



RESILIENT, INCLUSIVE, AND FREE

TOWARDS A POST-PANDEMIC
INDO-PACIFIC REGION

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Attribution: Mihir S Sharma, Ria Kasliwal, Abhijit Mukhopadhyay, *Resilient, Inclusive, and Free: Towards a Post-Pandemic Indo-Pacific Region*, September 2021, Observer Research Foundation.

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This report was prepared with support from the High Commission of Australia in India. The recommendations and the views expressed herein are, however, those of the researchers and do not reflect the formal position of the High Commission.

Design and layout: Rahil Miya Shaikh

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Introduction

Since the first cases were reported from the Hubei province of the People's Republic of China in late 2019, COVID-19 has spread to almost every country in the world.¹ The pandemic has taken over 4 million lives and shattered livelihoods, and has had ramifications on political and economic structures across the globe. The massive disruptions associated with lockdowns and restrictions on movement have pushed many countries into recession, and the global economic fallout has been on par with the impact of the 2008 financial crisis.

It comes at a time of trade tensions brewing in many parts of the world, especially between the United States (US) and China. Most analysts agree that behind the strain in US-

China trade relations are questions regarding the methods behind China's emergence as a global manufacturing, technological and economic power, and its consequences.

Together, these factors have precipitated, in many major economies, a wide-ranging shift towards inward-looking economic and domestic policymaking. This turn has stalled the progress of what some have called Globalisation 5.0 – a fifth phase of globalisation, driven by new-age science and technological innovations. COVID-19 only exacerbated a process already underway. Indeed, in the two years before the pandemic, there had been a breakdown of the international rules-based system and a grave weakening of the global institutional architecture.

This report revisits the forces that drove the earlier phases of globalisation: How countries are located vis-à-vis these drivers, and how the most pivotal of these countries could respond, will define the emerging world order. Technology, energy, and trade are the three engines that spurred the earlier phases of globalisation; this report assumes that states' attitudes to these three pillars will be key to the future of Globalisation 5.0.

The flux in trading structures and economic connections is particularly relevant for this report's focus geography: the Indo-Pacific. The world economy is becoming increasingly structured around the Indo-Pacific region, as it was, in the 1980s, around the Trans-Atlantic. It is in the Indo-Pacific that the future of global economic arrangements will be shaped.

What is the broad pre-pandemic context in which this present analysis is located? Threats to the rules-based order, essential for the economic cooperation of liberal democracies, have been growing in the Indo-Pacific. The response to these challenges has largely taken the form of security-related collaboration. The two tracks of international engagement in the region—security

and economics—have proceeded along orthogonal, and not parallel paths. Economic ties have not been affected by security considerations, and vice versa – even as the two tracks are linked by the rules-based order.

One reason for the divergence between the “security” and “economics” tracks is that security interests between the key democratic players in the Indo-Pacific have previously converged more closely than their economic interests. Threats to the liberal order, globally and regionally, motivate closer cooperation on the security track. On the economic side, however, each of these democracies has had different reasons and opportunities to benefit from dealing with illiberal regimes. This engagement, however, has sometimes come at the cost of economic security.

The pandemic has shaken liberal democracies out of this complacency by demonstrating a clear correlation between economic security and national security, as well as the limits of collaboration with illiberal players. The question is whether or not this realisation will endure, and if it does, whether institutional structures can be created to sustain it.

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This report traces the national impulses underlying decisions taken by countries in the Indo-Pacific region, as revealed during the pandemic, around the three pivotal issues of technology, energy, and trade – in particular, trade in medical equipment and pharmaceuticals. The case studies are centred around these sectors because it is in these three, above all, that state behaviours give a glimpse of globalisation attitudes and convergences in the post-COVID-19 world. Conclusions drawn from the experiences of these sectors will inform a broader theory of the forces acting to shift, or otherwise retain, supply chains in the Indo-Pacific.

The report will consider the constraints on state action in reshaping these supply chains, and whether existing groupings can perform the task. Are there institutions that can be constructed that would effectively place geoeconomic considerations at the heart of their mission? Can institutional arrangements involving the democracies of the Indo-Pacific make the leap, or even a connection, between the two tracks, given the opportunity provided by the recovery from the pandemic and the restoration of growth in the region?

The Chains of Globalisation

More than half of current world trade use the waterways of the Indo-Pacific.² This current dominance, if anything, understates the importance of the region for value creation in the coming century. The Indo-Pacific is a hub of supply chains, and there is little doubt that the growth engines of the 21st century will be located in this region. This is why the connections being created at present — both “soft”, in terms of contracts and regulations, and “hard”, or physical infrastructure — are likely to affect the distribution and nature of the dividends from growth for decades to come.

Over the past few years, countries across the region and beyond have turned away from what might be called a “naïve” view of globalisation. There is a

clearer recognition of the fixed costs that underlie undiversified supply chains. This realisation only grew deeper with the COVID-19 pandemic, as will be demonstrated in this report in three case studies.

The costs of undiversified or insufficiently inclusive supply chains can be understood along three domains: the geopolitical; the economic; and the geoeconomic.

The Geopolitical

From a geopolitical perspective, countries like India, Australia, and the US have developed a more sophisticated understanding of the degree to which overdependence on particular supply chains can create pressure points that reduce their strategic autonomy in foreign policy. A clear

“ Countries across the Indo-Pacific and beyond have turned away from a naïve view of globalisation; they now recognise the fixed costs that underlie undiversified supply chains. ”

example for the rest of the world of the possible pitfalls of insufficiently diversified supply chains or trading relationships was the friction between Australia and China in 2020.³

The fear that supply chains laid down as a consequence of short-term economic logic might be politically weaponised already existed, and had previously caused countries to examine how to avoid excessive dependence on any single route, commodity group, or country. India's turn towards "self-reliance" in 2020-21⁴ might in part be simple protectionism, but could also be seen as an imperfect expression of these same concerns, driven by increasing tensions along its northern border.

The Economic

The economic concerns around supply chains were brought into sharp relief by the pandemic and its concomitant crisis. It might be useful to understand this through an analogy to the 2008 crisis. During the global financial crisis, it was understood that the desire to create completely efficient financial transactions – defined in terms of the least "waste" of capital – also prevented the buildup of slack in the global financial system that would be needed in the event of an unforeseen or unprecedented crisis. The COVID-19 crisis created the same realisation, but for more material supply chains – in the first weeks and months of the crisis, especially, as countries and corporations struggled to examine whether specific trading partners would fail to deliver essential goods and inputs of production. The regulatory response to the financial crisis was, in essence, to reduce risk in the system through enhanced capital requirements for systemically important entities. The attempt to diversify supply chains can be seen as being an equivalent attempt to de-risk the trading system.

Therefore it can be seen as being both costly in terms of foregone efficiency, and essential from the point of view of reducing uncertainty. It is worth noting that this de-risking is being sought not just at the regulatory or political level, but also at the level of individual corporations.⁵ Large trading corporations could be allies in any effort to redesign the global architecture of the Indo-Pacific to de-risk supply chains, if their management and their shareholders are encouraged to understand and appreciate the benefits of the change.

The Geoeconomic

Geoeconomic concerns should not be underestimated, especially since this is where the dynamics of great-power competition come into play. One concern, common among countries in South Asia and Southeast Asia, is that specific networks of supply chains might lock them into a neocolonial economic dependency which in turn would put a ceiling on their growth. If, for example, the structure of supply chains is such that it costs less to import a commodity from a producer in coastal China to a market in coastal India than from a producer in interior Bangladesh to the same market in coastal India, then it will be hard for producers in interior Bangladesh to raise exports, move up the value chain, and achieve overall growth.

Suppose further that supply chains are structured in a manner that the same producer in interior Bangladesh finds the costs of exporting intermediate goods to coastal China to be lower than to coastal India. Whether seen from the lens of 19th-century colonial trade, or from 20th-century dependency theory, the implications are the same: bounded and dependent growth for countries on the "periphery" of supply chains. Not surprisingly, the desire for multipolar and

multinodal infrastructure that creates inclusive supply chains is strong among the emerging economies of the Indo-Pacific. Manufacturing powers like Japan have long sought to make “China plus one” sourcing models a reality.⁶

The implications are that any attempt to reconfigure the trading architecture of the region must not replace one node with another, but rather seek a genuinely democratic and decentralised approach to economic networks. Further, this reconfiguration must be backed up with infrastructure capital to allow for the new supply chains to be remunerative and sustainable.

Undiversified supply chains pose two additional burdens. One, supply chains impact great-power competitions by causing fear that they may alter

the dynamics of growth in different economies. Countries are moving to insulate frontier technologies from overexposure through either the manufacturing or the investment supply chain. India, for example, has sought to control investment into its tech startup sector.⁷ Similarly, The US’s attempts to manage the semiconductor production process, in cooperation with producers in Taiwan, is also widely understood as an attempt to manage future growth trajectories.⁸ Two, unprotected intellectual property poses a hindrance to the acceptability of multilateral institutions. Therefore, any new Indo-Pacific trading order must allow participating states to believe that they are being given an opportunity to reach the technological frontier and subsequently, a high growth trajectory.

Key Supply Chains: Problems and Requirements for a Post-Pandemic Architecture

Recent shifts in political attitudes to a representative set of prominent supply chains will help further illustrate the requirements of an effective and politically realistic post-pandemic architecture for “re-globalisation”. As discussed earlier, this report examines three pivotal engines of globalisation: technology (in particular, politically sensitive decisions about semiconductors and 5G); energy (i.e., renewable energy); and trade (i.e., trade in medical equipment and pharmaceuticals, given its severe disruption during the pandemic).

3.1 The Technology Frontier

The disruptions caused by the pandemic on economic activities in the Indo-Pacific region, like elsewhere in the world, will likely persist for some time. Inward-looking economic policies and trade

wars in the last two years have both obscured and revealed a growing technological rivalry between states to dominate the next round of global growth – which, it is assumed, will be driven by specific technological choices and platforms.

The situation has been compounded by the US’s apparent ambivalence in keeping to its traditional leadership role in institutions that have supported globalisation. Overall, therefore, the international geoeconomic environment suggests a pause on globalisation; this will have repercussions in the Indo-Pacific.

The tech rivalry, while as intense as the trade war, is more forward-looking. This report aims to determine the degree to which international competition is influencing the structure of the technological future in the Indo-Pacific, as well as the ways in which national—and indeed,

nationalist—impulses have been sharpened by the COVID-19 pandemic. To fulfil that objective, the report will examine three key determinants of technological progress: semiconductor production

and exports; the development and ownership of telecommunications networks; and, the skill level of high-end labour.

TABLE 1: Top 10 exporters of electronic circuits (digital and non-digital) in 2018

HS 854211: Electronic circuits; monolithic integrated, digital			HS 854219: Electronic circuits; monolithic integrated, other than digital		
	Country	Export Value (million USD)		Country	Export Value (million USD)
1	Hong Kong, China	130684.17	1	Philippines	13429.65
2	South Korea	109522.36	2	Mexico	2095.42
3	Other Asia, nes	95896.62	3	Saudi Arabia	10.90
4	China	85565.78	4	Ukraine	9.78
5	Singapore	81215.35	5	Egypt	7.85
6	Malaysia	42898.72	6	Moldova	1.05
7	United States	36847.96	7	Georgia	0.54
8	Japan	26474.12	8	Burkina Faso	0.32
9	European Union	21913.12	9	Kenya	0.23
10	Germany	16907.77	10	Rwanda	0.03

* nes = not elsewhere specified

Data source: World Integrated Trade Solution (WITS)⁹

(A) Microchip and semiconductor exports

Electronic circuits are driving the rapid pace of technological advancement in today’s digital age. Popularly known as microchips, or just chips, these held just a few transistors some decades ago;⁹ today’s integrated circuits (IC) are composed of many billions of interconnected transistors. Monolithic ICs are the entire circuit on a single silicon chip, usually around one-centimetre square.¹¹

The US has long been the leader in the semiconductor field, with a consistent 45-to 50-percent market share in “production”, as defined generally.¹² In the monolithic IC category, meanwhile, China – along with Hong Kong – appears the leading exporter (see Table 1). South

Korea and Singapore are also significant exporters of monolithic digital ICs.

