made unemployed has significant impacts on longer-term earnings – typical estimates suggest that workers who are made unemployed are 6–9% less likely to be in work in the longer term, and have wages 8–10% lower than they would otherwise have had even if they find another job (Tumino, 2015). Importantly, these effects seem to apply even if workers are unemployed for a short period. As we noted in Chapter 2, we expect significant numbers of workers to face unemployment over the coming years, implying substantial losses here.

A second form of scarring is losses resulting from the erosion of human capital as workers spend time out of paid work (Blanchard and Summers, 1986). Here too the effect can be significant, with a longer period of unemployment both reducing the chance of finding subsequent employment and reducing bargaining power for workers who do succeed in finding a job (Krueger, Cramer and Cho, 2014). Substantial economic reconfiguration increases the risk of such effects, as workers who become unemployed may find it takes longer to find a new job (or they might need to switch into a different sector or occupation entirely, also making the on-the-job skills they have built up less valuable).

As we noted in Chapter 2, high uncertainty and low aggregate demand already risk a more protracted period of weak labour demand and high unemployment. Recent survey data suggest all sectors are now planning to reduce the size of the workforce (see Figure 3.7).

Figure 3.7. Expected impact of COVID-19 on workforce size, July 2020



Note: Answer to the question 'Relative to what would have otherwise happened, what is your best estimate for the impact of the spread of coronavirus (COVID-19) on the employment of your business?'. Responses were collected from 3 to 17 July 2020.

Source: Bank of England Decision Maker Panel, Bank of England and Citi Research.

Sectoral reconfiguration adds to these headwinds to employment. Firms will need time to build up an understanding of what kinds of workers their new business model demands. Sectoral patterns in the recovery to date also imply a skew towards more capital-intensive sectors and potentially a slower recovery in labour demand as a result.

Nominal wage rigidities also risk weighing on labour demand on a more persistent basis. Increases in the National Living Wage – to which the government committed prior to the pandemic – and lower inflation both constitute challenges here as they could make downward adjustment more difficult. This could pose a particular challenge in the recovery from COVID and Brexit, for two reasons:

- First, reallocating workers across sectors often results in the loss of human capital and lower labour productivity, adding to labour costs. If wages are restricted in how much they can fall – for example, as a result of large increases in the minimum wage – this could cause a sharper rise in unemployment and substantially slow the recovery.

- Second, greater exposure of low-skilled workers to the current crisis makes it impossible for workers to move down the skill and pay spectrum in order to find a job, as has historically often been able to happen (Moscarini and Postel-Vinay, 2016). For many of those made unemployed because of COVID in particular, this increases the risk of a more lasting period out of work unless wages can adjust downward. Similarly, with respect to Brexit, many workers in more-at-risk sectors have few formal qualifications (though often high firm- and sector-specific skills), again making it more difficult for them to find similarly paid and skilled work in a different industry (see Levell and Norris Keiller (2018)).

The potential for extensive skill and geographical mismatches compounds the risks here. This could complicate labour market reconfiguration. Many of the sectors worst affected by the economic impacts of COVID are those that non-graduates would typically move into at the start of their careers (Henehan, 2020). These workers may, at least initially, be poor matches for those new jobs that materialise. The current crisis may also result in a slower recovery in activity in the UK's major cities. This may engender a geographical mismatch, as well as a sectoral and skills-based one. Both effects could increase the medium-term equilibrium rate of unemployment (formally known as the non-accelerating inflation rate of unemployment, or NAIRU) (Sahin et al., 2014).

In our forecasts, we assume some increase in NAIRU, but only a 0.3ppt increase in the longer-term rate (and no change in labour force participation). If the adverse labour market shock proves longer lasting, this would prove too optimistic (Krueger, Cramer and Cho, 2014). These issues suggest active labour market policies, such as the new Kickstart Scheme for those aged under 25, may have an important role to play in preventing more-lasting damage.

