Border Crossing
June 2025
Volume: 15, No: 3, pp. 101 - 112
ISSN: 2046-4436 (Print) | ISSN: 2046-4444 (Online)
bordercrossing.uk

TRANSNATIONAL PRESS® LONDON

Received: 25 April 2024 Accepted: 1 March 2025
DOI: https://doi.org/10.33182/bc.v15i3.2926

Commentary

Brexit, UK Manufacturing and Industrial Strategy

David Bailey[1] and Ivan Rajic[2]

Abstract

This paper offers an overview of the impacts of Brexit on UK manufacturing. In particular it looks at impacts via non-tariff barriers in terms of goods exports, imports, and UK manufacturing's position in European value chains. It then looks at regulatory divergence and its implications for UK manufacturing. The need for an industrial strategy is examined. Overall, we find that post-Brexit the UK economy is less open to trade and investment, reducing UK manufacturing competitiveness and its ability to compete in both EU and global markets. The government's new industrial strategy needs to address major issues facing the sector such as skills, investment, scaling-up new clean technologies, as well as ongoing post-Brexit uncertainties.

Keywords: *Brexit, Manufacturing, trade, non-tariff barriers, value chains, industrial strategy.*

Introduction

Five years ago, the UK formally ceased to be a member of the European Union. The fifth anniversary of the UK's departure represents an opportune moment to look at the impacts thus far on the UK economy (Menon, 2025). Indeed, Brexit may be 'done' but its impacts are ongoing (Bailey *et al.*, 2023). This paper offers an overview of the impacts of Brexit on UK manufacturing in particular. It looks at impacts via extra post-Brexit non-tariff barriers in terms of goods exports, imports, and UK manufacturing's position in European value chains. It then moves on to look at regulatory divergence and its implications for UK manufacturing. The urgent need for an industrial strategy is examined and Labour's position is analysed. Overall, we find that post-Brexit the UK economy is less open to trade and investment, reducing UK manufacturing competitiveness and its ability to compete in both EU and global markets. We argue that the new Labour government's forthcoming industrial strategy needs to address major issues facing the sector such as skills, investment, scaling-up new clean technologies, as well as ongoing post-Brexit uncertainties.

Trade and Investment Impacts

The immediate impact of the 2016 Referendum, well before the UK even left the EU, was heightened uncertainty for UK manufacturing, especially over the future UK-EU trading relationship. Investment in the UK was negatively impacted, then took a subsequent hit

[1] Professor, Birmingham Business School, Email: d.g.bailey@bham.ac.uk
[2] Dr., Anglia Ruskin University, Faculty of Business and Law, Email: ivan.rajic@aru.ac.uk

during COVID, and recovered only slowly, being some 10-11% lower than expected levels by mid-2022 (Horovitz and Martin, 2023). As a result, UK manufacturing has now fallen behind the EU and US in terms of investment in new technologies, such as electric vehicles (EVs) and battery gigafactories (Bailey, 2023).

The Trade and Cooperation Agreement (TCA) (UKICE, 2021) offered important clarity for UK manufacturers by avoiding some of the concerns that manufacturers had about the post-Brexit UK-EU relationship and largely preserving tariff free UK-EU trade. However, this was by no means equivalent to the frictionless trade that existed during membership. Brexit has imposed extra costs on firms (Bailey and Rajic, 2022) in terms of compliance (such as customs and rules of origin rules), supply chain disruption and associated measures (e.g. stockpiling), labour shortages (notwithstanding the relatively liberal UK position on migration after Brexit), regulatory burdens and reduced funding for research and development (R&D).

The UK has repeatedly delayed (NAO, 2024) the imposition of full customs checks on imports so as to keep imported goods flowing. While the UK's Border Targeting Operating Mechanism (Brader, 2024) has set out how the UK will gradually introduce border controls on imports from the EU, entry summary declarations (HMRC, 2024) have been delayed until 2025. This has offered some relief for manufacturers in bringing in components, particularly in manufacturing supply chains (for example, in automotive).

However, challenges remain around exporting (such as the costs of completing declarations) given that the EU has imposed the full gamut of customs checks. This is an asymmetry that disadvantages (Brader, 2024) British manufacturers: the latter have had to spend much time and money on complying with customs rules while EU competitors can still trade relatively freely with the UK.