Yet, crucially, this seeming dominance of exports by China conceals a particular dependence on high-tech components being manufactured elsewhere, including in Taiwan. As of 2019, Taiwanese Semiconductor Manufacturing Companies (TSMCs) produced more than 70 percent of chips designed elsewhere, including by the biggest US brands such as Intel. According to James Lewis of CSIS,¹³ only 16 percent of the semiconductors used in China, including for re-export, are produced wholly domestically.

The government in Beijing has an aggressive strategy to change this. With potential investments of almost \$120 billion over five years, half of which

is to come from provincial governments,¹⁴ it aims to produce 70 percent of the chips used domestically by 2025. It had earlier planned to produce 40 percent domestically by 2020, but it is not clear if that target has been achieved amidst the pandemic.

The barriers to reaching the technological frontier in manufacturing are high. Patrick Yue, a microchip researcher in Hong Kong whose laboratory is partly funded by Chinese telecommunications giant Huawei, estimates that Chinese technological ability is “three to four generations” behind TSMC.¹⁵ The same media report that quoted Yue also said China is lagging behind other countries in manufacturing microchips, although it is competitive in designing chips.

Since the outbreak of the COVID-19 pandemic, the US has clamped down further on the transfer of cutting-edge microchip technology to China. In May 2020,¹⁶ the US Commerce Department expanded the federal government’s ability to demand licences for sales to Huawei of chips – even those made abroad – that use US-developed technology. It further tightened that restriction in August 2020.¹⁷ One crucial gap in China’s supply chain for advanced semiconductors is the manufacturing equipment used to make them – this equipment is still produced largely in the US and Japan (in particular, by Tokyo Electron and Hitachi), with some of the most high-tech options coming from ASML N.V in the Netherlands.

China’s position in the supply chain for microchips is difficult to excise. The costs for the US might also be quite high; if revenue for US semiconductor companies falls, according to the Boston Consulting Group, the second-order effects of reduced R&D and capital expenditure would be even more difficult, and the US would cede leadership in the field to Korea.¹⁸ Even if this is considered to be an alarmist scenario, the bottlenecks in securing this particular

supply chain are more complex. In particular, it is not clear how and why manufacturing companies elsewhere in the Indo-Pacific that supply high-end semiconductors to China (that are designed in China but use manufacturing processes and equipment that China cannot access) could change their behaviour.

A strategy to manage this supply chain will therefore need comprehensive inputs from multiple countries in the Indo-Pacific. Indeed, the dangers of an uncoordinated strategy in this sector were already apparent during the 2019 eruption of tensions between Japan and South Korea. Japanese restrictions on the export of crucial inputs in the memory chip production process – in particular, etching gas – incentivised Korean companies to seek Chinese substitutes.¹⁹

It is important to note that the semiconductor supply chain now increasingly has backward and forward linkages across the economy, and disruptions to the chain can destabilise the larger post-pandemic recovery. India in the first months of 2021 received an object lesson in this field, when the crucial automotive sector – one of the few sectors of the Indian manufacturing economy that was capable of creating jobs for post-pandemic recovery – found itself unable to increase or even maintain production because of the global semiconductor drought.

The post-pandemic attempts to secure the semiconductor supply chain could have benefited from greater coordination between like-minded countries. Taiwan, home to TSMC, is central to the future of the sector. The United States has effectively arm-twisted TSMC into setting up a \$12-billion plant in the US, for which the manufacturer began raising over \$500 million in loans in February 2021.²⁰ Both TSMC and domestic US manufacturers are seeking direct federal subsidies; President Joe Biden

spoke in February about prioritising domestic semiconductor manufacturing and laid out a 100-day review to support American chip companies.²¹

Meanwhile India has tried, as part of its new “self-reliant” economic strategy, to induce investment into semiconductor fabrication. While the country has capabilities in chip design, it has

not been able to attract a major chip foundry despite multiple attempts. Another expression of interest in December 2020, which sought specific proposals from global manufacturers, has lapsed.²² Official notification was, however, that the Indian government also invited Indian companies or consortia interested in the acquisition of fabrication facilities outside India to apply.²³

Analytically, two different approaches to post-pandemic supply chains are on display here, though mixed up in similar policies. No real recommendations for a secure semiconductor supply chain can be developed unless these two different motivations are clearly disentangled.

Thus it is important, moving forward, to distinguish those aspects of these policies that are meant to re-shore investment and capital or grow domestic jobs, as against those that are meant to diversify or secure supply chains. The possibilities for international cooperation are great for the latter set of policies and motivations; much lower for the former. There is one important lesson to take away from the semiconductor race: de-globalisation and re-globalisation can

be confused with one other. The restoration and security of supply chains is not the same as the onshoring of manufacturing, although the latter could be one component of a strategy directed at the former. Export restrictions and straightforward onshoring might intend to secure supply chains but, as demonstrated by the actions of Korean companies in 2019, they would have the counter-productive result of incentivising the creation of alternative, cheaper, but less secure competition.

Onshoring is competitive; economic security is cooperative. The problem visible in the semiconductor race is that the absence of institutional frameworks privileging the creation of common economic security can lead to competitive onshoring and export controls.

(B) The 5G Race

The Fourth Industrial Revolution of automation and Artificial Intelligence (AI) also depends upon the rollout of 5G infrastructure across the world. The future progress of innovation and productivity would be structured around this next-generation network. The spread of COVID-19 may have paused or decelerated the process, but the inevitability of the global industry and services graduating to the 5G network had already predated the pandemic.

The new 5G tech will come with greater bandwidth, decreased latency times, better energy efficiency,

and greater network capacity. Apart from expected improvement in mobile device technology, 5G will also transform and catalyse technological advancements like self-driving cars, virtual/augmented reality, tactile internet, smart cities, and internet of things (IoT).²⁴

Although the rollout has largely been preliminary and the corresponding infrastructure is yet to be in place, an initial mapping of the rollout gives a glimpse of the overall state of play.

There is widespread perception that China has made rapid strides in 5G technology; that any

FIGURE 2: 5G rollouts in East Asia



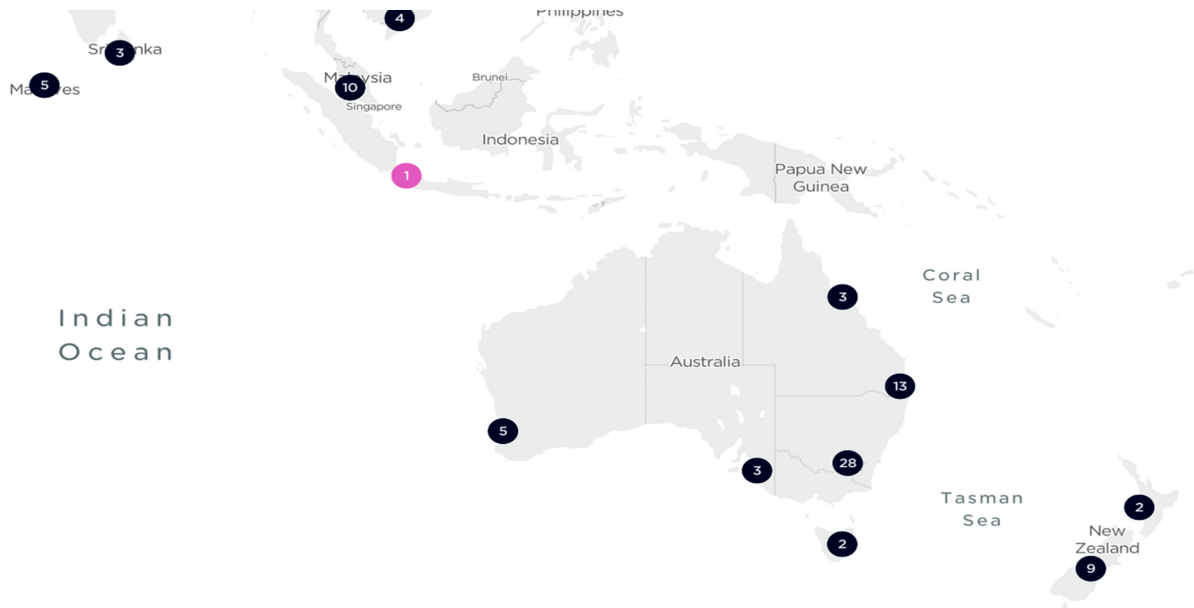
- * Deployment includes commercial activity, limited availability, and pre-release deployment.
- * Circles with larger numbers represent sum of all three - commercial and limited availability, and pre-release.

Source: Interactive Ookla 5G Map

Australia and New Zealand have some deployments of 5G network, but they are relatively less than those of South Korea, Japan or China (see Figure 3). In Australia’s case, most of these deployments are in the cities of the southeast, and there have

been widely reported glitches in the current infrastructure. Like in Korea, however, the level of investment in 5G increased during the pandemic, with Telstra – which runs on Ericsson equipment – bringing forward \$500 million in expenditure.

FIGURE 3: 5G rollouts in Australia and New Zealand



- * Deployment includes commercial activity, limited availability, and pre-release deployment.
- * Circles with larger numbers represent sum of all three - commercial and limited availability, and pre-release.

Source: Interactive Ookla 5G Map

The US, for its part, has caught up in terms of 5G rollouts (see Figure 4). In March 2020, the US moved almost everything it could online, including schooling and work. COVID-19 could serve to fast-forward 5G adoption in the country. The federal government, in particular through the Federal

Communications Commission (FCC) is actively trying to accelerate deployment across both urban and rural areas. Telecom provider Verizon reported a 75-percent spike in bandwidth demand in the initial weeks of the pandemic.²⁷

FIGURE 4: 5G rollouts in US cities



- * Deployment includes commercial activity, limited availability, and pre-release deployment.
- * Circles with larger numbers represent sum of all three - commercial and limited availability, and pre-release.

Source: Interactive Ookla 5G Map

India, meanwhile, is yet to take significant on-the-ground steps in its transition to 5G. This delay may limit the country's tech options in the future, and create economic and strategic compulsions in a post-COVID-19 world order. Since the pandemic hit, however, news emerged that Reliance Jio has succeeded in building its own 5G software stack, which would run on semiconductors powering open-source radio access networks that were constructed elsewhere.²⁸ Qualcomm Ventures, the investment arm of the high-end chipmaker Qualcomm Incorporated, signed an agreement in July 2021 to buy a small stake in Jio; since Qualcomm has the most valuable set of 5G-related patents,²⁹ this will facilitate a rollout in India that may not even be dependent upon Huawei.

The overall lesson of this survey is that many leading telecommunications companies — particularly those with cleaner balance sheets — responded to the COVID-19 pandemic by scaling up investment and doubling down on their 5G commitments. In many cases, the capacity created for 5G proved useful when pressure increased on LTE networks.

The broader technological question remains, however, whether Chinese telecom infrastructure suppliers — and particularly Huawei — will be treated differently in a post-pandemic economy. Where do national and nationalist impulses in liberal democracies stand in this regard?