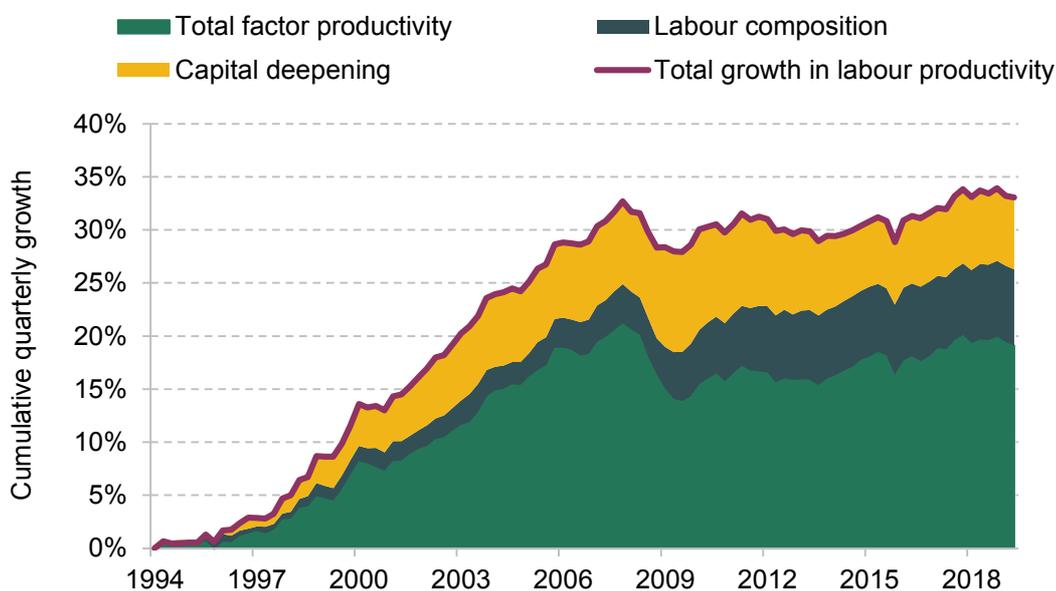
3.4 In search of a new business model: risks to potential growth

With the near-term economic outlook already relatively uncertain, it is difficult at this stage to make any hard and fast predictions to quantify the potential impact of COVID and Brexit in the longer term. Among other things, outcomes here will be primarily shaped by policy choices. However, we think both COVID and Brexit do pose some important challenges. As we noted above, lower levels of trade and

reconfiguration are both likely to weigh on the level of output. Over the coming years, this alone implies lower growth rates. However, even in the longer term (5–15 years ahead), we think both shocks could have a notable impact on growth.

Productivity growth has been a notable weakness for the UK economy in the years since the financial crisis (Melolinna, 2020). Having grown relatively strongly in the early years of the new millennium, output per hour has essentially stalled since 2008 (see Figure 3.8). Labour productivity is now around 20% below its pre-financial crisis trend, a feat unprecedented in 250 years of UK history (Crafts and Mills, 2020). This primarily reflects a break in the rate of growth of total factor productivity (which measures economic efficiency). Growth here may have been somewhat inflated before the crisis by the financial sector (Bean, 2016). However, we think this reflects a slowdown in more substantive productivity-enhancing trends such as worker upskilling and lower trade curtailing growth among the UK’s most productive firms (Henehan, 2019; Schneider, 2018).

Figure 3.8. Cumulative quarterly growth of labour productivity and its components, UK market sector



Note: Labour productivity growth is the cumulative quarter-on-quarter log change in market sector gross value added (GVA) per hour worked.

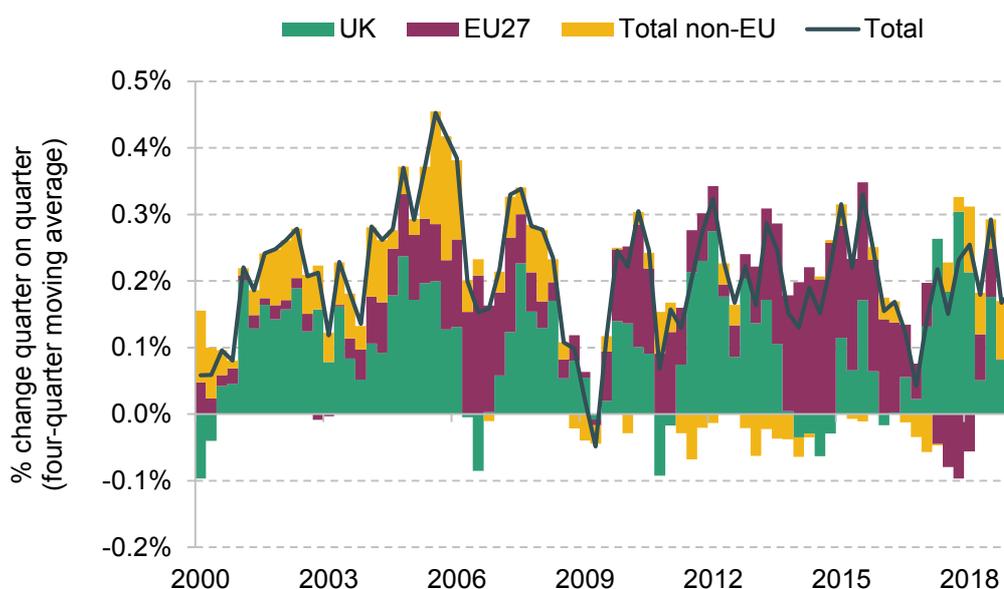
Source: ONS and Citi Research.

