ORF OCCASIONAL PAPER

253

JUNE 2020

US and China: Decoupling in the Era of COVID-19

Manoj Joshi

ORF OBSERVER RESEARCH FOUNDATION

US and China: Decoupling in the Era of COVID-19

Manoj Joshi

ORF OBSERVER RESEARCH FOUNDATION

ABOUT THE AUTHOR

Manoj Joshi is a Distinguished Fellow at ORF. He is a commentator and columnist specialising on national security issues. He has been a member of the National Security Advisory Board and the Government of India's Task Force on National Security headed by Naresh Chandra.

ISBN: 978-93-90159-25-3

US and China: Decoupling in the Era of COVID-19

ABSTRACT

Questions about the utility of globalisation are not new. Could the COVID-19 outbreak be the final nail on the coffin for an idea that drove the world economy in the past three decades? In theory, countries would produce what they specialised in, leaving it to the market to ensure everyone got a better price for it. As 2020 began, the pandemic spread from one province of China and soon disrupted production across the world. Countries banned the export of key medicines and equipment, throwing light on the hollowing out of manufacturing in developed countries. Economic trends in the past decade encouraged diversification of production away from China; another process, rooted in geopolitics, has seen the decoupling of information technology links between the US and China. COVID-19 has not only accentuated issues like re-shoring and near-shoring key industries and shortening supply chains, but has provided a push to a larger idea of "decoupling" technology ties between the US and China. This is driven largely by politics, though it has implications for the entire global economy.

Attribution: Manoj Joshi, "US and China: Decoupling in the Era of COVID-19," *ORF Occasional Paper No. 253*, June 2020, Observer Research Foundation.

1. INTRODUCTION

While the idea of "deglobalisation" first emerged around the time of the global financial crisis of 2008, it has been largely discounted given the complexity of global supply chains and the value that was added to global trade by the vast transportation networks and lower tariffs. Since then, for various economic and political reasons, the idea that the world is retreating from global economic integration has taken greater hold. In more recent times, it has mutated to the notion of "decoupling".[a] While the issue that has emerged is primarily in relation to the China and the United States (US), it is also now being spoken of in the context of Japan and China.

The issue has two drivers: one political and the other, technological. While the notion of deglobalisation is not new, "decoupling" has taken a salience in the presidency of Donald Trump. As such, it is a recent phenomenon on which hardly any theoretical literature can be found. "Decoupling" has no real precedent, other than perhaps the Cold War-era relationship between the Soviet Union and the West.

The paper does not aim to be an academic dissection of deglobalisation, but argues that the politics and context of deglobalisation has provided the template upon which decoupling is taking shape. It examines the options before the US and the world, weighs the pros and cons of decoupling, and outlines its implications for India.

a 'Decoupling' is the deliberate dismantling of cross-border supply chains that were a key feature of globalisation.

2. THE DEGLOBALISATION BACKGROUND

A December 2018 paper by the Bank of International Settlements argued that "after decades of rapid integration, globalisation has shown signs of stalling since the GFC [Global Finance Crisis of 2008.]"[1] It speculated that this could be an outcome of its drivers—transportation cost and tariff rates—reaching a trough, the rise of automation, and a backlash arising from "a public perception that the losses from globalisation are bigger than the gains."[2]

Signs of deglobalisation have been around for some years, manifesting in a variety of ways. The Doha Round of the World Trade Organisation (WTO) achieved an impasse, the Trans Pacific Partnership (TPP) collapsed, and the so-called "rules-based international order" has steadily eroded, with China ignoring the UN Convention on the Laws of the Sea (UNCLOS) in its disputes in the South China Sea and the US walking out of the Paris Climate Change Agreement and, more recently, the World Health Organization.

At the heart of globalisation are the global supply or value chains through which raw materials, parts, components move across borders to be combined to make finished goods. By providing lower costs and greater efficiencies for manufacturers, consumers benefited and businesses made profits. In recent years, these supply chains have been buffeted by rising wage rates, technological trends, as well as the US-China trade war,[3] and now they have had to confront an entirely new order of challenges from COVID-19.

By the time the Trump administration came to office in 2017, annual US-China trade in goods was at the level of US$635 billion, with the US having a negative balance of US$375 billion.[4] The desire to eliminate this deficit became an important feature of Trump's policies and political rhetoric. As president, he put tariffs on Chinese imports and stepped up criticism of what globalisation had brought in its wake—de-industrialisation and off-shoring that had allegedly taken away value jobs from the US.

The big complaint globally has been that globalisation has led to Chinese dominance of manufacturing and supply chains. As a 2017 European Chamber of Commerce report noted, by 2015, China produced 24 percent of the world's power, 28 percent of the automobiles, 41 percent of the world's ships, over 50 percent of the refrigerators, over 60 percent of the colour TV sets, over 80 percent of the air conditioners and computers, and over 90 percent of the mobile phones and half the world's steel.[5]

As for the US, an analysis of non-tariff goods revealed in 2019 that more than half the US imports of furniture and footwear came from China, as did over 80 percent of its cellular phones and nearly all its laptops. The report noted that the problem for companies to set up elsewhere was not just higher costs and logistics, but the lack of a supply base for the tier-1 suppliers, and dearth of equipment and related skills.[6]

In recent years concerns had grown, mainly in the US, over what many are seeing as China's over-the-top 'techno nationalism', where technology acquisition by all means, has become national policy. There were calls to restrict the export of technology to China, step up the scrutiny of Chinese investments in the US, and put in place restrictions on Chinese students in American institutions of higher learning.[7] There was resentment, too, at China's Internet which had been walled off from international data flows or e-commerce, while Chinese officials and companies did not hesitate to take advantage of the openness of the Internet. There were also concerns over how China used its dominance of certain materials to push a political agenda. In 2010, China banned the exports of rare earth metals to Japan because of the detention of a Chinese fishing boat captain whose trawler rammed Japanese Coast Guard ships.[8] Such metals are used in a range of products from electronics to cars. At the time, China controlled 97 percent of the world's total production of the rare earth elements, of which around half were exported to Japan.[9]

To be sure, deglobalisation has been underway for some years. *The Economist* reported in July 2019 that "globalisation is becoming regionalisation."[10] It cited an analysis by McKinsey Global Institute (MGI) which revealed that the global value chains in 16 or 17 industries it studied have been contracting in the past decade. Data for three industries revealed differing patters of supply chain fragmentation: the clothing sector was globally "footloose", the car industry was creating regional hubs, and the electronics industry remained rooted in China.[11]

A report based on a sample of 56 companies by Nomura in September 2019 noted that there was not just a short-term diversion of companies away from China because of the Sino-US troubles, but a medium-term trend for relocation.[b] Three sectors were most affected: electronics; apparel, shoes and bags; and electrical equipment. Trade tensions had seen efforts towards reshoring of production back to Japan (capital machinery) and Taiwan (electronics). US and Taiwanese companies accounted for 25 percent of the sample, while Chinese companies themselves constituted 16 percent, all seeking to set up new factories outside China.[12] Likewise, a study of the 2019 US-Mexico-Canada (USMCA) rules relating to the automobile industry

b The largest beneficiaries of this pattern were mostly in Asia, and mainly Vietnam, Taiwan and Thailand; Mexico was the main beneficiary outside Asia.

revealed that it would rejig supply chains in favour of North America since it required that a relatively high percentage of the vehicle's value come from the region. While there could be disadvantages in terms of the price of the vehicles and their spares, there would also be benefits to other industries like steel and aluminium.[13]

According to the Reshoring Index released by consultancy firm Kearney, by 2019 it was apparent that companies were reacting to the US-China trade war by reducing imports of manufactured goods from China, while increasing imports from other East Asian countries, as well as Mexico. It believes that because of the pandemic, "companies will be compelled to go much further in rethinking their sourcing strategies—indeed, their entire supply chain."[14]

Deglobalisation, therefore, has seen a certain regionalisation, "near shoring" or "reshoring" of supply chains, a process that has been promoted both by the US and China. The case of the USMCA has been referred to above. Earlier, the American initiative to create the Trans Pacific Partnership (TPP) was an even bigger step in the direction of moving supply chains away from China. However, the Trump administration did not take that route and the US walked away from the agreement that would have created a high-quality, high-technology, trade zone comprising mainly of US allies.[15]

As for China, its companies were already relocating parts of their supply chain to Southeast Asia because of the rising wages in China. Though the issue was open, China did not rule out joining the TPP, but its focus was on the Regional Comprehensive Economic Partnership (RCEP) that sought to bind the Indo-Pacific—the ten ASEAN nations, Australia, New Zealand, South Korea and Japan—closer to China.

3. DECOUPLING AND COVID-19

In the past two years, "decoupling" has emerged, riding on the broader trend of deglobalisation. Where the latter followed an economic logic, often impelled by technology, wage rates and trade agreements, "decoupling" has been seen as a deliberate political step motivated by a notion of national well-being, if not national security. Politics has always intersected with economics on the issue of decoupling. Well before the word became popular, the notion of some kind of "uncoupling" or distancing between the US and Chinese economies has resonated politically in *both* countries.

As presidential candidate in 2016, Trump called for moving away from the trade relationship with China and "uncoupling" from it. This was part of his larger attack on America's trade relationships which he argued had "stolen" jobs from Americans.[16] As President, Trump saw this as a major issue in the relationship and immediately demanded the redressal of the huge trade imbalance between the two countries and over the next two years, imposed a series of tariffs on imports from China. Beijing did retaliate, but as its imports from the US were not as large, it did not have the same impact.

As for China, it did not say things out aloud, but its policies and plans spoke for themselves. As its manufacturing prowess grew, so did the idea of national self-sufficiency or "indigenous innovation". The December 2005 National Medium and Long Term Science and Technological Development Plan formed the basis of the strategy to move from the ability to "reinnovate" imported products to "indigenous innovation" based on domestic industry and R&D capabilities.[17] Successive Five Year Plans have emphasised this idea of "National Indigenous Innovation Capability (NIIC)".[18]

China began to follow a systematic policy of replacing foreign technology with domestically developed technology in a range of areas. From the outset, for commercial and political reasons, China walled off its Internet from that of the world. In the last two years, faced with US policies aimed at restricting technology to China, Beijing has accelerated its efforts to develop its IT industry, especially in the manufacture of semiconductors.