Europe in 2019 provided a salutary lesson about the limits of anti-Huawei arguments in the pre-pandemic world. No European country banned Huawei from 5G auction bids till the end of 2020.³⁰ Though data security and privacy concerns were debated widely, European countries largely avoided making a clear position. Pricing was key. For example, the Netherlands' leading wireless carrier KPN had chosen Huawei to provide equipment for their 5G

network. The official reason was cited as quality, although Huawei outbid Swedish firm Ericsson, reportedly by 60 percent. That is a price that does not even cover the production costs and cannot be matched by any independent private operator, possibly due to both overt and covert government subsidies to Huawei.³¹

It will soon be clear if Europe's attitudes have undergone a change. In the middle of the pandemic, France announced that it will allow Huawei to bid in its supply equipment auction for 5G with the rider that restrictions will be placed around nuclear and military sites if the Chinese giant bags the contract.³² The multi-band 5G auction in Sweden was initially postponed after a legal challenge from Huawei; five local firms were awarded the spectrum on offer in early 2021. The auction for Finland 26 GHz spectrum in 2020 also went with local providers. Meanwhile, the British Telecom-owned provider EE replaced Huawei with Ericsson, through a deal to deploy dual-mode 5G core, a fully container-based, cloud native mobile packet core for 4G, 5G non-standalone and standalone services as a single fully integrated core.³³

Australia has banned both Huawei and ZTE much earlier, citing national security concerns.³⁴ New Zealand, however, is still undecided, and has not ruled out using equipment from Huawei.³⁵

India's attitude has changed most sharply in the period following the pandemic and the heightening of border tensions with China. *The Financial Times* reported that industry executives now believe that it is "game over" for Chinese 5G equipment, and the government would no longer allow it even for testing.³⁶ The costs for India of doing so would be high. Other than Jio, Indian telecom operators are heavily dependent on Huawei equipment, and are also debt-ridden; the additional 30 percent cost of

Ericsson or Nokia 5G kits would be difficult for them to bear. In other words, the likely costs would be monopoly, possible bankruptcy, and a delayed and

expensive 5G rollout. That the Union government is nevertheless willing to risk an informal ban on Huawei is telling.

In the 5G race, it is in the Indo-Pacific, more than elsewhere, that the divergence between liberal democracies is stark. Australia may have taken the lead in excluding Chinese kit makers from 5G infrastructure; but others, including in India and ASEAN, have weighed the cost, security, timelines and privacy issues differently.

This analysis suggests that 5G is a sector where there is an unusually clear trade-off between cost and security, and several liberal democracies and Indo-Pacific powers have taken different views. The lesson is that, if presented with just these two distinct options, no government's choice can be easy. The question, when it comes to mapping the future of economic security in the Indo-Pacific, is how to make it easier for countries to navigate this great-power competition while serving their economic and national security goals.

It is necessary therefore to search for mechanisms that might expand the set of choices available, or diminish the contrast between the two. The 5G choice is particularly difficult for those countries in the emerging Indo-Pacific that are wary of Chinese presence in a critical sector but are also, after the exigencies of the pandemic, short of resources. The choice is no longer between the expensive and the insecure; it may be between the unaffordable and the insecure, and therefore between growth and missing out. Any post-pandemic architecture for the region will have to incorporate the understanding that governments which are excessively resource-constrained will need to make choices that could weaken collective security. Thus, addressing fiscal needs in the post-pandemic period is central. The 5G sector is a particularly visible example of this imperative.

3.2.) New-Energy Supply

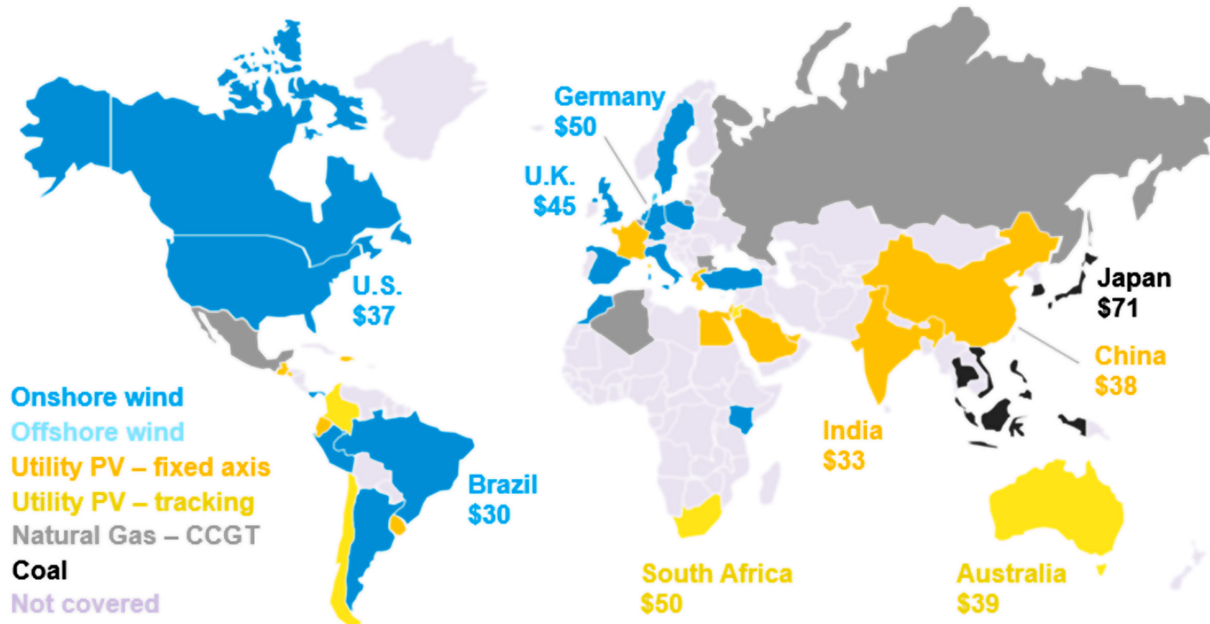
Two distinct possibilities emerge from the current situation in the global energy sector. The first is the possibility that oil and gas prices remain lower in the next two years. This will reduce the incentive for achieving energy efficiency and finding cleaner sources. Liquefied natural gas (LNG) prices are simultaneously falling due to supply surplus and low oil prices. Under these circumstances, consumers may tend to shift from coal to gas, but current low oil prices also reduce the selling price of domestic coal. Therefore, overall, cheaper fossil energy sources may make renewable energy less

competitive. Ongoing or planned investments in clean renewable energy infrastructure could get delayed or even suspended. When the focus shifts to public expenditure directed towards fighting the pandemic and/or providing fiscal stimulus, the availability of resources for clean energy investment or subsidies can get extremely limited. That will make it more difficult to end the dominance of cheap but polluting fossil fuel use.³⁷ Even so, the revenue and profitability of OPEC+ will depend upon selling oil and gas not on their own terms, but rather to ensure the continuing unfeasibility of investment in alternative infrastructures.

The second possibility is that renewables like solar PV and onshore/offshore wind, if scaled up sufficiently, may put existing commercial electricity generation through coal and gas at serious risk in the long run. If large-scale solar and wind

energy is complemented by tech innovations like affordable electric vehicles, in the near future these renewables will have the ability to radically alter the global energy regime.

FIGURE 5: Cheapest sources of new bulk electricity generation by country, 1H 2020



* Utility PV is large scale electricity generation through solar photovoltaic power station, CCGT is combined cycle gas turbine.
 * Map shows benchmark LCOE for each country in \$ per megawatt-hour.
 * LCOE calculations exclude subsidies or tax-credits.

Source: BloombergNEF³⁸

Figure 5 shows the benchmark levelised cost of the cheapest source of new bulk electricity generation. Interestingly, the cheapest source for new bulk electricity generation in the Indo-Pacific for India, Australia and China, is solar.

This cost advantage depends on the degree to which Chinese authorities subsidise the production of solar panels, and in turn the dependence of any particular county’s solar sector on Chinese imports. In 2018, nine out of the top 10 biggest solar panel exporters were from China.³⁹ Even within the country, in the span of 25 years it has gone from virtually no solar panels towards becoming the leader of the world by a margin of more than 100 percent.⁴⁰ China’s wind power

trajectory, though different from its solar path, has also started to pay dividends lately, and now many of the world’s largest wind turbine companies are located in China.⁴¹ Therefore, if the second possibility of rising renewables materialises, the question is whether it embeds a dependence on or a tech-economic leadership for China in terms of capability of producing equipment like solar panels and batteries.

The effect of the pandemic on these considerations was clear. Early on, the dependence on Chinese imports of PV modules was rendered undeniable in several countries that faced project overruns because of a slow return to work in the key manufacturing areas of Jiangsu, Zhejiang, and

Anhui. The sector recovered swiftly, however, producing the panels that were the equivalent of 59 gigawatts capacity, an increase of over 15 percent over the equivalent period in the previous year; outward shipments, however, were down by about one-fifth from predictions.⁴²

In the US, imports of solar panels from China have been subject to Super 201 tariffs since January 2018. Faced with a steady increase in imports, nevertheless, the US Trade Representative has withdrawn some exclusions and closed loopholes during the pandemic.⁴³ This was in spite of a normalisation of certain other tariffs on Chinese imports.⁴⁴

Perhaps the clearest indication of shifting national impulses in terms of escaping dependence on China in this sector came from India. During the pandemic, it announced a hefty tariff on photovoltaic modules in spite of other government measures to protect the sector that was hurt by contractual defaults and low demand during the pandemic. Crucially, it has been reported that the Indian government might try to exclude Chinese firms from bidding for the initial \$28-billion run for developing-country home power systems in the International Solar Alliance.⁴⁵ Since the latter is a crucial new multilateral initiative for New Delhi, this is an important indicator that in the post-Covid world, India is prepared to use even its prized multilateral engagements to reconfigure supply chains – at least in this crucial sector.

It emerges from this analysis that, during the pandemic, the renewable energy supply chain became another avenue for competitive attempts at economic security. The pandemic has hastened existing tensions in the area not only because it revealed the extent of dependence upon China in this crucial sector, but also because governments searching for sectors that could lead the post-pandemic recovery perforce seized upon renewable energy generation and storage as a component of their strategies. Again, it is crucial to distinguish, going forward, the multiple different objectives in play. Governments cannot be allowed to claim that their objective is supply-chain resilience if it is in fact merely the promotion of domestic growth. The differences between the two, as explained in this section, are substantial not just in terms of collective

economic security, but also in what they imply for the future of cooperation and coordination on economic security.

In concrete terms, policies aimed at supply chain resilience would build in interaction with reliable international partners at the planning and proposal level. One possible argument in defence of these varying attempts at de-globalisation instead of re-globalisation is that no institutional framework currently exists aimed at supply chain resilience among like-minded countries. In the absence of such a framework, national impulses towards reducing overdependence on China will overemphasise the competitive “onshoring” component of the strategy, as opposed to the cooperative “resilience” component.

3.3) Trade: The Medical Supply Chain

From cooperation to competition in pharma

During a global pandemic that hits different parts of the world in waves and with varying intensity, advocates of traditional trade linkages might point out that ensuring the flow of medical commodities between geographies promotes access and efficiency. Yet, in practice, this has not been the case, leading to more questions about trade balances and differential controls on supply chains.

It is now evident that economic recovery in many countries may pivot around the effectiveness of the healthcare, pharmaceutical and medical equipment sectors, at least in the next one or two years.

India's choices have particular relevance in this sector. The country occupies the 11th place among the world's top 15 pharmaceutical products exporter countries. Germany, Switzerland, the US, Ireland, and Belgium were the top five exporters in 2019. Notably, China is absent in this top 15 drugs and medicines exporter countries' list (see Table 2). No other Indo-Pacific country is in the list.

TABLE 2: Top 15 pharmaceutical products exporters in 2019

Rank	Country	Export value	Rank	Country	Export value
1	Germany	91.2	9	UK	27.1
2	Switzerland	83.0	10	Denmark	17.5
3	USA	53.6	11	India	16.3
4	Ireland	53.4	12	Spain	12.8
5	Belgium	52.7	13	Austria	11.3
6	France	35.5	14	Sweden	10.2
7	Italy	33.6	15	Canada	8.4
8	Netherlands	30.1			

* Export values are in US\$ billion

Data Source: UN Comtrade

The real extent of India's potential in this sector is even starker in Table 3, which provides the top 15 gainers in terms of highest positive net exports.^b

This holds immense promise for India, and also for other potential economic and strategic partners in the Indo-Pacific.

^b Net exports are defined as the value of a country's total exports minus the value of its total input imports in that particular product category.