The slowdown in productivity growth means the UK has become increasingly dependent on increases in aggregate hours worked for so-called ‘potential growth’ – this is growth in economic capacity. Between 1990 and 2007, annual real GDP growth averaged 2.5%. Of this, 0.15ppt was the result of increased labour supply, while 2.35ppt was the result of higher productivity per hour worked. Since 2010, annual growth has averaged 1.9%, but over half of this is attributable to a rise in total hours worked. In other words, the majority of the UK’s growth is now coming from more workers (and some working longer), rather than greater productivity.

Over the coming years, the economic slowdown is likely to result in substantial labour market slack, meaning any reduction in labour supply is unlikely to affect output immediately. However, further ahead, reductions in labour supply could have a significant impact on potential growth.

More workers, rather than greater average hours, have driven the majority of the increase in labour supply in recent years. Between 2010 and 2019, EU migrants (who make up 7% of the economically active population) have driven roughly half of the total increase in the number of workers, while immigration from outside the EU has contributed relatively little (roughly 5% of the total) – see Figure 3.9. In this

Figure 3.9. Growth in economically active population by nationality



Source: ONS and Citi Research.

context, Brexit is a notable risk. The UK could of course offset any decline in migration from the EU by encouraging immigration from elsewhere. However, the government appears focused on reducing immigration (with a particular focus on immigrants with fewer formal qualifications).¹³ If this becomes a more lasting feature of the UK economy, this could imply lower potential growth to come.

Brexit and COVID also pose some important downside risks to longer-term productivity growth. Foreign direct investment (FDI) has fallen sharply in the UK in the wake of the 2016 referendum, following a wave of foreign acquisitions in later 2016. While estimates vary, most expect this fall to prove persistent; for example, Dhingra et al. (2016) estimate Brexit could result in a 22% fall over the coming decade. FDI is generally thought to contribute to productivity by facilitating knowledge spillovers and subsequent improvements to both production and management practices. The ONS has shown that the productivity at the average UK firm involved in FDI activities was around three times higher than among those firms that were not (Office for National Statistics, 2017). Others find more direct evidence of a causal link (Alfaro et al., 2004; Haskel, Pereira and Slaughter, 2007; Alfaro et al., 2010). A reduction in the level of FDI could therefore imply more persistent reductions in the rate of productivity growth in the years to come.

With respect to COVID, longer-term damage to agglomeration economies could also pose downside risks. Agglomeration effects within cities such as London, Manchester and Birmingham have also made a disproportionate contribution to national UK productivity growth in recent years, especially in the period before the current crisis. Part of the story is the increase in the level of output as more workers and firms have moved into more productive cities. The reversal of some of these effects over the coming years could contribute to a lower level of GDP, as we noted above. However, there may be more-lasting impacts on the level of GDP growth too – for example, because of reductions in the scope for intensive competition and knowledge spillovers when firms and workers are living further apart (Palivos and Wang, 1996; Baldwin and Martin, 2004). This, again, may weigh on long-term growth.

¹³ On 19 February 2020, the Home Office published a detailed plan of its post-Brexit, ‘points-based’ immigration plans. The new regime requires migrants to speak English, have a job offer from an approved sponsor, and meet skills and salary thresholds. These are designed to reduce overall immigration numbers overall, especially among less-skilled groups.

In recent years, the UK has harnessed a relatively open and urbanised economic model to drive growth. Alongside the substantial one-off reduction in productivity, these effects imply the UK may now also have to look elsewhere. At the moment, it is not obvious where such growth is likely to come from. This is one area where policy to identify and support institutions that can help to generate growth could have genuinely big benefits – but only if it is done well.

3.5 Policy coordination, inflation and implications for fiscal space

Monetary and fiscal policy have worked ‘hand in glove’ since the beginning of the COVID-19 pandemic. Both have had to adjust to a crisis unprecedented in both character and scale. Each has also been forced to innovate owing to limited conventional monetary policy space. Fiscal policy has subsequently carried the primary burden of macroeconomic stabilisation (Nabarro, 2020). The primary effect of monetary support has instead been to restrain funding costs and prevent crowding-out effects. This has boosted the efficacy of fiscal space by ameliorating some of its adverse consequences.

COVID and Brexit constitute adverse shocks to both supply and demand, but in both cases we think the demand-side shock seems likely to be both larger and more persistent over the coming years. The implication is that monetary policy is incentivised by its mandate to provide as much support as possible to close the output gap and return inflation to target. In the current context, this means keeping interest rates low and keeping credit conditions as accommodative as possible for both the government and the wider economy.

