

### **Foreword**



The Covid-19 pandemic has had enormous impacts on people and communities around the world. It has also deeply impacted business and supply chains. We have learned a good deal over the past two years about the interconnectedness of global logistics and trade.

It's clear for instance that the trade challenges that the pandemic occasioned have accelerated certain structural trends that will shape future growth in the global economy, for example in the context of digitalisation. At the same time the pandemic has underlined our vulnerability to global shocks and the importance of ecological stewardship. These trends have the capacity to transform businesses and industries. They also offer significant opportunities if we capitalise on innovation to drive genuinely sustainable economic development and business growth.

The UK Government is committed to being a world leader in this transition by developing and promoting technological innovation and low-carbon solutions domestically and internationally. In 2019, the UK became the first major economy to legislate for a move towards net-zero emissions by 2050. The government's 2020 Ten Point Plan is mobilising £12bn (US\$16.5bn) to invest in clean growth technologies and initiatives, with an aim to support 250,000 green jobs by 2030. With "clean growth" becoming the new economic paradigm, the government supports business across sectors, such as agriculture, energy, consumer goods and financial services, in adopting sustainable and resilient operational and sourcing practices such that they can take full advantage of the opportunities coming from the transition.

The UK is also a global leader in the digital economy–developing and

commercialising advanced technologies and services such as AI, robotics and blockchain. Mass digitalisation is, in turn, supporting vibrant disruptor industries, such as fintech (financial services), healthtech (health and medical goods and services), edtech (education services), and creative industries. This digital economy is a critical source of employment across the country and the UK Government has been working towards ensuring that businesses can successfully compete globally. This includes work to develop critical skills domestically and attract the best talent from around the world.

Flourishing International trade will play a critical role in ensuring that economies around the world overcome the unprecedented economic and social challenges occasioned by the pandemic, climate change and technological disruption. The UK Government will continue to champion an open and fair trade and investment landscape, supporting UK businesses' ability to innovate and offer their goods and services around the world, facilitating productivity growth, inclusive economic development and economic opportunity for UK companies on the global stage.

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## About this report

Trade challenges and opportunities in the postpandemic world is an Economist Intelligence Unit (EIU) report, supported by the UK's Department for International Trade (DIT).

This is a summary brief for a series of reports exploring key trends in the trade and investment landscape in eight critical areas: Clean Growth; Agriculture, Food and Beverages; Digital Technology; Education; Creative Industries; Consumer Goods; Financial and Professional Services; and Investment. Through a range of expert interviews, secondary literature review and a data audit, these reports explore the challenges and opportunities for global trade and investment in individual sectors in the post-pandemic world. The EIU would like to thank all experts for their time and generosity.

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# Trade and investment in the pandemic

## Trade and investment in the pandemic

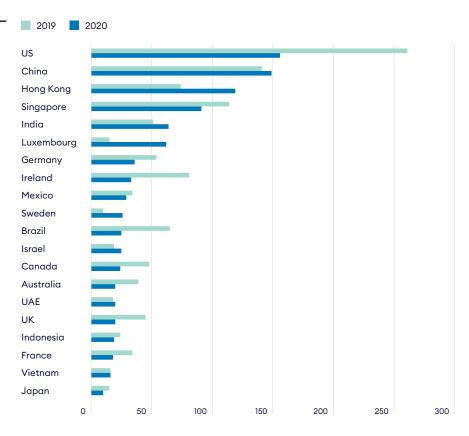
Globalisation has been facing headwinds for several years.

The free flow of goods, services, ideas and people that propelled the world economy through the 1990s and 2000s was dealt a blow by the global financial crisis and the rise in protectionism that followed, especially in advanced economies. Trade-restricting measures, such as temporary export bans and other non-tariff measures, have mushroomed, while multilateral negotiations on trade liberalisation are at an impasse.<sup>1</sup>

At the same time, the forces of global trade are changing. The shale revolution reduced the need for the US to import large amounts of oil and gas, for

instance, while Chinese demand for natural resources fell as its booming economy slowed in the 2010s. Together, those forces ushered in a period of "slowbalisation"-a stagnation, rather than decline, of globalisation over the past decade.<sup>2</sup> As a share of GDP, global trade and foreign direct investment (FDI) had not returned to their pre-financial crisis peaks before Covid-19 struck.3 The pandemic also precipitated changing patterns in FDI inflows, causing some host countries' investment to decrease, while others, such as Hong Kong, India and Luxembourg, demonstrated increased FDI inflows in 2020.