TABLE 3: Top 15 gainer countries (highest positive net exports) in drugs and medicine export in 2019

Rank	Country	Value	Rank	Country	Value
1	Switzerland	26.5	9	Sweden	5.3
2	Germany	26.0	10	Belgium	4.9
3	India	13.7	11	Singapore	3.0
4	Ireland	13.6	12	Austria	2.0
5	Denmark	12.3	13	Israel	1.2
6	France	10.8	14	Slovenia	1.2
7	Netherlands	9.7	15	Hungary	0.7
8	Italy	7.5			

* Net export values are in US\$ billion

* Net exports are defined as the value of a country’s total exports minus the value of its total imports.

Source: *World’s Top Exports*^c

Most medicines consist of two types of ingredients: inactive components, and the medically mission-critical component known as active pharmaceutical ingredients (APIs). The API business is a rare pool of profitability as margins remain attractive even in the most commoditised categories, and API suppliers achieve greater scale by operating globally rather than locally. Though not in the top bracket in finished medicinal products, China holds a significant market share in the API market.

India, on the other hand, has historically concentrated on exports of generic drugs, which are limited in nature. Many countries in Asia, West Asia, Eastern Europe, and Latin America have already been engaged in building or expanding their own generic drugs network; and in the post-COVID-19 world, the rush to create capacity in this area will only accelerate. To be sure, within India, the pandemic has broken out parallel to a realisation that the country’s champions in the pharmaceutical space are dependent on API imports from China.⁴⁶

Therefore, calls have been made for India to venture into API manufacturing aggressively, even at the cost of direct competition with China.

Calls for self-reliance are also being made in other parts of the world.⁴⁷ Russia’s “Pharma 2020” strategy, designed in 2008, sought to reduce its dependence on imported medicines; the pandemic has reportedly sped up attempts to reframe and refocus efforts on “Pharma 2030”.⁴⁸ Indonesia has also declared its intention to be “self-reliant” in both medicines and medical equipment.⁴⁹ US President Biden has signed an executive order aimed at reviewing, over the next year, six crucial supply chains including “biological preparedness” and a more immediate, 100-day effort to secure API manufacturing.⁵⁰ In its press release detailing the executive order, the White House did not refer to the proportion of APIs imported from China; it included the substantial proportion of API imports from India as a justification for its review. Again, this suggests that a cooperative impulse has been rendered competitive by the pandemic.

^c World’s Top Exports, at <http://www.worldstopexports.com/drugs-medicine-exports-country/>

These sectors encapsulate the dilemma faced by many nation-states in a post-COVID-19 world. The impulses to shift focus towards self-reliance are undeniable; yet, the presence of properly robust supply chains could benefit each country involved in such chains. In a post-pandemic world every country will have to walk this tightrope – on one side is a clamour for self-reliance, and

on the other, benefits of a globalised supply chain. The impulse towards a narrow economic “independence” for nationalistic reasons might well win out. It is important to ensure that this is not because there are no options available for creating globalised supply chains that are both resilient and secure.

For instance, the diversity in the pharmaceutical global supply chain offers an array of advantages. Different foreign jurisdictions offer the large-scale global companies benefits like tax incentives, affordable raw materials, relatively low-priced energy, and large pools of highly skilled (and often relatively cheap) workers. An earlier US FDA (Food and Drug Administration) Report found that producing APIs in India is 30- to 40-percent cheaper compared to the US; the resultant savings can then be passed on to consumers.⁵¹

Although the dissemination of vaccines against the novel coronavirus is progressing at unprecedented pace, the immediate need was for therapeutic medicines to treat the virus. Amongst the contenders, Remdesivir emerged as the first treatment approved for medical use in the United States. Originally developed by Gilead Sciences to treat Ebola (against which it proved to be ineffective), it has shown efficacy against MERS viruses in the laboratory and was initially authorised

or approved for emergency use for COVID-19 in 50 countries including India, Japan, EU and Australia.⁵² It has since been demonstrated to be ineffective, and deprecated by the World Health Organization (WHO).

Yet the initial response to the belief that Remdesivir might be a usable therapeutic is in itself instructive. Even before its approval in the US, the US administration started hoarding stocks of the drug,⁵³ reducing its global availability. In order to expand Remdesivir’s supply across the globe, Gilead Sciences signed non-exclusive voluntary licensing agreements⁵⁴ with four Indian generic pharma manufacturers,⁵⁵ and a Pakistani firm⁵⁶ to manufacture and distribute the drug in 127 countries that face serious obstacles to healthcare access.^{57,58} These licences were to be royalty-free till WHO declared the end of the COVID-19 public health emergency, or until another pharma product or vaccine was approved to treat or prevent the disease.⁵⁹

Even though this licencing eventually proved unnecessary, there are still lessons to be drawn here. Technology transfer and cooperation can mitigate the effects of economic nationalism, supply chain intervention, and export controls.

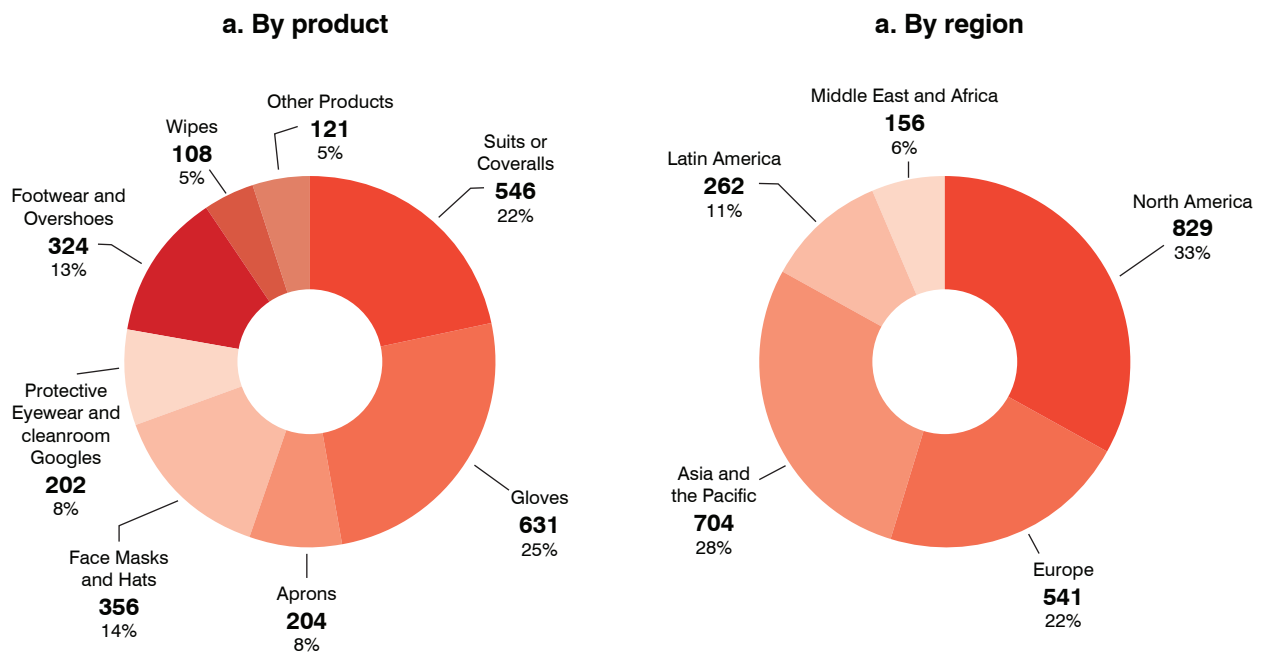
And the private sector can continue to be a key, responsible stakeholder in creating a more resilient form of globalisation, if it is provided with the correct incentives.

The global PPE race

The global market for personal protective equipment (PPE) was estimated to be \$2.5 billion in 2018 (see Figure 6). By region, North America had the largest market share, followed by Asia-Pacific and Europe. PPE and pharma manufacturing in Asia-Pacific is

significant, and India meets around 20 percent of global demand for medicines and vaccines. South Korea remains one of the bigger pharmaceutical manufacturing markets, and Singapore provides the regional hub for international pharmaceutical companies.⁶⁰

FIGURE 6: Market share by PPE product and region, 2018 (revenue in \$ million, %)



* PPE = personal protective equipment

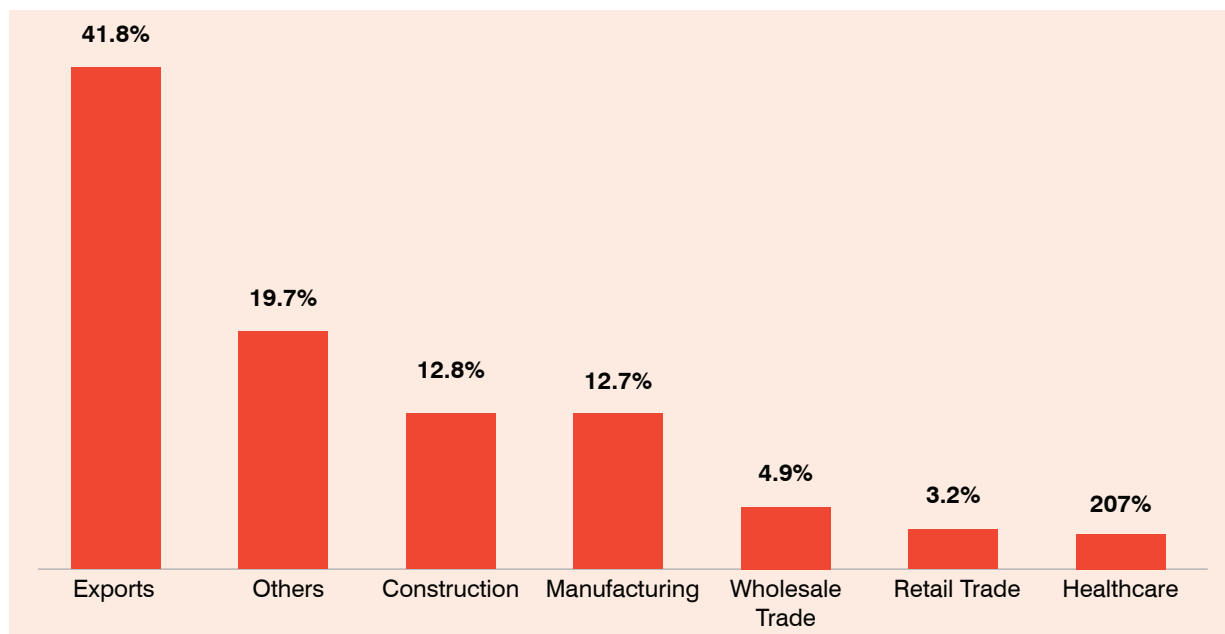
Source: ADB Briefs No. 130 (April, 2020)^d

Looking at a sample distribution of the PPEs (the sample country being the US), protective gears were the least used in the healthcare sector; in comparison, construction and manufacturing used

more PPEs before the pandemic (see Figure 7). As such, the pandemic has drastically changed the nature of market demand for PPEs.

^d ibid

FIGURE 7: Respiratory protection equipment distribution segmentation, industry-wise (in the US before COVID-19)



Source: Kenan Insights Fact Sheet (2020)⁶

As is now common knowledge, pre-pandemic, the mass production of gloves and masks was concentrated in China, reportedly accounting for half the global capacity. Taiwan meets 20 percent of the global supply of face masks.⁶¹ For gloves, the distribution of manufacturing capacity is more diverse – with significant capacities existing in Indonesia, Malaysia and Thailand. Small production facilities are also scattered across other countries like the Philippines and Turkey. However, extraordinary measures have been adopted to ramp up production over the past year. In China, automobile companies are now producing masks and other PPEs, and truck manufacturers are producing goggles. More than 60 manufacturers in the UK aviation and automobile manufacturing are poised to produce ventilators. Auto manufacturers in the US, including Ford and General Motors, are also working with medical device manufacturers to increase production of ventilators and respirators.⁶²

India’s response has been among the most spectacular, demonstrating its private sector’s ability in low-end manufacturing when given support and attention by the government. Barely any PPE sets were made in India when the pandemic hit; within a year, it had become the world’s second largest producer of PPE, with 600 companies producing half a million PPE suits daily.⁶³

Yet, in spite of this increase in capacity and the presence of a solid supply chain, the PPE sector has been the site of the most blatant subversions of trade protocols using national power. A “war for masks” in April⁶⁴ left no state looking good. Similar patterns have been observed in the case of vaccines.