In some cases, manufacturing firms have either ceased exporting or now stockpile at hubs in, say, the Netherlands. Manufacturing supply chain disruption was exacerbated by Covid-19 (manifested by chip shortages in manufacturing and skills shortages in certain sectors), and the war in Ukraine (visible in higher energy costs and key materials shortages). Overall, British manufacturers have been exposed to risks (Bailey *et al.*, 2022) and additional costs that are unlikely to disappear going forward, in what can be seen as a 'slow-burn' disruptive process which acts as a drag on growth. Such impacts are also thought to be most profound for export-orientated sectors in regions such as the North East (Dhingra *et al.*, 2022), which in turn makes a post-'levelling up' regional development agenda even more challenging.

All of this matters as the significance of manufacturing (Bailey and Rajic, 2022) for the UK economy belies its relatively small size (10% of the UK economy). Manufacturing accounts for a disproportionate share of total exports (45%) and private sector R&D spending (65%). Also, some services exist because they are closely tied to manufacturing.

The adverse impacts of Brexit have been seen through reduced trade with the EU (Du *et al.*, 2024), with an estimated 27% drop in UK exports and a 32% reduction in imports between 2021 and 2023, along with a 33% decline in the range of goods traded by the UK with EU (ibid). This has played out in different ways across firms and industries. Sectors such as material-based manufacturing have been most affected, with significant falls in export values and the variety of products exported. And post-Brexit non-tariff barriers have proved

particularly challenging to smaller firms (Freeman *et al.*, 2024) in manufacturing supply chains (Bailey *et al.*, 2023).

Most recently, the EU's General Product Safety Regulation (EU, 2023) requires non-EU firms exporting to the EU to appoint a responsible person within the EU to manage compliance and safety-related issues. This is again likely to impact most on small UK manufacturers, with some reportedly pulling exports from the Single Market (Taaffe-Maguire, 2024).

Value Chain Impacts

Some sectors (including automotive) began reorganising their supply chains away from EU countries (Freeman *et al.*, 2022), even before the TCA, perhaps in anticipation of likely barriers to trade on imported inputs regardless of the outcome of the Brexit negotiations. Such sectors have also seen a rise in imported components from non-EU countries, suggesting that their supply chains have been through a process of adjustment and dis-integration from EU supply chains, which may reduce efficiency for UK manufacturing. If such firms initially chose to source their inputs from the EU, then this was previously likely to have been the most efficient option, so this reallocation is likely to reflect a decline in efficiency in UK manufacturing costs.

There appears to be a knock-on effect on UK manufacturing - a more closed economy has meant less trade and investment, and a hit for trade orientated sectors. Meanwhile, manufacturers more orientated towards the domestic market, such as the food and drink sector (The Manufacturer, 2024), have grown. These tend to be lower-productivity sectors, and such changes in production to focus on the UK market (Dhingra *et al.*, 2022) may be another part of the reason for UK productivity falls post-Brexit.

What's also clear is that manufacturers have had to undertake detailed risk management (Bailey *et al.*, 2022a) and scenario planning and take a range of mitigating actions. These have included exporting fewer types of products or pulling out of exporting to the EU completely, stockpiling components given difficulties in maintaining Just-in-Time systems, shifting production to the EU, or looking to redirect trade to new markets outside the EU.

Wider Trade Issues

While there has been some redirection of goods exports towards non-EU countries, this has not compensated for the reduction in trade with the EU. The global trading system also faces uncertainty given President Trump's tariffs of 10 percent or more on all US imports. Given that the UK exported over £58bn (Inge, 2024) worth of goods to the US over the last year, this could be a sizeable hit for UK manufacturing and would likely impact on high-value sectors such as automotive, aerospace and pharmaceuticals, as well as drink exports such as whisky. Such effects would be worsened by tit-for-tat tariffs by other countries; UK total exports could fall by £22 billion (Tamberi, 2024) (-2.6%) and imports by £1.4 billion (-0.16%), with significant variations across sectors.

More broadly, post-Brexit the UK has agreed a series of 'rollover deals' which have preserved pre-existing relationships from its time in the EU. Some new trade agreements have been signed with New Zealand, Australia, and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). However, these new deals are expected to have limited economic impact (Fry, 2025). The deal with Australia is forecast to boost

GDP by just 0.1% compared to 2019 and only marginally reduce prices for consumers (Bailey and Rajic, 2022). These limited benefits are partially due to the fact that in some sectors, such as aerospace, tariffs are already set at zero. In other sectors tariffs exist, but are low, so lowering them to 0% does not really provide a big boost to UK exporters. Mostly, though, the benefits are small simply because UK trade with Australia is low given distance and size.[3] On the CPTPP, an Asia-Pacific trade bloc, the government's own estimates are that this will increase bilateral trade by £4.9bn by 2040, compared to the projected levels of trade. The UK GDP is expected to be around £2bn higher than it would otherwise be in 2040. These are welcome but very small economic benefits (ibid).