**Figure 1:** Changing guards: *Top host economies by FDI inflows (2019-20)* 



Source: United Nations Conference on Trade and Development (UNCTAD)  $\label{eq:conference} % \begin{center} \$ 

According to the United Nations Conference on Trade and Development (UNCTAD), FDI flows plunged 35% to US\$1trn in 2020.

The virus has touched every corner of the global economy and brought unprecedented challenges to global trade. Lockdowns and border closures fettered the free movement of people and goods. Demand crashed as shops closed down, dozens of major companies went bankrupt, and millions of jobs were lost. In all, the global economy contracted by 3.5% in 2020, though individually, many countries experienced worse shocks to GDP.

Capital flows also suffered. According to the United Nations Conference on Trade and Development (UNCTAD), FDI flows plunged 35% to US\$1trn in 2020, as active investment projects ground to a standstill, and companies reconsidered future plans. That marked their lowest level since 2005.4

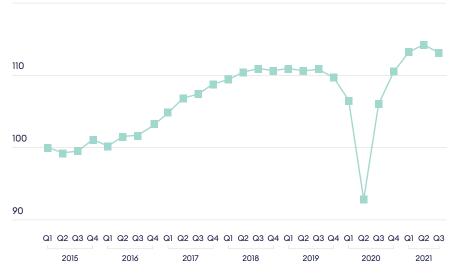
Trade in services was also hit hard.
The World Trade Organisation (WTO)
estimates that commercial service
exports declined by 20% in 2020, as
travel restrictions curbed face-to-face
meetings. With planes grounded, tourism
earnings generated by hotels, restaurants

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and tour operators plunged by 63%.<sup>5</sup> Universities reeled as revenue-generating international students were locked out, and creative industries relying on live audiences were shut down almost overnight. Europe's performing arts sector lost 90% of its revenue and its music sector posted a 76% decline in 2020.<sup>6</sup>

By comparison, the global trade in goods proved remarkably resilient. As the pandemic took hold, the WTO predicted that it might slump by up to a third.7 In the event, it fell by 5.3% in 2020, bouncing back after a bottom-out in the second quarter.8 That is partly due to the easing of lockdowns and the arrival of vaccinations. Huge fiscal stimulus packages supported consumer spending, while many businesses found innovative ways to sustain their operations.9 Moreover, when untraded domestic services, such as eating out or going to the cinema, ceased altogether, consumer demand was redirected towards other traded goods.<sup>10</sup> Remarkably, global trade in goods is expected to grow by 10.8% in 2021," as the global economy recovers.

**Figure 2:** Global trade: Back in black: *World Merchandise Export Volume, Index (2015=100)* 



Source: World Trade Organization (WTO)

Some industries are emerging from the pandemic stronger. Two in particular stand out: digital technology and the market for low-carbon goods and services. These had started overhauling our lives before the pandemic arrived, with Covid-19 hastening their uptake as companies were forced to digitalise their supply chains, consumers demanded more sustainable

ways of living, and governments set stronger climate pledges. The advance of these industries is fuelled by a third trend: the resurgence of industrial policy, designed by governments to guide countries out of the pandemic. The following sections of this report examine these three themes in greater detail.

## Mass digitalisation

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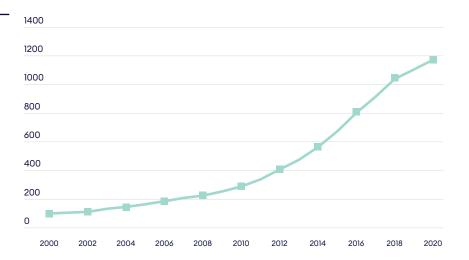
#### Figure 3: Fintech boom: Number of UK Fintech companies (rebased at year 2000), 2000-2020

#### Mass digitalisation

Of all the trends shaped by the pandemic, the digitalisation of global value chains (GVCs) for goods and services is perhaps the most visible.

Covid-19 accelerated the uptake of technology in business and society by several years, as digitalisation became a necessity rather than a choice. This is particularly evident in the sectors hit worst by the pandemic. In education, lockdowns forced universities and schools to shift to online learning models, with varying degrees of success. E-commerce uptake reached levels that would otherwise have been years away, with sales in the UK rising by 46% in 2020.12 Theatres and musicians started streaming live productions into people's homes.<sup>13</sup> Meanwhile it was estimated that six million adults in the UK downloaded an online banking app for the first time.14

Having transformed economies, that transition is not likely to end with the pandemic. Covid-19 has consolidated the integral role of digitalisation in growth and protection against future shocks. Companies are deploying Internet and Communication Technologies (ICTs) not only to interact with consumers, but to bolster resilience in their supply chains. Wellestablished tools, such as digital payments and cloud computing, are already widely used in GVCs. Increasingly, they are supported by advanced technologies, including the Internet of Things (IoT), artificial intelligence (AI) and machine learning, robotics, blockchain solutions, virtual and augmented reality (VR and AR) and 5G.15 Big data is being harnessed to root out waste and inefficiencies in supply chains. The growth and acceptance of digitalised innovation is evident when considering the rise in digital-tech start-up platforms that have been rapidly taking over the financial services market in the UK.