⁶ Kenan Insights Fact Sheet (2020), “Where Did All the PPE Go?”, 13 April, at <https://kenaninstitute.unc.edu/wp-content/uploads/2020/04/Fact-Sheet-Where-Did-All-the-PPE-Go-4.6.2020.pdf>

The PPE market reveals the rawness of the new national tendencies, the fundamental lack of trust in the safety and reliability of the trading order, and an apparent unwillingness to create systems even with close allies – even within the European

Union – that could survive the pressures of an emergency. In the absence of greater bilateral, minilateral, and multilateral co-operation, the prognosis for the global trading order is not very hopeful.

Vaccine nationalism

Prior to the approval of COVID-19 vaccines, many high-income countries like Britain, the US, and the European bloc had reserved doses of the most promising candidates that were sufficient to immunise their populations several times over. The arguments against vaccine nationalism need not be outlined in detail in this report. It is short-sighted and self-defeating. WHO has expressed concern that such unilateral deals might make vaccines inaccessible to those in the poorest parts of the world – and thereby allow the pandemic to persist globally instead of ending it on a reasonable timeline. It is also clear that, the longer it takes to vaccinate the world, the greater the danger of further virulent mutations of the virus that might not just be more transmissible and deadly but also more resistant to therapeutics and existing vaccines.⁶⁵

Despite the fact that a large majority of people worldwide needs to be vaccinated to eradicate the virus, hoarding by high-income countries has been prevalent. The US, for example, secured close to 3 billion doses (or eight times the total population) – while most low- and middle-income countries (LMICs) are far from the 2021 target of inoculating 20 percent of their population.⁶⁶ According to data collected by Duke University, high-income countries which represent only 16 percent of the global population, have purchased 55 percent of COVID-19 vaccine supplies worldwide.⁶⁷ Consequently, in January 2021, approximately 40 million vaccine doses had been handed out

in the developed countries while according to the WHO's head, there was one low-income country that had access to a mere 25 doses.⁶⁸ In addition to delaying access, this hoarding has clearly also made the vaccines more expensive: some LMICs have had to pay double the price than the EU did.⁶⁹ Moreover, countries such as India and South Africa have asked for a temporary waiver of TRIPS obligation related copyrights and patents, but the proposal is being opposed by the US, UK, Japan, EU and Australia.

A study by the ICC Research Foundation has found that the global economy might lose over \$9 trillion if developing countries fail to gain access to vaccines. As much as half of that cost would be borne by advanced economies, with the largest ones losing up to four percent of their GDP as compared to a scenario where all countries managed to be vaccinated.⁷⁰ This divergence might be exacerbated if advanced economies succeed in reserving an even larger share of forthcoming production for their population's booster shots.

In a larger-scale replication of the conflicts over N95 masks early in the pandemic, the year 2021 has seen public face-offs on vaccine supplies, even between like-minded countries. The EU tried to block movement of EU-produced vaccines from Ireland to Northern Ireland, which triggered Brexit-related rows.⁷¹ Additionally, the EU came under heavy criticism after member Italy blocked the export of 250,000 AstraZeneca doses to Australia, citing shortages and delayed supplies to the bloc. This decision reflected concerns that British-Swedish

company AstraZeneca was shortchanging the EU to fulfil its contracts with other nations.^{72,73} That is, however, only part of the story. It is also the case that the UK's contract with AstraZeneca, as opposed to Europe's, prioritised British demand. The public response to this situation is disquieting, and is a clear demonstration of the perverse incentives for political leaders in the absence of an institutional framework for cooperation. The European Union – which has, in spite of a slower vaccination rollout, been exporting vaccines and elements of the vaccine supply chain at its contractually mandated rate – is under pressure to institute an export ban that essentially replicates the UK's behaviour. The consequence is greater inefficiency across the chain.

If anything, the US response has been even more disturbing. Draconian wartime regulations have been used to prevent the export of vaccines and vaccine material from the US, causing a crucial part of the global supply chain to essentially drop out of commission. This is in spite of the fact that the US rollout has been relatively swift. In effect, the US has publicly and brazenly prioritised the immunisation of its entire population over allowing its companies to honour their contracts to protect the most vulnerable populations outside the US. The Biden administration has been as stringent as its predecessor, if not more, on the “America First” agenda in vaccines. The signals for the rest of the world, including US partners and allies in the Indo-Pacific, are disturbing. If the political turn

towards economic nationalism in the United States has so effectively survived the transfer of power in Washington, claims that the US administration is now ready for greater cooperation with its allies to collectively address threats to economic security will deservedly be questioned.⁷⁴ The US's behaviour in these crucial months of the crisis might be considered the most worrying indicator of the dubious solidarity of post-pandemic groupings of liberal democracies.

India's choices have been as disruptive to the integrity of supply chains, particularly in the emerging economies. It was long expected that India would assume centre-stage in the global vaccination rollout, given that it had extensive private sector capacity and was home to the world's largest vaccine manufacturer, the Serum Institute of India (SII). As of end-March 2021, India had issued 50 million doses to its own residents, and has exported 60 million shots, to bilateral partners as well as to the COVAX facility. In all, 76 countries received vaccines made in India. This commitment to preserving supply chains came apart rapidly as the devastating second wave, driven by the Delta variant, hit India in April and May 2021. Exports have largely been cut off, forcing previous SII customers—even close allies like Bhutan—to look elsewhere for supply. India has now clearly chosen to follow the US down the path of shutting off global supply till a significant proportion of its own population have been vaccinated.

Detailing the cost of vaccine nationalism demonstrates the degree to which autarkic impulses, in the absence of institutional constraints, can overwhelm common sense. The implications for a post-pandemic global order that fails to create constructive mechanisms for cooperation on supply chain resilience are disquieting. It cannot be said for certain if the presence of some form of consultation in the

early months of 2020 on the vaccine supply chain could have avoided the ugly, disconnected and self-interested approach currently on display. Yet what is clear is that, in the absence of a framework for such consultation between like-minded countries that could also ensure the globalised private sector has a clear common mandate, the pandemic has been extended, and bilateral relationships have been threatened.

3.4) Summary of case studies

Countries such as India and Australia, both of which are integral to crucial future-looking supply chains – whether in renewables or in resources or in public health – are crucial stakeholders in a resilient post-pandemic trade order. Yet, as detailed in this section, the impulses of many of their partners – and even of India itself – during the pandemic are such that shared economic security after the pandemic might be considered less likely than before.

Each supply chain considered above was threatened during the pandemic, and also central to future growth horizons for the Indo-Pacific. The conclusions drawn from each case study are similar: The pandemic hastened pre-existing impulses

towards securing supply chains. The war for masks and subsequently for vaccines has decisively weakened trust in supply chains, even if those are limited to like-minded liberal democracies.

A distinction can be found in each case between a “de-globalisation” impulse, that seeks to simply directly control manufacturing and value chains, and a “re-globalisation” impulse, that sets out to diversify and expand the supply network. Even if “de-globalisation” does not win, the 5G case shows that countries which are starved for resources might be forced into choices that weaken future resilience. In many cases, the globalised private sector has served to moderate the autarkic impulses of states, and therefore should be seen as an ally in any cooperative re-globalisation effort.

A Post-Pandemic Architecture

A new institutional framework for the Indo-Pacific that solves some of the issues outlined in the two previous sections will not arise automatically, nor through autonomous efforts by individual economies. It is certainly true that, given recent history, the countries of the region cannot and will not assume that the United States will always be in a position to assume the mantle of leadership. Indeed, even after the political transition in Washington, the US has not demonstrated a decisive break with its “America First” doctrine on supply chains, as shown earlier. Therefore, any movement towards new organisational structures to support trade, security and growth in the region will have to be cooperative in nature.

There are some questions that need to be answered about the nature of this cooperation: What sort of cooperation is desirable? Which cooperative activities should be prioritised, and how can collaborative mechanisms be institutionalised? Which domains should this activity focus on to achieve the most lasting results? And, most importantly, what is actually achievable given the various domestic political-economy constraints of

the Indo-Pacific’s biggest players, as well as the extraordinary demands already placed upon states in the region by the pandemic?

These constraints on state action deserve closer examination. First, on the economic side, the undeniable movement towards economic nationalism, partly as a response to recent pressures on the international trading system, must be taken into account. As discussed earlier, this movement was enhanced in some ways by the pandemic. But it does suggest that any new form of cooperation should avoid a simple focus on trade barriers. India’s unwillingness to join the Regional Comprehensive Economic Partnership (RCEP), for instance, and the US’s continued disinterest in the Trans Pacific Partnership (TPP) even after a change of administration in Washington, suggests that other forms of economic cooperation are more likely to succeed.

Second, treasuries are overburdened by domestic pandemic responses. The Indian government, for example, has launched a record-setting borrowing programme⁷⁵—yet will likely struggle to find sufficient money for other imperatives such as defence modernisation. Similar pressures are visible in

other emerging economies across the Indo-Pacific. Meanwhile, more advanced economies have launched massive stimulus programmes – but even these tend to have a domestic focus.

The objectives for a new framework of cooperation in the Indo-Pacific, when put together with these constraints on state action, therefore suggest that norms-based collaboration could be the most useful immediate form of action. While norms-based, these collaborations can also have material and tangible objectives that could lead to concrete changes on the ground.

One such possibility is a group of powers coming together to harmonise regulations that govern, for example, infrastructure investment, green projects, or data governance. Several blueprints of such an exercise do in fact exist, but in most cases require institutionalisation and proper buy-in from various domestic regulatory establishments across the Indo-Pacific. The Blue Dot Infrastructure Network, for example, is a US-led effort to “certify” projects in the infrastructure as being “open and inclusive, transparent, economically viable, financially, environmentally and socially sustainable, and compliant with international standards, laws, and regulations”.⁷⁶ This builds on the Japanese government’s efforts, following that country’s leadership of the G-20, to create a coalition around “quality” infrastructure.⁷⁷

Any attempt to build a robust coalition for infrastructure investment must reckon with the somewhat lukewarm response to the Blue Dot standards. The fact is that, in many emerging economies in particular, project preparation costs are a significant component of initial set-up costs for investors; and meeting Blue Dot requirements might well be de-emphasised especially if the benefits are not clearly apparent. After all, unlike state-directed investment pipelines, a private sector-focused programme like the Blue Dot network cannot guarantee investment, but only make it more likely. What could, however, energise this or similar investment structures is if the principles underlying the Blue Dot network become part of the basic regulatory apparatus of key Indo-Pacific countries. This would require discussions and engagements between governments that are the equivalent of those that are required for “behind-the-border” trade agreements such as the TPP.⁷⁸ Central banks, securities markets regulators, environmental agencies, and others will have to reform domestic processes to increase the likelihood that individual projects will receive the Blue Dot certification, or some other such form.

It should be clear from this example that, although such collaborative efforts may not require massive amounts of public finances, they will require political capital, bureaucratic goodwill, and a whole-of-government effort. This will not happen in a vacuum.

“ The objectives for a new framework of cooperation in the Indo-Pacific, when put together with the constraints on state action, suggest that norms-based collaboration could be the most useful immediate form of action. ”

The first step will come from bilateral engagements and commitments by the political leadership. That may have to be followed up by dialogue between regulatory agencies. In other words, without some sort of institutionalised setting, sufficiently broad dialogue is unlikely to happen.