Regulatory Divergence and 'Reset' Prospects

Whether there is more progress on trade reorientation in the future remains to be seen. Similarly, if there is more regulatory divergence from the EU going forward, it will become possible to see whether it will bring benefits or disruptions to UK manufacturers.

Possibilities for regulatory divergence were argued to be a key benefit of Brexit. Yet few firms in sectors such as automotive, aerospace, pharmaceutical or chemicals see any benefit in regulatory divergence and rather only additional costs. The weight of evidence and industry opinion points towards more divergence meaning more disruption.

Going forward, the UK government needs to acknowledge that manufacturing continues to experience effects that go beyond 'teething problems'. One 'reset' which might help UK manufacturing is the Product Regulation and Metrology Bill (UK) (Product Regulation and Metrology Bill [HL] (UK), 2024-25). This would allow the government to keep pace with new EU product safety regulations. In addition, the EU 'CE' mark (denoting conformity with EU product requirements) could continue to be accepted in the GB market even as EU regulations evolve, avoiding new administrative costs (Reland, 2024) for businesses.

There are other kinds of alignment required to provide greater access to EU markets, however. For example, UK chemicals exports to the EU have fallen by 24 per cent since 2016. Alignment could cut industry costs and help it re-enter EU markets (although this would not be automatic as UK exporters to the Single Market would still need to prove compliance at the border) (Bailey, 2025).

The Need for an Industrial Strategy

Indeed, however any UK-EU 'reset' develops, the UK needs an active, integrated, and well-funded industrial strategy. Recent shocks, including the Covid-19 pandemic (Bailey *et al.*, 2021) and the energy price spike induced by the war in Ukraine, led to both supply chain disruption and inflation. In Europe and the US, these shocks also exposed a lack of resilience in areas such as energy security and the supply of medical equipment (Bailey *et al.*, 2020).

Governments have reconsidered the role of industrial policy in (re-)building domestic manufacturing capacity to safeguard against future crises, to reduce reliance on China, and –

[3] As expected. See Hearne et al (2019).

critically – to get to Net Zero more quickly than the market seems able to manage (Bailey *et al.*, 2023).

As a result, industrial policy is back, and in a big way around the world, although whether one policy can hit multiple targets is open to question, especially for a small open economy like the UK. For example, at the macro-level, policymakers have emphasised the importance of (and begun to implement) so-called mission led industrial policies to meet societal challenges, such as climate change and the transition to net-zero technologies (Mazzucato, 2021). In the UK, the new 'mission-driven' government has ambitions for green technologies, to encourage greater resilience, and ensure security of supply in manufacturing supply chains 'securonomics' (The Financial Times, 21/5/24). Yet there are fears that mission-led policies are top-down (Henderson et al., 2023), highly selective, technology-policy focused, with insufficient consideration of differential regional impacts. Regions with existing capabilities, enhanced knowledge bases, skillsets and specialisms, and business and social networks may be in a better position to benefit from 'mission-led' initiatives. This will have implications for addressing (existing) regional inequalities. Local policymakers and place leaders will need to adjust place-based policies to ensure their regions can take advantage of central government initiatives.

The United States is the 'flag-bearer' for new industrial policy via former President Biden's 'three-fer' comprising the Inflation Reduction Act (IRA) (McKinsey & Company, 2022), the Bipartisan Infrastructure Law (White House, 2021) and the CHIPS and Science Act (White House, 2022) which add up to over $2 trillion of industrial policy (Weaver, 2022) support for green manufacturing, reshoring and decoupling from China. These have provided a range of subsidies and tax breaks to foster investment in and take-up of low carbon technologies, such as battery electric vehicles (BEVs), heat pumps and carbon capture as well as semi-conductors.

The IRA alone has stimulated some $278billion (Perkins and Aston, 2023) of new investment, creating some 170,000 new jobs. Not surprisingly, the European Union (EU) has grown concerned over the IRA's impact on the EU's own green manufacturing base, particularly in terms of diverting investment away from the EU, especially on battery making for BEVs. And looking East, the EU has launched an investigation into Chinese subsidies for battery electric vehicles. Yet China has of late re-emphasised its focus (The Business Times, 2023) on industrial policy, while South Korea has just unveiled a $29bn boost (Bakre, 2023) for its EV battery industry.