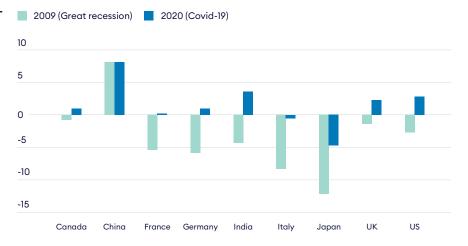


Source: Deloitte, 2020

Total spending on ICT was growing at a steady rate of 4% annually before Covid-19, and is expected to pick up from 2021, driven by the uptake of advanced technologies such as AI and IoT. This should propel global ICT spending from an estimated US\$5.2trn in 2021 to \$5.8trn in 2023, according to International Data Corporation (IDC), a technology research firm. Io Investment in AI, in particular, is soaring. By one

estimate, worldwide revenue generated by the sale of Al-based software and services will grow from US\$62bn in 2020 to US\$998bn in 2028.<sup>77</sup> The same goes for cybersecurity, which saw growing demand as workers set up at home and companies moved to cloud-based infrastructure during the pandemic. Global revenues for cybersecurity services are projected to rise from US\$67bn in 2019 to US\$111bn in 2025.<sup>18</sup>

**Figure 4:** Resilient IT: Total IT spending on packaged software, hardware and IT services (% change year-on-year).



Source: The Economist Intelligence Unit; IDC

The UK, with its bubbling tech venture capital (VC) scene, remains a hub for start-ups, with London currently ranking fourth in the world behind San Francisco, Beijing and New York as a source of tech VC investment.

Mass digitalisation is, in turn, supporting vibrant disruptor industries, such as fintech (financial services), healthtech (health and medical goods and services) and edtech (education services), among others. Aside from the US and China, countries such as the UK, India and Canada are home to companies at the forefront of these growing fields of activity. The UK, with its bubbling tech venture capital (VC) scene, remains a hub for such start-ups, with London currently ranking fourth in the world behind San Francisco, Beijing and New York as a source of tech VC investment.<sup>19</sup> Britain is among the top global destinations for investment in agritech start-ups, which attracted US\$1.1bn in funding in 2019.20 According to a report by Deloitte, the UK is home to a growing fintech industry, with around 2,500 companies disrupting business models

in sub-sectors including retail banking, insurance and wealth management.<sup>21</sup>

This will have far-reaching consequences for global trade and investment in the years ahead. Though emerging technologies are finding their way into GVCs, their deployment is still relatively low, and there is a long way left to run before their transformative effects are fully felt.<sup>22</sup> Going forward, they will enhance global food supply chains and create more immersive learning experiences. They promise to deliver more localised, customised financial services,23 promote efficiencies in manufacturing and agriculture, and improve consumer-facing services. Countries leading the development and deployment of these technologies will benefit from growing investment flows in the years ahead.

## The sustainability shift

#### The sustainability shift

The second notable trend accelerated by the pandemic is the drive for sustainability.

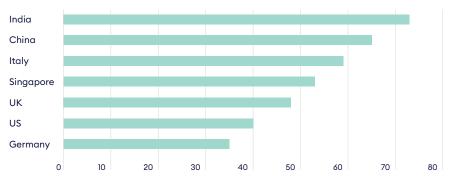
Before Covid-19, companies were setting increasingly ambitious targets to reduce emissions and clean up their supply chains. The economic shock that the pandemic triggered could have derailed such plans, however the opposite happened. "Clean growth", and a drive for sustainable and resilient sourcing, became the new stated economic paradigm, impacting all sectors of the economy, from consumer goods to energy, agriculture and financial services.<sup>24</sup>

This was driven partly by supply-side shocks. Bare supermarket shelves and global shortages of personal protective equipment (PPE) reinforced the need for companies and governments to build greater resilience against unpredicted external events. The pandemic exposed fragilities in the just-in-time supply chains that industries, including agriculture and retail, had been depending on, as well as

the risks of relying on single nations as sources of traded goods. According to one survey of supply chain executives, 100% of respondents said they experienced production and distribution problems at the height of the pandemic in 2020.<sup>25</sup>

