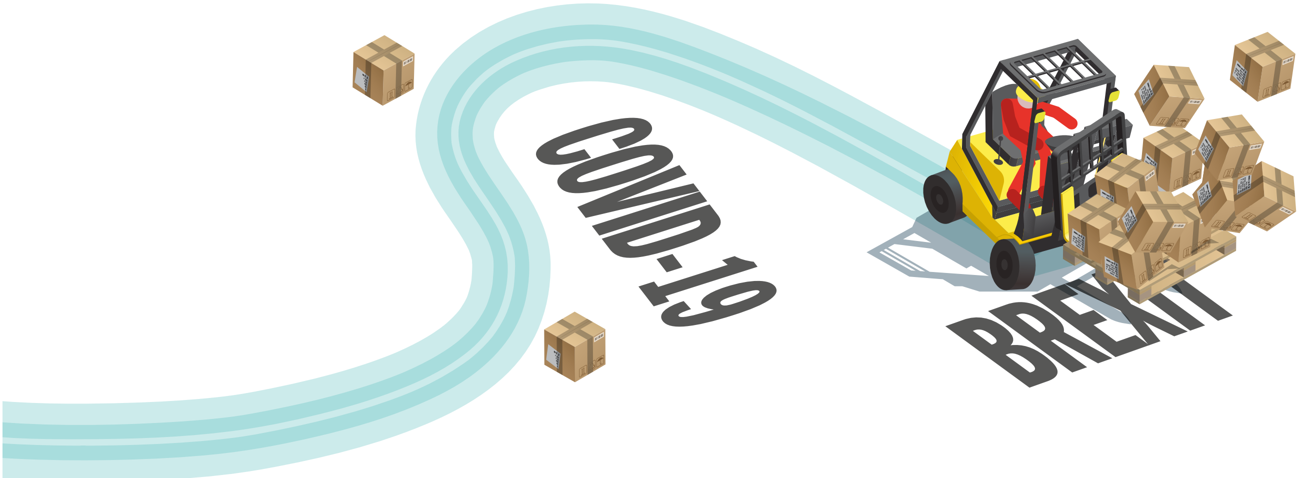
After the huge negative economic impact of the pandemic, Brexit will present another profound change of circumstances for UK businesses. Analysing real-time survey data, **Josh De Lyon** and **Swati Dhingra** show that the sectors that have suffered less during lockdown are the ones exposed to most damage from leaving the European Union.

Covid-19 and Brexit: contrasting sectoral effects



The world economy is experiencing its biggest downturn for a century. In the UK, 50% of companies reported a fall in business in April 2020 relative to the past three months. Meanwhile, the country continues to negotiate its exit from the European Union (EU) – its biggest trading partner – aiming to leave by the end of the year.

Both Covid-19 and Brexit will have a profound impact on economic activity in the UK, but there may be big differences in terms of which sectors they affect. Here we present new evidence that the sectors that have been initially most negatively affected by Covid-19 are generally different to those that are affected more by Brexit.

To measure the effects of Covid-19, we use firm-level survey data for April 2020 that have been made available to us through the Confederation of British Industry (CBI). We aggregate this to the sector level to compare with measures of the economic effects of Brexit across UK sectors taken from previous work.

Figure 1 shows that there is a negative correlation between changes in business volumes in April 2020 and the current and expected effects of Brexit as captured by three different measures. This means that generally the sectors hit by Covid-19 in the first month of lockdown have been different to those expected to be affected by Brexit. This is true regardless of which Brexit measure is used, despite each varying in the time period covered and the nature of the specific effect caused by Brexit.

The first Brexit measure captures each industry's exposure to the sharp depreciation in the value of the pound

Figure 1:

Correlation coefficients for changes in business volume in April with three measures of the current and future effects of Brexit

	Net change in volume of business, April 2020	**Industry count**
Intermediate import depreciation	-0.18	52
Brexit uncertainty	-0.25	9
CEP trade model forecast	-0.48	24

on the night of the EU referendum in June 2016. The world trading system has developed over recent decades so that now the majority of world trade is in intermediate goods and services that are used as inputs into production by businesses. Therefore, the devaluation of the pound meant that companies with a high share of imported inputs faced increasing costs to production (Costa et al, 2019). This measure therefore captures effects of Brexit that occurred immediately following the referendum.

The second measure – Brexit uncertainty – captures business responses to the Decision Maker Panel conducted by the Bank of England concerning uncertainty due to Brexit and the negotiations in the period following the referendum (Bloom et al, 2019). This measure is contemporary and broad, although it is restricted to highly aggregated industry categories.