Since 2018, Washington's approach towards Beijing began to operate at two levels—one to demand a balanced trade and the other, the walling off of its own technology through tightened export control regimes targeting Chinese investors and producers. In its dealings with both allies and adversaries, the US also signalled a desire to "reshore" jobs back home, often citing national security concerns, by creating a new regulatory framework, as well as encouraging the emergence of industry 4.0 technologies. The COVID-19 pandemic has sharpened these demands, arising in many cases from the experience of having been caught short of medical equipment and pharmaceuticals as the crisis deepened.[19]

The pandemic also brought out the systemic weaknesses of globalisation. China had become the world's largest exporter of intermediate goods and components used to make final products. These goods represented almost two-thirds of Chinese exports. As China shut down in February, the impact reverberated around the world, especially in several East Asian countries like Japan, South Korea, Taiwan and Vietnam that emphasise "just in time" manufacturing.[c] Many industries ran short of key assemblies and

c In this system raw materials, goods, assemblies and subassemblies are received "just in time" to align with the production schedule of a product. This increases efficiency, and reduces inventory costs.

components. For about a month or so, a major pharmaceutical country like India was concerned about the shortage of Active Pharmaceutical Ingredients (API) that it imports to make drugs. Inevitably, even outside the geopolitical context countries have been forced to think about the need for building resiliency into their supply chains.

The pandemic has generated great bitterness in Sino-US relations, in part owing to the grievous hurt American people are suffering because of the COVID-19 outbreak, and also because Washington has found it convenient to blame Beijing for its own initial missteps. It has become grist to the US electoral mill in a year which will decide who will be president for the next term.

China

In the Chinese perspective, the principal motivation for its opening up in the 1980s was to catch up with—and even overtake—the US as a technological power. Indeed, this was only a process of returning China's trajectory to what it was before its "century of humiliation" at the hands of the West.[20] Many post-colonial countries like India were sympathetic to this vision and also had national programmes to achieve such a goal.

In the 1990s, the US welcomed the growth of Chinese industry, especially its cheap mass-production capability that proved to be a boon to the US middle class which, in any case, were facing a relative decline in incomes since 1980. For multinational corporations, the lure of exploiting low-cost labour abroad and making huge profits was irresistible.

The rise and rise of China complicated things, however. Initially, there were reports of theft of key nuclear and space technologies.[21]

Instead of a progressive political opening up of China following the Internet revolution, the world was chagrined to find that Beijing successfully constructed a 'Great Firewall' around its own Internet, and launched a massive campaign of cyber espionage to steal technology from around the world.[22] This Great Firewall ring-fenced the Chinese Internet and blocked global giants like Google, Amazon, and later Facebook and Twitter, from its market. It created a protected technosphere that encouraged the rise of China's own domestic champions—Alibaba, Tencent, WeChat and Baidu. In its own way, it was the first act in what would emerge as the "decoupling" drama.

Chinese concerns were not just commercial but also political. The fact that the US companies controlled the flow of information in the Internet was something deemed dangerous in an authoritarian society like China. A new set of concerns were revelations made by Edward Snowden in 2013 showing ties between US technology giants and the US National Security Agency.[23] China felt it was too reliant on US technology.[d] Many of them were forced into joint ventures with Chinese companies to ensure they did not undermine Chinese security.[24] Another track followed by China was to deepen its own supply chains and ensure that all the key components of a product were manufactured domestically.[25] Associated with this was the government decision to systematically move away from using western operating systems (OS) like Windows for personal computers, and create its own OS, especially for its military.[26] There were strategic areas where China began to dominate the entire supply chain, such as rare earth metals used in the manufacture of electronics and automobiles, and electric vehicles (EVs). China produces nearly two-thirds of the

d Especially technology provided by the giants like Apple, Cisco, Google, IBM, Intel, Microsoft, Oracle and Qualcomm.

world's lithium-ion batteries used to power EVs, compared to five percent by the US, and controls most of the world's lithium processing facilities.[27]

China not only put in place a sophisticated system of absorbing foreign technology obtained through licence, purchase or espionage, but also invested heavily in R&D and education to create an eco-system to establish domestic capacity for R&D and innovation.[28] Beijing got a huge fillip when it entered the WTO in 2001 with all the concessions available to a developing economy and it suffered only a mild slowdown because of the global financial crisis of 2008. As the developed economies experienced the more severe impact, the crisis accentuated China's economic and technological power. By then the country had become the workshop of the world, and overtaken Japan as the top foreign holder of US debt, having more than US$0.6 trillion-worth of US debt in the form of its Treasury Securities.[29]

By 2010, China had had considerable experience in deploying national resources and institutions to become a manufacturing powerhouse. It now sought to move to the next stage, using the tactics that had brought it so far— harnessing state institutions to acquire technology by fair means or foul, and subsidising key industries to become the dominant global player in industries like IT, high-end machine tools, aerospace and ocean engineering equipment, new materials, and biomedicine.[30] All this segued into the Made in China 2025 Plan (MIC2025) in 2015 and its associate, New Generation of Artificial Intelligence Development Plan of 2017 aimed at making AI and Information Technology as the driver for China's next industrial transformation. [31] Today China is positioned as a leader in electric and autonomous vehicles technology, 5G networks, robotics and some aspects of biotechnology.

These are all seen as game-changers for China that would ensure that the country, which had missed the three industrial revolutions, would be on the crest of the fourth, the one that would merge “the physical, digital and biological spheres.”[32] At the same time, China had added another arrow to its quiver—it sought to accelerate the process through the acquisition of foreign companies to access technology. This was relatively easy in Europe which had few barriers to such acquisitions.[33] It was different in the US which always jealously guards its technology, even from friends and allies, though it involves them in its web of technology restriction rules.[34]

The scale and direction of acquisitions in the period 2015-2018 raised alarm, eventually compelling the EU to institute rules to restrict China in key industries and sectors. Simultaneously, China began the Belt and Road Initiative (BRI), a vast strategic undertaking to redraw maritime and over-land transportation links across the world. In a sense, they sought to create supply chains that would, by definition, be dominated physically, and possibly politically, by China. Even more ambitious has been the Digital Silk Road through which Beijing seeks to develop fibre-optic networks to promote connectivity along the countries linked to the BRI, many of them developing economies.

The tariff and technology clash with the US escalated through 2018 and laid bare a key Chinese weakness. This was the gap that existed between the US and China in semiconductor technology. Despite huge investments, China was manufacturing only five percent of the total global supply as compared to 45 percent by the US, the other big players being TSMC of Taiwan and Samsung of South Korea.[35] The Chinese products were five to ten years behind them in terms of technology. In the short term, there is little China can do to redress the balance, but in the longer term, it can use funding of the kind it employed to promote the semi-conductor industry, to create Chinese companies that can make world-class plasma etching or photolithography equipment to make semiconductors.[36]

As the voices in the US over China's technology acquisition tactics became louder, Beijing lowered the profile of MIC2025 and began to soft-pedal programmes like the Thousand Talents scheme through which foreign-trained Chinese scholars were lured back to the country.[37] But for companies like Huawei, which are in the cross-hairs of the US, the pressure has been relentless and there is no choice—they have to sink or learn to swim against the tide. As of now, despite all the pressures, on the eve of the COVID-19 pandemic, China remained a premier FDI destination. In 2019, FDI rose by 5.8 percent to US$136.71 billion.[38, e]

The trajectory of the Covid-19 crisis which saw China hit first, but also enabled it to begin its recovery before others, does offer China an opportunity to stave off immediate pressures as foreign companies will be reluctant to act when global demand is down. But this is not going to give Beijing the kind of advantage that it gained in 2008. With the country weighed down in debt, China's fiscal response has been cautious and no major stimulus is expected.[39]

There have also been some sober Chinese assessments of the risks ahead. The worries about China relate both to the political and economic issues. Efforts by China to deflect attention to its early mishandling of the COVID-19 outbreak has led to a new kind of "Wolf Warrior" diplomacy which is assertive, if not provocative, and could

e This means that notwithstanding anecdotal evidence of firms relocating from China, thousands of other foreign firms were being set up in China every month, in addition to the tens of thousands that were already there.

worsen the climate of relations between Beijing and many foreign countries, including the US.[40]

In a WeChat blogpost which went viral and has since been taken down, a Chinese blogger Pingzhenghe decried the "Wolf Warrior' approach. Because of the pandemic, world attitudes towards China had hardened and there was need for a realistic rather than grandiose response. According to the blogger, China may have a big economy and first-rate infrastructure, but "the center of world innovation is in the United States and in Western countries. Once decoupled, China's technological innovation capacity will undoubtedly plummet." Any decoupling would harm everyone, but it would "harm China the most."[41]

Another more balanced assessment came in mid-April in WeChat. Shi Zhan, Associate Professor at the China Foreign Affairs University said that decoupling would indeed take place, but more so in the industries related to security as well as the medical field. He acknowledged that a general decoupling would be a major setback for China since it was "still a long way from being a manufacturing powerhouse." To reach that point, it needed a workforce as talented as that of Japan and South Korea.[42]

Other assessments have been more sanguine. CICC Research has argued in a paper that China had sufficient advantages to ride out any politically driven decoupling. First, China was a large market, indeed the country was on the way of becoming the world's largest. Second, China had a relatively complete upstream and downstream supply chain and industrial clusters which were a major attraction for MNCs and local companies. Indeed, given the COVID-19 experience, some of the foreign companies were likely to increase their localisation. Third, China had a sophisticated infrastructure in terms of transportation and information technology. This, in turn, enhanced the logistics efficiency of the country and its adoption of e-commerce. Fourth, despite its ageing population, it was now reaping the dividend of the investments it had made in education and R&D.[43]

There has been some speculation on whether the massive economic setback arising from COVID-19 would encourage the Communist Party of China (CPC) to press ahead with what it terms "marketisation reforms"—reducing the role of State Owned Enterprises (SOEs), the market-distorting state support to the economy, and allowing the market to play the key role in resource allocation. This would not just help reduce tensions with the US, but benefit China itself since the private sector contributes two-thirds of China's GDP.[44]

The current COVID-19 crisis has focused attention on the plight of China's micro, small and medium enterprises (MSMEs) which have played a key role in the country's economic success. Both the Chinese State Council and the CPC have emphasised the importance of marketisation in statements in April 2020. But according to Scott Kennedy of the Center for Strategic and International Studies, Washington DC, such proposals are "long on sentiment and short on specifics" and contain nothing that would constitute deep reform such as allowing land ownership, privatising SOEs, and eliminating housing residency requirements.[45]

There are, however, other indications that China is moving, albeit slowly, to address some of the issues. Since 2018, it has been pruning its market access (MA) negative list of industries and opening up more sectors to foreign and domestic investors and also simplifying administrative procedures for investors.[46] The Foreign Investment

Law (FIL) passed in 2019 has sought to level the playing field for Chinese and foreign investors, banned forced technology transfer and provided protection for Intellectual Property (IP). A measure of China's determination to change is evident in its 47-place jump in the World Bank's "Ease of Doing Business" list from 78 in 2017 to 31 in 2020.[47] At the end of the day, the issue is the sincerity with which China will implement the measures it has announced.