In response to the 'American Challenge', the EU announced a €250 billion Green Deal Industrial Plan (European Commission, 2023), along with a relaxation of EU 'state aid' rules to allow member states to use fiscal incentives to fast-track investment in green sectors, with an emphasis – at a high level at least - on skills, supply chains, funding and smart and simple regulation, such as cutting red tape for new net-zero manufacturing projects and accelerated permitting rules for renewables (Council of the EU, 2022).

This has all led to concern over a green subsidy race (Conley, 2023). The risk is that subsidy schemes will stifle competition, raise global trade tensions, and reduce opportunities for developing economies to grow their own clean-tech sectors. New policies could also challenge the existing multi-lateral trade framework and WTO rules. Indeed, this could be a major moment for reset at the WTO, especially when both the EU (European Commission,

2023a) and UK (HM Treasury and DESNZ, 2023) are introducing Carbon Border Adjustment Mechanisms.

But on the positive side, both the US and EU subsidy schemes should help accelerate a much-needed green transition. That will accelerate decarbonisation and the move to Net Zero. This is needed as the market, left to its own devices, is not moving quickly enough.

And what of the UK? The UK had several industrial strategies after 2010, with a highly developed attempt, developed by Greg Clark (HM Government, 2017), scrapped under the Johnson government. In its place came a plan to 'Build back better' (HM Treasury, 2021) with a focus on levelling up (Fai and Tomlinson, 2023) (a political rhetoric since dropped by the new Labour government).

The UK's Government's Industrial Strategy Green Paper

The UK Government's Industrial Strategy Green Paper (UK Government, 2024), launched at the Investment Summit last October, could mark a significant shift in how the country shapes its economic future. Released amidst a backdrop of global economic uncertainty, deglobalisation, the ongoing impacts of Brexit highlighted above, and the challenges of Net Zero and digitalisation, the draft strategy is an attempt to align Britain's economic base with the key challenges of the 21st century.

The Green Paper is designed to stimulate debate on how best to position the UK for economic growth. And as with any forward-looking policy document, the strategy will generate a mix of hope and concern.

There is a lot to welcome in the Green Paper. Actually, having a strategy for a start is welcome. The UK has had numerous strategies before but the last comprehensive effort, launched in 2017 under the Theresa May government, was dropped by the subsequent Prime Minister Boris Johnson in 2021 when he launched his so-called 'plan for growth' (Bailey, 2021).

The proposal in the Green Paper for an Industrial Strategy Council set up on statutory footing to oversee the strategy is a welcome move. The Council could offer a degree of external oversight, and potentially 'hardwire' the idea of industrial strategy as a partnership between the state and business. This is not meant to be a top-down, 'picking winners' approach but rather a collaborative effort to discover new opportunities and challenges and to develop new policies accordingly. However, the Council needs much more detail if it is to be on a comparable footing to say the Office for Budget Responsibility (which was set up in 2010 to provide independent and analysis of UK public finances).[4]

The draft industrial strategy has not shied away from some of the big issues. A major strength this time round is that a focus on place and tackling regional inequality (Newman and Richards, 2024) is a main objective. This is welcome as economic growth in Britain has been disproportionately concentrated in London and the Southeast, leaving other regions as

[4] See: https://obr.uk/about-the-obr/what-we-do/

'left behind places.' A focus on devolution and empowering local leaders to shape industrial policies tailored to their specific needs is a step in the right direction.

The emphasis on energy and infrastructure is also much needed. The UK's infrastructure is in dire need of modernisation, particularly in the context of new technologies and shifting energy needs. By pledging to invest, the government hopes to lay the groundwork for a more interconnected economy. Improved connectivity could boost productivity spillovers across space, reduce economic disparities between different regions, and attract investment in those left-behind places.

The Green Paper places a big emphasis on innovation, and research and development (R&D). The government's pledge to increase public investment in R&D, particularly in emerging industries of the future such as artificial intelligence, robotics, and clean energy technologies, is welcome. If successfully implemented, this could help the UK build an industrial base that is not just competitive but also resilient to the kind of technological disruption envisaged in Industry 4.0.