Going forward, any post-pandemic structure needs to encourage such broad dialogue on a number of issues involving as many stakeholders as possible. The lessons of Section 3 in particular are clear: This post-pandemic architecture needs to satisfy clear

conditions. First, it needs to be open and inclusive, to ensure that the trading networks it creates are multipolar, and that no excessive imbalances of power are built up. Economic security must be central to the framework. Second, it needs built-in element of cooperation with the private sector. Third, it needs to ensure that the management of risks – both national security risks and crisis risks – are taken into account. And finally, it must seek to open up the opportunity to grow to all economies in the Indo-Pacific.

Towards a New ‘Coalition of the Willing’

The broader aim for any post-pandemic cooperation between Indo-Pacific powers, especially on regulatory matters, is the post-pandemic rebalancing of supply chains. It is through institutional engagement that cooperation can evolve to coordination. Thus, any post-pandemic structure needs to rebalance the supply chains by turning cooperation into coordination. This will only be possible if all the members of a multilateral organisation take interest in the common development of all; in turn, such a change in behaviour can only be brought out and sustained via proper institutional arrangements and incentives. Coordinated investment by major players should also be overseen by an appropriate grouping of Indo-Pacific powers. The next question that needs to be explored, therefore, is whether any such grouping exists, could be upgraded and institutionalised, and if so, how.

There are multiple groupings in the Indo-Pacific with varying degrees of current activity and future potential. There are, however, several characteristics of most existing groups that – given the conclusions drawn in the previous sections – could identify limits to their operation and future growth when it

comes to reconfiguring the geoeconomic balance in the region. A subset of these are explored in the appendix to this report.

These arguments can be broadly divided into three. First, that some groupings have emerged from a period when tariff reduction-led globalisation was non-controversial. In other words, they might struggle to re-imagine themselves as the location for broader coordination – whether of regulations, trade policy, or investment. This is the problem that many see with the Asia-Pacific Economic Cooperation (APEC), for instance – in spite of its past successes, broad membership, and depth of institutionalisation and support.

Second, most of the bilateral or plurilateral arrangements that focus more sharply on supply chain resilience and diversification have yet to gather sufficient momentum. Either they have failed to garner private sector interest, or they have been unable to draw additional countries into their ambit; or else, they have been under-resourced. The Asia-Africa Growth Corridor is one such example, which may have suffered from insufficient commitment and resourcing.⁷⁹ A broader problem, however, could be defined as lack of trust. If the private sector

is to be a partner in states' efforts to rebalance supply chains, it will need to trust that a grouping will survive and live up to its commitments. If other states are to become partners of the grouping in the rebalancing and resilience effort, then these states could be accorded trust through demonstrations that the grouping is not exclusionary, and is willing to act in service of the shared interests of the Indo-Pacific, and serve the specific needs of state partners.

And third, many groupings have become less potent because of friction between a subset of their member states. This is not to say that they do not serve an important purpose. The Shanghai Cooperation Organisation, in particular, continues to grow as a location for dialogue between states of the region that otherwise are experiencing tension. Yet dialogue is not cooperation, and cooperation is not coordination.

Therefore, in order to overcome constraints, any new grouping would have to do the following:

1. Define itself explicitly as a location for resilience and rebuilding of the economic architecture of the region.
2. Be invested with sufficient political capital and resources at the start in order to build momentum and attract cooperation from additional stakeholders, including other Indo-Pacific powers; and
3. Limit its initial core membership to like-minded countries that share similar worldviews and levels of political will.

Focusing on like-minded countries – such as liberal democracies – will move a grouping from dialogue to cooperation; and defining an explicit mission will move it further from cooperation to coordination. However, building a broader, indeed regional, trust in such a grouping is a deeper problem. After all,

almost by definition, creating an initial coalition of countries with similar worldviews, interests, and will is an exclusionary act. How can such a coalition claim a more inclusionary mission?

5.2) Quad-Plus-Plus

This report has earlier pointed out that constructing a post-pandemic architecture of the Indo-Pacific requires a convergence between the “economic” and “security” tracks of engagement. It has also argued that such engagement will be ineffective without a group of countries committed to institutionalisation and resourcing the supply chain resilience effort. And, finally, that the grouping satisfy the three criteria listed above if they are to coordinate and draw in partners. How can India and Australia work together to create such a grouping?

While it is possible that a new configuration of countries could be led by India and Australia to steer this process, any genuine answer to the questions posed by this report must begin with the Quadrilateral Security Dialogue, or the Quad, comprising India, Australia, Japan and the US. All other existing structures have basic problems that cannot be addressed in the medium term (see the Appendix).

The Quad, as it existed prior to the pandemic, would not have been an appropriate instrument either. In that period, the Quad had essentially been a security-based collaboration, even though it began following cooperation to deal with the impact of the 2004 tsunami. It has seen its share of problems, some of them owing to weaknesses in India-Australia relations. The Quad is viewed by suspicion by the Chinese leadership; but, even more problematically, it has to deal with concerns among other players in the Indo-Pacific that it is exclusionary⁸⁰ and that its purpose is limited to controlling Chinese ambitions.

Renewing the Quad using the criteria derived above would begin to address at least some of these weaknesses.

First, there is no question that the four countries of the Quad, at least at this time, have congruent worldviews and intentions about creating resilient supply chains. The investment of all four establishments in the Quad concept is also no longer in question, given the reorientation of their policies in recent years towards securing the Indo-Pacific and ensuring it is, in geoeconomic terms, “free and open”.

Thus the areas for action that we are left with are, first, its historic focus on security ties to the exclusion of other forms of engagement; and, second, the need to address the notion that the Quad is “exclusionary”.

What is needed could informally be called a “Quad-Plus-Plus”. In other words, two additional components need to be built into the Quad. A Quad-plus partners; and a Quad-plus economics.

A Quad-plus economics

What would Quad-plus economics look like? One answer could be that it would be a Quad in which the existing official participants also discuss economic issues, or in which joint projects in the geoeconomic domain are discussed and agreed upon. Without denying that this would be a useful initial step, the question is whether it would provide enough momentum, or possess sufficient scale.

A better solution – which takes into account the idea that, at its heart, the Quad is a dialogue between like-minded countries – would be to redesign and expand the nature of dialogue the Quad represents. The Quad must cease simply being a ministerial interaction owned by the foreign policy and security

establishments of each country. Dialogue must be deepened, under the Quad ambit, to include other crucial policy directions of all four countries.

This interaction should include, for example, central banks. The four Quad countries should send representatives from their central banks and financial regulators to determine whether similar standards are evolving for lending to infrastructure projects; for bank exposure to specific sectors; and for the regulation of cross-border capital from non-market regimes. This is a sector in which the effects of systemic competition and the weaponisation of capital flows are clearly being felt. Responses from each Quad member country have been haphazard rather than coordinated. Thus, creating a formal structure under the Quad for regulatory interaction will empower and inform each country’s regulators and central banks even if they are not provided with explicit directives by the political leadership. From the Indian perspective, in particular, this is essential, as the Reserve Bank of India and the securities market regulator typically do not engage with India’s partners efficiently or effectively, even under the auspices of traditional structures like the Basel process for co-operation among central banks and financial regulators.

Interactions under the Quad should also be extended to the agencies most responsible for the new economic frontiers, particularly those related to the green transition, in each country. As described earlier in this report, the supply chain underlying the renewable energy build-out is an avenue for geoeconomic friction – and, indeed, more recently, protectionism. To the extent that these changes are meant to manage an overdependence on photovoltaic unit manufacturing in China, they are understandable. But domestic policy changes in countries like India would be more efficiently and sustainably structured if they were preceded with dialogue with like-minded countries that could

discuss joint methods for providing resilience and diversification to these supply chains. Disputes like those between India and the United States at the WTO over forcing domestic content into photovoltaic panels – aimed at China, but with the US as collateral damage – could then have been avoided.

Similar processes of consultation and trust-building can and should be developed around the management of technology and data flows; patent regimes and intellectual property; investment in semiconductors and rare earths supply chains; and the replacement and restoration of the physical network that underlies digital connectivity. In each case, national decisions by each Quad member should be informed by exposure to the decisions of the others. Even in the absence of an explicit political or legal directive towards harmonisation of regulations in these sectors, an expansion of the Quad's ambit of operations will necessarily help to build greater trust between the country's governing structures. The desirable end point is, in the words of Takshashila's Nitin Pai, the creation of a "bubble of trust" encompassing these four countries that encourages decision-makers in each to take geopolitical and geoeconomic factors into account.⁸¹

Quad-plus partners

Trust needs to be developed not just between the domestic-focused agencies and decision-makers of the Quad, but also between the Quad and other powers in the Indo-Pacific. The central aim must be to demonstrate that the purpose of the Quad is to boost connectivity and growth potential across the region – but on inclusive terms.

In this case, seeing the Quad purely as a series of summits or dialogues limits the levers available to build trust. A comparison with the G-20 is worth

considering in this context. The G-20 invites half a dozen guest countries to summits; but there is no evidence that this has led to greater trust in the grouping. The Quad's meetings in 2020, for example, included three guest countries.⁸²

The cost of including guests in meetings is, however, manifold. Ongoing dialogues benefit from consistency across time and institutional memory, both of which suffer when guests are randomly included. Institutionalisation is also difficult under these circumstances, as is the definition of a common aim and purpose. The current usage of "Quad Plus", which focuses on summit-based outreach to other Indo-Pacific powers like Vietnam and Korea, is thus constrictive and counter-productive.

A more effective way of building trust is through action. The Quad needs to prioritise joint efforts in and with partner countries that directly address specific needs or requirements in the geoeconomic domain. It is not as if examples do not exist. The Australia-Japan-US decision to fund liquefied natural gas infrastructure in Papua New Guinea,⁸³ referred to in the Appendix, is one useful illustration. This action was accompanied by, or coincided with, specific institutional changes in each partner country; for example, the Japan Bank for International Cooperation created a task force for trilateral lending. Such interventions need to be scaled up, deepened in terms of institutional commitment, and expanded to include India.

The next step, however, given the many calls on public finances in the post-Covid era, must be the discussion on how to energise private investment into joint Quad projects. These could include specific lines of credit to manage currency risk; blended finance to mitigate political risk; or other traditional mechanisms for development finance that catalyses private capital. There is no need for

the Quad to reinvent the wheel. Each Quad country has an existing development finance architecture. These must, through political intervention, be given a joint orientation, incentives for cooperation, and a focus on the Indo-Pacific.

The ongoing global process to create a better strategic underpinning for development finance – seen in the reconfiguration of the relevant agencies in several countries, including the US following the BUILD Act in 2018⁸⁴– provides an opportunity. This process must be conducted in parallel in the Quad countries, and embed the joint priorities of the Quad. (USAID's 2021 review of "focus countries" for the post-pandemic recovery selected no targets in Southeast Asia, and only one in the Indo-Pacific more broadly – Bangladesh.⁸⁵) Ideally it should also create permanent institutional connections between the respective countries' overseas development and infrastructure finance institutions, in the manner specified for regulators in the previous subsection of this report. This would provide the institutional foundation for a growth and economic security-oriented framework for the Indo-Pacific.

The broader question that needs to be answered is this: how can such coordination on investment be demand-driven, strategic, and effective? 'Demand-driven' means that it should respond to the directly felt needs of Indo-Pacific partner nations for economic security and growth; being 'strategic' requires it to be part of an overall roadmap for future structure of Indo-Pacific trade and connectivity; and 'effective' means it should focus on rewiring currently existing supply chains, or building new ones that have an explicit private-sector focus.

That gets to the heart of the problem with the current, somehow defensive, nature of the Quad.

Criticisms that the Quad is directionless are in fact concerns that it does not have a concrete vision for the region's future that is different from the past. In contrast, for instance, the Belt and Road Initiative, in spite of its many flaws, has a vision. Indeed, even more important than a vision, it has a map.

The Quad, if its intervention in the region is to serve the larger strategy of rebalancing and renewal, must also develop a map of what more inclusive, balanced and sustainable supply chains and trading/investment relationships in the Indo-Pacific would look like. In spite of the criticism directed its way, the Quad does in fact have a vision for the security arrangements in the region: a "free and open Indo-Pacific". An equivalent vision must be created for economic security.

