

# The UK's industrial supply chains are dependent on European manufacturers



*What impact will Brexit have on UK manufacturing? As **Bob Hancké** points out, the domestic economic effects of Brexit are dynamic, not static. While some industries will be devastated by Brexit, resources may switch to other areas which, in theory, could thrive. But for this to happen, the UK needs to revamp its industrial supply chains, which are dependent on close links to European manufacturers that will be hampered by a hard Brexit.*

The prevailing line on Brexit and UK manufacturing runs roughly like this: unless free trade in goods survives the EU-UK talks – something that looks increasingly unlikely – industry will quickly pack its bags and decamp to locations on the continent from where it can continue to produce, export and import without tariffs. The noises coming from some of the bigger manufacturing companies in the UK, such as Airbus, BMW and Nissan, leave little doubt about the urgency that these large companies associate with the free trade element in Brexit. Before long, Brexit UK will be an industrial desert – which, according to some senior government ministers it already is anyway (so why bother?).

A quite nuanced recent [article in The Guardian](#) takes issue with this line of thinking and examines the problem from a more dynamic perspective. It correctly points out that investment horizons usually cover the better part of a decade: in the car industry, for example, models change moderately every five years, give or take a year, and airplanes fly on an even longer cycle. Up-front investments have to be written off, preferably over a large number of units, which produces a significant level of inertia. The article concludes that after Brexit, UK manufacturing will slowly wilt: R&D will gradually be shipped overseas and future investment will be diverted as well, with the expected effect on British manufacturing.

## A manufacturing-free zone?

The birthplace of modern industry would become a manufacturing-free zone. This is certainly a very plausible scenario, given where we are now with the talks between the EU and the UK going nowhere. But my nagging sense is that it is one of two possible scenarios – and the other one has at least as big a chance, given the medium-term constraints for companies if we take this logic further.

Let's spell out this slightly more positive scenario. Most assembly plants, for cars, aerospace parts or white goods, have a minimum shelf life of ten years or more – lest the owner is willing to take a massive loss on the investment. Now, most companies with plants in Britain are not very rich companies. Renault-Nissan, Airbus and BMW certainly do well, but not to the extent that they can simply write off losses related to plant closures: the investment itself, the redundancies (and foregone training costs), the collapse of supplier networks which might be echoed by problems in the home plants and the reputational costs.

In fact, it is hard to imagine many large manufacturing companies that can take such a blow; their profits and cash reserves are too low for such a shock, and if they could take it, they would almost certainly starve other operations of much-needed investment. Closing a plant in Britain is not a good idea.

Assuming that most of these operations remain open as manufacturing plants for the foreseeable future, what about the parts supplied by other companies that go into the final product? Modern cars, for example, are essentially combinations of complex systems manufactured by companies that many of us have never heard of, bolted together in the final assembly plants that sport the badge. Ditto for most other industries, where vertical disintegration has reduced the value added that Bauknecht itself put into its induction stove, Zanussi in its refrigerators or Magimix in its mixers.

## Crucial components

For the car industry, more than 75% of the value added, often approaching 90%, is produced outside and bought in. This changes the second part of the Brexit 'should I stay or should I go' question.

Concentrate on the car industry: about half the parts in an average car cross the Channel a few times before they end up in the final product. This is a simple effect of the fact that industries have a tendency to cluster in relatively well-specified regions because others are there who produce public goods such as skills and general technological know-how: southern Germany, Switzerland, northern Italy, Catalonia, Flanders, southern Denmark, etc.

About a year ago, The Guardian followed the crankshaft in the Mini assembled in Oxford on [its journey](#) from stand-alone part to completed car and discovered that it crossed the Channel three times – and then once more in the finished product for a customer in Germany or France. If each of these crossings incurs a 10% tariff, the car will become, say, 30% more expensive. Not an easy cost to absorb in a competitive industry. If the German luxury brands would find it hard to accommodate that, imagine what it would mean for mass producers with their razor-thin margins.

If, under a relatively hard Brexit, the final assembly plants stay, no other sustainable option remains for them, therefore, than to reconstitute local supply chains. Instead of crossing the Channel three times, the crankshaft could cross the Thames twice, not incur any tariffs along the way and become part of a Mini to be exported. That exported car might still be taxed more than today, but probably not that much, since more BMWs are sold in the UK than Minis in the EU; it would cut down on paperwork and possible delays that upset the now industry-standard (but very fragile) just-in-time production systems where parts are delivered when needed and not in large batches once a week or so; and it saves the company a multitude of other tangible and intangible costs.



### A fork in the road

The combination of these two possibilities changes the Brexit equation dramatically, at least for manufacturing. Instead of a looming apocalypse, re-industrialisation of those regions that house a sophisticated, advanced manufacturing sector becomes a possibility. The economics of the manufacturing sectors, with their long time horizons and fragmented production systems, nudge them there. But economics alone is not enough – else we wouldn't even be considering Brexit.

It will also require a reconfiguration of different parts of the value chain; an industrial policy to organise technology transfer; a regional policy to develop support systems including Chambers of Commerce, local development agencies and broad associations of stakeholders; and the development of sophisticated training systems for both engineering skills and shop-floor workers. Many of these issues were addressed in the government's recent [Industrial Strategy White Paper](#), which highlighted the need to support domestic suppliers after Brexit.

Business alone cannot organise these for a variety of reasons, ranging from simple inability to complex collective action problems associated with the production of public goods. And some sectors, especially those where a reintegration of supply chains is difficult, may go to the wall as the inevitable consequence of a hard Brexit: it is hard to imagine textiles, ceramics or cutlery will survive a tariff wall. All this helps understand the mild Brexit panic in business circles. But government can provide the necessary help here, and it should do so.

*This article originally appeared at the [New European Trade Unions Forum](#) and [EUROPP – European Politics and Policy](#). It gives the views of the author, not the position of LSE Brexit or the London School of Economics. Featured image credit: [Sam Agnew \(CC BY-NC-SA 2.0\)](#)*

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