The third measure is the outcome of a state-of-the-art trade model and captures the predicted long-term impact of the expected trade relationship between the UK and the EU after Brexit (Dhingra et al, 2017). It ignores adjustment effects and focuses only on trade – omitting other factors such as foreign investment and migration. It is similar in nature to the UK government's own economic model, but crucially, it contains more detailed industry predictions, allowing for a more thorough comparison with the effects of Covid-19 across sectors.

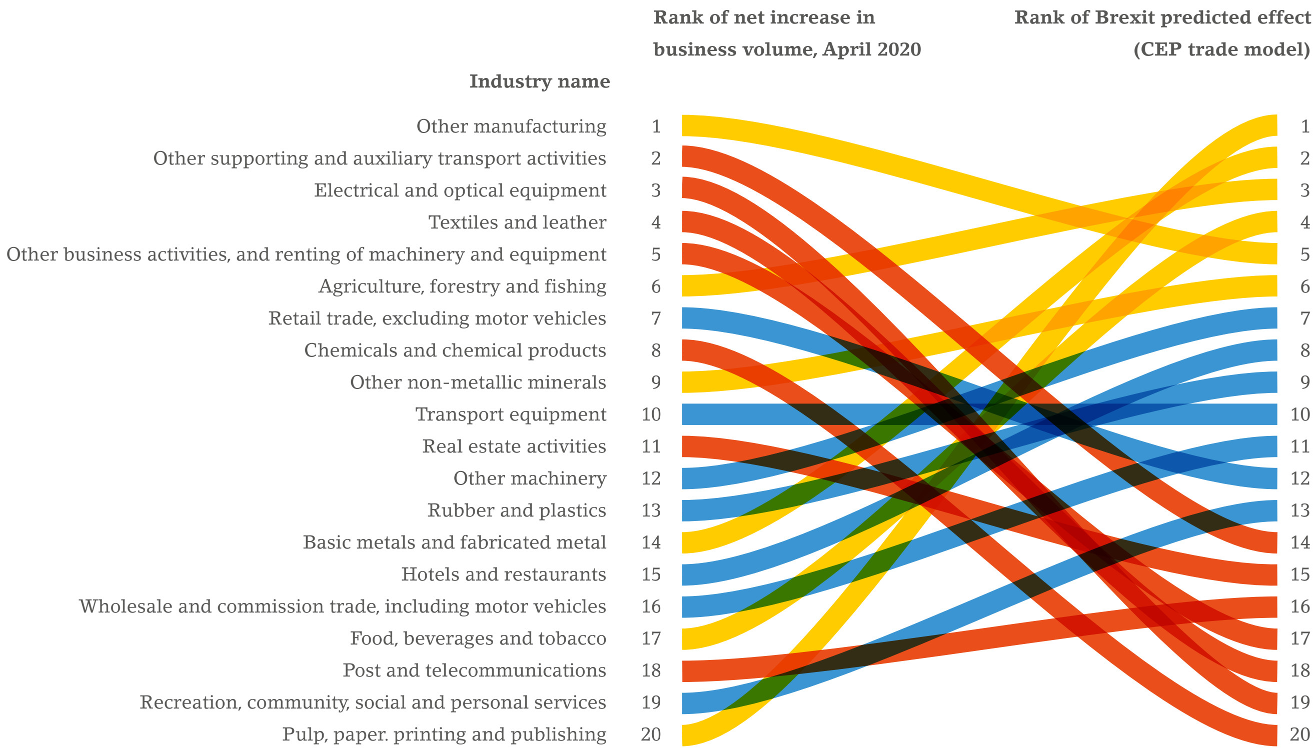
To explore these cross-industry correlations in detail, Figure 2 presents the full ranking of industries according to how positively (top) or negatively (bottom) they have been performing in April 2020 relative to the past three months and their trend of business volumes a year before.

We colour each line according to the predicted long-term effect of Brexit – with yellow being the least negatively affected sectors, red the most negatively affected and blue in between.

Sectors that have not yet been hit by lockdown are generally expected to be hit negatively by Brexit

One obvious difference that emerges from the list is that Covid-19 has delivered a hard hit to domestic services such as recreation, hotels and restaurants, which are a large employer in any developed economy, while these are less likely to be directly affected by Brexit policy except

Figure 2:
Change in business volume in April and predicted effect of Brexit by industry



Notes: Industries are ranked on the left-hand side in terms of their net increase in business volume in April 2020: from least negatively affected (1) to most negatively affected (20). The lines are shaded according to the predicted long-term effect of Brexit (Dhingra et al, 2017): red for most negatively affected; yellow for least negatively affected; and blue in between. Sectors with fewer than five businesses in the data in April 2020 are omitted.

through knock-on changes in demand and labour services. Most manufacturing sectors and transport have been less negatively affected, although again there are exceptions within these sectors.