The big challenge that Beijing confronts as a result of COVID-19 are, first, a reputational damage. The appellation "Chinese" or "Wuhan" virus may not last, but in the minds of the world community, the disaster is something that originated in China. There is sufficient evidence to suggest that Beijing delayed its response, whether due to incompetence or out of CPC procedures designed to maintain "social stability".[48] This may or may not be true, but it has gained currency because of the US campaign.

More worrisome is the melding of the process of reshoring and shortening supply chains with the political notion of "decoupling". In the past decade, rising wages and China's ageing population already encouraged companies, many of them also Chinese, to move to Southeast Asia where labour costs are lower. US actions against China's ICT industries had persuaded certain suppliers to shift manufacturing related to the US out of China; the pandemic, especially the collapse of the Chinese supply chain in February 2020, made the issue salient. But the real worry is that American tensions with China, motivated to a degree by election-year politics, could spiral out of control and morph into a full-fledged and mutually destructive Cold War.

Japan and EU

The lockdown of Hubei, just one province of China, forced car makers across the world to shut down because of supply chain issues. Companies like Nissan, Toyota and Honda had to suspend or halt production in their factories in Japan and elsewhere.[49] The outbreak also disrupted Chinese exports of food and clothing to Japan.[50] The stoppage of tourist travel, too, had a huge impact on Japan since it came on the eve of the Lunar New Year holiday that sees massive traffic from China to Japan. The Chinese constitute 30 percent of all tourist traffic to Japan and 40 percent of their expenditure.[51] China is Japan's largest trade partner with 19.51 percent of its exports going to China, while the latter exports 23.20 percent of its total exports to Japan.[52] These figures suggest that beyond issues of supply chains, many Japanese companies are dependent on their operations in China for their profits.

Some Japanese companies have begun thinking of shifting to Southeast Asian countries such as Vietnam.[53] Increased labour costs in China, and the rift between Beijing and Washington, were creating conditions for Japanese firms to consider relocation. They were encouraged by developments in digital and robotic technology that could reduce labour costs and offset the inevitable burden of the shift. The COVID-19 outbreak probably helped them make clearer plans.[54] Indeed, Japan was the first to openly encourage their companies to leave China. In early April the government earmarked US$2.3 billion of its stimulus package to help its manufacturers shift production out of China and back to Japan.[55]

It is clear that this US$ 2.3 billion would be insufficient to encourage a major shift from China to Japan. But Tokyo could also not ignore the message it received from the shortage of masks it faced in April and May 2020 as demand spiked, because 70 to 80 percent of the masks were made in China. Japan's National Security Council is now drafting a new basic strategy for economic security. It plans to designate pharmaceuticals and medical devices as strategic goods and institute measures to encourage their domestic production.[56]

Incidentally, these developments have been taking place in a period when Sino-Japanese relations have been seeing an upswing. The initial Japanese assistance to China in the COVID-19 outbreak, and the Chinese return gestures in donating kits to the National Institute of Infectious Diseases has played positively. There will be more developments when Xi Jinping conducts his official visit to Japan, one that had to be postponed in April because of the pandemic.[57]

As the crisis hit Europe, EU solidarity took a back seat as countries struggled to obtain masks, personal protection equipment (PPE) and basic chemicals required for medicines.

Not surprisingly, the first response was that the region had become over-reliant on China. French Finance Minister Bruno Le Maire told radio station France Inter, "We have to decrease our dependence on a couple of large powers, in particular China, for the supply of certain products."[58] He called for strengthening European "sovereignty in strategic value chains" like cars, aerospace and medicines.[59]

Chancellor Angela Merkel of Germany said that the lesson of the pandemic was the need for a certain emphasis on European sovereignty that should be built on the "pillar of domestic production."[60] The

COVID-19 backdrop was apparent in the call to emphasise European sovereignty and the importance of a single market and "the supply of critical raw materials and pharmaceuticals to enhance Europe's strategic autonomy."[61]

In 2019 the EU took an important step when it redefined China as an economic competitor "in pursuit of technological leadership" as well as "systemic rival promoting alternative models of government."[62] Europe is, of course, in the midst of its own decoupling, with the UK leaving the European Union. In recent years, having seen the wave of Chinese takeovers of well- known European companies, Brussels has become wary of Beijing's embrace. In recent years, individual European countries like Germany have tightened rules to make it harder for non-European companies to buy stakes in their firms. In November 2018 the EU began working out the first set of bloc-wide rules to prevent foreign investments affecting national security, and as part of this, screening regulations were adopted which will come into force in October 2020. As the COVID-19 pandemic got underway, the EU said it would encourage governments to invest in "weak companies" to prevent them from being taken over.[63]

On March 10 Europe issued its new industrial strategy which sought to double down on the tradition of encouraging small and medium enterprises (SMEs) which make up 99 percent of all European firms. It said that a transformation had already been occurring, among them the use of "disruptive technologies" like 3D printing which could make "localisation" an opportunity "to bring more manufacturing back to the EU in some sectors."[64] The collective European response to COVID-19 was bungled. Confronted with the pandemic, EU countries shut their borders to each other and the EU bureaucracy had a difficult time persuading countries to cooperate. The political response of the

EU was "sluggish" and there were bitter differences between members on the best way of dealing with the economic fallout of the crisis.[65]

There have been calls in Europe for deeper changes in the way the EU functions, in particular in asserting greater collective sovereignty. It needs to look at the issue of security beyond simply its military aspect and incorporate the realm of digital, health, biological, environmental, resource and communications security.[66] Even so, the signals from Japan and the EU are clear that they intend to restructure their supply-chain relationships with China. They do not plan to "decouple", but certainly the old terms of trade are set to change. In an interview EU Trade Commissioner Phil Hogan argued that the medical equipment experience, or the calls for "strategic autonomy" implied in Chancellor Merkel's remarks above, should not mean that everything would have to be produced in Europe. That was actually "an unattainable goal" given the nature of the supply chains. The issue was of building resilience to ensure that crises do not catch you off-guard, as they clearly did in the case of COVID-19.[67]

The EU and China have been discussing a Comprehensive Agreement on Investment since 2014 aimed at creating new investment opportunities for European countries by opening China's market and creating a level playing field in which European companies would compete on an equal basis with the Chinese. This agreement was expected to be signed in September 2020. But given the pandemic, there are questions as to whether the event will indeed take place. In the meantime, relations between several European countries and China have been roiled by the "Wolf Warrior" approach. Its propaganda overdrive has often seemed to suggest that the pandemic originated in Italy. In another instance, a contretemps developed over an alleged comment by a Chinese diplomat criticising the French handling of the pandemic.[68]

The US

The issues giving a rising momentum to decoupling were clearer in the US, as some steps were already underway before the pandemic. They had revealed two distinct aspects—the political and the technological. At the political level, many of those who have been, and are advisers to President Trump—Steve Bannon, John Bolton, Peter Navarro and Robert Lighthizer or Deputy NSA Matt Pottinger—have long sought a more confrontational approach with China.

Where the Obama US National Security Strategy of 2015 claimed that the scope of US-China cooperation had been "unprecedented",[69] its 2017 iteration by the Trump administration accused China, and Russia, of "eroding American security and prosperity."[70] As such the document, and its associated National Defense Strategy of 2018, began to see China as a "strategic competitor" and soon an adversary. The NSS has also spoken of the importance of defending the National Security Innovation Base (NSIB) against both licit and illicit acquirers of US technology.[71] Statements of Secretary of State Mike Pompeo and Vice President Mike Pence, especially in their two important speeches in October 2019 have set a tough tone in US approaches towards China.[72] Yet, neither of these leaders have called for decoupling and, indeed in his speech, Vice President Pence specifically noted: "We are asked whether the Trump Administration seeks to decouple from China—the answer is a resounding 'no'."[73]

Trump had always been concerned of the huge trade deficit that the US had run against China. Soon he realised that in addition to issues of trade, there was now also that of technological dependency. Because of this the first shots had been fired over the 5G issue in 2018 and subsequently expanded to other areas of technology.[74] The Trump administration also just about caught up with the larger implications of the ten-year 2015 Made in China 2025 (MIC2025) plan, part of a three-stage strategy to transform China to a technological power by 2049.[75]

US policy has moved on three tracks under Trump. One, Trump raised tariffs on imports from China with a view of negotiating a change in Chinese behaviour. The administration's views were informed by a March 2018 report by the US Trade Representative (USTR) Robert Lighthizer which said that in order to achieve the goals of MIC2025, China was hacking US networks, providing state subsidies to key industries, forcing US firms to part with technology as a price for carrying on business in China.[76]

Two, a series of legislative measures by the US in 2018 progressively tightened the rules against Chinese companies, especially those in Information Technology. The principal targets were China's IT industry and companies like ZTE, Huawei, and Fujian Jinhua Integrated Circuit. Besides adding Huawei to the Entities List, it also issued a criminal indictment against the company. Later, companies making super-computers or their components were targeted. In October 2019, the US government targeted DJI, the world's leading drone and drone component maker. It is important to note that the Trump administration invoked "national security" in restricting dealings with these Chinese companies. The US Department of Commerce's Bureau of Industry and Security also began to identify and make rules for emerging technologies that were vital for US national security. The first such rule on controlling AI based software was issued early in January 2020.[77]

Three, the Administration took measures to ensure that its vaunted defence technology would retain its edge over everyone else. It gave teeth and direction to the US 3rd offset strategy, that was launched in 2014, that was based on "increased human-machine collaboration and combat teaming," according to Robert Work, a senior US defence official dealing with the subject.[78] In February 2019, Trump issued an Executive Order "On Maintaining American Leadership in Artificial Intelligence."[79] A day later, the Department of Defence made public a 2018 AI Strategy Document that spoke of a destabilising Chinese threat which would undermine the US and its allies.[80] While these were important signals, there was no indication as to how the government intended to fund the initiative.

