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# Home Advantage? Rhetoric Versus Reality in the Reshoring Debate

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## Executive Summary

Politicians on both the right and the left of UK politics are proposing to reshore production from overseas as a solution to popular concerns about regional inequality and the security of global supply chains. But reshoring is the wrong answer to the question of how to deliver prosperity and security because it is a response that springs from nationalistic impulses rather than economic realities. If implemented, it would prove a costly mistake. Policy should instead focus on the industrial and innovation strategies that will be needed to build up the competitive sectors of the economy.

The 30-year trend to offshore the more labour-intensive segments of production has been a win-win for companies and consumers in both high- and low-income countries. It has raised efficiency, lowered prices, increased choice, and made global trade more extensive and resilient. Reversing this process would squander these gains without delivering the volume of well-paying jobs that proponents claim it will.

In this paper, we assess the impact of the globalisation of production and evaluate the main claims that it has damaged domestic economies, increased their exposure to shocks and undermined their security.

The first claim about reshoring is that reindustrialisation on a large scale can deliver prosperity in communities previously damaged by deindustrialisation. But this is a backward-looking, nostalgic lament that ignores the existing and nascent industrial strengths of many of these cities and towns. Bringing back this work to the UK would either involve relying on automation (thus creating few jobs), or on labour-intensive activity with poor pay and working conditions, helping neither individuals nor their communities. It would be far better to use industrial strategy<sup>1</sup> to ensure sectors, companies and workers have the skills, technology and infrastructure needed to compete in global value chains.

The second argument is that reshoring is necessary to create “jobs of the future” in high-technology and green sectors. Although a more forward-looking and rational argument at face value, the risk is that the rhetoric of reshoring obscures the investment that will be required to develop and grow technology clusters in previously deindustrialised communities. Reshoring isn’t how we are going to grow the fintech and digital-media clusters in Manchester, for instance, or the AI and data-science capabilities of Birmingham and Leeds, or the renewables industry in the North East. Rather, they require forward-looking innovation, industrial and development strategies that position the high-tech and green sectors as the natural evolution of manufacturing – and which create new sources of prosperity for deindustrialised communities.

The third argument is motivated by mounting security concerns over technological dependence on our geopolitical rivals, such as China. Again, caution is necessary as the UK, on its own, lacks the industrial

base to reshore critical technologies, including 5G. Instead, the task for policymakers is to develop a coherent intellectual framework for assessing security risks in technology development and deployment. This includes a more sophisticated use of trade and national-security policy to develop strategic partnerships with allies in sensitive areas of technology.

Fourth is the need to address risks and improve resilience. Global crises like the Fukushima nuclear disaster and Covid-19 have shown the ease with which disruption to global trade can produce shortages of critical supplies, be it PPE, semiconductors or gas. But relying solely on domestic production would increase, not reduce, the risks of damaging bottlenecks.

Instead, the way to minimise the risk and impact of supply-chain disruption is by governments engaging in proper contingency planning and firms improving their management of information flows. Ultimately, the UK needs to develop a comprehensive strategic framework for identifying and planning for potential future crises.

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## Introduction

Over the past few decades, the globalisation of trade, investment and production has delivered unprecedented productivity and welfare gains to companies and consumers in both advanced economies and developing countries.

But the system of global economic integration is currently being rethought in many Western countries, including the UK. Businesses and governments are grappling with the tension between the need for international cooperation and the growing domestic political pressure to prioritise local economic growth by reshoring manufacturing jobs, previously lost to low-wage countries.<sup>2</sup>

Aspects of this rethink are an understandable and rational response to shifting economic, national-security and technological challenges, and the short-term supply-chain disruptions caused by Brexit and Covid-19. Yet the simplistic political narratives on reshoring in the UK – from both left<sup>3</sup> and right<sup>4</sup> – obscure the more complex and nuanced questions that need to be asked about shifts in the industrial structure of the UK economy and its reliance on inputs from overseas.

For example, what is the nature of the risk of technological exposure to China? How can the robustness and resilience of supply chains be improved in response to shocks such as Covid-19?

Hasty or ill-conceived attempts to reduce reliance on overseas suppliers could jeopardise the economic advantages that globalisation brings while stoking international trade tensions. It could be costly to taxpayers, as well as largely futile, if governments attempt to subsidise unsustainable reindustrialisation.

There are also political dangers. For the UK to reshore supply chains, whether on the basis of national security or in an attempt to create jobs, the government would not only have to assess how the nature of globalisation is changing following both the financial crisis and the pandemic, but also understand how the UK's place within specific global value chains is evolving. Fixating on nostalgia for the mass factory jobs of the past risks overlooking what we need to do to create the industries, employment and investments of the future, including in green jobs and tech.

This paper unpicks the economic and political aspects of the reshoring debate, posing a set of questions that policymakers need to be able to answer when devising a framework for keeping the borders open while restoring economic belonging. The chapters to follow analyse how the evolution of globalisation is leading to calls for reshoring; identifies the cores strands of what is commonly meant by reshoring; and then assesses the economic case for reshoring.

## The Reshoring Debate: Key Terminology

**Offshoring:** moving all or part of a business operation overseas, usually to take advantage of lower costs.

**Reshoring:** returning a business operation that was previously moved overseas to its original country.

**Nearshoring:** bringing a business operation previously offshored to a distant location to one that is closer to the original country.

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## What Is at Stake?

The globalisation of trade, investment and production has driven growth worldwide over the past five decades, generating enormous welfare and efficiency gains. But global economic integration may now be slowing and, in some respects, going into reverse. What are the dynamics of these trends, and how will they reshape the world economy?

### The Economic Impacts of Globalisation

Until the 1980s, manufacturing companies typically located the various stages of production on one site. This bundling of activity in one place allowed companies to better manage the complexities of large-scale production necessary to sell globally. In addition, while labour might have been cheaper abroad, the high costs of coordinating production on an international basis had been a significant barrier to offshoring.