Covid-19 may also have driven demand-side changes. For several years, shoppers have been growing increasingly conscious of the environmental and social consequences of fast fashion, long-haul holidays and reliance on imported products. According to recent EIU research, web searches for "sustainable fashion" tripled in the US and Europe between 2016 and 2019, for example, 26 while demand for meat and dairy alternatives has grown considerably. One survey estimates that over half of international consumers plan to buy more sustainable products once the pandemic subsides. 27

**Figure 5:** Sustainability matters: % who agree with the statement "I will buy more sustainable products" after the pandemic has ended



Source: YouGov

One consequence may be a push to bring supply chains nearer to home. There were signs before the pandemic that some multinational enterprises (MNEs) were beginning to pull back from globalised supply chains, driven by protectionist trade policies and political uncertainties, among other factors.<sup>28</sup> As they look to

protect themselves from future shocks, more firms may seek to unwind the gradual outsourcing that saw them shift large portions of their operations to developing nations. That shift could include diversifying, regionalising, localising or 'near sourcing' (a process of moving operations closer to the point of sale) more of their operations.

The pandemic is shifting the global investment landscape towards the sustainability imperative.

The challenge for companies is to find a way of bolstering resilience in their supply chains without compromising competitiveness, and while continuing to meet consumer demand for speed and convenience.

Concurrently, the pandemic is shifting the global investment landscape towards the sustainability imperative. As the risks relating to company assets' exposure to climate change grow more real and visible, shareholders and financial institutions are looking increasingly at sustainability credentials as a measure of long-term resilience. As markets slumped in 2020, firms with higher environmental, social and governance (ESG) ratings outperformed their peers.<sup>29</sup> Since January 2020, the S&P Global Clean Energy Index has advanced

by 63%.30 Green finance-a blanket term for the money needed to support investments that will curb global warmingis thriving. UNCTAD estimates that the market for green investment products, such as sustainable funds, green bonds and social bonds, reached US\$3.2trn in 2020-an increase of more than 80% on their levels in 2019.31 That trend is certain to continue. Private sector innovation is driving down costs and improving the performance of green goods and services. The vast majority of private financing is making its way towards transport and renewable energy projects. Greenfield FDI flows into clean energy surpassed that in hydrocarbons for the first time in 2020,32 while renewable energy capacity grew at its fastest pace this century.33

**Figure 6:** Climate finance growth: *Total global climate finance flows (US\$bn), 2012-2019* 



Source: Climate Policy Initiative

It remains, however, only a fraction of what is needed. Financing the transition to a climate-resilient economy will require unprecedented political will and mobilisation of financial resources. According to estimates from BCG Partners and The Global Financial Markets

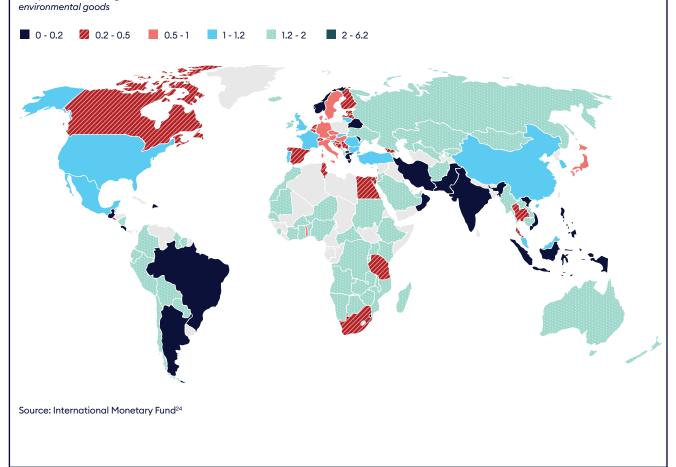
Association, some US\$100-150trn will be needed to keep global warming to 1.5°C above pre-industrial levels by 2050-the goal set under the Paris Agreement in 2015.<sup>34</sup> That amounts to an average investment of US\$3-5trn a year-eight times the current figures.