There were other immediate and important issues of concern to the US as far as its defence sector was concerned. A September 2018 report to the President by a White House inter-agency task force looking into the country's manufacturing and defence industrial base and supply chain resiliency, warned that the US was "dangerously vulnerable" because it relied on sole suppliers and Chinese entities in the supply chain. Industrial policy of foreign competitors had diminished US manufacturing's competitiveness because of globalisation policies as well as "targeting by great powers like China."[81]

Technology was one aspect of the situation, the other was that of foreign investment in critical sectors which have been processed by the inter-agency Committee on Foreign Investment in the United States (CFIUS). In the 2016-2017 period, the CFIUS shot down or ensured that several Chinese proposals were withdrawn.[82] The US also expanded to place restrictions on visas for Chinese students studying robotics, aviation and high-end manufacturing. Finally, there was a crackdown on the relationship between US academics and Chinese universities.[83] But the Trump Administration approach was not very clear. Having brought the Chinese telecom giant ZTE to its knees in

2018, the President gave it a reprieve.[84] Likewise, having begun the crackdown on Huawei, the US left a door open for US companies to do business with it. Further, Washington continued to negotiate a mega trade deal with Beijing. The Administration was clearly divided between the hawks like Navarro and Pottinger, and the more moderate people like Jared Kushner and Steve Mnuchin. Through 2019, the rhetoric waxed and waned.

In August 2019, Trump threatened that he would order US companies to stop doing business with China. At the time, White House economic adviser said the President was only suggesting that US companies should think about "moving your operations and your supply chains away from China."[85] In September, there was talk of the US delisting Chinese companies from the US stock exchanges. In November US Senators moved a legislation to require the Administration to present a global National Economic Security Strategy that would report regularly to the Congress on US' global competitiveness and threats to its economic security and ways to deal with them.[86] In January 2020, China and the US announced a Phase I deal to address the tariff and technology issue, whereby Beijing's imports from the US will be expanded; in that sense, it would more deeply integrate US-China relations. This has since been overtaken by COVID-19.

The obvious area of concern that emerged as the Chinese production shut down and the infection moved westwards to Europe and the US was the issue of dependence for a variety of healthcare and pharmaceutical products. But while political rhetoric threw light on the issue, the policy choices before the US were more complex.[87] Benjamin Shobert, an international health expert at the National Bureau for Asian Research said that getting Active Pharmaceutical

Ingredients (API) and medicines to be made in the US would not lessen dependence on China for raw materials and chemical precursors. US environmental standards pushed the chemical industry to China several decades ago, and bringing it back would entail changes in the regulations which may not be acceptable to the public.[88]

The pandemic has placed the issue at the intersection of the political and economic logic of decoupling. Initially, the Trump administration played down the danger of the virus. Subsequently, as it spread in the US, it took on a new theme of attacking China for not having done enough at the outset to prevent its spread. Later, it took yet another approach, suggesting that the virus may have escaped from a laboratory in China and Beijing was negligent. Secretary of State Mike Pompeo called for China to come clean.[89]

Notwithstanding the political storm, the Office of the Director National Intelligence issued a statement on April 30 noting, "The Intelligence Community also concurs with the wide scientific consensus that the COVID-19 virus was not manmade or genetically modified."[90] It added that it would continue to investigate as to whether "the outbreak began through contact with infected animals or if it was the result of an accident at a laboratory in Wuhan."[91] In short, while the virus did originate in China, there was no direct evidence that it had escaped Wuhan's research facilities.[92] This was no bar to Trump. On the same day, asked at a press conference whether he had seen evidence that the COVID outbreak was linked to the Wuhan lab, Trump responded, "Yes, I have."[93] He refused to give further details, saying, "I can't tell you that. I am not allowed to tell you that."

The breakdown of the Chinese-origin supply chains in February persuaded White House trade adviser Peter Navarro to tell a Fox News programme in late February that it was time to bring home more of the US pharmaceutical supply chain. The US, in his view, had off-shored too much of its supply chain, including those for essential medicine.[94] In April, at a speech in Washington DC, Senator Rick Scott of Florida said that the coronavirus outbreak would lead to "more decoupling" because people were concerned about being "too dependent in a country that acts as an adversary."[95] On April 9, White House economic adviser Larry Kudlow told Fox News that the one policy that could lure US companies back from China, would be to shoulder the expense of every US company that wanted to move out of China: "100 per cent immediate expensing across the board. Plant, equipment, intellectual property, structures…."[96]

By April, it was clear that the US was not restraining itself. On April 27, it announced a proposed rule change that would impose new restrictions on dual-use items. It would require a licence for any US company to sell items to companies in China that support the military. Another rule change would require foreign companies shipping certain American goods to China to have the approval of their own governments and that of the US as well.[97]

The rhetoric coming out of the White House reached fever pitch with Trump saying that he believed that China's handling of the COVID-19 pandemic was aimed at making him lose his re-election in November.[98] *Washington Post* reported on 30 April that Trump was "furious" with China and was looking for ways of "hitting" it.[99] Suggestions from stripping China of sovereign immunity in US courts, cancelling debt obligations or further raising tariffs across the board were being discussed by Trump officials. In an interview with *Reuters*, Trump even speculated that the US could consider writing off the massive US debt held by China in US securities.[100] In early May, he went a step further. Speaking to *Fox Business*, he said that cutting off “the whole relationship [between the US and China] was an option. He added that the US could “save $ 500 billion if you cut off the whole relationship.”[101]

Meanwhile, plans to pay companies and provide them tax breaks to move supply chains from China are being drawn up. According to a report, one of the suggestions is to establish a US$ 25-billion “reshoring fund” to aid the process. [102] There is also a lot of activity in Congress to deal with the issue of dependence on China and could feature in future legislation. A lot of these issues run against conservative orthodoxy which opposes government subsidies and setting industrial policy. The State Department, too, is active in working with other agencies and foreign governments to shift US supply chains from China.

In May 2020, the US took a major step in reshoring a key strategic industry. On one hand, it laid out rules that would compel global leader in semiconductors—TSMC of Taiwan —to break with Huawei. On the other, it persuaded the Taiwan manufacturer to make a major US$12-billion investment in a state-of-the-art semiconductor factory in Arizona in the US. The Administration lauded the move as in keeping with the President’s call to bring high-tech industry back to the US.[103] This is clearly an instance of how the COVID-19 emergency has encouraged states to take steps that may have been unthinkable before the pandemic.

Reports from the ground in China suggested that though battered by the tariffs, US companies were not about to reshore soon. Alan Beebe, President of the US Chamber of Commerce in China was quoted in April 2020 as saying “ In contrast to some global narratives, our China-based data suggests that the majority of our members will not be packing up and leaving China anytime soon."[104] He did expect a few companies to diversify away from China and even reshore to the US, but this would be part of a "China +1" strategy to deal with supply chain risks.

US Options

The US has three alternatives ahead. First, is to expand the scope of technology restrictions on China, to possibly cover the entire gamut of the Made in China 2025 project.[f] This could incorporate other measures like removing Chinese companies from US listings and prohibiting select Chinese nationals and officials from using the US banking system and freezing their assets under the Magintsky Act.

Linked with this could be a move to encourage, or even force American businesses in China to relocate.[g] This would be in keeping with the Trump Administration approach in dealing with China on technology issues. Both these statutes have draconian powers which have been invoked by past presidents. Trump has threatened to use the IEEPA to pressure Mexico to check illegal migration[105] and in August 2019, he tweeted that he had ordered US companies to look for alternatives to China based on the powers he had under the act.[106]

f This targets the IT industry, high-end CNC machines, aerospace and ocean engineering equipment, high-end vessels, rail transportation, energy saving and new energy vehicles, electrical equipment farming machines, new materials, biomedicine and high-end medical equipment.

g This could be done through economic and tax incentives, or the invocation of the Defence Production Act or the International Emergency Economic Powers Act which can mandate some decisions to the private businesses in the name of national security.

Second, is to outcompete China by dramatically boosting US high-tech capabilities by pouring fresh investments into education, basic research and support sectors of the industrial setup as used to be the case in the Cold War. In 1960, the US accounted for 69 percent of the global R&D expenditure. Of this, 70 percent was funded by the government and 30 percent by industry. Now those figures have been reversed. Further, government R&D spending had declined from 1.2 percent of the GDP in 1976 to less than 0.8 percent in 2016.[107] The Trump administration has, as earlier discussed, outlined ambitious plans in several directions. What is unclear is the source of their funding because they must flow to the entire network of "knowledge capabilities and people—including academia, National Laboratories, and the private sector—that turn ideas into innovation, transforms discoveries into successful commercial products and companies."[108]

Third, is to continue to push China, using the existing weapons of tariffs and diplomacy, to modify the parts of its behaviour that the US finds unacceptable. The US would be far more effective if instead of acting alone, it coordinates its moves with its friends and allies. As discussed earlier, both the EU and Japan are now concerned about their over-dependence on China and their need for wider economic security. This could provide for more heft and yield, in Kevin Rudd's words, "managed strategic competition."[109]

Of the three, option one is the most risky and problematic as it has consequences for both the US and China. Indeed, as the Huawei case revealed, both countries have been shown a mirror and the picture is not as clear as it should have been. While China's weaknesses in core technologies like semiconductors, computer operating systems, aero engines and precision bearings are evident, so is the importance of Chinese sales to US giants like Apple, Intel, Qualcomm, Micron

Technology, Broadcom and Boeing, to name a few. The same could be said of many European, Japanese and South Korean companies. It is for this reason that though restrictions were applied on Huawei in May 2019, the US moved to block off Huawei's access to US technology abroad only in May 2020, and the action will only kick in 120 days later.

Exercising the decoupling option when the economy is in recession because of COVID-19, could also lead to self-harm, depending on the calculations in Washington. As noted earlier, the trend towards decoupling pre-dates the pandemic. COVID-19 can well be seen as the cover under which the Trump administration is taking a draconian move motivated by ideology, but whose downsides can be explained by the pandemic and blaming China. From the President's point of view, what seems to matter is re-election. After all, on the eve of the pandemic, he had agreed to a wide-ranging Phase I deal with China that would have hugely tightened the Sino-US economic embrace.

4. IMPLICATIONS FOR INDIA

The developments relating to deglobalisation and decoupling offer opportunities for India and New Delhi would be wise to pursue them. Notwithstanding the slogan of "*Aatmnirbharta*" (self-reliance) that has come in the wake of COVID-19, foreign direct investment and foreign trade remain the two key requirements to pull India out of the poverty trap.