For now, monetary policy therefore dovetails relatively well with the government’s approach to fiscal policy. We do not expect this to change substantially anytime soon. But, in the medium term, this complementarity cannot be assumed. The Bank of England could be forced to take a less accommodative stance, in response to either a jump in inflation expectations or difficulties in the UK’s external account. Either event carries risks for the wider economy, pushing up the government’s cost of borrowing and potentially making it more difficult to provide further fiscal support.

Re-anchoring fiscal policy in the aftermath of this crisis (by bringing down the deficit) must be a priority in the medium term. With monetary policy now likely to remain constrained for some time to come, once this crisis has abated it will be even more essential to ensure some fiscal space remains available for when the next crisis arrives. With the UK also dependent on foreign capital, this is likely to be key to ensuring monetary policy can play the same supporting role in future as in 2020.

Monetary and fiscal policy: working in tandem

Fiscal policy has been at the forefront of the policy response to the COVID-19 crisis in the UK (as in other jurisdictions – see Chapter 1). The UK government is set to borrow more in the current fiscal year than at any stage outside of world wars. UK public borrowing (excluding public sector banks) has totalled £128 billion in the fiscal year to date (6.2% of annual GDP), over five times more than the same period in 2019 and three times larger than any other three-month period on record. As set out in Chapter 4, under the central scenario prepared by Citi for this Green Budget, IFS researchers forecast that government borrowing in 2020–21 will climb to 17.1% of national income.

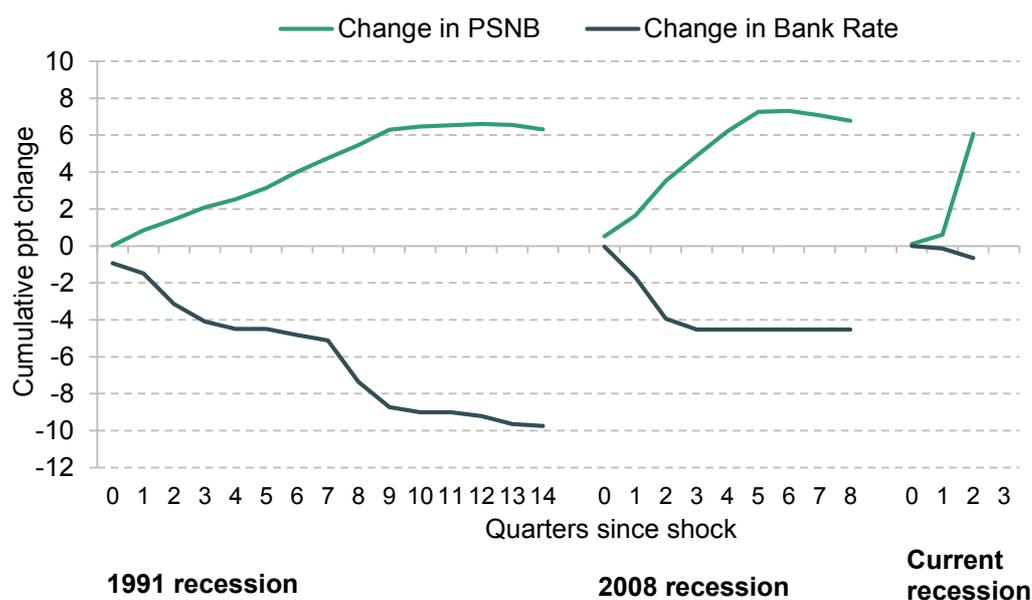
The primacy of fiscal policy reflects first the character of the current crisis. Whereas the 2008–09 recession was a financial crisis, COVID (aside from the public health challenges) is primarily an economic one. The sectorally asymmetric character of the current shock also means fiscal policy is better placed to provide the kinds of targeted support measures that are necessary (Guerrieri et al., 2020). Given substantial reconfiguration that is likely necessary over the coming years, policy has to both facilitate reconfiguration and support demand. Targeted fiscal support is better able to achieve this than monetary policy.

However, greater fiscal support to date also reflects the limited monetary policy space available going into the crisis (see Figure 2.10). Speaking at the start of the year, former Bank of England Governor Mark Carney commented that a ‘reasonable judgement’ of total policy space was around 250 basis points (bps) (Carney, 2020). This is significantly less than the ~450bps of Bank Rate cuts during the financial crisis. The Wu–Xia shadow policy rate offers a more direct comparison, summarising the combined impact of rate cuts and asset purchases (Wu and Xia, 2015). This has fallen by roughly 250–300bps in recent months. However, the scope for this to fall further seems increasingly limited. During the

financial crisis, this measure fell by 1,200bps between December 2007 and May 2013.