#### **UK perspective: Sustainability as opportunity**

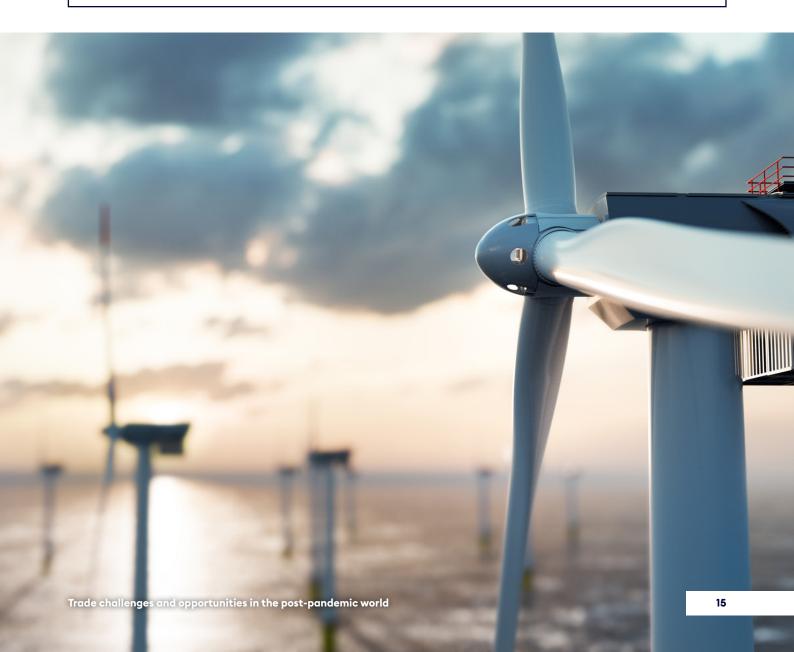
The transition to net zero offers a chance for governments and businesses to shape the economy of tomorrow. In the UK, much attention has been paid to both political support for the green transition and private sector innovation. The UK Government, host of the November 2021 COP-26 climate conference, has a long-standing commitment to Greenhouse Gas (GHG) emission reduction. In 2008, the UK legislated to reduce GHG emissions by at least 80% by 2050 compared to 1990 levels. This target was updated to 100% in 2019, making the UK the first major economy to legislate towards net-zero emissions. 35,36

The government also implemented targeted industrial support measures and financial aids, including the national Ten Point Plan, mechanisms like the Automotive Transformation Fund (ATF) and the support offered by UK Export Finance to boost the international reach of UK green goods and services businesses.<sup>37</sup> As a result, the country is also among the leaders in R&D and commercialisation in segments including electric vehicles and e-mobility, batteries, and offshore wind alongside hydrogen and emerging alternative fuels, like algae.<sup>38</sup> British companies are also offering green finance and digital services, from carbon accounting start-ups through to the green finance products emerging in London's vibrant financial sector, including ESG investment platforms, green bonds and disclosure requirements pushing major multinationals to reach a stronger sustainability performance.<sup>39</sup>





Developing and attracting top-quality talent is critical for fostering innovation in advanced digital and clean technology. However, despite significant progress in some of these areas, more needs to be done to mobilise financial, human and technological resources for sustainable and inclusive economic development in the face of global environmental, social, technological and political challenges. Developing and attracting top-quality talent is critical for fostering innovation in advanced digital and clean technology. This requires keeping the international trading system open to the flow of goods, services, labour and finance–particularly those required for technological innovation and net-zero transition. It is also critical that the transition is inclusive and "just" for communities, with clear support for diversifying economic activity and helping people adapt in a changing labour market. To balance these objectives, there is a need to differentiate truly environmental state industrial policy from protectionism under the guise of climate transition.<sup>40</sup>



## The industrial policy era

#### The industrial policy era

The trends of mass digitalisation and an increased focus on resilience and sustainability were boosted by a third theme: the return of big government and industrial policy.

As businesses closed and workers were sent home, governments pumped trillions of dollars into the global economy through programmes including wage subsidies and furlough schemes, bolstered unemployment benefits and rent and tax holidays. These made the interventions of the global financial crisis, and the Marshall Plan, which helped rebuild Europe after the Second World War,<sup>41</sup> look small in comparison.

In the US, President Joe Biden approved a US\$1.9trn relief package in March 2021, adding to a US\$900bn bill passed by Congress in December 2020, and another US\$2.5trn of aid approved by former President Donald Trump during his last year in office.<sup>42</sup> Stimulus packages in the UK equated to over 17% of GDP.<sup>43</sup> Some estimates put Japan's fiscal outlay at over 50% of GDP.<sup>44</sup>