India was not hit too hard by the pandemic in February and March. By the end of February 2020, it had only three confirmed cases, out of 1,700 tested. But the shut-down in Hubei and then, the rest of China, began to impact India's pharmaceutical sector with prices rising for some key Active Pharmaceutical Ingredients (API) that the Indian industry imports from China. For some APIs, especially antibiotics, Indian dependence on China was more than 90 percent. According to a report, India's Chemicals and Fertiliser Ministry had formed a task force to draw up a plan to raise production of APIs in the country.[110]

Another development were the restrictions that India placed on investment from China in April. On paper, the government notification to block, what newspaper headlines said, were "opportunistic" takeovers was aimed at all countries sharing a land border with India, but in practical terms it was targeting China. The government action was motivated by the economic turmoil caused by the COVID-19 outbreak. Later it was discreetly clarified that all that had been done was to block the automatic route; investment could still come from China with due permission from the government.[111]

Viewing the disruption caused by the pandemic, there have been claims that Western and Japanese companies are lining up to relocate supply chains away from China to India. In April, leaders as diverse as UP Chief Minister Yogi Adityanath, former BJP President and Union Minister Nitin Gadkari, and Prime Minister Narendra Modi have spoken about the issue of attracting companies that want to leave China. According to a report by the Press Trust of India, the UP Chief Minister had asked his officials to work out the package that could be offered to investors, in addition to the existing incentives. He has also tasked his ministers and senior officials to take up the issue with embassies of various countries to take advantage of the opportunity. In his view, the state had the connectivity and the human resources to attract investments.[112]

Gadkari was more straightforward. In an interaction with overseas Indian students in a video-conference, he said that all the world now had a "hatred" for China and wondered whether it was "possible for us to convert it into an opportunity for India?"[113] A few days earlier in a video-conference organised by ASSOCHAM, he had called on industry bodies to aid the government effort to persuade American and British companies to relocate in India from China. He also spoke of government efforts to aid such a shift.

At the end of April, in his interaction with chief ministers, Prime Minister Modi, too, pressed the point: "As you know, several industries will be exploring options beyond China after the coronavirus crisis. We all should work on a comprehensive plan for possibility of investments in the states."[114] On April 30, the PM chaired a high-level meeting of officials on the eve of what was to be the end of the 2nd phase of the lockdown that had begun on March 25. In the meeting, Modi called for an acceleration of reform measures and removal of hurdles to boost investment to fuel growth.[115] The PMO, the Niti Ayog and Department for Promotion of Industry, were reported to be finalising plans to offer incentives for companies wanting to relocate from China. According to a report, India had set up "dedicated groups to directly interact with firms that may want to diversify out of China" and have already reached out to some 100 multinational companies.[116]

Meanwhile, India appears to have emerged as an important component of the Trump administration's plan to "rip global supply chains from China." Building on the processes that have been in place since 2018, the US now plans to not only offer companies to move sourcing and manufacturing out of China, but also rope in a collection of "trusted partners" in what is being mooted as the "Economic Prosperity Network" of companies, civil society groups with a common perspective on digital business, energy and industry standards, education and so on. India figures prominently among the countries targeted to set up the network.[117]

However, as the August 2019 Nomura report cited earlier indicated, India does not figure too high on the priority list of the companies seeking to relocate. Of the 82 destinations mentioned as possible choices for relocation by 56 companies of the sample, India was cited by only three, of which two were in electronics and one in consumer durables.[118] Indeed, India's problems in attracting foreign investment are well known. Besides land and labour laws, there are issues relating to the bureaucracy and regulatory agencies which carry out abrupt changes of rules. Then there are volatile, sometimes draconian tax demands and other policy flip flops.[119] This is in addition to the generally poor quality of human and physical infrastructure which remain hurdles for investors.[120]

Ever since the US-China trade and technology stand-off intensified in 2018, there has been a push factor for some companies to relocate from China, which has presented an opportunity for India. India would have to take interlocking steps that cannot be done overnight. The fallout of COVID-19 could well provide India the motivation to push through the reforms needed to attract investors. In May 2020, the government announced a series of economic stimulus packages whose central theme was "*Aatmnirbhar Bharat*" or "self-reliant India".[h]

According to an analysis by Nomura Global Markets Research, though the government has sent the right signals for medium to long-term growth, they were not likely to solve the short-term problems.[121] There were other issues that needed to be addressed—"the fragile financial sector, the high cost of compliance, the complex tax structure

h Besides providing for the "survival needs" resulting from the crisis, it also pushed through a series of reforms in industry and agriculture that have been outstanding for some time.

and contract enforcement." And no specific measures were announced to integrate India with the global value chains.[122]

Other critics have raised the issue of implementation of declared policy. Writing in the *Wall Street Journal*, Sadanand Dhume has wondered whether Modi's call for "self-reliance" signals greater protectionism.[123] India, after all, stayed out of plans to join the Regional Economic Cooperation Partnership (RCEP) because it was not willing to open up its economy. Dhume has noted that the Make in India scheme announced with such fanfare by Modi in 2014, to have manufacturing contribute 25 percent to India's GDP, has largely failed; the contribution of manufacturing to the GDP has declined from 15.1 percent in 2014 to 14.8 percent in 2018.[124]

India can either be "*Aatmnirbhar*" or part of a global system, even if it is divided into rival technospheres. If the world system cleaves into two, India's geopolitical and economic orientation would make it a natural fit in the US camp. But if India wants to pursue its ambitious goal of becoming a manufacturing power, it cannot afford to break with the East Asian value chains that are likely to remain closely inter-linked with China.

The Indian economy was already limping when COVID-19 struck. Now, even as it has yet to see the peak of the pandemic, it has already suffered grievous damage. What New Delhi needs is a peaceful and stable global environment in which it can revive its economy, a process that could take half a decade. Given the way the post-COVID-19 recovery is shaping up, it may be a good idea for New Delhi to keep its options with Beijing open.

5. CONCLUSION

Domestic politics in the US and Europe, new manufacturing technology, e-marketing, and rising wage rates in China have been altering the landscape of globalisation for some years now. So have US-China tensions that had already begun the process of decoupling their IT industries. The COVID-19 pandemic is now etching it with its own patterns.

At one level, it has brought the awareness that countries need to ensure sufficient capacity in industries that are vital to national security: not only defence equipment or strategic materials, but also pharmaceuticals and medical equipment. The political and economic disruption caused by COVID-19 is giving countries an opportunity to take hard decisions. Countries like the US that were inclined to move away from China are now presented with an opportunity to take measures which they may have hesitated to otherwise. Likewise, countries like India are taking the moment to push pending reforms.

Yet, experts say that the idea of any serious decoupling of the sprawling manufacturing/technology supply chains is not likely to happen in a hurry. It would require complex policies of tax breaks and subsidies to persuade companies to return to Europe and America. It would have to confront the fact that half of the world's electronics manufacturing capacity is based in China. And this is not just a matter of scale, "but to the diversity and sophistication of [their] products."[125] The global technology and consumer electronics sectors are not only hugely reliant on China's infrastructure and specialised labour, but also of their upstream linkages, often reaching back to the production of raw materials and precursors.

Supply chains are not just about products and components, but basic chemicals, raw materials, and minerals. Most OEMs are often unaware of the complexity of their supply chain which can have several tiers.[126] Indeed, a contrarian message of the COVID-19 disruption has been the resilience of the East Asian supply chains, considering that Taiwan, South Korea, China and Japan have overcome the pandemic and are the first set of major economies to get back into production.[127]

The issue is complicated by the fact that China is now a huge, and often critical consumer market for many companies in the US, Europe, Japan and South Korea. Where its infrastructure development, manufacturing and exports played a major role in China's growth earlier, it is now being driven by domestic consumption and the upgrade of its urban infrastructure. China is on course to become the world's biggest consumer market before the end of the coming decade.[128]

After COVID-19 the issue of supply chain restructuring will not be simply about China, but the need for all to avoid putting all the eggs in one basket. Supply chains are bound to be restructured with a view of building resilience, even while reducing risks and keeping down costs. There is likely to be a "China+1" strategy, where companies relocate to other countries while retaining a significant and even major position in China.

Experts say that these could still be early days and that the true impact of the Covid-10 outbreak is not yet with us.[129] With the US elections some months away, the future course is not clear. As of now the momentum towards the political and economic cleaving of China and the US is gathering steam, and cool heads are needed to navigate a re-engagement between these two leading economic powers of the world.[130] Shifting key strategic industries to the US is one thing, but reshaping the world in the image of the 1950s, quite another. New terms of engagement need to be worked out, with China bearing the greater burden. These terms need to address concerns about technology theft, forced tech transfer, poor IP protection; provide a level playing field for foreign companies; and reduce the state intervention in the economy. China also needs to ensure that it follows WTO regulations in both letter and spirit.

For its part, the US needs to abandon an approach that seems to demand that China permanently accept, at one level, a second-class status, and at another extreme, regime change. A sounder approach would be for the US to work together with its allies, Japan and EU, in providing policy options that can nudge China towards policy changes with the least possible disruption to its own and the world economy. All the signals suggest that China is not unwilling to change, but given past experience, the imperative is sustained, coordinated and coherent pressure.

ENDNOTES

1 Yanuz Aslan et als ed "How has globalization affected emerging market economies," BIS Background Paper in "Globalisation and deglobalisation," BIS Papers No 100 December 2018 (Monetary and Economic Department, Bank of International Settlements, Basel, 2018) pp 43-4

2 Ibid.

3 "A quick guide to the US-China trade war," BBC News, January 16, 2020, https://www.bbc.com/news/business-45899310, Accessed on June 3, 2020

4 "Trade in goods with China," United States Census Bureau, https://www.census.gov/foreign-trade/balance/c5700.html, Accessed on May 3, 2020

5 European Chamber of Commerce in China, "China Manufacturing 2025: Putting Industrial Policy ahead of market forces", March 2017, https://static.europeanchamber.com.cn/upload/documents/documents/CM2025_EN_final_version_0301[473].pdf p. 2, accessed on May 3, 2020

6 "Supply Chain Graphic of the Week: China's dominance of many US import categories," Supply Chain Digest, June 19, 2019, http://www.scdigest.com/ontarget/19-06-19-12.php?cid=15591, accessed on May 5, 2020

7 For more on this see, Manoj Joshi, "Invest, Acquire, Dominate: The rise and rise of China tech," ORF Occasional Paper No 223, November 11, 2019, https://www.orfonline.org/research/invest-acquire-dominate-the-rise-and-rise-of-china-tech/

8 Andrew Jacobs, "China softens tone in Japan dispute," *New York Times,* September 28, 2010, https://www.nytimes.com/2010/09/29/world/asia/29chinajapan.html?, Accessed on June 3, 2020

9 Yuko Inoue, "China lifts rare earth export ban to Japan: trader,"

Reuters, September 29, 2010, https://www.reuters.com/article/us-japan-china-export-idUSTRE68S0BT20100929, accessed on May 15, 2020

10 "Supply chains for different industries are fragmenting in different ways," *The Economist*, July 11, 2019, Special Report on Global Supply Chains, https://www.economist.com/special-report/2019/07/11/supply-chains-for-different-industries-are-fragmenting-in-different-ways, Accessed on April 9 2020

11 Ibid.

12 Nomura Global Markets Research, "Trade tensions: a look at the bottom up evidence," *Asia Insights*, September 4, 2019. This is a small sample and does not address the importance of China's large domestic consumption market.