Rather than monetary policy stepping back, we prefer to think of recent policy as a form of implicit monetary and fiscal policy coordination. Monetary policy has been highly active since the start of the COVID-19 outbreak, with 65bps of rate cuts and £290 billion of quantitative easing. However, the aim of policy has increasingly shifted from trying to push borrowing costs down further to instead trying to ensure these remain low, and crucially remain so for some time to come. By ensuring stable long-term (and sometimes riskier) borrowing costs, this should stimulate the economy, but also facilitate support elsewhere – in particular, via fiscal policy. This consists primarily of keeping the government ‘yield curve’ as flat as possible

Figure 3.10. Cumulative changes in the UK Bank Rate and public sector net borrowing over the last three recessions



Note: Quarter 0 denotes the period two quarters before the beginning of the recession. Public sector net borrowing (PSNB) excluding financial interventions and public sector banks is used here. This is expressed as a four-quarter average as a percentage of nominal GDP. Cumulative change in PSNB is the percentage point change in borrowing since the beginning of the downturn (as a percentage of GDP). Cumulative change in Bank Rate is the percentage point change in the policy rate since the beginning of the downturn.

Source: Bank of England, ONS and Citi Research.

despite significant increases in borrowing.¹⁴ Combined Bank of England purchases so far this calendar year have therefore amounted to 95% of net issuance, meaning government bond markets have, in effect, been fully insulated from the costs of COVID so far (see Chapter 5). This has allowed a dramatic fiscal expansion, without any associated increases in either government or aggregate borrowing costs (which, by contrast, have fallen to historical lows).

Monetary policy support is conditional on low inflation. In the near term, domestically generated inflation is likely to soften (see Chapter 2). In response to low inflation and high levels of spare capacity in the economy, monetary policy should remain loose for some time to come. This will have the side effect of helping to ensure that the government can continue to borrow substantial sums at low rates of interest. However, weakness in the economy also means that if fiscal policy is dialled down, monetary policy may be forced to take a more proactive stance. With the government yield curve now very flat, this is likely to force the Bank to look at further cuts to Bank Rate.

Historically, the Bank of England has been relatively unwilling to entertain rate cuts to zero or below. The key issue is that, while banks are largely forced to pass on the reduction to creditors, they are unable to compensate by charging lower interest rates on customers' deposits (since customers can simply withdraw their money). The implication is compressed net interest margins, lower bank profitability and (in some cases) weaker credit supply. However, we think some of these constraints may now be less binding than in previous eras (see Box 3.1) – the Monetary Policy Committee (MPC) has consistently emphasised that the 'effective lower bound' (the floor on interest rates) is a moving target. In more recent meetings, it has noted further rate cuts are now 'in the toolkit'.¹⁵ We expect that cuts into negative territory are likely in 2021, given the weak cyclical outlook (see Chapter 2).

¹⁴ In March, the Monetary Policy Committee announced a £200 billion package, 95% of which seems to have been allocated towards gilts. Since then – in June – this has been complemented by an additional £100 billion purchase of gilts.

¹⁵ See paragraph 52 of <https://www.bankofengland.co.uk/-/media/boe/files/monetary-policy-summary-and-minutes/2020/september-2020.pdf>.

Box 3.1. Are constraints on negative rates easing?

There are several indications that negative interest rates would now pose less of a risk for parts of the financial system than might have been the case previously. For example, in 2013 Sir Charlie Bean (then Deputy Governor for Monetary Policy, now member of the Budget Responsibility Committee of the OBR) argued that such a policy risked widespread collapse among building societies and mortgage lenders, who would largely be forced to pass on the savings to their borrowers, but could not pass it on to their depositors (Bean, 2013). Since then, the widespread increase in the use of fixed-rate mortgages has reduced the exposure on this front. In the long term, this does not alleviate the issue entirely, but does suggest a more protracted impact, providing time to find alternative solutions.

The outstanding challenge for the UK is the relatively large share of retail deposits in bank funding. Most of the evidence in other jurisdictions suggests it is incredibly hard to pass on negative rates to retail depositors. As such, this tends to worsen the impact of negative rates on bank profitability. We think many of these issues are tractable – at least with respect to a small rate cut. Costs here could be at least offset by a relatively generous tiering regime – meaning banks are not forced to incur losses on these assets deposited at the central bank. As in other jurisdictions, we think this could allow further cuts to interest rates without undermining credit supply. Over the coming years, rate cuts could actually provide a net benefit to bank profitability by reducing the rate of loan impairments, as in the ECB’s experience (Rostagno et al., 2019).