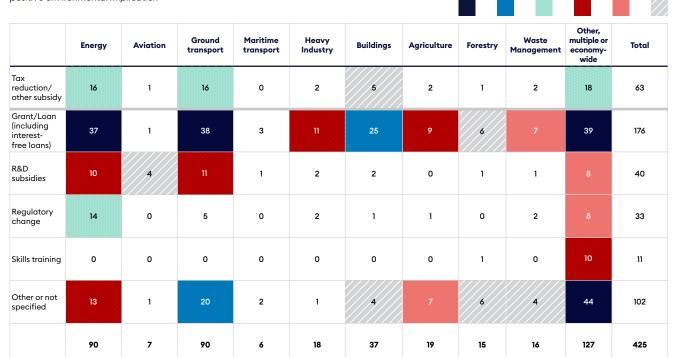
Lower numbers

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Higher numbers

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Figure 8: Committing to environmental sustainability: Sectoral measures with clear positive environmental implication



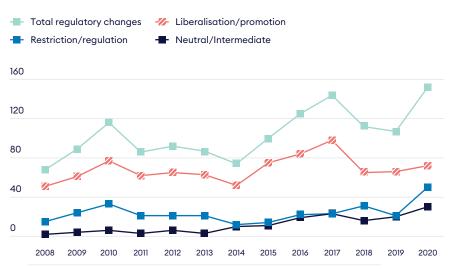
Source: OECD16

These measures staved off the immense economic damage that would usually follow a recession and averted the potential obliteration of whole industries. As Covid-19 stimulus programmes wind down, governments have drafted new plans to "Build Back Better", giving the state a bigger role in shaping the economy-often towards the priority areas of green growth and digital innovation. In the US, that involves investing in clean energy manufacturing, to meet a goal of 100% carbon pollution-free electricity by 2035.45 Under a Ten Point Plan for a Green Industrial Revolution launched in 2020, the UK government committed £12 billion to clean growth industries, such as hydrogen, offshore wind and electric vehicles, with the aim of creating up to 250,000 skilled green jobs by 2030.46

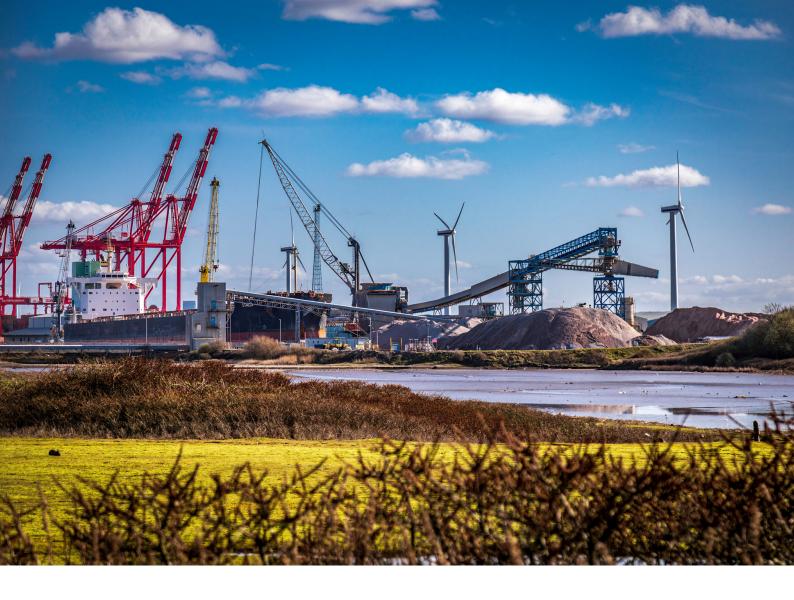
To some extent, that builds on recent trends. States had already started taking

a bigger role in their economies before the pandemic-as digital technologies have come to underpin more economic activity, ICT, in particular, has become the target of increasingly proactive industrial policy. According to UNCTAD, 101 countries, representing more than 90% of global GDP, adopted formal industrial development strategies in the decade from 2008, predominantly focused on technological innovation.<sup>47</sup> While China's government has pursued this approach for several years, it is a relatively new development for Western governments. "Strategic public investments to shelter and grow champion industries is a reality of the 21st-century economy. We cannot ignore or wish this away", warned Brian Deese, President Biden's top economic advisor in 2021, while calling for the US to launch a "national industrial strategy" to shore up its manufacturing base.48

Figure 9: Policies matter: Number of investment policy measures adopted globally between 2008-2020



Source: United Nations Conference on Trade and Development (UNCTAD)



There are signs, however, that this is linked to rising protectionism in many parts of the world. Supply chain vulnerabilities and the risk of predatory takeovers of strategic and sensitive industries are also under scrutiny from regulators in the US, Europe and Asia. In February 2021, President Biden kicked off his "Build Back Better" strategy by signing an executive order, "Securing America's Critical Supply Chains", which aims to reduce reliance on foreign-made inputs. Meanwhile, capital flows face growing controls. According to the OECD, over half of its 38 member states had cross- or multisectoral investment screening mechanisms in place in 2018, compared to less than a

third a decade earlier.  $^{49}$  UNCTAD finds that the number of investment policy measures adopted in 2020 rose by 40% compared with 2019. The share of restrictive or regulatory measures over measures aimed at liberalising or facilitating investment reached 41%, which was the highest on record.50 How much further those trends might run as the pandemic passes remains an open question. However, they are likely to have an uneven impact on the flow of trade and investment in the years ahead, with the potential to both accelerate growth in domestic companies as they respond to new trade opportunities whilst also deterring FDI and cross-border commerce.