The ICT revolution in the 1970s to 1980s changed that calculation by allowing companies to disaggregate higher-value R&D and specialised customer knowledge from lower-value commoditised production, which was either automated or offshored to lower-cost economies. As the various stages of the manufacturing process were shifted overseas, the economic and commercial pressures of trade encouraged companies to restructure and optimise their international supply networks into so-called global value chains (GVCs).

The production of intermediate or final goods and services can now be broken down into three broad categories:

**Domestic production:** when production happens exclusively within a country's own borders, for example a haircut.

**Traditional trade:** when goods cross borders for consumption, for instance French wine consumed in the UK.

**Global value chains:** when production is shared between two or more countries; intermediate products in simple GVCs cross borders only once (for example, Chinese steel in a London building), while intermediate products in complex GVCs cross borders at least twice (such as the production of iPhones).

The decades prior to the global financial crisis of 2007–2008 witnessed a strong trend towards the international dispersal of value-chain activities such as R&D, design, production, marketing, distribution and sales. Steep falls in transport costs and huge improvements in ICT made it possible for lead firms – those at the head of supply chains – to manage these effectively, delivering enormous productivity gains.

The impact since has been considerable. McKinsey estimates that two-thirds of global trade now consists of intermediate inputs within GVCs rather than finished goods, while participation in trade accounted for 15 to 25 per cent of GDP growth between 1997 and 2012.<sup>5</sup>

This period of globalisation has triggered tremendous economic and political changes in productivity, employment, and the domestic distribution of economic gains and losses, as follows:

**Productivity impacts.** Shifting low-value production overseas generated enormous efficiency gains in manufacturing, which allowed companies and countries to reallocate resources to higher value-added activities. Offshoring via GVCs enabled lead firms to reap enormous benefits from economies of scale and specialisation, spurring innovation. As suppliers of intermediate components in finished goods were obliged to bid for original equipment manufacturers (OEM) to include those components in their supply chains, they were forced to compete and become more efficient.

The huge cost advantages that accrued from this enabled companies to provide innovative goods and services and to offer lower prices, thereby producing big welfare gains for consumers in developed countries.<sup>6</sup> Offshoring to cheaper locations also reduced inflation overall and helped to synchronise global inflation pressures.<sup>7</sup> The shift towards services occurred across many advanced economies and was part of their natural evolution: as these economies became more efficient in producing goods, relative prices fell, freeing up income to be spent on services instead.<sup>8</sup>

Reversing this through widespread reshoring would therefore mean sacrificing this productivity, competitiveness and innovation, with capital diverted from more productive uses. For example, Bank of America has estimated that reshoring all manufacturing to the US from China would cost \$1 trillion in capital expenditure over five years.<sup>9</sup>

Reshoring production – if adopted by other countries around the world – would reduce competition and therefore innovation, causing a drag on growth. According to the Organisation for Economic Co-operation and Development (OECD), both the global economy and all national economies individually would be smaller in a localised production regime compared with the current level of global economic integration.<sup>10</sup> Localisation would reduce real GDP, on average, by approximately 5 per cent around the world, as countries would lose out on the competitiveness and innovation driven by open markets.

But the individual impact on national economies varies widely according to their participation in GVCs. The EU, with its large internal market and highly integrated supply chains, would suffer a 4.2 per cent hit to GDP, but the loss to the UK economy, which is more internationally interdependent, would be 12.2 per cent.

**Employment effects.** As part of the process of disaggregating production processes, advances in ICT and the adoption of computers changed the relative demand for different types of skills. Beginning in the



mid-to-late 1970s, jobs with routine tasks – those with step-by-step processes, procedures or rules – began to be automated, reducing the requirement for manufacturing and clerical workers alike.

At the same time, this growth in productivity involving skilled routine tasks shifted demand towards typically better-paid knowledge workers whose activities did not follow a set routine. As these non-routine, largely service-sector roles grew, so too did the relative demand for lower-paid manual workers (such as cleaning and hospitality staff), whose jobs tend to complement service-sector knowledge workers.

Driven by advances in technology, these relative shifts led to polarisation in the labour market: an increase in well-paid jobs at the top and lower-paid jobs at the bottom, while routine work in the middle was hollowed out by automation and offshoring.

Overall, research suggests that advances in technology account for almost 75 per cent of the decline in manufacturing employment in the US, with trade accounting for 25 per cent, at most, in the loss of employment.<sup>11</sup> More generally, the World Trade Organisation (WTO) concludes that trade has not caused a significant loss of jobs in developed countries.<sup>12</sup> By boosting productivity, trade and GVCs inevitably reshape the economy, which causes some jobs to disappear, but higher productivity also creates new jobs. Hence, unemployment in the UK was at its lowest levels for almost 50 years prior to the pandemic.

**Contribution to regional disparities.** Despite the macroeconomic benefits over time, there may still be localised but damaging effects. As old jobs are destroyed, new ones will be created although they may not appear in the same place as the displaced workers, which may then fuel populism. While areas that benefit from export expansion through cheaper inputs to production may see growth in wages and employment, other areas that compete with low-cost imports or have no access to foreign markets may fall behind.

This can create considerable inequalities between regions, especially where the economy is not sufficiently diversified. Labour-market rigidities and supply bottlenecks in some localities may prevent labour and capital being reallocated to more efficient uses, a process necessary for generating new employment to replace losses.<sup>13</sup>

Such rigidities can make the sudden loss of a major local employer in an economically homogenous area particularly devastating. The closure of the steelworks in the UK's Redcar is an example. Although employment has partially recovered from the initial direct loss of 5,000 jobs in 2016, many of these jobs are on lower wages and involve inferior conditions.<sup>14</sup>

Responses to economic shocks from trade can have political consequences, especially in terms of rising support for populism and separatist politics. A UK study of the import shocks as a result of trade with

China underlines this. While the average NUTS 3 region (a classification of areas used by the EU) saw imports rise by €320 per worker between 1990 and 2007, the same figure ranged from €6 in Camden and the City of London to €750 in Leicester. Moreover, the size of the import shock was strongly correlated with support for Brexit.<sup>15</sup>

