

Another sneak peek at Brexit book 'Keeping the Wheels on the Road'

The third book in our Bite-Size book series 'Keeping the Wheels on the Road: UK Auto Post Brexit' has now been published and is available for you to enjoy! We're celebrating the book's release by giving you a sneak peek at a selection of writing from many of the book's contributors.

The UK car industry is in crisis, but the exact causes are a matter of intense debate. *Keeping the Wheels on the Road*, edited by Professor David Bailey, the foremost commentator on the UK auto industry, Professor Alex De Ruyter, Neil Fowler and John Mair, analyses the current position of the UK's car industry, the range of pressures and issues it faces and its likely shape after any form of Brexit from a range of perspectives. Industry experts, observers, commentators and representatives of the industry's unions, provide arguments for cautious optimism through to rather shocked pessimism.

Your sneak peek of Ian Henry's chapter...

Ian Henry is managing director and owner of AutoAnalysis and Visiting Professor at the Centre for Brexit Studies at Birmingham City University.

As the UK's departure from the EU nears, future trading relationships remain uncertain. There is a proposed but as yet unratified withdrawal agreement, during which nothing substantive would change until the end of 2020. The UK automotive industry does not want to leave but sees the transition period as an opportunity to prepare for life outside the EU.

A hard Brexit would mean the UK and EU switching immediately to trading on WTO terms. Vehicles exported to the EU would face a 10 per cent tariff, with the same rate applied to EU exports to the UK. Tariffs would also apply to other markets with which the EU has trade deals: the UK would lose the benefits of such deals once outside the EU. In addition, components would be subject to tariffs within a range of 2.5-4.5 per cent; some components or materials, notably aluminium

sheet used by Jaguar Land Rover (JLR), would be subject to higher rates.

As well as tariffs, a hard Brexit would see border delays as customs and other regulatory checks are introduced. While these may be partly obviated through schemes such as Authorised Economic Operator status and advanced submission of relevant documentation, the industry's transporters would be caught up in the flow of other sectors without such status. The sector's finely-tuned just-in-time supply chains will be at risk.

UK automotive manufacturing has experience of tariffs on components sourced outside the EU, or on vehicle exports beyond the EU. For example, vehicles shipped to the US are subject to import duty of 2.5 per cent. Until the EU-Japan Free Trade Agreement came into effect at the start of February 2019, cars and components traded between the EU and Japan remained subject to the 10 per cent tariff on cars and the lower rate on components. However, adding tariffs to EU trade would be on a far greater scale and place strain on its long-term economic viability from which it may not recover.

Calculating the cost of no deal

AutoAnalysis has developed a model to calculate the impact of tariffs on UK vehicle manufacturing. This produces results broadly consistent with public statements by the industry. JLR has said that it expects a hard Brexit tariff cost of £1.2bn. The model uses public data, alongside proprietary information which AutoAnalysis has collected in recent years. The model works as follows, taking a hypothetical UK-made vehicle: Annual production: 200,000, with 150,000 EU exports:

- Finished vehicle EU landed cost subject to duty: £21,000
- External bill of materials: £9,000, of which EU sourcing is 50 per cent at tier 1s; UK content is 40 per cent at tier 1s, but 30 per cent of this is actually sourced from the EU
- Average imported components tariff: 3.5 per cent
- EU finished vehicle tariff: 10 per cent

Taking these base parameters, the tables below show how tariffs would add slightly more than £39m to the bill of materials cost, but generate a far higher number, £315m, in tariffs on finished vehicles. The total can be reduced through forward processing relief: tariffs paid on component imports can be offset against tariffs paid on vehicle exports. Here, with 75 per cent of production exported to the EU, 75 per cent of the tariffs paid on imported components (£29.3m) could be reclaimed. However, setting up HMRC-compliant systems to achieve this is neither simple nor quick.

Imported component tariff cost for a hypothetical UK-made vehicle

REPORT THIS AD

Import costs	£
Bill of materials	9000
EU sourcing 50%	4500
UK sourcing 40%	3600
Of which 30% from EU	1080
Total EU content per vehicle	5580
Tariff cost per vehicle (3.5%)	195.3
Total cost (200,000 vehicles)	39,060,000

Export tariff cost for a hypothetical UK-made vehicle

Export costs	£
EU landed cost of vehicle, subject to duty	21000
Tariff payable per vehicle (10%)	2100
Total cost (150,000 vehicles exported to EU)	315,000,000
"New" cost of vehicle pre dealer margin etc	23100

We have applied the above process to each volume vehicle manufacturer in the UK using the average of their production volumes and EU exports for 2017 and 2018. While we cannot reveal individual company figures, we can say that the costs of tariffs range from £125m to more than £1bn per company. The total annual cost to the UK's volume vehicle companies is at least £2.7bn. Similar calculations for the lower volume manufacturers, Ford's UK engine manufacturing operations and the engine operations of the Japanese vehicle

companies, which export a proportion of their UK-made engines, generate additional tariff costs of more than £400m a year.