#### **Endnotes**

- 1. UN Conference on Trade and Development (UNCTAD), 2021: https://unctad.org/topic/trade-analysis/non-tariff-measures/covid-19-and-ntms
- 2. Economist Intelligence Unit, 2021: https://eiuperspectives.economist.com/sites/default/files/the\_cost\_of\_deglobalising\_world\_trade\_eiu\_report.pdf
- 3. Macrotrends, 2021: https://www.macrotrends.net/countries/WLD/world/trade-gdp-ratio
- 4. UN Conference on Trade and Development, 2021: https://unctad.org/system/files/official-document/wir2021\_en.pdf
- 5. World Trade Organisation, 2021: https://www.wto.org/english/news\_e/pres21\_e/pr876\_e.htm
- 6. The Guardian, 2021: https://www.theguardian.com/culture/2021/jan/26/eu-creative-sector-faces-economic-devastation-from-covid
- 7. World Trade Organisation, 2020: https://www.wto.org/english/news\_e/pres20\_e/pr855\_e.htm
- 8. World Trade Organisation, 2021: https://www.wto.org/english/news\_e/pres21\_e/pr876\_e.htm
- 9. Ibid
- 10. The Economist, 2020; https://www.economist.com/finance-and-economics/2020/09/12/how-has-trade-survived-covid-19
- 11. World Trade Organisation, 2021: https://www.wto.org/english/news\_e/pres21\_e/pr889\_e.htm
- 12. Economist Intelligence Unit, 2021, 'UK Industry Report: Consumer goods and retail' (accessed 14.6.21). Available at: http://country.eiu.com/articleindustry.aspx?articleid=1160757899&Country=United%20Kingdom&topic=Industry&subtopic=Consumer%20goods
- 13. The Guardian, 2020: https://www.theguardian.com/stage/2020/sep/21/future-of-live-theatre-online-drama-coronavirus-lockdown
- 14. Wired, 2020: https://www.wired.co.uk/article/mastercard-future-payments
- 15. World Economic Forum, 2020: https://www.weforum.org/reports/mapping-tradetech-trade-in-the-fourth-industrial-revolution
- 16. International Data Corporation: https://www.idc.com/promo/global-ict-spending/forecast
- 17. Grand View Research, 2021: https://www.grandviewresearch.com/industry-analysis/artificial-intelligence-ai-market
- 18. The Business Research Company, 2020: https://www.globenewswire.com/news-release/2020/11/05/2121251/0/en/Cybersecurity-Industry-Overview-Shows-US-To-Account-For-The-Largest-Share-Among-Countries-In-The-Global-Cyber-Securities-Market-2020.html
- 19. According to Tech Nation, total UK VC investment in technology companies was \$15bn in 2020, though that figure was dwarfed by the \$144bn invested in the US and the \$45bn invested in China. Tech Nation 2021: https://technation.io/report2021/
- 20. AgFunder,' AgriFoodTech Investment Report'. 2021. https://research.agfunder.com/2021/2021-agfunder-global-report.pdf
- 21. Deloitte, 2021: https://www2.deloitte.com/uk/en/pages/financial-services/articles/uk-fintech-landscape.html
- 22. UN Conference on Trade and Development, 2021: https://unctad.org/system/files/official-document/tir2020\_en.pdf
- 23. UN Conference on Trade and Development, 2020: https://unctad.org/system/files/official-document/wir2020\_en.pdf
- $24. \quad \textbf{Economist Intelligence Unit, 2021: https://impact.economist.com/perspectives/sites/default/files/eiu\_dit\_clean\_growth.pdf} \\$
- 25. McKinsey, 2020: https://www.mckinsey.com/business-functions/operations/our-insights/resetting-supply-chains-for-the-next-normal
- 26. Economist Intelligence Unit, 2021: https://eiuperspectives.economist.com/strategy-leadership/re-threading-supply-chains-lifestyle-industry
- $27. \hspace{0.2in} You Gov, 2021: \hspace{0.2in} \hspace{0.2in}$
- $28. \quad \text{UN Conference on Trade and Development, 2019: } \\ \text{https://unctad.org/system/files/official-document/tdr2019\_en.pdf} \\ \text{2019: } \\ \text{$
- 29. The Economist, 2020: https://applied.economist.com/articles/sustainability-in-the-time-of-covid-19
- 30. EIU calculations. Based on Jan-21, 2022 stock prices
- $31. \quad \text{UN Conference on Trade and Development, 2021: https://unctad.org/system/files/official-document/wir2021\_en.pdf} \\$
- 32. fDi Intelligence, 2021: https://report.fdiintelligence.com/files/ThefDiReport2021.pdf