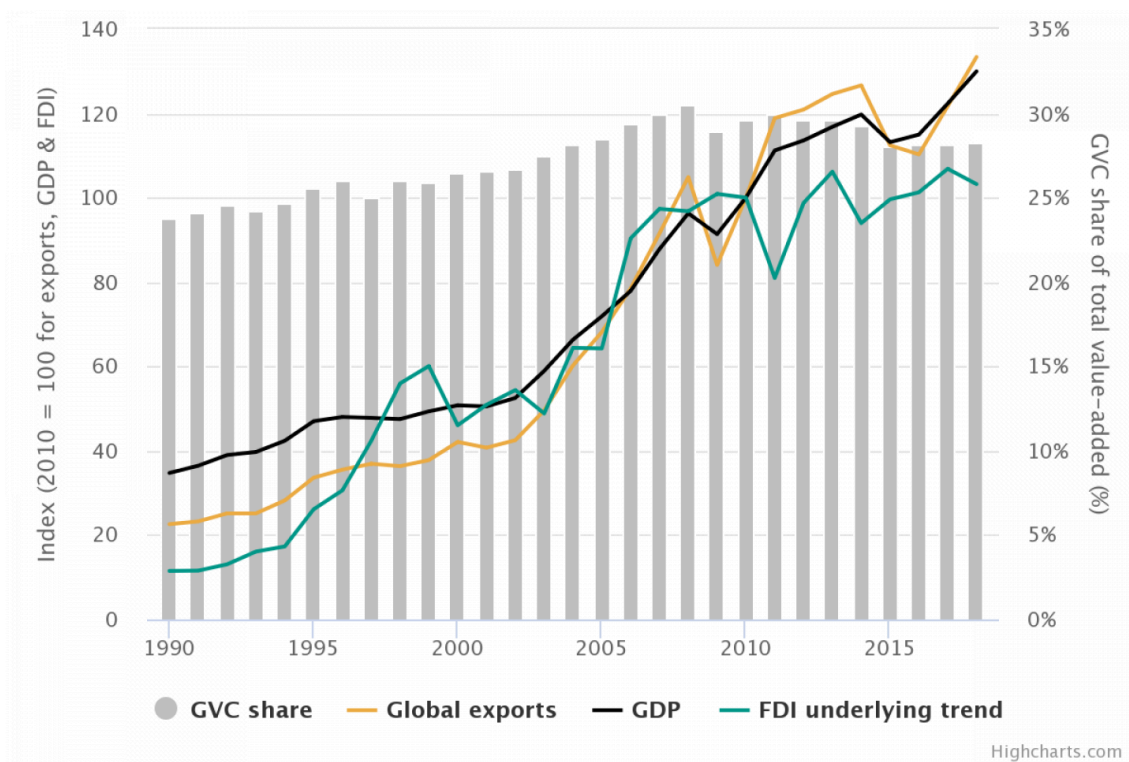
A similar study in the US shows that votes for Trump in the 2016 presidential election were closely related to the magnitude of adverse Chinese trade shocks. The greater the loss of jobs in communities due to the rise of imports from China, the higher the support for Trump.<sup>16</sup>

### **A New Era of Globalisation**

In contrast to the rapid globalisation of production in the three decades prior to the financial crisis, the more recent contribution of global value chains to global trade has shifted (Figure 1).

According to the World Bank, both domestic production and traditional trade recovered strongly between 2011 and 2015. However, the share of trade taking place within GVCs fell by around 3 percentage points over the same period.<sup>17</sup> This means that after three decades in which GVCs – in other words, parts crossing multiple borders during the production process – have grown in relative importance, the composition of global trade began changing in the years following the financial crisis.

**Figure 1 – Slowdown in the share of trade taking place within global value chains after 2008**



Source: Chart <sup>18</sup> adapted from [UNCTAD World Investment Report 2019](#) and a 2020 [VoxEU blog](#) contributed by the UNCTAD Investment and Enterprise research team. FDI data was sourced from [Vujanović et al., 2021](#).

This shift in the global production structure reflects three critical factors.

First is rising wages in countries such as China, which is pushing labour-intensive manufacturing to other relatively low-wage countries such as Bangladesh and Vietnam. Yet even here, trade networks are no longer fragmented across multiple countries. Rather, they are consolidating within individual countries: of China, the share of traded intermediate inputs in the developing world relative to their industry’s overall output shrank from 18 per cent at its peak in 2002 to 13 per cent in 2017. <sup>19</sup>

Second is technology innovation, which has allowed companies to bring production closer to markets in countries with rising wages (for example, China) or with higher relative wages. For large, fast-maturing economies, such as China, companies are substituting domestically produced intermediate inputs for imported intermediate inputs. This lengthens domestic value chains and reduces the cross-border production-sharing typical in GVCs. <sup>20</sup> Companies are also using automation technologies to move some production closer to customers in higher-wage markets such as the US, the UK and Japan. This latter shift is partly about improving visibility and resilience in supply chains, <sup>21</sup> and partly about moving production and services closer to final demand. <sup>22</sup>

The third factor has been the rising tide of trade protectionism following the global financial crisis.<sup>23</sup> Even prior to former President Trump's trade wars, protectionism was increasing in response to the relatively slow economic recovery. Between 2008 and 2016, the share of intermediate imports from China that faced temporary trade barriers imposed by high-income G20 nations increased from approximately 6 per cent to around 12 per cent.<sup>24</sup>

In summary, the disaggregation of production into GVCs beginning in the 1980s benefited almost everyone to some extent – workers and consumers alike. However, some benefited much less than others and a few lost out entirely. Now, the dynamics of global economic integration are shifting once again: the dispersion of production into complex, cross-border value chains has given way to a period in which production networks, which previously spanned multiple borders, are being consolidated within individual countries that are specialising in specific stages.

Yet it is not abundantly clear that the political debate in advanced economies accurately reflects these complex realities. The next chapter unpacks the unfolding narrative over reshoring.

## What Is the Rationale for Reshoring?

Politicians in the EU, the US and the UK are debating the need to reverse offshoring by “nearshoring” production to a country or location closer to home, or in some cases attaining near or complete autonomy in a sector by locating entire supply chains domestically – in other words, reshoring.