Within the banking sector itself, some of the largest risks are likely among smaller banks who are (1) less able to absorb losses in general and (2) have a high density of more conventional retail activity (particularly retail deposits and mortgage lending). Vulnerability in this part of the sector could be an important indicator of whether the Bank chooses to go ahead with further cuts.

Note: For more information, see Schulz and Nabarro (2020).

A cut in Bank Rate to, say, –10bps will not likely drive a widespread boost across the economy as a whole on its own: after all, it would only represent a 20bps cut from the current level. A significantly larger cut would risk financial instability, and likely prove self-defeating. The UK will therefore remain primarily dependent on

fiscal policy for some time. The important thing is that the Bank of England is likely to ensure low borrowing costs for as long as weak inflation and spare capacity persist. This should ensure sufficient fiscal space to do more over the coming months. With monetary policy constrained, if fiscal policy is withdrawn too soon, this risks a much more prolonged period of weak demand and weak inflation.

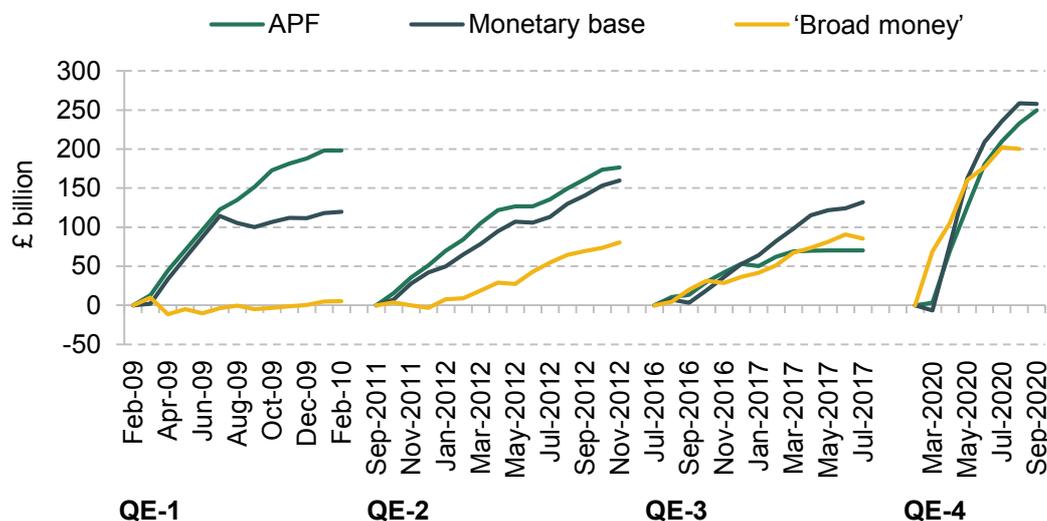
Medium-term inflation: two-way risk

While inflation is likely to remain relatively contained in the near term, in the medium term this is less assured. Upward pressure on inflation risks the withdrawal of monetary policy support and (in the absence of growth) increasing the cost of additional fiscal support. We see three risks here.

First, changes in the UK's external relationships may impart an inflationary bias over the coming years. As discussed above, the UK has developed comparative advantages based on the export of business services and the import of consumer goods (Schulz, 2018). To the degree that both Brexit and broader de-globalisation contribute to an unwinding of these trends, this is likely to put upward pressure on consumer prices. Sterling depreciation could also compound these effects in the near term; pass-through from these effects could be particularly quick given the character of the Brexit shock – as was the case in 2016–17 (Forbes, Hjortsoe and Nenova, 2018). However, the MPC has also previously shown it is able to look past some of these transitory effects.

Second, in comparison with previous periods of 'quantitative easing', recent asset purchases in the UK have substantially increased the quantity of broad money (which includes both cash and bank deposits). Theoretically, an increase in the money supply should result in higher inflation (the quantity theory of money states that the general price level is proportionate to the amount of money in circulation). However, this relationship has ceased to be a good guide to inflation dynamics over the last four decades (McLeay, Radia and Thomas, 2014; Castillo-Martinez and Reis, 2019). One reason, during the 2008 crisis, is that increases in so-called 'base money' did not translate into increases in 'broad money' – namely, that available to the economy as a whole. However, during the current crisis, broad money has actually increased significantly (see Figure 3.11). Empirically, broad money growth has maintained a loose relationship with realised inflation in the UK (King, 2002). This at least increases the potential that a higher money supply could start to drive inflation higher.

Figure 3.11. Asset Purchase Facility purchases, base money and broad money growth in respective quantitative easing (QE) rounds, UK



Note: Monetary base is calculated by summing notes and coins in circulation and the reserve balances of banks and building societies. 'Broad money' is M4 excluding intermediate other financial corporations.