The plan's focus on clean growth is also timely. As the world is forced to face the realities of climate change, the Green Paper recognises that the UK's industrial future must be sustainable. This is reflected in proposals for reducing carbon emissions and developing green technologies. By prioritising clean energy and promoting investment in sectors like electric vehicles and renewable energy, the strategy aligns with goals for achieving net-zero emissions by 2050.

While the Green Paper has much to offer, there are concerns about the feasibility of its implementation and whether it really addresses some of the deeper systemic issues facing the UK economy such as, inter alia, low levels of investments, skills gaps, high energy costs undermining competitiveness, and deep-seated regional inequalities (Bailey and Hildreth, 2024).

The 'Elephant in the Room' is of course Brexit. Post-Brexit non-tariff barriers have disrupted UK trade with the EU and continue to act as a drag on growth. This seems to have been put in the 'too difficult to tackle' box; as a result the Green Paper skirts around Brexit and its impact on the UK's industrial landscape.

In particular, the Green Paper offers little clarity on how industries that have been deeply integrated in EU supply chains and markets, such as advanced manufacturing and automotive, can actually thrive outside of the European Union. And with many businesses still unsure about regulatory and trade frameworks, the Green Paper does not sufficiently address the ongoing disruptions from Brexit which act as a drag on growth (Bailey *et al.*, 2022).

Moreover, a major tension is whether the Green Paper's focus on technology and high-skilled sectors could leave behind certain regions, industries and workers. The strategy's vision for a high-tech, innovation-driven economy is commendable. But there is a risk that this selective mission-led technology approach is at odds with the goal of tackling regional inequalities, and could in fact widen the divide between high-skilled and low-skilled workers and between successful and left-behind places.

For workers in industries like retail, hospitality, or traditional manufacturing - sectors that are not necessarily innovation-driven - the strategy offers little in terms of support or

retraining. Yet without a robust plan for upskilling and re-skilling workers throughout their lives, as we see for example in Singapore through its SkillsFuture[5] programme, there could be a growing polarisation between those who benefit from the green and high-tech technologies and those who do not. This is especially important given the likely wide-ranging effects of Industry 4.0, for example in terms of automation (De Propris and Bailey, 2021).

A major concern is the lack of detail as to how the strategy will be funded. Many of the policies outlined, such as investing in infrastructure, boosting R&D, and supporting regional growth, require substantial financial clout. However, the Green Paper does not provide much detail on where the funding will come from or how much will be available. In fact, Rachel Reeves cut the National Wealth Fund (Pickard *et al.*, 2024) by a fifth, even as it is being used to revamp the UK Investment Bank. Without clear financial backing, there is a risk that the proposals remain aspirational rather than actionable.

Overall, the new Green Paper is a welcome forward-looking document that seeks to position the UK for the future in terms of innovation, infrastructure, and clean energy. Its focus on regional development, technological advancement, and sustainability is commendable and much needed in the face of growing global and domestic challenges. However, the success of this strategy will depend on its ability to translate ideas into action and on whether it addresses some of the deeper structural issues facing the economy, such as regional inequality, post-Brexit uncertainties, and the divide between high-skilled and low-skilled workers.

Conclusion

Five years ago, the UK formally ceased to be a member of the European Union. The fifth anniversary of the UK's departure represents a good moment to look at the impacts thus far on the UK economy (Menon, 2025). This paper has offered an overview of the impacts of Brexit on UK manufacturing in particular. It has looked at impacts via non-tariff barriers in terms of goods exports, imports, and UK manufacturing's position in European value chains before moving on to look at regulatory divergence and its implications for UK manufacturing. Overall, we find that post-Brexit the UK economy is less open to trade and investment, reducing UK manufacturing competitiveness and its ability to compete in both EU and global markets.

Possibilities for regulatory divergence were seen as a key benefit of Brexit. Yet few firms in sectors such as automotive, aerospace, pharmaceutical or chemicals see any benefit, rather only additional costs. The weight of evidence and industry opinion points towards more divergence meaning more disruption. One 'reset' which might help UK manufacturing is the Product Regulation and Metrology Bill. This would allow the government to keep pace with new EU product safety regulations. In addition, the EU 'CE' mark (denoting conformity with EU product requirements) could continue to be accepted in the GB market even as EU regulations evolve, avoiding new administrative costs for businesses.