Reshoring is being actively discussed as a solution to the economic and social problems that can stem from deindustrialisation because trade, for all its aggregate benefits, can be disruptive, with costs and gains at times unfairly distributed. Where the relative so-called losers from globalisation are highly concentrated geographically and within their position in the labour market, this discontent can spill over into politics. Inevitably, politicians feel pressured to address these challenges. And some may seek to exploit discontent about deindustrialisation to distract from the consequences of other unpopular policies.

### Political Responses to Shifts in Globalisation

Increasingly, governments in the US, the UK and the EU are struggling to reconcile an “agenda to restore the economics of belonging with keeping borders open”.<sup>25</sup>

In the **US**, neither Republican nor Democratic presidents have pursued greater economic integration with any great energy for over a decade. Both parties have instead settled on a narrative that positions globalisation as a force that has been bad for workers and must therefore be stopped in its tracks.<sup>26</sup> This rhetoric began to harden considerably under Donald Trump’s presidency from 2017. But the Biden administration is increasingly evoking competition with China as the reason for a renewed focus on an active industrial strategy tasked with reshoring production in strategic areas.

The US Congress is currently debating the \$1 trillion Infrastructure Investment and Jobs Act to build up capacity in strategic areas, which is explicitly being sold as a “jobs package”.<sup>27</sup> The American Foundries Act, passed in 2020 to bolster US leadership in semiconductor and broader microelectronics industries, has led to new semiconductor factories being opened in upstate New York that might otherwise have gone to Taiwan (which itself is strategically vulnerable to China). Covid-19 has also heightened concerns over resilience. Brian Deese, director of the White House’s National Economic Council, has said the pandemic exposed “unique economic vulnerabilities” in US production.<sup>28</sup>

In the **EU**, the European Commission has labelled China an “economic competitor in pursuit of technological leadership”.<sup>29</sup> Former EU Commissioner for Trade Phil Hogan responded by calling for European strategic autonomy.<sup>30</sup> With China in mind, the French and German governments

recently launched “A Franco-German Manifesto for a European industrial policy fit for the 21st Century,” which calls for subsidies and a relaxation of rules on mergers to create European regional champions.<sup>31</sup>

In the **UK**, the government’s recent security review called for more attention to be paid to security and resilience issues with particular regard to supply chains.<sup>32</sup> In 2020, the China Research Group of backbench MPs pressured the government into removing Huawei from its 5G network,<sup>33</sup> and they are seeking to exclude Chinese companies from participation in large-scale energy-infrastructure projects.<sup>34</sup> The government says it wants to maximise the locally produced content of industries like renewables while think tanks close to the Conservatives have called for a manufacturing “renaissance” to create jobs in deprived areas.<sup>35</sup> The Labour Party has said it will invest to reshore jobs, pledging to make, sell and buy more in Britain.<sup>36</sup>

The motivations overlap somewhat but, overall, the reshoring debates in the US, the UK and the EU can usefully be separated into four distinct strands:

**Re/deindustrialisation:** Unemployment and loss of manufacturing jobs in advanced economies have entrenched regional disparities and are causing the politics of belonging to become an increasingly important factor in domestic politics. Politicians are responding to, and at times fuelling, populist-related pressures by pledging to reverse deindustrialisation and bring manufacturing jobs home. This rhetoric sits awkwardly alongside a genuine opportunity to use industrial strategy to ensure existing sectors evolve so they can continue to add value and, where it makes commercial sense, to reshore high-value production and highly skilled jobs sustainably.

**Sectors of the future:** Also included in the political rhetoric are ambitions both for a green industrial revolution to create green jobs, and to capture more of the economic gains from the technological revolution. The appealing yet simplistic focus on reshoring detracts from harder policy choices relating to the technologies, supply chains and skills infrastructure that will be needed to ensure jobs in future sectors are created in the UK in the first place (even if they eventually migrate overseas as the UK moves further up the value chain).

**Technology security:** Fears about technological dependence on China has led the US, the UK, the EU and other developed economies to rethink sovereignty in high-tech industries. This is driving moves to reshore supply chains in critical technologies, such as those for semiconductors<sup>37</sup> and 5G telecoms, either domestically or in friendly countries. Relying on Taiwan for semiconductors is increasingly seen as a geopolitical risk in light of growing tensions with China.

**Crisis response:** GVCs are complex and vulnerable to shocks, such as pandemics, extreme weather events, political conflicts and cyberattacks. Covid-19 brought these risks to the fore as countries squared

up to each other over PPE and vaccines. Governments are therefore looking to improve resilience and reduce vulnerability by shortening GVCs.

All these concerns have merit and cannot easily be ignored by politicians. Over-reliance on China at a time of rising geopolitical uncertainty is surely foolhardy. The pandemic has once again exposed critical vulnerabilities in key supply chains. And governments are right to think creatively about how to generate prosperity in areas that previously suffered from deindustrialisation.

But new restrictions on trade and clumsy attempts to bribe or force companies to reshore segments of GVCs could have harmful long-term economic consequences, at a time when the global economy needs to rebuild after Covid-19 and prepare for major challenges such as climate change. For example, the global semiconductor shortage illustrates how attempts to reshore critical technologies through trade restrictions and subsidies can have disruptive economic consequences globally. <sup>38</sup>

Equally damaging would be for the new nationalist and protectionist rhetoric on trade and economic integration to prompt countries to turn inwards. This would harm international cooperation in important areas like business regulation and taxation, environmental protection and workers' rights. At worse, they could spark a return to the so-called beggar-thy-neighbour policies of the 1930s, which plunged the world into depression and stoked political extremism.

The next chapter explores the economic logic behind each of these rationales, posing a series of hard questions that politicians must answer before pursuing reshoring as an economic strategy.

## Assessing the Case for Reshoring

The previous section set out the contours of political conflict on globalisation and reshoring in advanced economies. In the UK, the debate risks conflating political priorities with economic ones under the guise of addressing long-standing concerns about regional disparities, the need to rethink our economic model<sup>39</sup> and the desire to recast the UK's place in a post-Brexit world.