Source: Bank of England, Haver Analytics and Citi Research.

However, on its own, we do not think this will be enough to substantially move the dial on inflation. Other determinants of so-called 'money velocity' (the speed at which money circulates in the economy via transactions) remain too unstable to make any concrete predictions based solely on the quantity of base money. However, these factors do suggest that if inflation expectations – for example – were to shift, the subsequent acceleration in inflation could prove even more dramatic, forcing a more abrupt monetary policy response. So while this sort of sudden response is not likely in our view, it nevertheless represents a risk.

Third, upside risks to domestic inflation expectations could also force the Bank to react by tightening monetary policy sooner than might otherwise be expected. Over the coming months and years, we think this could prove the largest upside risk to inflation. In recent months, near-term household price expectations have increased significantly, alongside an increase in greater medium-term uncertainty. In our own household inflation survey (conducted in conjunction with YouGov),¹⁶ both the

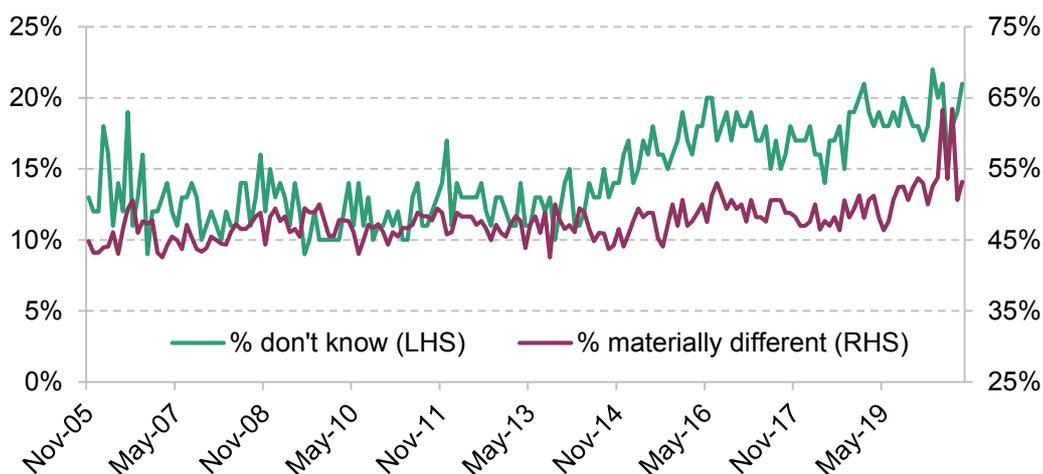
¹⁶ This survey is conducted using an online survey administered monthly to roughly 2,000 people randomly selected from YouGov's 185,000+ survey panel. See [Alert: UK Economics Flash - Citi/YouGov Inflation Tracker: A significant increase in long-term inflation expectations](#).

proportion of respondents responding they ‘did not know’ with respect to long-term inflation, and those expecting an outcome materially different from current levels, have jumped since March (see Figure 3.12). We think this primarily reflects disruption to household consumption patterns during the pandemic. However, to the degree this chips away at established price expectations, expectations may now be more vulnerable to any further price shocks.

Reconfiguration implies some prices will go up as well as down. We also know not all prices are equal as far as inflation expectations are concerned. For example, petrol prices have historically been thought to be particularly salient for inflation expectations, since consumers can quite easily compare prices of the same product over time. Across UK consumption baskets, goods inflation could also prove relatively more influential. In the wake of both COVID and Brexit, there is a risk price growth here could accelerate, even as demand and price pressures overall remain subdued. As such, it is possible inflation expectations could increase on a more sustained basis.

Rising inflation expectations alone would risk driving higher actual inflation. The Bank may therefore likely have to react by tightening monetary policy. However, to the degree this also reflected de-anchored expectations, this would also force the

Figure 3.12. Share of respondents expecting a substantial change to long-run inflation



Note: ‘Materially different’ measures the proportion of respondents who expect long-run inflation either below 2% or above 5%. The 2005–19 mean of this measure is 47%.

Source: YouGov and Citi Research.

MPC to react more forcefully to other transitory increases in inflation – such as those resulting from sterling depreciation. For now, we still think inflation expectations in the UK remain well anchored across households, firms and markets at target consistent levels. But recent volatility creates risks.