Partners' trust will be built when the Quad's direction is known, and there is confidence that projects and funding serve a common goal rather than arbitrary or transitory group requirements. This vision does not need to be a commitment; nor does it need to be permanent. Just a shared, public and explicit listing by the Quad's agencies of a project pipeline – together with an articulation of the supply chains that these projects intend together to supplement or add to Indo-Pacific trade routes – would be immensely valuable in building trust. It is through the existence of a map, even if unrealistic, that countries can evaluate the dangers embedded in the BRI. Populating such a map, or a listing, would also be demand-driven, if each project would already be the outcome of bilateral or multilateral discussion including at least one Quad country. More than observers, Quad Plus needs a concrete vision for the supply chains of the future.

Summary and Conclusion

The COVID-19 pandemic has exacerbated pre-existing pressures on the structure of global trade and economic integration. It strengthened the political will for the reconfiguration, rebalancing, and resilience of supply chains.

Specific national responses to these pressures, this report has shown, have emphasised de-globalisation at the expense of re-globalisation. Therefore, they have been insufficient and uncoordinated as responses to the crisis that battered economic integration, particularly in the Indo-Pacific.

This does not mean that a resilient, open and free post-pandemic global order is impossible. It merely raises the stakes. It demonstrates the urgent need to conceive of mechanisms that could enable and incentivise international cooperation on supply chain resilience. This report argues that recovery from the pandemic provides an opportunity for effectively merging conversations on “economic”

and “security” into one that focuses on economic security, sustainability, and resilience.

However, the constraints on state action in the post-pandemic era are considerable. Resources are stretched, and attention is turned inward as protectionist impulses become more common.

Given these constraints, this report finds that a new framework addressing supply chains, norms, and infrastructure must take the initiative of moving from dialogue to cooperation, and from cooperation to coordination. Such a grouping must have a core of like-minded nations; demonstrate an inclusive spirit; be private sector-friendly rather than state capital-directed; and define its aims and goals explicitly.

After considering the weaknesses and drawbacks of existing groupings in the area, this report concludes that – for India and Australia, in particular – the best chance to navigate the coming challenges for the Indo-Pacific is to reclaim and reinvigorate the Quad.

A security-focused grouping must be given a new set of requirements, be used to energise broader and deeper consultations between the four Quad members, and define a clear and concrete vision for the future of the Indo-Pacific that could lead to broader involvement by even the non-Quad nations. This report thus provides specific sectoral recommendations for cooperation, and outlines how a foundation for coordinated investment might be achieved in the short to medium term.

For India and Australia, the Quad is the only game in town: its strengths are a shared purpose and a previously ambiguous definition that keeps all four nations on board. But the pandemic has raised the stakes for cooperation, as well as the corresponding pay-offs. There is thus a clear case for investing political capital on creating a clearer definition for the Quad, which foregrounds shared economic security, regulatory harmonisation, and supply chain resilience.

“ The best chance to navigate the coming challenges for the Indo-Pacific is to reclaim and reinvigorate the Quad. A security-focused grouping must be given a new set of requirements, be used to energise broader consultations, and define a concrete vision for the future of the region. ”

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Annexure

Some existing cooperative structures in the Indo-Pacific,
with selected commentary on their limitations and challenges

Trilaterals

1. USA-Japan-Australia Trilateral Security Dialogue

“A successful example of an informal security arrangement in the Asia-Pacific region that goes beyond the traditional “hub-and-spokes” US alliance system.”

“Its very informality has also limited the scope of this triad’s security cooperation to activities that focus largely on peacetime activities that do not involve the use of force. Its informality — perhaps most notably underscored by the lack of a formal command and control structure similar to what exists in NATO — makes it difficult, if not impossible, for Washington, Tokyo, and Canberra to address more tangible security challenges in a direct manner.”

https://www.stimson.org/wp-content/files/file-attachments/US-Japan_Australia-WEB.pdf

2. USA-Japan-Australia Infrastructure Cooperation

An official trilateral Memorandum of Understanding has been signed, and specific diplomats have been assigned to manage co-ordination on investments such as in Papua New Guinea.

<https://thediplomat.com/2019/06/australia-japan-us-start-down-their-own-indo-pacific-road-in-png/>

Then Australian Foreign Minister Julie Bishop announced that the trilateral partnership would be “formalised... in due course”.

“Where is the money? The China–Pakistan Economic Corridor alone is valued at anywhere between US\$46 and \$62 billion. Even if real spending does not match the headlines, the BRI is still likely to be worth tens of billions of dollars. By comparison, the trilateral initiative runs the risk of looking more tokenistic and symbolic than a real geopolitical alternative.”

<https://www.lowyinstitute.org/the-interpretor/the-new-us%E2%80%93japan%E2%80%93australia-infrastructure-fund>

3. India-Japan-Australia Supply Chain Initiative

Trade ministers from the three countries announced a new initiative on “regional cooperation on supply chain resilience in the Indo-Pacific” in September 2020 and “instructed their officials to promptly work out the details of the new initiative for its launch later [that same] year”.

<https://www.dfat.gov.au/news/media-release/australia-india-japan-economic-ministers-joint-statement-supply-chain>

However, no formal structure has as yet been announced.

4. RoK-Japan-China Trilateral Cooperation

A relatively institutionalised relationship, with a trilateral cooperation secretariat and “over sixty trilateral consultative mechanisms” including “over one hundred cooperative projects”.

http://www.eai.or.kr/main/english/research_view.asp?intSeq=17694&code=41&keyword_option=&keyword=&gubun=research

The secretariat is a decade old as of 2021, and leader-level summits have been held regularly since 1999.

5. USA-Japan-South Korea Trilateral

The Trilateral Coordination and Oversight Group was active from 1998, with a focus on North Korea in particular; it has since become largely defunct.

“South Korea’s endeavor to join a networked security architecture remains fairly nascent so far. Most of Seoul’s efforts are bilateral, and even minilateral and multilateral cooperations have been limited to engage neighboring countries in Northeast Asia.

This is mainly due to the ROK’s foreign policy focus on North Korea and subsequent accommodating attitude toward China, which do not necessarily support US efforts to build a networked security architecture to resist China’s revisionism.”

https://media.defense.gov/2021/Feb/06/2002577570/-1/-1/1/JIPA_QUAD_PLUS_SPECIAL_ISSUE.PDF

“South Korea’s and Japan’s negative perceptions of each other inhibit closer trilateral cooperation. Differing positions on Japan’s colonial past, Japan’s military goals, and appropriate approaches to China and North Korea often prevent the two countries from coming together over their common interest in promoting peace in the region. More than just disagreements, these issues make the two countries view one another as unreliable security partners.”

<https://carnegieendowment.org/2020/03/18/%20overcoming-obstacles-to-trilateral-u.s.-rok-japan-%20interoperability-pub-81236>

Minilaterals

1. The Quadrilateral Security Dialogue (Quad)

The Quad is an informal strategic dialogue between the United States, Japan, Australia and India that has traditionally involved ministerial-level summits. “All four of the Quad countries agree that recent Chinese policies and actions are a threat to their common interests. However, there are clear divergences between the Quad states and these are important for the prospects of effective Quad cooperation. Principal among these divergences are their differing threat perceptions — this is the core hindrance to collective action and a key factor delimiting the scope of any action the four countries might take together to defend their common

interests. This divergence in threat perceptions is based on a range of factors, including the existence or absence of direct territorial disputes with China, perceptions of the potential risks of retaliation by Beijing, the economic and military capabilities that each state has to bring to bear (alone and together with others) should retaliation occur, other higher order national priorities and threats, and finally the limitations of each nation's strategic culture. While there are divergences between Japan, the United States and Australia on these issues, the clear outlier among the four is India.... India shares some common interests with the other three Quad countries but is less able to withstand the costs that could be directed its way if it became a more active partner.”

<https://www.lowyinstitute.org/publications/assessing-quad-prospects-and-limitations-quadrilateral-cooperation-advancing-australia>

2. Asia-Pacific Economic Cooperation (APEC)

In 2021, the APEC agenda requires “more than 300 meetings... across the more than 40 committees which do the work, involving the 21 member economies”.

<https://www.lowyinstitute.org/the-interpretor/what-apec-has-offer-2021>

“The role of APEC has been gradually diminishing in recent years. On the one hand, it was a loose group from the beginning without a permanent establishment. On the other hand, its scope is too large, spanning the Pacific, and compared with the BRICS that are also not small in scope, it also lacks coordinated common interests.”

<https://news.cgtn.com/news/2020-11-18/As-APEC-prepares-to-unveil-new-vision-what-do-the-experts-think--Vw1unlhxWo/index.html>

3. Asia-Africa Growth Corridor (AAGC)

Introduced in 2017; an Indo-Japanese partnership with a focus on infrastructure in the western Indo-Pacific, alongside more traditional development activity in Africa.

“However, even though three years have passed since they published the vision document, we do not have any concrete achievements. The three organizations that created the vision have not shown any progress regarding the AAGC... The AAGC has not been on an official agenda for the Indian and Japanese prime ministers, as there was no concrete progress. Modi and Abe have met eight times since the AAGC was announced, but they never mentioned it officially at summit meetings. It never appeared on their joint statements... The idea was so broad that it includes connectivity, skill development, education and healthcare, and thus focused more on raising the standards of the social environment rather than eliminating hurdles to do business in Africa or creating a scheme that encourages companies to invest more in Africa.”

<https://www.ifri.org/en/publications/editoriaux-de-lifri/lettre-centre-asie/should-we-forget-about-asia-africa-growth>

4. Regional Comprehensive Economic Partnership (RCEP)

“RCEP is an achievement of an ASEAN-centered regional economic integration... Because of ASEAN, RCEP became the first multilateral trade agreement that includes China, Japan, and South Korea. It is in line with ASEAN's strategy of engaging and involving relevant powers in a common framework based upon ASEAN.”

<https://www.lowyinstitute.org/the-interpretor/what-rcep-can-tell-us-about-geopolitics-asia>

“It is unclear if the RCEP will align with the intentions of ASEAN or if it will alternatively accelerate the Sinification – the increasing spread of Chinese influence – of Southeast and East Asia. If the RCEP rules and processes are not stringent enough, it could bring countries further into China’s orbit, provide China with significant negotiating leverage over its partners, and facilitate China and its state-owned enterprises (SOEs) a hegemonic position in regional trade. China alone has already emerged as ASEAN’s biggest trading partner. Additionally, India’s decision to not participate will be another factor affecting the possible Sino-centric nature of the RCEP, as the exit of 1.3 billion people could boost China’s influence – a prospect other members do not want. India’s absence will also diminish ASEAN’s aspirations to expand into the Indo-Pacific region.”

<https://www.aseanbriefing.com/news/rcep-impacting-aseans-supply-chains-business-environment/>

5. Indian Ocean Rim Association (IORA)

“Proposed by Mauritius in 1995 and established in 1997, the IORA as of November 2017 has 21 member states and 7 dialogue partners, and is the only body which seeks to promote development, cooperation and trade across the whole Indian Ocean area.”

<https://www.iora.int/en/about/about-iora>

“While IORA is the only regional association which seeks to cover the whole Indian Ocean region, there is at the same time a large variety of overlapping regional associations which seek to promote cooperation in a particular area or in a particular sphere.... While these may be useful in themselves, they distract attention and activity away from the pan-regional context. IORA

is not structured in a manner which enables effective decisions to be made. To avoid possible conflict, the association proceeds on the basis of consensus in making decisions, and it avoids discussion of issues which may arouse controversy or undermine bilateral relationships.....The imbalance in the development level creates a basis for complementarity (between the more developed and less developed countries) but at the same time leads to problems in the developmental process. The divergence in development levels tends to give rise to uneven sharing of the benefits stemming from economic cooperation, creating resentment. This makes it more difficult to ensure a unified pace in economic cooperation across the region.”