These arguments cannot be lightly dismissed. What is important, though, is to highlight the trade-offs involved in reshoring, and to pose questions for policymakers as they look to construct a policy framework for handling ongoing shifts in GVCs.

The challenge for policymakers is to distinguish between spurious and legitimate arguments for reshoring when they frame their debates on policies such as trade and investment policy, and industrial strategy. When, in other words, is reshoring rational and worth facilitating through proactive industrial strategies to capture and maximise gains, or to protect the economy and national security? In contrast, when is it protectionist and short-sighted?

### Reshoring as a Route to Prosperity

After a decade of historically low productivity growth, voters and politicians alike are rightly concerned about how best to generate prosperity and address persistent regional disparities. Reshoring is increasingly being seen by both the left and the right of UK politics as the magic bullet to address these concerns.

As discussed above, these arguments have taken two forms: reshoring as a means of reindustrialisation, and reshoring as part of creating the sectors and jobs of the future.

**Reshoring as a means of reindustrialisation.** The first involves calls from the left and the right of politics to back reshoring as a means of reviving the economic<sup>40</sup> and cultural<sup>41</sup> identity of local areas where deindustrialisation created or exacerbated regional disparities.

According to this view, manufacturing has generated greater productivity growth than most of the rest of the economy, and therefore manufacturing jobs pay a premium, on average, compared to all other sectors in relatively deprived areas. In addition, the reindustrialisation argument emphasises that the sector's innovation potential as well as its ability to export to growing global markets make it a unique source of prosperity.



Consequently, this argument often proposes the large-scale reshoring of manufacturing and reindustrialisation – for example, through proposals to raise manufacturing’s share of GDP from 10 per cent closer to Germany’s 22 per cent – as an effective route to meeting the government’s “levelling-up” agenda.

Yet the case for reshoring activity, as part of the reindustrialisation of large parts of the UK economy, must address two core challenges. The first is to understand whether reshoring is compatible with the UK’s position in GVCs (therefore, meshing with our specific sources of competitive advantage). The second is whether there is sufficient intermediate and final demand in the UK and in export markets to justify sustainable reshoring.

The problem here is that seeing reshoring as a way of increasing high-quality, well-paid employment in manufacturing is to misunderstand how technology has reshaped global trade and changed how the UK competes in GVCs. As stated above, semi-skilled production and assembly jobs were automated or offshored over the past few decades, with the sector losing 5 million jobs between 1971 and 2021. As a consequence, the jobs that have remained are typically engaged in higher value-added activities, such as R&D and engineering. They are well-paid, productive and innovative, but there are fewer of them. This focus on competing on value-add (i.e., on process and product innovation and investing in intangibles) has enabled high-value manufacturing sectors, such as automotive and aerospace, to more than double their Gross Value Added (GVA) between 1998 and 2018 <sup>42</sup> without adding any net jobs. Over a longer timeframe, manufacturing enjoyed a productivity boom in the 1990s at the same time <sup>43</sup> that it was cutting jobs, so the sector has not been a net job creator for at least 50 years. <sup>44</sup>

What about the claim that reshoring parts of supply chains would create, at the least, some jobs that would be high wage and productive? The fallacy here is that the jobs that have been offshored to relatively low-wage countries are no longer the same jobs. Reshoring manufacturing from low-labour-cost to high-labour-cost locations like the UK would only be economically sustainable by reducing the labour content of labour-intensive products through automation, or by lowering standards and wages. <sup>45</sup>

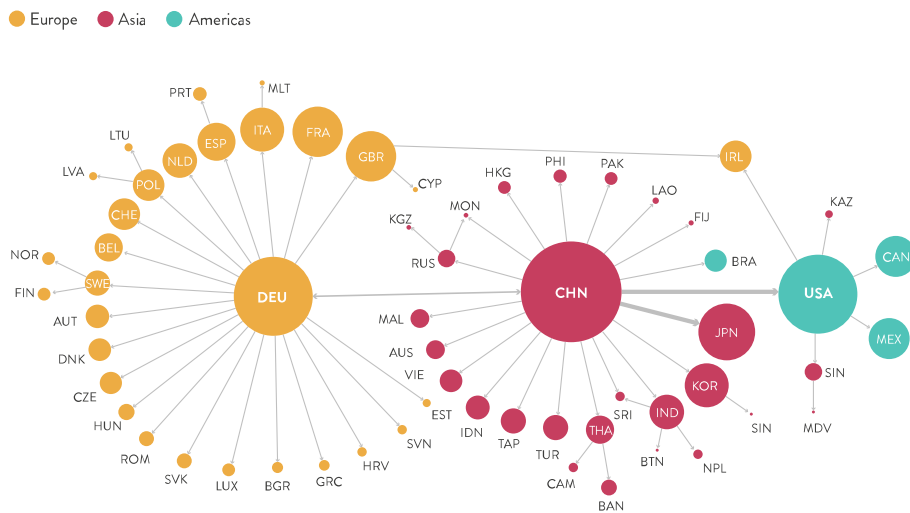
An alternative path might be to increase tariff and non-tariff barriers to trade, and to subsidise both labour and capital investments to shelter UK producers. But these are efficiency-destroying measures that the OECD suggests would lower growth in the UK by 12 per cent. <sup>46</sup> Reshoring could therefore return output to the UK, but it would have little direct impact on net employment and would likely come with a crippling economic price tag.

Supposing, though, a government is determined to encourage reshoring of some segments of supply chains in the belief that it will increase the share of domestic manufacturing in GVA. Where might it look?