13 William Alan Reinsch et al., eds, "The Impact of Rules of Origin on Supply Chains: USMCA's auto rules as a case study," A Report of the CSIS Scholl Chair of International Business, April 2019 (Center for Strategic and International Studies) - Executive Summary, https://www.wita.org/wp-content/uploads/2019/04/190403_Scholl_RulesofOrigin_WEB_v3.pdf, accessed on May 12, 2020

14 "Trade war spurs sharp reversal in 2019 Reshoring Index, foreshadowing COVID-19 test of supply chain resilience," Kearney [April 2020], https://www.kearney.com/operations-performance-transformation/us-reshoring-index/full-report, accessed on May 12, 2020

15 Jane Perlez, "US allies see Trans-Pacific Partnership as a check on China," *New York Times,* October 6, 2015, https://www.nytimes.com/2015/10/07/world/asia/trans-pacific-partnership-china-australia.html, accessed on May 13, 2020

16 "Trump has attacked China this week accusing it of 'one of the greatest thefts in world history' but what is behind his attacks," *South China Morning Post*, August 27, 2015, https://www.scmp.com/news/china/policies-politics/article/1853069/trump-has-attacked-china-week-accusing-it-one-greatest, accessed on May 13, 2020

17 State Council of the People's Republic of China, "Outline of the National Medium- and Long-Term Science and Technology Development Plan 2006-2020, http://www.gov.cn/jrzg/2006-02/09/content_183787.htm, (Translated by Google), accessed on May 16, 2020

18 James McGregor, "China's drive for 'indigenous innovation': a web of industrial policies," US Chamber of Commerce (nd, np), https://www.uschamber.com/sites/default/files/documents/files/100728chinareport_0_0.pdf, accessed on May 16, 2020

19 Jakob Hanke Vela, "Coronavirus won't kill globalization, but will clip its wings," *Politico*, April 23, 2020, https://www.politico.eu/article/coronavirus-wont-kill-globalization-but-will-clip-its-wings/, accessed on May 16, 2020

20 Julian Baird Gerwitz, "China's Long March to Technological Supremacy: The roots of Xi Jinping's ambition to 'catch up and surpass'," *Foreign Affairs*, August 27, 2019, https://www.foreignaffairs.com/articles/china/2019-08-27/chinas-long-march-technological-supremacy, accessed on May 14, 2020

21 Manoj Joshi, "Invest, Acquire, Dominate...." 13-14

22 Ibid.

23 Ewen MacAskill and Dominic Rushe, "Snowden document reveals key role of companies in NSA data collection," *The Guardian*, November 1, 2013, https://www.theguardian.com/world/2013/nov/01/nsa-data-collection-tech-firms, accessed on May 23, 2020

24 Raymond Zhong and Paul Mozur, "For the US and China, a technology Cold War that's freezing over," *New York Times*, March 23, 2018, https://www.nytimes.com/2018/03/23/technology/trump-china-tariffs-tech-cold-war.html, accessed on April 25, 2020

25 Anjani Trivedi, "China to the World: We don't need your factories anymore," *Wall Street Journal*, October 18, 2018, https://www.wsj.com/articles/chinese-manufacturers-once-needed-overseas-suppliersnot-any-more-1476801578, accessed on April 4, 2020

26 James Griffiths, "A Chinese OS at last? More than 40 per cent of Dell PCs in China now running homegrown Windows alternative," *South China Morning Post*, September 14, 2015, https://www.scmp.com/tech/china-tech/article/1857948/chinese-os-last-more-40-cent-dell-pcs-china-now-running-homegrown, accessed on May 15, 2020

27 Ernest Scheyder, " Exclusive: US seeks to challenge China's electric-vehicle supply chain dominance," *Reuters*, May 2, 2019, https://www.reuters.com/article/us-usa-lithium-electric/exclusive-u-s-legislation-aims-to-thwart-chinas-electric-vehicle-dominance-idUSKCN1S81EO?, accessed on May 16, 2020

28 Manoj Joshi, "Invest, Acquire, Dominate…." 16-17

29 China Power, "Is it a risk for America that China holds over $1 trillion in U.S. debt?" Center for Strategic and International Studies (CSIS) China Power Programme, https://chinapower.csis.org/us-debt/, accessed on June 2, 2020

30 Manoj Joshi, "Invest, Acquire, Dominate…" see section III on "China's Contentious Leapfrog"

31 "'Made in China 2025' plan issued," May 19, 2015, http://english.www.gov.cn/policies/latest_releases/2015/05/19/content_281475110703534.htm, accessed on June 9, 2019; Press Notice, The State Council, "New Generation of Artificial Intelligence Development Plan," State Council Document [2017] No 35, July 8, 2017, https://flia.org/wp-content/uploads/2017/07/A-New-Generation-of-Artificial-Intelligence-Development-Plan-1.pdf, accessed on June 11, 2019

32 Klaus Schwab, "The Fourth Industrial Revolution: what it means and how to respond," *Foreign Affairs*, December 12, 2015, https://www.foreignaffairs.com/articles/2015-12-12/fourth-industrial-revolution, accessed on May 3,2020

33 See Manoj Joshi, "China and Europe: Trade, technology and competition," ORF Occasional Paper No 194, May 22, 2019, https://www.orfonline.org/research/china-europe-trade-technology-competition-51115/

34 For more on this see, Manoj Joshi, "Invest, Acquire, Dominate..."

35 See Section I: Industry Overview, 2019 Factbook of the Semiconductor Industry Association, https://www.semiconductors.org/wp-content/uploads/2019/05/2019-SIA-Factbook-FINAL.pdf, accessed on May 5, 2020

36 Stewart Randall, "Silicon: Can China make chips?" *Technode*, December 4, 2019, https://technode.com/2019/12/04/silicon-can-china-make-chips/?, accessed on May 5, 2020

37 Meng Jing, "China mutes volume on Thousand Talents Plan as US spy concerns rise but scientists still covet funding," *South China Morning Post*, December 8, 2018, https://www.scmp.com/tech/science-research/article/2176897/china-mutes-volume-thousand-talents-plan-us-spy-concerns-rise, accessed on April 20, 2020

38 "China's 2019 FDI up 5.8 %, outbound investment falls 6%" *Reuters,* January 21, 2020, https://www.reuters.com/article/china-economy-fdi/chinas-2019-fdi-up-5-8-outbound-investment-falls-6-idUSB9N28102R#:~:, accessed on June 3, 2020

39 "China's post-covid propaganda push," *The Economist*, April 16, 2020, https://www.economist.com/china/2020/04/16/chinas-post-covid-propaganda-push, accessed on May 5, 2020

40 Manoj Joshi, "Coronavirus has made China's diplomats turn into 'Wolf Warriors'," *Quint*, April 20, 2020, https://www.thequint.com/voices/opinion/china-diplomat-coronavirus-india-foreign-policy-trump-wuhan?, accessed on May 5, 2020

41 See Pinzhenghe "Its not alarmist to say that the world is isolating China, April 20" in Jordan Schneider's post, "Two views on US-China relations from China: Don't Decouple," *Supchina,* April 28, 2020, https://supchina.com/2020/04/28/two-views-on-u-s-china-relations-from-china-dont-decouple/?, accessed on May 4, 2020

42 Shi Zhan, "Be Prepared for the worse," April 16, 2020, https://mp.weixin.qq.com/s/jP25zmhgsM1pIEt9iYYOtg, accessed on May 4, 2020

43 Wang Hanfeng, Liu Gang and He Lu, "Will the industry chain be transferred out of China," CICC Research, May 18, 2020, https://mp.weixin.qq.com/s/FDUM9YAAKsXVbGBUQ5vxOg (Google Translate). Accessed on June 3, 2020. CICC Research is an arm of China International Capital Corporation, one of China's leading investment banking firms.

44 Mark Preen, "Economic reform in China: Current progress and future prospects," *China Briefing,* April 3, 2019, https://www.china-briefing.com/news/economic-reform-china-opening-up-future-prospects/, accessed on May 1, 2020

45 Scott Kennedy, "China won't be scared into choosing marketisation," *CSIS Commentary,* April 23, 2020, https://www.csis.org/analysis/china-wont-be-scared-choosing-marketization?, accessed on May 1, 2020

46 Zoey Zhang, "China's 2019 Market Access Negative List: What investors need to know," *China Briefing*, December 11, 2019, https://www.china-briefing.com/news/chinas-2019-market-access-negative-list-whats-new-attention-investors/, accessed on May 2, 2020

47 See Maurits Elen's interview of Alberto Vetoretti partner, Dezan Shira & Associates, "What's missing in China's foreign investment law?" *The Diplomat,* January 22, 2020, https://thediplomat.com/2020/01/whats-missing-in-chinas-foreign-investment-law/, accessed on May 2, 2020

48 "China didn't warn public of likely pandemic for 6 key days," *Associated Press,* April 15, 2020, https://apnews.com/68a9e1b91de4ffc166acd6012d82c2f9, accessed on April 20, 2020

49 Junko Horiuchi, "Coronavirus uncertainties deal heavy blow to Japan auto industry," *Kyodo News,* March 6, 2020, https://english.kyodonews.net/news/2020/03/d0c9dbf983ca-focus-coronavirus-uncertainties-deal-heavy-blow-to-japan-auto-industry.html, accessed on April 20, 2020

50 Akira Kawamoto, "Commentary: The great COVID-19 disruption

to Asian economies has begun," *Channel News Asia*, February 24, 2020, https://www.channelnewsasia.com/news/commentary/covid-19-wuhan-coronavirus-economy-impact-trade-supply-chain-12435728, accessed on April 12, 2020

51 Leika Kihara, "IMF warns of coronavirus hit to Japan's economy via tourism, trade," *Reuters,* February 10, 2020, https://www.reuters.com/article/us-china-health-imf-japan/imf-warns-of-coronavirus-hit-to-japans-economy-via-tourism-trade-idUSKBN2041WB?, accessed on March 8, 2020