Credible inflation targeting is fundamentally a question of political will. If the Bank (and the government along with it) are clear that they are willing in the short run to sacrifice employment and growth for price stability, then inflation expectations are more likely to remain at target levels. The issue here is that this trade-off may no longer be as obvious (at least with respect to higher inflation) as may have been the case historically. In particular, there may be doubts regarding government commitment to price stability. The Bank of England's mandate is under the control of the Treasury, rather than the MPC. If inflation were to increase ahead of the recovery, the government could therefore choose to ease the trade-off by requiring the Bank to adopt a more accommodative approach. We do not see this as likely, but even the risk could affect inflation expectations. This could force the Bank to clamp down harder in an attempt to reaffirm the target.

As discussed in Chapter 5, this implies the potential for conflict with fiscal policy. This could be eased by forcing the Bank to adopt a new approach, such as average inflation targeting (which has now been adopted by the Federal Reserve in the United States). However, given the points above, it is clear such a move carries enormous risks. Even if it is a sensible change, unless it is communicated with exceptional care there is a risk that it will be misinterpreted as a weakening of central bank independence motivated by a desire to help the public finances. This could feed back into inflation expectations, and so prove self-defeating.

Risks for fiscal space in the longer term

Macroeconomically, the UK economy is likely to depend disproportionately on fiscal policy over the coming decade. Policy rates are likely to remain close to their lower bound for some time to come. This means fiscal policy will likely have to bear the brunt of new-found adverse shocks. Larger increases in borrowing in the event of future downturns are therefore both likely and desirable.

However, as in the recent crisis, fiscal support is likely to prove more effective if it can go hand in hand with monetary accommodation. The question, in the longer term, is how sustainable combined fiscal and monetary interventions (of the type

seen in 2020) are likely to prove. We think the answer will depend primarily on fiscal policy and specifically whether this can return to a more sustainable trajectory. Not only will this directly protect fiscal space but also, in the process, we think it also ensures monetary policy is able to respond to future crises in a supportive fashion.

The key here is the financial role gilts play in a downturn or crisis. In such conditions, as capital seeks risk-free assets, money tends to flow into gilts, pushing government borrowing costs down. In the process, these flows facilitate fiscal support. Importantly, this also ensures the UK does not suffer large national capital outflows. The key risk going forward is that if gilts are perceived as risky, then a wider sell-off and a broader capital outflow from the UK could become a possibility. This would directly increase government borrowing costs, but it would also make it very difficult for the Bank of England to support government borrowing even if it wanted to. This is because monetary policy will likely have to instead focus on shoring up the UK's capital account, especially given UK dependence on foreign financing.

The UK may have less room here than commonly thought. Long-term borrowing costs have fallen significantly and we expect nominal interest rates to remain below growth for some time as a result of the virus (Jordà, Singh and Taylor, 2020). However, the margin between these and trend growth may still fall somewhat. Long-term borrowing costs are at historical lows and are likely limited in how much further they can drop. As we noted above, the risks to potential growth are, however, also likely to the downside. If the gap between debt servicing costs and potential growth is allowed to narrow too far, concern about the UK's fiscal sustainability could become more pressing. The challenge here is that the 'fiscal fundamentals' do not currently make for happy reading. The UK has not run a primary surplus since the 2001. Since 2010, fiscal policy has been characterised by a growing rate of turnover with respect to fiscal rules (Emmerson and Stockton, 2019). If the gap between growth and borrowing costs narrows, therefore, this could result in some unease.

Re-anchoring fiscal policy over the coming years is therefore important to ensure that fiscal space (and economic policy more generally) is sufficiently durable to navigate choppier economic waters. While in the near term fiscal policy must remain supportive of the wider economic recovery, in the medium term reducing deficits (and particularly increasing tax revenue) must therefore be a priority.

3.6 Conclusion

The UK has to face up to the prospect of two major structural economic shocks within 12 months of one another. Brexit is, we think, still likely to weigh sharply on the economy in 2021. In addition, this is also likely to compound the structural reconfiguration already demanded by COVID. Both shocks imply substantial long-term losses to output and the threat of a weaker level of potential growth.

For now, the policy focus must remain on growth. Limited monetary policy space, and the risk of more lasting reconfiguration, mean this is now essential to avoid a more protracted period of weakness and the de facto ‘Japonification’ of the UK economy. The character and scale of the shock means fiscal policy must carry the burden.

However, in the medium term, the UK’s weak fiscal fundamentals leave it vulnerable. In the current crisis, ongoing monetary policy support should help reduce the risk to government borrowing costs (and those across the economy as a whole). As we emerge from this crisis, though, downside risks to potential growth risk compressing the margin between borrowing costs and growth. This could result in greater scrutiny of the UK’s fiscal sustainability. Dependence on foreign capital risks exacerbating the associated vulnerability. In this context, ensuring fiscal policy is on a sound footing once the current crisis has abated must be an absolute priority.

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