[5] See: www.skillsfuture.gov.sg

However, alongside any UK-EU 'reset' developments, the UK needs an active, integrated, and well-funded industrial strategy. In this context, the Labour government's new industrial strategy is welcome but is largely silent on Brexit and the drag on growth this produces, even though the central plank of government policy is ironically meant to be about stimulating growth. In particular, the Green Paper offers little clarity on how industries that have been deeply integrated in EU supply chains and markets, such as advanced manufacturing and automotive, can actually thrive outside of the European Union. In this respect, more consideration is needed of issues to be mitigated (for example, the EU's Carbon Border Adjustment Mechanism) and opportunities to be seized (for example, enhance UK-EU cooperation on clean energy). These are serious omissions. We argue that the new industrial strategy needs to address major issues facing the manufacturing sector such as skills, investment, scaling-up new clean technologies, as well as ongoing post-Brexit uncertainties.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Additional information

Funding

We are grateful to support from the Economic and Social Research Council's UK in a Changing Europe programme under award number [ES/X005844/1].

References

Bailey, D (2021) Industrial Strategy: building back badly, UK in a Changing Europe Blog, Available at: https://ukandeu.ac.uk/industrial-strategy-building-back-badly/

Bailey, D (2023) The race for electric vehicle battery making is well underway and the UK is barely off the starting grid, UK in a Changing Europe Blog, Available at: https://ukandeu.ac.uk/the-race-for-electric-vehicle-battery-making-is-well-underway-and-the-uk-is-barely-off-the-starting-grid/

Bailey, D (2025). Manufacturing and Industry, in UK and a Changing Europe The Brexit files: from Referendum to reset. London: UK in a Changing Europe.

Bailey, D., & Hildreth, P. (2024). Place, devolution and industrial strategy: three key tests for labour. Contemporary Social Science, 1–17. https://doi.org/10.1080/21582041.2024.2443463

Bailey, D., & Rajic, I. (2022). Manufacturing After Brexit. UK in a Changing Europe. https://media.ukandeu.ac.uk/wp-content/uploads/2022/01/UKICE-Manufacturing-After-Brexit-Report_FINAL-2.pdf

Bailey, D., & Rajic, I. (2022, January 26). Manufacturing After Brexit. UK in a Changing Europe. https://ukandeu.ac.uk/research-papers/manufacturing-after-brexit/

Bailey, D., Clark, J., Colombelli, A., Corradini, C., De Propris, L., Derudder, B., … Usai, S. (2020). Regions in a time of pandemic. Regional Studies, 54(9), 1163–1174. https://doi.org/10.1080/00343404.2020.1798611

Bailey, D., Crescenzi, R., Roller, E., Anguelovski, I., Datta, A., & Harrison, J. (2021). Regions in Covid-19 recovery. Regional Studies, 55(12), 1955–1965. https://doi.org/10.1080/00343404.2021.2003768

Bailey, D., De Propris, L., De Ruyter, A., Hearne, D., & Ortega-Argilés, R. (2023). Brexit, trade and UK advanced manufacturing sectors: a Midlands' perspective. Contemporary Social Science, 18(2), 250–265. https://doi.org/10.1080/21582041.2023.2192700

Bailey, D., de Ruyter, A., Hearne, D., & Ortega-Argilés, R. (2022). Shocks, resilience and regional industry policy: Brexit and the automotive sector in two Midlands regions. Regional Studies, 57(6), 1141–1155. https://doi.org/10.1080/00343404.2022.2071421

Bailey, D., de Ruyter, A., MacRae, C., McNeill, J., & Roberts, J. (2022a). Perceiving and managing Brexit risk in UK manufacturing: evidence from the midlands. Contemporary Social Science, 17(5), 468–484. https://doi.org/10.1080/21582041.2022.2073386

Bailey, D., Hearne, D., & Charles Budd, L. (2023). People, places and policies beyond Brexit. Contemporary Social Science, 18(2), 125–131. https://doi.org/10.1080/21582041.2023.2216185

Bailey, D., Pitelis, C. N., & Tomlinson, P. R. (2023). Place-based industrial and regional strategy – levelling the playing field. Regional Studies, 57(6), 977–983. https://doi.org/10.1080/00343404.2023.2168260

Bakre, M. (2023, December 13). South Korea announces $29 billion to help its battery companies 'reduce foreign dependence. Emerging Technology News. https://etn.news/buzz/south-korea-29-billion-battery-aid

Brader, C. (2024, April 26). Border Controls for UK and EU imports and exports. House of Lords Library. https://lordslibrary.parliament.uk/border-controls-for-uk-and-eu-imports-and-exports/