52 World Bank, World Integrated Trade Solution (WITS), https://wits.worldbank.org/countrysnapshot/en/JPN, accessed on April 28, 2020

53 Corey Wallace, "Leaving (north-east) Asia? Japan's southern strategy," *International Affairs* vol. 94, Issue 4, July 1, 2018 p. 896, https://academic.oup.com/ia/article/94/4/883/5039991, accessed on May 14, 2020

54 Junko Horiuchi, "Japan firms weigh production shift out of China as virus wreaks havoc," *Kyodo News,* Feb 7, 2020, https://english.kyodonews.net/news/2020/02/0a392905b0de-focus-japan-firms-weigh-production-shift-out-of-china-as-virus-wreaks-havoc.html, accessed on April 25, 2020

55 Isabel Reynolds and Emi Urabe, "Japan to fund firms to shift production out of China," *Bloomberg,* April 8, 2020, https://www.bloomberg.com/news/articles/2020-04-08/japan-to-fund-firms-to-shift-production-out-of-china, accessed on April 25 2020

56 Shunsuke Shigeta, "Calls for 'China exit' mount as Japan reviews economic security," *Nikkei Asian Review*, May 12, 2020, https://asia.nikkei.com/Politics/Inside-Japanese-politics/Calls-for-China-exit-mount-as-Japan-reviews-economic-security, accessed on May 20, 2020

57 Cheng Li and Ryan McElveen, "Mask diplomacy: How coronavirus upended generations of China-Japan antagonism," *China US Focus,* March 10, 2019, https://www.chinausfocus.com/foreign-policy/

mask-diplomacy-how-coronavirus-upended-generations-of-china-japan-antagonism, accessed on May 20, 2020

58 Laurens Cerulus, "Coronavirus forces Europe to confront China dependency," *Politico,* March 10, 2020, https://www.politico.eu/article/coronavirus-emboldens-europes-supply-chain-security-hawks/, accessed on May 21, 2020

59 Ibid.

60 Vela, "Coronavirus won't kill globalisation"

61 Explainer: European Industrial Strategy Package," *Modern Diplomacy,* March 12, 2020, https://moderndiplomacy.eu/2020/03/12/explainer-european-industrial-strategy-package/, accessed on April 16, 2020

62 European Commission and HR/VP contribution to the European Council, "EU-China: A strategic outlook 12 March 2019," (Strasbourg, 12.3.2019), https://ec.europa.eu/commission/sites/beta-political/files/communication-eu-china-a-strategic-outlook.pdf, accessed on April 16, 2020

63 Justin Harper, "EU helps protect weak firms from foreign takeovers," *BBC News,* April 17, 2020, https://www.bbc.com/news/business-52320435, accessed on April 25, 2020

64 Communication from the Commission to the European Parliament, the European Council, the Council, the European economic and social committee of the regions, A New Industrial Strategy for Europe, European Commission (Brussels, March 10, 2020), https://ec.europa.eu/info/sites/info/files/communication-eu-industrial-strategy-march-2020_en.pdf, accessed on April 25, 2020.

65 Luke McGee, " The EU has bungled its response to coronavirus and it might never fully recover," *CNN World*, April 10, 2020, https://edition.cnn.com/2020/04/10/europe/eu-bungled-coronavirus-response-analysis-intl/index.html, accessed on April 26, 2020

66 Romana Vlahutin," Reconnected: How the EU can assert its sovereignty after the pandemic," European Council on Foreign Relations, April

21, 2020, https://www.ecfr.eu/article/commentary_reconnected_how_the_eu_can_assert_its_sovereignty_after_the_pand, accessed on May 15, 2020

67 Alan Beattie and Jim Brunsden, "EU should 'not aim for self-sufficiency' after coronavirus, trade chief says," *Financial Times,* April 23, 2020, https://www.ft.com/content/95dcaac2-162e-4ff4-aca5-bb852f03b1e9, accessed on May 15, 2020

68 Andrew Small, "The meaning of systemic rivalry: Europe and China beyond the pandemic," *European Council on Foreign Relations Policy Brief*, May 2020, https://www.ecfr.eu/page/-/the_meaning_of_systemic_rivalry_europe_and_china_beyond_the_pandemic.pdf, 6-7, accessed on June 3, 2020

69 The White House, National Security Strategy (Washington DC, The White House, February 2015), https://obamawhitehouse.archives.gov/sites/default/files/docs/2015_national_security_strategy_2.pdf

70 The White House, National Security Strategy of the United States of America (Washington DC, The White House, December 2017), https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf, accessed on May 7, 2020

71 Ibid.

72 See 2019 Herman Kahn Award Remarks: US Secretary of State Mike Pompeo on the China Challenge," Hudson Institute, October 30, 2019, https://www.hudson.org/research/15444-2019-herman-kahn-award-remarks-u-s-secretary-of-state-mike-pompeo-on-the-china-challenge, accessed on May 15, 2020; The White House, "Remarks by Vice President Pence at the Frederic V Malek Memorial Lecture, October 24, 2019," https://www.whitehouse.gov/briefings-statements/remarks-vice-president-pence-frederic-v-malek-memorial-lecture/, accessed on May 15, 2020

73 Op cit., "Remarks by Vice President Pence...."

74 Manoj Joshi, "Invest, Acquire, Dominate..." 29-30

75 "'Made in China 2025" plan issued...."

76 Office of the United States Trade Representative(USTR) "Findings of the investigation into China's acts, policies, and practices related to technology transfer, intellectual property, and innovation under Section 301 of the Trade Act of 1974" Executive Office of the President of the United States March 22, 2018, https://ustr.gov/sites/default/files/Section%20301%20FINAL.PDF, accessed on May 31, 2020

77 White & Case, "Bureau of Industry and Security issues first 'emerging technology' control on artificial intelligence-based geospatial imagery software," February 7, 2020, https://www.whitecase.com/publications/alert/bureau-industry-and-security-issues-first-emerging-technology-control-artificial

78 Christopher P Cavas, "'Human-Machine Collaboration' could be key to new offset strategy," *Defense News*, September 10, 2015, https://www.defensenews.com/home/2015/09/10/human-machine-collaboration-could-be-key-to-new-offset-strategy/

79 "Executive Order on Maintaining American Leadership in Artificial Intelligence" The White House, February 11, 2019," https://www.whitehouse.gov/presidential-actions/executive-order-maintaining-american-leadership-artificial-intelligence/, accessed on May 15, 2020

80 "Summary of the 2018 Department of Defense Artificial Intelligence Strategy," US Department of Defense, February 12, 2018, https://media.defense.gov/2019/Feb/12/2002088963/-1/-1/1/SUMMARY-OF-DOD-AI-STRATEGY.PDF, accessed on May 15, 2020

81 Assessing and strengthening the manufacturing and defense industrial base and supply chain resiliency of the United States: Report to President Donald J Trump by the Interagency task force in fulfillment of Executive Order 13806, September 2018, https://media.defense.gov/2018/Oct/05/2002048904/-1/-1/1/ASSESSING-AND-STRENGTHENING-THE-MANUFACTURING-AND%20DEFENSE-INDUSTRIAL-BASE-AND-SUPPLY-CHAIN-RESILIENCY.PDF, accessed on May 15, 2020

82 See Committee on Foreign Investment in the United States, "Annual Report to the Congress, CY2016 and CY 2017," https://www.treasury.gov/resource-center/international/foreign-investment/Documents/CFIUS-Public-Annual-Report-CY-2016-2017.pdf, accessed on May 2, 2020

83 Josh Lederman and Ted Birdis, "AP sources: US to impose limits on some Chinese visas," May 30, 2018, https://apnews.com/82a98fecee074bfb83731760bfbce515; Jeff Tollefson, "Chinese American scientists uneasy amid crackdown on foreign influence," *Nature*, June 3, 2019, https://www.nature.com/articles/d41586-019-01605-9, accessed on May 2, 2020

84 Karen Freifeld and Sijia Jiang, "ZTE given temporary reprieve from U.S., removes more executives," *Reuters*, July 4, 2018, https://www.reuters.com/article/us-usa-trade-china-zte/zte-given-temporary-reprieve-from-us-removes-more-executives-idUSKBN1JT2SD#:~:, accessed on April 13, 2020

85 Jessica Donati, "Trump Aides say he isn't ordering US companies out of China," *Wall Street Journal*, August 25, 2019, https://www.wsj.com/articles/trump-aides-say-he-isnt-ordering-u-s-companies-out-of-china-11566762657, accessed on May 2, 2020

86 Keegan Elmar, "US senators propose economic security strategy act to counter China's rise," *South China Morning Post*, November 14, 2019, https://www.scmp.com/news/china/diplomacy/article/3037557/us-senators-propose-economic-security-strategy-act-counter, accessed on May 2, 2020

87 See "What Covid-19 reveals about the risks of global medical supply chains," Interview of Benjamin Shobert, Senior Associate for International Health, *The National Bureau of Asian Research*, April 1, 2020, https://www.nbr.org/publication/what-covid-19-reveals-about-the-risks-of-global-medical-supply-chains/, accessed on April 20, 2020

88 Ibid.

89 Manoj Joshi, "The exegesis of the COVID19 origin: Did the virus

escape the lab?" Observer Research Foundation, April 18, 2020, https://www.orfonline.org/expert-speak/exegesis-covid19-origin-did-virus-escape-lab-64812/, accessed on April 23, 2020

90 Press Release, "Intelligence Community Statement on the Origins of COVID-19," Office of the Director of National Intelligence, April 30, 2020, https://www.dni.gov/index.php/newsroom/press-releases/item/2112-intelligence-community-statement-on-origins-of-covid-19, accessed on May 4, 2020

91 Ibid.

92 Joby Warrick, Ellen Nakashima, Shane Harris and Anna Fifeld, "Chinese lab conducted extensive research on deadly bat viruses, but there is no evidence of accidental release," *Washington Post*, May 1, 2020, https://www.washingtonpost.com/national-security/chinese-lab-conducted-extensive-research-on-deadly-bat-viruses-but-there-is-no-evidence-of-accidental-release/2020/04/30/3e5d12a0-8b0d-11ea-9dfd-990f9dcc71fc_story.html, accessed on May 3, 2020

93 Morgan Chalfant, "Trump says he has seen evidence linking coronavirus to Wuhan lab," *The Hill*, April 30, 2020, https://thehill.com/homenews/administration/495571-trump-says-he-has-seen-evidence-linking-coronavirus-to-wuhan-lab, accessed on May 3, 2020