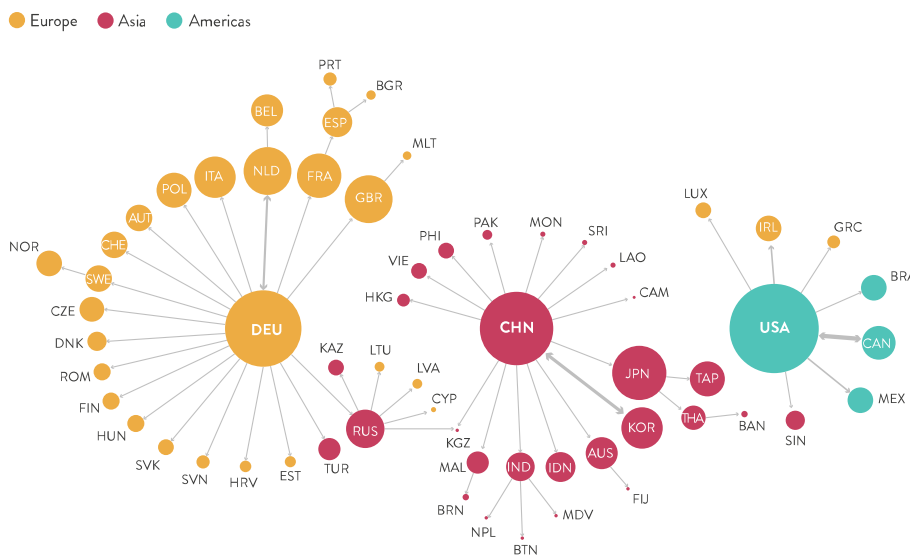
The UK's place in GVCs depends on the specific sector. Analysis conducted as part of a 2019 World Bank report, for instance, shows that most value-added in the UK's textiles supply chain comes from China. Supply chains in some sectors, such as aerospace, are also relatively more fixed and mature than in newer industries such as batteries for electric vehicles.

Across most manufacturing sectors, however, the UK is largely integrated into a European supply chain, as Figure 2 shows. The diagrams, which plot major value-added GVC linkages across countries, also illustrate that the UK can best be characterised as a secondary spoke of a much larger German supply-chain hub in most manufacturing industries.

**Figure 2 – Breakdown of global value chains across all sectors, 2017**



Simple GVC (intermediary inputs cross one border)



Complex GVC (intermediary inputs cross two or more borders)

Source: *Global Value Chain Development Report 2019*, co-published by WTO, Ide-Jetro, OECD, RCGVC-UIBE, World Bank and China Development Research Foundation. (Note: the size of a bubble represents the share of a country's value-added exports in global value-added exports.<sup>47</sup>)

Decisions on where to locate supply chains are made based on fundamentals such as production costs and access to large markets, including the US, the EU and China. In turn, the scale and growth of demand in these markets help determine the shape and sustainability of GVCs.

Companies looking to potentially move primary (e.g. steel) or intermediate (e.g. engine castings) production activity to the UK will be looking at whether the scale and likely growth of demand (either in the UK or potential export markets) justify investing in capacity in the UK, at the expense of expanding existing facilities abroad. In addition, a company considering shifting production or services to the UK will want to assess whether it can competitively meet that demand while operating from there.

In order to see a big shift in GVCs in the UK's favour, the UK government would either have to significantly increase levels of domestic procurement, radically overhaul regulation, or introduce trade-restricting policies to overcome the commercial logic dictating the structure, location and evolution of GVCs.

For most manufacturing sectors, the UK market is just too small for much reshoring to be viable, a situation made more difficult by Brexit. There are potentially some small sectors (e.g. wind turbines, as discussed below), and pockets of manufacturing for which supply chains are inevitably reasonably local and so reshoring opportunities are likely to exist. But for most, the costs and loss of competitiveness involved make it unviable. Ultimately, reshoring is unlikely to bring back many jobs<sup>48</sup> and, if it did, they are most likely to be low-quality and low-paid.

### **Is Reshoring Economically Sustainable? Key Questions**

What is the political and economic rationale for trying to change the UK's position in GVCs?

Given that the UK's position in GVCs varies across different sectors, what is the UK's competitive advantage that would make reshoring and reindustrialisation of specific capabilities sustainable?

Would any reshoring activity need to be capital- or labour-intensive to be commercially viable and sustain (or grow) the UK's position in GVCs?

Is there sufficient demand domestically, regionally or globally to make reshoring to the UK commercially sustainable?

What are the industrial, innovation, regulatory and trade strategies needed to make reindustrialisation sustainable, given the ever-shifting patterns of demand in the global economy?

**Reshoring and the sectors of the future.** Second, part of the rhetoric on reshoring revolves around ambitions both for a green industrial revolution to create green jobs, and to capture more of the economic gains from the technological revolution.

These arguments tend to adopt a forward-looking rationale for generating prosperity, rather than attempting to reshore manufacturing jobs that have already been lost, by directing attention to entirely new industries and technologies. As these sectors and jobs are still emerging, there is potential for advanced economies to create high-productivity industries in emerging green and technology sectors through industrial policies. The aim would be to foster the development of unique abilities that allow these economies to dominate production networks of specific industries for a period of time.

The US, the UK and the EU have each indicated they want to maximise the locally produced content of new industries in areas such as renewables. This could involve domestic subsidies for new industries like the hydrogen economy or heat pumps. As these industries serve the purpose of re-equipping commercial and domestic heating and power generation, they are more likely to be distributed across the country rather than clustered in southeast England, for instance, or Silicon Valley.

Future industries connected to other technologies besides renewables could also be more widely distributed than they are now. Pittsburgh in the US, which was prominent once in the steel industry, has more recently built on its local universities to become a hub for AI, machine learning and robotics.<sup>49</sup> In the UK, Manchester is now one of the leading fintech and digital hubs in Europe;<sup>50</sup> Birmingham was chosen for a Goldman Sachs' global technology centre;<sup>51</sup> and Leeds is an AI and data-science hub.

Still, it is important to be clear about the limits that should be set on policies so they do not segue into destructive protectionism. As lower-wage countries climb inexorably up the value chain, the high-skilled, innovative processes of today are inevitably the low-skilled, commoditised processes of tomorrow.

The aim of policy should not be to prevent companies from moving parts of production chains elsewhere, but to support them to invest in and retain the higher-value segments of these chains in the UK for as long as it makes economic sense to do so. In other words, the net-zero industrial and high-technology agendas should be viewed as a positive shock to galvanise innovation, skills and productivity in related industries – not as an excuse for a programme of import-substitution that simply replaces cheaper and more efficient foreign technologies with home-grown ones.