The Business Times. (2023, December 13). China puts focus on industrial policy, skips big demand stimulus. https://www.businesstimes.com.sg/international/china-puts-focus-industrial-policy-skips-big-demand-stimulus

Conley, T. (2023, March 30). Green subsidy race? 5 experts explain what to expect. World Economic Forum. https://www.weforum.org/agenda/2023/03/inflation-reduction-act-eu-green-deal-subsidy-race-consequences/

Council of the European Union (2022, December 19). REPowerEU: Council agrees on accelerated permitting rules for renewables. https://www.consilium.europa.eu/en/press/press-releases/2022/12/19/repowereu-council-agrees-on-accelerated-permitting-rules-for-renewables/

De Propris, L., & Bailey, D. (2021). Pathways of regional transformation and Industry 4.0. Regional Studies, 55(10–11), 1617–1629. https://doi.org/10.1080/00343404.2021.1960962

De Propris, L., & Bailey, D. (n.d.). Industry 4.0. and Regional Transformations. Regional Studies Association. https://www.regionalstudies.org/rsa-blog/industry-4-0-and-regional-transformations/

Dhingra, S., Fry, E., Hale, S., & Jia, N. (2022). The Big Brexit: An assessment of the scale of change to come from Brexit. Resolution Foundation. https://economy2030.resolutionfoundation.org/reports/the-big-brexit/

Du, J., Liu, X., Shepotylo, O., & Shi, Y. (2024). Unbound: UK Trade post-Brexit. Centre for Business Prosperity Research Paper. https://www.aston.ac.uk/sites/default/files/2024-09/Full%20Report.pdf

European Commission. (2023, February 1). The Green Deal Industrial Plan: Putting Europe's net-zero industry in the lead. https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/green-deal-industrial-plan_en

European Commission. (2023a, September 29). Carbon Border Adjustment Mechanism (CBAM) starts to apply in its transnational phase. https://ec.europa.eu/commission/presscorner/detail/en/ip_23_4685

European Union. (2023). General product safety regulation 2023. EUR-Lex. https://eur-lex.europa.eu/EN/legal-content/summary/general-product-safety-regulation-2023.html

Fai, F. M., & Tomlinson, P. R. (2023). Levelling up or down? Addressing regional inequalities in the UK. Contemporary Social Science, 18(3–4), 285–297. https://doi.org/10.1080/21582041.2023.2282161

Financial Times (21/5/24) 'Labour sets out 'securonomics' vision to avoid inflationary shocks', Financial Times, https://www.ft.com/content/15d6a761-4efe-4ac8-ba51-4ee2a6095304

Fry, E (2025) Brexit Impact – Trade, in UK and a Changing Europe The Brexit files: from Referendum to reset. London: UK in a Changing Europe.

Freeman, R., Manova, K., Prayer, T., & Sampson, T. (2022). UK trade in the wake of Brexit. London School of Economics Centre for Economic Performance Discussion Paper 1847. https://cep.lse.ac.uk/pubs/download/dp1847.pdf

Freeman, R, M Garofalo, E Longoni, K Manova, R Mari, T Prayer, and T Sampson (2024) Deep integration and trade: UK firms in the wake of Brexit, UK in a Changing Europe Blog, Available at: https://ukandeu.ac.uk/deep-integration-and-trade-uk-firms-in-the-wake-of-brexit/

Hearne, D., De Ruyter, A., & Davies, H. (2019). The Commonwealth: a panacea for the UK's post-Brexit trade ills? Contemporary Social Science, 14(2), 341–360. https://doi.org/10.1080/21582041.2018.1558277

Henderson, D., Morgan, K., & Delbridge, R. (2023). Putting missions in their place: micro-missions and the role of universities in delivering challenge-led innovation. Regional Studies, 58(1), 208–219.

https://doi.org/10.1080/00343404.2023.2176840

HM Government. (2017). Industrial Strategy: Building a Britan fit for the future. https://assets.publishing.service.gov.uk/media/5a8224cbed915d74e3401f69/industrial-strategy-white-paper-web-ready-version.pdf

HM Revenue & Customs. (2024, November 20). Making an entry summary declaration. https://www.gov.uk/guidance/making-an-entry-summary-declaration

HM Treasury, & Department for Energy Security & Net Zero. (2023, December 18). Factsheet: UK Carbon Border Adjustment Mechanism. https://www.gov.uk/government/consultations/addressing-carbon-leakage-risk-to-support-decarbonisation/outcome/factsheet-uk-carbon-border-adjustment-mechanism