In practice, a hard Brexit would add more than £3bn to UK vehicle manufacturing's annual costs through tariffs alone. This is unsustainable. For example, in 2016/2017, JLR made profits of £1.6bn, and £1.5bn in 2017/2018. JLR will break even at best in 2018/19 (it has already reported losses in three quarters) although the reasons for this are varied, and are not solely due to Brexit. It is clear that tariffs would eradicate most, if not all, of the company's profits. Ford has referred to a hard Brexit as a 'red line' of its own, an ominous warning for the long-term future of the company's UK operations.

In addition to identifiable tariff costs, the industry would face non-tariff barriers (NTBs), covering the costs of regulatory compliance, customs processing, additional delays at the borders, the need for additional stocks to cover supply chain disruption and increased working capital requirements to cover additional stocks, funding tariff payments and changes to the VAT regime. Research from other parts of the world suggest that NTBs in automotive could amount to up to 10 per cent.

Countering these costs

There are no simple solutions. If the UK Government wanted to refund tariffs to affected companies and industries, this would place an unsupportable burden on the public purse. More significantly, such a strategy would not be allowed under WTO rules. There has been some talk of a temporary zero-tariff arrangement; pro-Brexit politicians have suggested that Article 24 of GATT could be invoked permitting zero tariffs ahead of a long-term FTA. There is no certainty that this would be accepted or practical (the EU would have to agree for one thing) and we doubt this would be achievable in practice.

However, there are some generic mitigation options for the industry including:

- **Increasing UK content of UK-made vehicles:** this is fine in principle but financial and management resource limitations of the supply base mean this would likely not happen on a sufficient scale or speed to eliminate the cost of tariffs. Complex

automotive supply chains mean that simply relocating tier 1 suppliers to the UK would not suffice. Companies throughout the supply chain at tier 2, 3 and 4 levels would also need to relocate to the UK to meet FTA rule of origin requirements.

- Automotive suppliers want to be near their largest addressable market, and this generally means locating in the EU, and not the UK.
- **Relocating UK production to factories inside the EU:** such moves would damage the UK economy, and while we think this will likely happen over time, vehicle companies do not all have spare EU capacity readily available to permit this taking place quickly or without significant cost.
- **Changing the markets into which UK manufacturers sell:** this too is easier said than done. JLR and Mini already export worldwide and it is questionable whether lost EU sales (caused by tariff-induced price rises) could be recovered through additional non-EU sales. Toyota and Vauxhall typically ship 80-85 per cent of their output to the EU and other markets in wider Europe (Turkey, Switzerland, Norway etc); it is difficult to see which markets UK factories could be allocated without affecting operations elsewhere.
- **Refocusing UK production to supply the domestic market:** this may be possible but would require investment to enable UK factories to make a wider range of models; most of the best-selling models in the UK are not made here.

Car companies' Brexit amelioration plans

The car companies have begun to implement contingency or amelioration plans to counter a no-deal Brexit:

BMW will close Mini for all of April; it was planning to close the factory in August to prepare for the new electric Mini and update the paint shop but will bring this temporary closure forward.

Honda has announced six non-production days in April to avoid potential supply chain disruption. JLR will extend its annual April shutdown, for the same reason.

Others are increasing UK-held stocks. The warehousing implications of this are significant and with other industries such as food also

taking on additional space, there is a limit on how much can be achieved in this way.

Aston Martin will import through ports other than Dover and will also, where necessary, fly components in, though this is clearly an expensive operation.

Conclusion

A hard Brexit would increase the industry's costs by more than £3bn a year through tariffs alone. There are some amelioration strategies which the industry can adopt but these are unlikely to solve the long-run problems that could arise. We expect around 10 per cent of 2018 output would be lost in 2019 even with a soft Brexit due to known production shutdowns and planned model changes; lost production this year would reach **at least** 175,000 units in the event of no deal, and much more in the long run. A hard Brexit would result in a smaller and much less dynamic industry in the UK, with reduced sales into the EU and reduced investment in the future.

Investment in the UK has fallen substantially in the last couple of years.²⁴ Further decline will follow, maybe rapidly. The calm and measured words of Japanese diplomats in the UK are worth taking on board: leaving the EU means that the UK's role as 'gateway to Europe' is over. A hard Brexit means the gate will be closed more quickly than otherwise would be the case.

['Keeping the Wheels on the Road: UK Auto Post Brexit' is available NOW in paperback and digitally on Amazon here.](#)

Other books in the Bite-Size series include:

['Do They Mean Us? The Foreign Correspondents' View of Brexit'](#)

['The Case for Brexit'](#)

[Will the Tory Party Ever Be the Same?: The Effect of Brexit](#)

['Farmageddon?: Brexit and British Agriculture'](#)