- 33. Wall Street Journal, 2021: https://www.wsj.com/articles/wind-solar-power-made-strong-gains-in-2020-iea-says-11620709200?mod=hp\_lista\_pos5
- 34. Global Financial Markets Association, 2020: https://www.gfma.org/policies-resources/gfma-and-bcg-report-on-climate-finance-markets-and-the-real-economy/
- $35. \quad Institute for Government, 2020: https://www.instituteforgovernment.org.uk/explainers/net-zero-target.pdf. and the state of the$
- 36. UK Government, 2020: https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law
- 37. Automotive Transformation Fund, 2020: https://www.apcuk.co.uk/opportunities-for-you/automotive-transformation-fund/
- 38. Entrepreneur First, 2020: https://www.joinef.com/companies/phycobloom/
- 39. The Global City, 2021: https://www.theglobalcity.uk/industries/sustainable-finance
- 40. International Chamber of Commerce, 2019: https://iccwbo.org/content/uploads/sites/3/2019/03/icc-report-trade-and-climate-change.pdf
- 41. McKinsey Global Institute, 2020: https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-has-revived-the-social-contract-in-advanced-economies-for-now-what-will-stick-once-the-crisis-abates#
- $42. \quad \text{The Washington Post, 2021: } \\ \text{https://www.washingtonpost.com/world/2021/03/10/coronavirus-stimulus-international-comparison/world/2021/03/10/coronavirus-stimulus-international-comparison/world/2021/03/10/coronavirus-stimulus-international-comparison/world/2021/03/10/coronavirus-stimulus-international-comparison/world/2021/03/10/coronavirus-stimulus-international-comparison/world/2021/03/10/coronavirus-stimulus-international-comparison/world/2021/03/10/coronavirus-stimulus-international-comparison/world/2021/03/10/coronavirus-stimulus-international-comparison/world/2021/03/10/coronavirus-stimulus-international-comparison/world/2021/03/10/coronavirus-stimulus-international-comparison/world/2021/03/10/coronavirus-stimulus-international-comparison/world/2021/03/10/coronavirus-stimulus-international-comparison/world/2021/03/10/coronavirus-stimulus-international-comparison-world/2021/03/10/coronavirus-stimulus-international-comparison-world/2021/03/10/coronavirus-stimulus-international-comparison-world/2021/03/10/coronavirus-stimulus-international-comparison-world/2021/03/10/coronavirus-stimulus-international-comparison-world/2021/03/10/coronavirus-stimulus$
- 43. Statista, 2021: https://www.statista.com/statistics/1107572/covid-19-value-g20-stimulus-packages-share-gdp/
- 44. Ibid.
- 45. The White House Briefing Room, 2021: https://www.whitehouse.gov/briefing-room/statements-releases/2021/07/22/fact-sheet-how-the-build-back-better-plan-will-create-a-better-future-for-young-americans/
- 46. HM Treasury, 2021: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/968403/PfG\_Final\_Web\_Accessible\_Version.pdf
- $47. \quad \text{UN Conference on Trade and Development, World Investment Forum 2018: https://unctad.org/system/files/official-document/wir2018\_en.pdf} \\$
- 48. Atlantic Council, 2021: https://www.atlanticcouncil.org/commentary/transcript/brian-deese-on-bidens-vision-for-a-twenty-first-century-american-industrial-strategy/
- 49. Organisation for Economic Co-operation and Development, 2020: https://www.oecd.org/coronavirus/policy-responses/investment-screening-in-times-of-covid-19-and-beyond-aa60af47/
- 50. UN Conference on Trade and Development, 2021: https://unctad.org/system/files/official-document/wir2021\_en.pdf



#### Department for International Trade

The UK's Department for International Trade (DIT) has overall responsibility for promoting UK trade across the world and attracting foreign investment to our economy. We are a specialised government department with responsibility for negotiating international trade policy, supporting business, as well as delivering an outward looking trade diplomacy strategy.

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