By looking to the industries of the past to create jobs, politicians risk turning technological tailwinds that create new, relatively better-paid jobs into headwinds for reshoring low-wage manufacturing jobs. <sup>52</sup>

### Can Reshoring Support Sectors of the Future? Key Questions

How mature or developed are GVCs for emerging technologies?

Does the UK have the potential for sustainable technological and industrial leadership, given the shape of GVCs for emerging technologies?

Will activity located in the UK, for example in the case of renewables, only be for domestic demand or are there export opportunities?

What is the scale of domestic, regional and global demand in the industries of the future, such as renewables?

What trade, investment and regulatory policies need to change to support inward investment and/or export opportunities for emerging technologies?

## Reshoring to Strengthen Security and Resilience

A succession of economic, geopolitical and global health shocks over the past decade has forced companies and politicians to rethink the security and resilience of their operating models. For companies, the issue is the degree to which GVCs designed for efficiency are resilient and robust to shocks. For politicians, the issue is the extent to which greater self-sufficiency can make the country more secure and prepared for the next crisis.

As discussed above, these arguments have taken two forms: reshoring and building national champions as a means of addressing national-security concerns, and reshoring as a means of building greater resilience in the face of a crisis. Yet these approaches create tensions, not simply in how best to balance national security with the promotion of open and free trade, but also in answering the question of whether opting for self-sufficiency and/or national champions actually strengthens security or resilience.

**Reshoring to address national-security concerns.** Fears about technological dependence on China have led the US, the UK and other developed economies to rethink sovereignty in high-tech industries. This is fuelling moves to reconsider supply chains in critical technologies including semiconductors and 5G telecoms, either to locate them domestically or in friendly countries.

Decisions on location for these sectors always involve a trade-off between efficiency and the security externalities of involving potentially hostile states in developing strategic technologies. The line will inevitably be drawn, and redrawn, in response to changing geopolitical, rather than purely commercial, considerations.

Thus, China's emergence as a military as well as economic competitor has clearly shifted the balance of risks for and against deep engagement. It has made the previous close involvement of the UK and its allies in developing sensitive technologies with China look naive and complacent. But this also means that decisions on reshoring these technologies are, likewise, a blend of the economic and strategic.

First, it is questionable whether reshoring sensitive new technologies such as 5G or semiconductor production is even feasible, given resource constraints such as availability of R&D spending, trained staff and capabilities of relevant supply chains. Both commercially and strategically, collaborating with allies in Europe, the US and Asia is likely to prove relatively more sustainable from an economic and security perspective than opting for a British national champion in, for example, 5G. <sup>53</sup>

It is also important to ask to what extent it is possible to sufficiently hedge against supply-chain risk in high technologies. For example, semiconductors are still reliant on the import of rare materials from places like China. There may be better ways of tackling these risks besides reshoring – new security protocols for 5G, for example – that call for examination.

Second, once a critical technology is based in the UK, the government faces an open question as to how willing it is to intervene in takeovers of UK-owned companies that design, produce or operate technologies critical to national security. The UK government has called into question both the proposed Nvidia takeover of UK chip-design company Arm, and Advent's (a private-equity company) takeover of defence manufacturer Ultra, which makes critical systems for the Royal Navy's nuclear submarines. In the latter case, Advent had already bought UK defence company Cobham and sold half of the business within 18 months, without breaking the long-term commitments it had made to the UK government.

While new national-security rules from January will increase scrutiny of takeovers in 17 sectors, the UK has yet to provide clarity on whether its priority lies in keeping an open door or protecting the capacity of UK companies to continue providing UK security and armed forces with technology critical to national security. <sup>54</sup>

Whether it involves national-security concerns over emerging technologies or protecting the critical technologies that the UK already has, we need a coherent intellectual framework to weigh up the costs and benefits of engagement, not the ad hoc approach we have now.

## Will Reshoring Technology Help to Support National Security? Key Questions

What is the best strategic framework through which to identify, prioritise and monitor capacity in strategic technologies?

What is the nature of the security risk? What is the most effective means of addressing it (for example, reshoring, nearshoring or other means)?

What is the UK's position in GVCs comprising strategic technologies, such as 5G or semiconductors? What are the equivalent positions of our national-security allies?

Is there sufficient domestic, regional and global demand to sustainably support the reshoring of strategic technologies?

What trade, takeover, competition, procurement and regulatory policies need to change to support inward investment and/or export opportunities for emerging technologies?

What are the right ownership structures, governance models and investment horizons for companies that supply strategic technologies, and do they support the operational independence the UK needs to protect national security?

**Reshoring to strengthen crisis response.** In a crisis, the primary objective is to maintain and, when required, scale up production. During the Covid-19 pandemic, for example, demand for PPE equipment in the UK rose by over 17,000 per cent for eye protection, 4,700 per cent for face masks and 1,600 per cent<sup>55</sup> for medical gowns. Concerns about shortages resulted in most countries introducing some form of trade restrictions on medical equipment, vaccines or PPE.

Similar surges in demand in most countries have led to calls from leaders in the UK,<sup>56</sup> the US,<sup>57</sup> Europe<sup>58</sup> and Japan to reduce reliance on third countries for “strategic value chains”, most notably for medical equipment and PPE. In each of these cases, the logic behind the calls for reshoring is that overseas-based value chains limits a country's own ability to withstand and respond to a crisis.

Resilient supply chains are ones that can return to normal operations over an acceptable timeframe following a disruption, while a robust supply chain is able to maintain operations during a crisis.<sup>59</sup> In general, it is a mistake to equate self-sufficiency with either resilience or robustness of supply chains during a crisis.

Maintaining crisis levels of capacity outside crisis times is financially unsustainable for companies and taxpayers (via government subsidies). Rather, greater anticipation, preparation, diversification and international co-operation are needed to make supply chains more resilient and robust to shocks, and capable of responding to any surge in demand.

In addition, geographical concentration tends to make supply chains more, not less, vulnerable to risk.<sup>60</sup> There are several reasons for this.