Meng, Shu (2018). “The Indian Ocean Rim Association (IOR): Achievement, Potential and Limitations - https://www.jstor.org/stable/j.ctv4ncp9p.11?seq=1#metadata_info_tab_contents

6. Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)

BIMSTEC is a regional organization comprising seven Member States dependent on Bay of Bengal - Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand. The permanent secretariat is in Dhaka. They have regular ministerial level meetings.

“Persisting organisational weaknesses, inconsistent levels of commitment and a general ambiguity regarding how to engage with other institutional actors have been the key reasons hampering the functioning of the organisation. The dormancy that has beset the organisation for two decades is largely due to two factors—absence of effective and sustained political will among member countries and following from this, a lack of resources in terms

of both finances as well as manpower which could have kept the workings of BIMSTEC active and extant....The BIMSTEC region is beleaguered by poor road and rail connectivity, insufficient last-mile links and cumbersome customs and clearance procedures which hamper trade.”

<https://www.orfonline.org/research/breathing-new-life-into-bimstec-challenges-and-imperatives-65229/>

7. South Asian Association for Regional Cooperation (SAARC)

The South Asian Association for Regional Cooperation (SAARC) was established in Dhaka in 1985.

“Most agree that at the heart of the failure of SAARC is the India-Pakistan hostility; their inability to put aside political differences and co-operate for the sake of the region. Each SAARC country has its set of issues – with its identity, domestic politics, immediate neighbours and extra-regional players; these are profoundly embedded in history and further complicated by geographical contiguity.”

<https://theasiadialogue.com/2017/05/26/south-asia-the-challenge-of-integration-is-saarc-still-relevant/>

“In the wake of conflicts in South Asia, regional power politics has been holding SAARC back from achieving its full progress. The real problem in this regard is considered the Charter of SAARC that ignores the discussion of political and other main issues. “

SAARC: An Evaluation of its Achievements, Failures, and Compulsion for Cooperation

[-https://www.gprjournal.com/jadmin/](https://www.gprjournal.com/jadmin/)

Author/31rvloIA2LALJouq9hkr/BX0BIUWk6n.pdf

“Despite the attempts to liberalize their economies, South Asian states maintain rigid and tight trade barriers among themselves be it tariff or non-tariff. Despite attempts to redirect tariff negotiations, the sensitive lists still remained relatively long, which ironically consist of products with high potential for regional trade.... Non-tariff barriers are a notorious obstacle to South Asian economic cooperation.”

Challenges to Regional Cooperation in South Asia: An Overview - <https://www.nepjol.info/index.php/joia/article/view/29081/23580>

8. Bangladesh, Bhutan, India, Nepal (BBIN) Initiative

The Bangladesh, Bhutan, India, Nepal (BBIN) Initiative focuses on connectivity, water management infrastructure, and transport.

“The member countries do not have their priorities completely aligned. For example, Bhutan often puts its emphasis on maintaining its leading rank in the gross national happiness index over economic growth. Consequently, there have been some reservations in Bhutan about free movement of cargo and people within the sub-region, something that could produce great economic benefits for the region as a whole. Furthermore, there are political problems and issues of mistrust within the BBIN countries. India’s demand for transit through Bangladesh has been a political hot potato for many years. Recently, India and Nepal experienced a political standoff where Nepal accused India of creating trade blockages.”

https://www.orfonline.org/wp-content/uploads/2016/03/ORF-Issue-Brief_135.pdf

“Political violence mixed with radicalisation; Violent extremism; Lack of appropriate access, finance,

and the availability of skilled labour and managerial skills; Lack of sufficient infrastructure among the BBIN countries; Low intraregional trade and investment; and Lack of proper trade facilitation, which hinders the 30 BBIN-MVA-identified transport connectivity projects that need US\$8 billion.”

https://www.orfonline.org/wp-content/uploads/2018/08/ORF-Kolkata_Report_BBIN_Final-1.pdf

9. Shanghai Cooperation Organisation (SCO)

The Shanghai Cooperation Organisation is a “Eurasian” grouping established in 2001. It has 8 member states, 4 observer states, 6 dialogue partners, and 4 guest attendees. The member states include China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Uzbekistan, with India and Pakistan, joining in 2017. A decision-making body called Head of State Council holds annual summits.

“While the Shanghai Cooperation Organisation was formed ostensibly to curb extremism in the Eurasian region and enhance border security, many suggest that the real objective was to counterbalance the activities of the United States and NATO in Central Asia. This thus acts as an instrument for China to exercise its control in the region.”

<https://www.orfonline.org/expert-speak/sco-2019-opportunities-and-challenges-for-india-51614/>

“When the Shanghai Cooperation Organisation was just being created, all the players in the region shared a common interest: no one needed the borderland to turn into a space of conflict in which only extremists and terrorists could profit. Russia needed calm along its eastern and southern borders, while China sought quiet northern and western borders, the Central Asian countries sought participation in the dialogue between Russia and

China, and everyone was interested in ensuring that internal subversive elements could not find refuge in the territory of a neighbour. The problem is that India and Pakistan joined the organisation with very different goals.”

<https://www.orfonline.org/expert-speak/sco-conflict-between-india-pakistan/>

“Cross-border terrorism is the biggest challenge for countries belonging to the Shanghai Cooperation Organisation (SCO), said Vice President Venkaiah Naidu while chairing a meeting of the SCO Heads of Government, comprising India, Russia, China, Pakistan and four Central Asian states. Without identifying Pakistan, he stated that India was concerned about state-sponsored terrorism. He spoke of the need for trade partners to be “trustworthy and transparent” and compliant with global rules, in criticism seemingly aimed at China’s trade practices.”

<https://www.thehindu.com/news/national/most-important-challenge-facing-region-is-terrorism-india-at-sco/article33212773.ece>

10. South Asia Subregional Economic Cooperation (SASEC)

SASEC countries share a common vision of boosting intraregional trade and cooperation in South Asia, while also developing connectivity and trade with Southeast Asia

<https://www.sasec.asia/index.php?page=what-is-sasec>

“Most analysis suggests that much of the potential for higher exports among the SASEC countries is restricted by the sensitive lists under SAFTA. In recent years, however, India has liberalized its sensitive list to a great extent. Furthermore, the

nontariff barriers (NTBs) restrict trade amongst SASEC countries. (for instance – Bangladesh’s Garment exporters)”

<https://theasiadialogue.com/wp-content/uploads/2017/05/developing-economic-corridors.pdf>

SASEC countries must tackle the challenges associated with greater use of automation, including the high initial costs and expertise required to maintain and repair these advanced applications and the potential loss of jobs due to reduced staffing levels.

<https://www.adb.org/sites/default/files/publication/529551/sasec-maritime-cooperation.pdf>

11. East Asian Summit (EAS)

“Established in 2005, EAS allows the principal players in the Asia-Pacific region to discuss issues of common interest and concern, in an open and transparent manner, at the highest level.”

<http://mea.gov.in/aseanindia/about-eas.htm>

“In its first six years the two most important, America and China, were largely indifferent to its existence. Yet as they have become more interested in the institution, the broader geopolitical environment has become more contested. As Sino-American relations move from uneasy coexistence to more overt competition, this is having a dampening impact on the capacity of the EAS to advance regional collaboration. There is a slight chance that such a forum might be a place in which trust between Asia’s behemoths might be forged, but thus far there is little evidence that either side is especially interested in pursuing this opportunity. It is not that they may not try to ameliorate their

competitive tendencies, but they are much more likely to do this bilaterally and not in a multilateral context. Furthermore, there remains a vast gap between at least some of the ideas being discussed among the members and their capacity to act on their decisions. There is an unfortunate cycle of underinvestment producing thin returns, which if left unchanged, could further limit EAS’s Appeal. Moreover, the limitation of just being a summit also affects EAS.”

The East Asia Summit and ASEAN: Potential and Problems – Nick Bisley- <https://www.jstor.org/stable/44683768?>

“In an address at the 15th East Asia Summit, External Affairs Minister S. Jaishankar also talked about the Indo-Pacific and noted the growing interest in the region as an integrated and organic maritime space with 10-nation ASEAN at its centre. The External Affairs Minister, referring to recent announcement of policies by several countries for the Indo-Pacific region, said that harmonising various perspectives would never be a challenge if there is commitment to international cooperation.”

<https://www.thehindu.com/news/national/east-asia-summit-2020-india-expresses-concern-over-actions-that-erode-trust-in-south-china-sea/article33100778.ece>

12. Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), is the successor to the TPP, which was signed in 2016 but failed to be put into effect once Donald Trump became US president. It includes all the remaining TPP countries and is widely known for extensive “behind-the-border” clauses.

“To avoid trade and investment diversion, non-members may need to align some domestic rules closer to CPTPP. Given the extent of benefits in the agreement, firms are likely to relocate, if they have options, into TPP countries. This could result in both trade and investment diversion out of non-members. To combat this challenge, some non-members may find it prudent to mimic TPP provisions in key areas domestically and reduce the incentive of firms to shift, thus coercing the non-members to comply to more liberalised rules despite not formally entering the CPTPP.

Furthermore, most of the TPP’s rulebook (which CPTPP follows) goes well beyond the existing WTO commitments, encouraging countries from diverse levels of economic development to pursue market liberalization. Thus, this process of encouraging the spread of ideas from TPP onward can be seen in the coalition within the WTO of members in the e-commerce space as countries like Australia, Japan and Singapore have taken leadership roles in Geneva.”

http://aei.pitt.edu/102526/1/MT_Comprehensive_and_Progressive_Trans-Pacific_Partnership.pdf

“The role of trade deals has become the subject of heightened debate amid the economic effects of COVID-19, as governments consider how to support vulnerable sectors, ensure access to medicines and medical technologies for their populations, and address job losses. Prior to the pandemic, experts had begun questioning whether the CPTPP yielded the expected economic benefits for the seven ratifying countries. In addition, the agreement’s rules on intellectual property (IP) and digital trade, among other issues, play into debate within some CPTPP signatory countries on whether to proceed with ratification, and for other countries regarding whether to request accession.”

<https://sdg.iisd.org/news/countries-highlight-trans-pacific-partnerships-contribution-to-sustainable-inclusive-economy/>

“The Biden administration will need to convince Congress and the American electorate that the agreement, and broadly, the region, is necessary for its economic recovery plan and long-term goals.”

<https://natoassociation.ca/biden-and-the-comprehensive-and-progressive-transpacific-partnership-challenges-for-re-entry/>

13. Mekong–Ganga Cooperation (MGC)

The Mekong–Ganga Cooperation (MGC) was established on November 10, 2000, at Vientiane, and comprises India and the countries of the Mekong basin.

“India’s pattern of trade with Mekong countries is relatively asymmetric, thereby implying high unlocked trade potential.”

<https://aic.ris.org.in/sites/default/files/Publication%20File/MGC-Report-2017.pdf>

“China’s control over the Mekong River basin has created conflicts and there is uneasy peace. Moreover, the 3,200-km Trilateral Highway Project which is crucial to expand trade with Burma and the rest of ASEAN has been delayed for years due to funding difficulties and, lately, political differences with Burma. Many critics suggest that India should not “Look East” but “Act East.” The lack of connectivity between India, Myanmar and beyond has led to limited trade prospects between the countries. Moreover, trade cooperation between India and the Mekong economies is, to a large

extent, about delineating clear advantages that India may have so as to navigate the challenges posed by the prior and differential Chinese presence. The present regional architecture, as it is evolving, suggests the need for Mekong economies to strike out a balance between the two giants.”

<https://www.thehindu.com/books/books-reviews/asean-india-talking-trade-with-mekong-region/article6458567.ece>

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A resilient, open, and free post-COVID-19 global order is not impossible. But now the stakes are steep. There is an urgent need to conceive of mechanisms that could enable and incentivise international cooperation on supply chain resilience. Recovery from the pandemic provides an opportunity for effectively merging conversations on “economic” and “security” into one that focuses on economic security, sustainability, and resilience.



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