HM Treasury. (2021). Build Back Better: our plan for growth. https://assets.publishing.service.gov.uk/media/604f5238d3bf7f1d142070b1/PfG_Final_print_Plan_for_Growth_Print.pdf

Horovitz, B., & Martin, J. (2023, March 13). How has Brexit affected business investment in the UK? Economic Observatory. https://www.economicsobservatory.com/how-has-brexit-affected-business-investment-in-the-uk

Inge, S. (2024, November 6). Trump tariffs threaten billions in British Exports. Politico. https://www.politico.eu/article/trump-tariffs-threaten-billions-in-british-exports/

The Manufacturer. (2024, August 20). Food and beverage manufacturers lead sector output growth in July – report. https://www.themanufacturer.com/articles/food-and-beverage-manufacturers-lead-sector-output-growth-in-july-report/

Mazzucato, M (2021) Mission Economy: a moonshoot guide to changing capitalism, Allen Lane – Penguin, London

McKinsey & Company. (2022, October 24). The Inflation Reduction Act: Here's what's in it. https://www.mckinsey.com/industries/public-and-social-sector/our-insights/the-inflation-reduction-act-heres-whats-in-it

Menon, A (2025) Introduction, in UK and a Changing Europe, The Brexit files: from Referendum to reset. London: UK in a Changing Europe.

National Audit Office. (2024, May 20). Delays and uncertainty hamper post EU exit border ambitions. https://www.nao.org.uk/press-releases/delays-and-uncertainty-hamper-post-eu-exit-border-ambitions/

Newman, J., & Richards, D. (2024, August 7). Ending the failure of regional policy – why Starmer must avoid 'hyper-active incrementalism. UK in a Changing Europe. https://ukandeu.ac.uk/ending-the-failure-of-regional-policy-why-starmer-must-avoid-hyper-active-incrementalism/

Perkins, H., & Aston, A. (2023, September 19). U.S. Inflation Reduction Act: one year on, a summary of impressive progress in the energy transition. Energy Post. https://energypost.eu/u-s-inflation-reduction-act-one-year-on-a-summary-of-the-impressive-progress-in-the-energy-transition/

Pickard, J., O'Dwyer, M., Parker, G., & Pilmmer, G. (2024, October 14). Rachel Reeves cuts National Wealth Fund budget despite UK investment drive. Financial Times. https://www.ft.com/content/857eb38c-5f54-4686-8720-521eaf43a124

Product Regulation and Metrology Bill [HL] (UK) Session 2024-25. https://bills.parliament.uk/bills/3752

Reland, J. (2024, October 10). The Brexit bill no one's talking about. UK in a Changing Europe. https://ukandeu.ac.uk/the-brexit-bill-no-ones-talking-about/

Taaffe-Maguire, S. (2024, December 12). British businesses stop shipping to Northern Ireland due to updated rules. Sky News. https://news.sky.com/story/british-businesses-stop-shipping-to-northern-ireland-due-to-updated-rules-13271068

Tamberi, N. (2024, November 8). Will Trump impose his tariffs? They could reduce the UK's exports by £22 billion. Centre for Inclusive Trade Policy. https://citp.ac.uk/publications/trumps-tariffs-could-reduce-uk-exports-by-22-billion

UK Government. (2024). Invest 2025: The UK's Modern Industrial Strategy. https://assets.publishing.service.gov.uk/media/6711176c386bf0964853d747/industrial-strategy-green-paper.pdf

UK in a Changing Europe. (2021, July 20). What is the Trade and Cooperation Agreement? https://ukandeu.ac.uk/the-facts/what-is-the-trade-and-cooperation-agreement/

Weaver, C. (2022, July 28). Congress passes $280bn Chips and Science Act. Financial Times. https://www.ft.com/content/d1e5bb5d-da09-488b-8430-a05d8016a95f

White House. (2021, November 6). Fact Sheet: The Bipartisan Infrastructure Deal. https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/06/fact-sheet-the-bipartisan-infrastructure-deal/

White House. (2022, August 9). Fact Sheet: CHIPS and Science Act Will Lower Costs, Create Jobs, Strengthen Supply Chains, and Counter China. https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/09/fact-sheet-chips-and-science-act-will-lower-costs-create-jobs-strengthen-supply-chains-and-counter-china/.