First, goods with narrow supply chains, in other words, based largely in the UK, may be vulnerable in a crisis because there are likely to be limited opportunities to source the additional raw materials or inputs needed to expand capacity. Second, companies that are overly reliant on sales in one country are more vulnerable to shifts in demand from that country. For example, UK rail and defence companies suffer from stop-start domestic procurement programmes, often relying on exports to sustain basic levels of capacity. Third, companies with a diverse range of products are relatively more resilient to shifts in demand for their products.<sup>61</sup>

Better information flows, improved visibility and greater flexibility of supply networks matter more to firms than the geography of production in helping to ensure their supply chains are ready for and can weather disruptions.<sup>62</sup> Indeed, networks of global suppliers help to improve efficiency while also providing the potential flexibility needed in the face of a crisis. The challenge for companies is not a question of geographic location, but rather how best to improve real-time information flows to better identify and manage risks, regardless of the length or complexity of supply chains.

In addition, a lack of preparedness and risk planning in procurement practices also prevents the ability to scale up. For example, the lack of pandemic preparedness in the UK meant that the government was left using legally questionable procurement practices to secure sufficient PPE while competing internationally for materials.

This ad hoc approach stands in contrast to the successful rapid procurement model of Urgent Operational Requests (UORs) used by the Ministry of Defence to support the operational capability of troops in battle.<sup>63</sup> Rather than trying to reshore critical supply chains, the UK should consider the option of ensuring that potential supply capacity (either for sensitive medical equipment or ICT) exists in countries that are considered allies, and then work with these international partners to ensure the robustness and resilience of relevant supply networks.

Lastly, the UK needs to consider the best strategic framework through which to identify and plan for future crises. For example, the UK has recently used five-yearly Strategic Defence and Security Reviews to reassess national-security threats and plan its defences accordingly. The 2015 Review identified a global pandemic a strategic national-security risk. This ultimately led to the publication of the UK's Biological Security Strategy in 2018, and contingency planning being given to the Threats, Hazards,



Resilience and Contingencies Subcommittee. This Cabinet sub-committee, which was intended to develop, monitor and manage pandemic planning, was scrapped by the government in autumn 2019 rather than being maintained.

### **Can Reshoring Help to Support Resilience in a Crisis? Key Questions**

Which sectors need to be robust and/or resilient to shocks (for example, defence and health care)?

What is the best strategic framework through which to identify, prioritise and monitor capacity in strategic sectors?

What is the UK's position in GVCs comprising sensitive sectors? What are the positions of our closest allies and trading partners?

To what degree would greater self-sufficiency increase the UK's exposure to shocks, and to what extent would it improve robustness and resilience to risks and shocks?

Are there other alternatives to improving resilience and robustness than reshoring – for instance, better visibility of supply networks?

What level of capacity needs to be maintained during times of peace and what is the likely surge demand?

What existing models – for example, Urgent Operational Requests in defence – would allow the UK to surge capacity to meet crisis demand?

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## Conclusion

The debate over globalisation and jobs is becoming clouded as some politicians and commentators create simplistic and misleading narratives about reshoring that ignore economic realities. This risks squandering – for minimal benefit and potentially significant cost – the enormous gains that have been made from the global integration of trade and production.

The reality is that the share of global trade taking place within GVCs – which were responsible for huge advances in productivity over the past 30 years – has already started to fall as firms increasingly regionalise their production networks. This shift to date has largely been driven by the commercial decisions of firms themselves. But politicians from the left and the right are entering the debate to call for further reshoring to address domestic priorities and concerns.

There are some sensible grounds for debate: logic dictates we should build more resilience into the global production system; policymakers should also address security concerns relating to China for some high technologies like 5G; there are vaccine-supply vulnerabilities that ought to be tackled; and politicians will want to address the dire warnings about panic buying of petrol, empty supermarket shelves and long delays for new cars as a result of the shortages of components and labour typically sourced from abroad.

But also apparent in these debates are more spurious justifications for reshoring based on specious arguments about its power to create high-wage jobs in left-behind areas. These appear to be motivated by political competition for votes in former industrial towns rather than a reasoned understanding of the economics of global trade.

Overall, reshoring manufacturing activity is highly unlikely to generate the prosperity and well-paid jobs in previously deindustrialised regions that its political proponents promise. Even if companies could be forced, enticed or bribed to reshore, the jobs it would bring would be small in number or, as in the textiles industry, relatively low-paid with poor working conditions.

Moreover, unless sufficient final demand exists in the UK or abroad to make these operations commercially viable, taxpayer subsidies will be required to sustain this reshoring activity. Such moves would also risk sacrificing the enormous economic benefits from GVCs, and their likely failure would sow further disillusionment with politics.

While security and resilience may provide reasons for reshoring, these decisions need to be made within the context of a transparent, coherent and consistent policy framework. Otherwise, strategic technologies risk being subject to reshoring activity one day only to be sold off the next. Supply-chain capabilities critical to responding to future crises risk withering away because of underinvestment (as has happened with the UK's defence capability), or being scrapped entirely (as happened with pandemic

preparedness in 2019). This will also make it harder, not easier, to respond to shortages of critical components.

There are far better ways to build a sustainable, secure and resilient economy. They should include using long-term industrial, innovation and national-security strategies to build the economic ecosystems necessary for emerging technologies in green and other industries. Of course, this requires long-term thinking about the skills, systems, supply chains and infrastructure needed for such industries, so make this the focus of policy rather than the ultimately doomed attempts to “bring jobs home.”

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Charts created with Highcharts unless otherwise credited.

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value-added in final product exports, i.e. goods and services that are made entirely domestically and then cross a national border once for final consumption only. The “complex GVC” diagram measures value-added in intermediate exports that are used by the recipient country to produce exports for other countries, i.e. trade where factor content crosses a national border at least twice. Both charts show trade flows for all goods and services sectors combined. Further details, including charts that show value-added for intermediate products that cross a border once (simple GVCs), are included in the World Bank GVC report. Methods for estimating GVC trade are drawn from Wang et al., 2017 and Meng et al., 2018.

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