This analysis highlights the double impact that Brexit and Covid-19 can have on the economy. Sectors that have not yet been hit by lockdown are generally expected to be hit negatively by Brexit.

In many ways, this is not surprising. The rapid spread of Covid-19 has caused countries across the world to enter lockdown. This has had a huge impact on the functioning of economies on both the demand and supply sides. Some sectors, such as in-person services, have ceased completely while others, such as distribution and some manufacturing, have needed to step in to meet urgent needs arising from the pandemic.

Brexit, on the other hand, will introduce new barriers to trade, migration and investment with the EU, and a change in the UK's relationship with other countries outside the EU. Tariff and non-tariff barriers that may arise in sectors like automotive, food and professional and financial services could significantly affect the structure and size of the UK economy in the long run, as well as creating costly short-term adjustments.

Our analysis highlights the importance of granular economic analysis during these extraordinary times.

As early as 2017, the government had announced that Brexit negotiations would be guided by granular impact assessments across sectors. Sound impact assessments are crucial for good policy design and this is what the government had rightly put forward.

Yet the most detailed quantitative impact analysis available from the government to date gives details for just 10 broad sector categories. For example, all of services is split into just three categories. This makes the evidence too scant to guide policy-making adequately and it isn't a surprise that the new policies that the government has announced in its Brexit plans, such as the tariff schedule published recently, have little justification for why certain policy objectives have been chosen.

The changed circumstances due to the pandemic make the need for detailed sectoral analysis even more important. It is clear that some sectors are going to see a reduction in market access after the UK's exit from the EU. While they may have withstood a bit of a setback in trade with the EU, a much harder hit at a time of a national and a global slowdown may push them towards being unviable. The current conditions in these industries will be useful in drawing up Brexit plans that are informed by existing circumstances.

The large negative hit from the pandemic has reduced the capacity of the UK economy to take further shocks. The UK is highly integrated with Europe and these linkages are likely to be even more important throughout the pandemic. The slowdown of the world economy has also cast another shadow over the idea of a 'Global Britain' making up for reductions in EU market access by pursuing opportunities outside the EU.

Our analysis shows that the sectors that will be affected by Brexit and those that are suffering from the Covid-19 pandemic and lockdown are generally different from each other. Rushing Brexit through this year without a new deal in place would therefore broaden the set of sectors that see worsening business conditions.

The EU's Brexit negotiator Michel Barnier has suggested that an extension to the transition period would be possible. The UK government should think carefully about its policy priorities now. The policy response to Covid-19 must be decisive and coordinated, and adding Brexit to the mix only increases the importance of getting these policies right.

Beyond the economics, the EU offers opportunities to help to deal with the spread and response to the virus, such as the large-scale scheme to obtain personal protective equipment, which the UK reportedly missed the opportunity to join on three occasions. As the effects of Covid-19 continue to become clearer over time, the government must move beyond its broad assessment of Brexit effects to much more finely-tuned plans that account for the differences in market conditions and constraints faced by UK businesses in the biggest slowdown of our lifetime.

Rushing Brexit through without a new deal would broaden the set of sectors that see worsening business conditions

Josh De Lyon is a research assistant in CEP's trade programme. **Swati Dhingra** is an assistant professor of economics at LSE and a research associate in CEP's trade programme.
The views expressed in this article are those of its authors and not those of the CBI.

Further reading

Nicholas Bloom, Philip Bunn, Scarlet Chen, Paul Mizen, Pawel Smietanka and Gregory Thwaites (2019) 'The Impact of Brexit on UK Firms', Bank of England Staff Working Paper No. 818.

Rui Costa, Swati Dhingra and Stephen Machin (2020) 'Trade and Worker Deskilling: Evidence from the Brexit Vote', CEP Discussion Paper No. 1622 (http://cep.lse.ac.uk/pubs/download/dp1622.pdf).

Josh De Lyon and Swati Dhingra (2020) 'How is Covid-19 Affecting Businesses in the UK?', *LSE Business Review* (https://blogs.lse.ac.uk/businessreview/2020/05/07/how-is-covid-19-affecting-businesses-in-the-uk/).

Swati Dhingra, Hanwei Huang, Gianmarco Ottaviano, João Paulo Pessoa, Thomas Sampson and John Van Reenen (2017) 'The Costs and Benefits of Leaving the EU: Trade Effects', *Economic Policy* 32(92): 651-705.

Domestic services such as recreation, hotels and restaurants have been hit hard by Covid-19 but are less likely to be directly affected by Brexit policy