94 Evie Fordham "Coronavirus crisis shows pharmaceuticals have offshored supply chain, Navarro says," *Fox Business News*, February 23, 2020, https://www.foxbusiness.com/markets/coronavirus-supply-peter-navarro-trump, accessed on April 23, 2020

95 Transcript: "The China Challenge: A Conversation with Senator Rick Scott" Hudson Institute, February 28, 2020, https://www.hudson.org/research/15789-transcript-the-china-challenge-a-conversation-with-senator-rick-scott, accessed on April 21, 2020

96 "Full immediate expensing would lure US firms back from China: Trump Adviser Kudlow," *Reuters*, April 10, 2020, https://www.reuters.com/article/us-usa-china-kudlow/full-immediate-expensing-would-lure-u-s-firms-back-from-china-trump-adviser-kudlow-

idUSKCN21R387, accessed on April 21, 2020

97 Karen Freifeld, "US imposes new rules on exports to China to keep them from its military," *Reuters*, April 27, 2020, https://www.reuters.com/article/us-usa-china-exports/us-imposes-new-rules-on-exports-to-china-to-keep-them-from-its-military-idUSKCN2291SR accessed on May 3, 2020, accessed on May 5, 2020

98 "Coronavirus: Trump says China wants him to lose re-election," *BBC News*, April 30, 2020, https://www.bbc.com/news/world-us-canada-52482109, accessed on May 15, 2020

99 Jeff Stein, Carol D Lennnig, Josh Dawsey and Gerry Shih, "US officials crafting retaliatory actions against China over coronavirus as President Trump fumes," *Washington Post,* May 1, 2020, https://www.washingtonpost.com/business/2020/04/30/trump-china-coronavirus-retaliation/ accessed on May 3, 2020, accessed on May 15, 2020

100 Jeff Mason, Matt Spetalnick, Humeyra Pamuk, "Trump threatens new tariffs on China in retaliation for coronavirus," *Reuters*, April 30, 2020, https://www.reuters.com/article/us-health-coronavirus-usa-china/us-not-considering-canceling-debt-held-by-china-trump-adviser-idUSKBN22C3DS, accessed on May 3, 2020

101 "Trump on China: 'We could cut off the whole relationship,'" *Fox Business*, May 14, 2020, https://www.foxbusiness.com/politics/trump-on-china-we-could-cut-off-the-whole-relationship, accessed on May 17, 2020

102 Andrea Shalal, Alexandra Alper and Patricia Zangrie, "US mulls paying companies, tax breaks to pull supply chains from China," *Reuters*, May 18, 2020, https://www.reuters.com/article/us-usa-china-supply-chains/u-s-mulls-paying-companies-tax-breaks-to-pull-supply-chains-from-china-idUSKBN22U0FH, accessed on May 21 2020

103 "Briefing on Taiwan Semiconductor Manufacturing Corporation's Intent to invest $ 12 billion in the US and on the CCP's ability to undermine US export controls," US Department of State, May 15,

2020, https://www.state.gov/briefing-with-under-secretary-for-growth-energy-and-the-environment-keith-krach-science-and-technology-adviser-to-the-secretary-mung-chiang-and-assistant-secretary-for-international-security-and-n/, accessed on May 21, 2020

104 Press Release, "Supply chain challenges for US companies in China," American Chamber of Commerce in China, April 17, 2020, https://www.amchamchina.org/about/press-center/amcham-statement/supply-chain-challenges-for-us-companies-in-china, accessed on May 16, 2020

105 " Statement from the President regarding emergency measures to address the border crisis," The White House, May 30, 2019, https://www.whitehouse.gov/briefings-statements/statement-president-regarding-emergency-measures-address-border-crisis/

106 Veronica Stracqualursi, "Trump claims he has 'absolute right' to order US companies out of China under 1977 law," *CNN Politics*, August 24, 2019, https://edition.cnn.com/2019/08/24/politics/trump-china-trade-war-emergency-economic-powers-act/index.html, accessed on April 12, 2020

107 Walter Isaacson, "How America risks losing its innovation edge," *Time*, January 3, 2019, https://time.com/longform/america-innovation/, accessed on May 20, 2019

108 The White House, National Security Strategy…2017

109 Kevin Rudd, "To decouple or not to decouple," Speech for the Robert F Ellsworth Memorial Lecture at the University of California- San Diego November 4, 2019, Asia Society Policy Institute, https://asiasociety.org/policy-institute/decouple-or-not-decouple, accessed on June 1, 2020

110 Teena Thacker, "Covid 19 Impact: Pharma companies feel the pain as prices of key inputs shoot up," *Economic Times*, February 15, 2020, https://economictimes.indiatimes.com/industry/healthcare/biotech/pharmaceuticals/covid-19-impact-pharma-companies-feel-the-pain-as-prices-of-key-inputs-shoot-up/articleshow/74144044.

cms, accessed on April 13, 2020

111 Aditya Kalra, "India toughens rules on investments from neighbours seen aimed at China," *Reuters*, April 18, 2020, https://www.reuters.com/article/us-health-coronavirus-india-investments/india-toughens-rules-on-investments-from-neighbours-seen-aimed-at-china-idUSKBN2200LQ, accessed on April 23, 2020; See also Aftab Ahmed and Aditya Kalra, "Exclusive: India plans to fast track Chinese investments after policy change—sources," *Reuters,* April 25, 2020, https://in.reuters.com/article/india-china-investments-exclusive/exclusive-india-plans-to-fast-track-chinese-investments-after-policy-change-sources-idINKCN2270L3, accessed on April 20, 2020

112 PTI, "UP government opens doors to companies leaving China after coronavirus," *NDTV News*, April 17, 2020, https://www.ndtv.com/india-news/up-government-opens-doors-to-companies-leaving-china-after-coronavirus-2213703, accessed on April 20, 2020

113 Nirbhay Kumar, "Tie up with US, UK firms planning exit from China over coronavirus: Gadkari to industry captains, *Business Today,* April 24, 2020, https://www.businesstoday.in/current/corporate/tie-up-with-us-uk-firms-planning-exit-from-china-over-coronavirus-gadkari-to-industry-captains/story/401961.html, accessed on April 30, 2020; See also "It's time to convert 'hatred' for China into economic opportunity: Gadkari," *Business Standard*, April 27, 2020, https://www.business-standard.com/article/economy-policy/it-s-time-to-convert-hatred-for-china-into-economic-opportunity-gadkari-120042700095_1.html, accessed on April 30, 2020

114 Times News Network, "Be ready to woo companies quitting China, PM Modi tells CMs," *Times of India*, April 28, 2020, https://timesofindia.indiatimes.com/india/be-ready-to-woo-companies-quitting-china-pm-modi/articleshow/75418023.cms, accessed on April 29, 2020.

115 Asit Ranjan Mishra, "PM Modi pushes for accelerating reforms to revive growth," *Mint*, May 1, 2020, https://www.livemint.com/news/india/modi-pushes-for-reforms-as-india-looks-to-restart-economy/amp-11588251348799.html?, accessed on May 10, 2020

116 Deepshikha Sikarwar, "Red carpet for firms looking to ditch China," *The Economic Times*, April 23, 2020, https://economictimes.indiatimes.com/news/company/corporate-trends/red-carpet-for-firms-looking-to-ditch-china/articleshow/75280859.cms?, accessed on April 30, 2020

117 Humeyra Pamuk and Andrea Shalal, "Trump administration pushing to rip global supply chains from China: officials," *Reuters*, May 4, 2020, https://www.reuters.com/article/us-health-coronavirus-usa-china/trump-administration-pushing-to-rip-global-supply-chains-from-china-officials-idUSKBN22G0BZ, accessed on May 16, 2020

118 Nomura Global Markets Research, "Trade tensions".

119 Jayshree P Upadhyay, "India's tightrope walk with foreign investors," *Mint*, October 17, 2019, https://www.livemint.com/news/india/india-s-tightrope-act-with-foreign-investors-11571306923895.html, accessed on May 16, 2020

120 S Mahendra Dev, "High growth cannot be sustained till India makes adequate investments in infrastructure," *Indian Express*, September 21, 2019, https://indianexpress.com/article/opinion/columns/economy-gdp-finance-ministry-nirmala-sitharaman-narendra-modi-6014830/, accessed on May 16, 2020

121 [Sonal Varma and Aurodeep Nandi}, "Asia Insights- India: How potent is the economic vaccine?" Nomura, Global Markets Research, May 18, 2020

122 Ibid.

123 Sadanand Dhume, "Can Indian manufacturing capitalize on the flight from China?" *Wall Street Journal*, May 14, 2020, https://www.wsj.com/articles/can-indian-manufacturing-capitalize-on-the-flight-from-china-11589479402?, accessed on May 20, 2020

124 Ibid.

125 "Supply chains for different industries…" *The Economist*, July 11, 2019

126 Sriman Ravikanti, "Multi-tier supply chain visibility," *CGN Global*, February 16, 2019, https://www.cgnglobal.com/blog/multi-tier-supply-chain-visibility, accessed on May 20, 2020

127 Damien Ma, "How Apple exemplifies the resilience of East Asian Supply Chains," MacroPolo (Paulson Institute), June 2, 2020, https://macropolo.org/apple-resilience-of-east-asian-supply-chains/?, accessed on June 4, 2020

128 "China's consumer decade," *Deutsche Bank News,* December 1, 2019, https://www.db.com/newsroom_news/2020/china-s-consumer-decade-en-11450.html, accessed on June 4, 2020

129 Camilla Hodgson, "WHO's chief scientist offers bleak assessment of challenges ahead," *Financial Times*, May 13, 2020, https://www.ft.com/content/69c75de6-9c6b-4bca-b110-2a55296b0875, accessed on May 15, 2020

130 Martin Wolf, "China-US rivalry and threats to globalization recall an ominous past," *Financial Times,* May 27, 2020, https://www.ft.com/content/5887ec6c-9d97-11ea-b65d-489c67b0d85d?, accessed on June 3, 2020

Observer Research Foundation (ORF) is a public policy think tank that aims to influence formulation of policies for building a strong and prosperous India. ORF pursues these goals by providing informed and productive inputs, in-depth research, and stimulating discussions. The Foundation is supported in its mission by a cross-section of India's leading public figures, academic and business leaders.

ORF OBSERVER RESEARCH FOUNDATION

Ideas • Forums • Leadership • Impact

20, Rouse Avenue Institutional Area, New Delhi - 110 002, INDIA
Ph. : +91-11-43520020, 30220020. Fax : +91-11-43520003, 23210773
E-mail: contactus@orfonline.org
Website: www.orfonline.org