



Shifting centres of supply chain: From China to India

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Abstract

The pandemic exposed tons of human realities, one of them being 'global supply chain,' the epicentre of which lies at China, or East Asia essentially. It was in wake of this along with the lingering tensions between China and the USA over a variety of issues including trade that the calculations of supply changes started bothering everyone alike. India, and for that matter, South Asia, is best positioned to fill that vacuum and take the lead. Historically, South Asia played a calculated role in supply chains but with the turn of century things have changed. With new responsibilities and opportunities lying at the doorstep, India has all that it needs to take the leap forward. This also coincides with India's great power ambitions, as its economy strengthens, so will its other sectors. India would need to grab this opportunity at the earliest with more smart business strategies, hurdle reduction, private-public collaboration, regional engagement, and outward oriented development strategies, because no great power could succeed without the supply chain lead.

Keywords: Pandemic, human realities, global supply chain, China, East Asia, USA

Introduction

The global supply chain functions as the backbone of major economies, especially in the developing countries, and emerging powers like China. What would happen in case these global supplies shift? The rivalry between several key players in the international arena with China is no longer a hidden fact. It is becoming apparent every passing day, and the pandemic exposed the loopholes in the system and how China is heavily dependent on this structure and the dependence that the world markets have on China. The given global economy is largely working on footloose foreign investors who are motivated by stability and profit alone. Therefore, the question arises what will happen if the Chinese economy continues to dominate the global supply chain? Is there any alternative that can come up in Asia to counter this overwhelming presence of China in the system? If yes, what are the challenges that these economies will face in order to de-throne China. Lastly, India is taking up the space of a regional leader swiftly, will this new-found leadership make its way to the supply chain arena? How best India can then take this movement to lead the Global supply chain forward? These numerous questions would be answered during the course of this paper.

Understanding Global Supply Chains

Industries have been at the heart of human developments, and supply chains have shifted from local to regional and from there to the global scale over a long stretch of time. It has evolved and encompassed both simple and complex industries, from textiles, food processing to aircraft, automotives, electronics and pharmaceuticals. The chains are spread across the globe in a manner that they cover different geographical locations and time zones. Different stages of production are located in various countries, and the trade links them creating a complex web of raw materials, processing, intermediate and final goods¹. The factors that influence this trend range from government suitability, corporate strategies, technological advances, ease of business, opening of economies, geopolitical environment, global trade temperature, to inter government

understanding. The list does not end with these, rather it is the lack of literature and data on factors like services that the understanding of global supply chains has not fully evolved. Different kinds of services are involved during different stages of the supply chain, and they are either outsourced or brought within the facility to ease the process. Along with the service sector, the role of small and medium enterprise is yet to be understood in full length. They are part of the supply chain in a limited capacity but their role can be advanced if given due attention, and they can be incorporated for the roles of exporters, inventors, and investors.

Does 'Asia' Stand a Chance?

Despite being associated with the 'third world' tag, Asia has excelled in the global value chains (GVCs), and this has largely accelerated their economies. The enthusiastic participation of Asia in the global supply chain has earned it the title of 'Factory Asia', and has pushed many low-income economies to the middle-income group². The most crucial component of this trade profile has been intermediate groups, or the parts and components trade. This has been led by China followed by Hong Kong and the Republic of Korea. India and the rest of South Asia is little behind in the chart but still has a significant presence. The economic boost by supply chains has allowed countries like Singapore and Korea to enter the high-income economies club at a faster pace than their counterparts. The agricultural economies of East Asia have jumped into the developing league of factory industries due to the blessings of supply chains. A range of factors have allowed these countries to take the lead in export driven industrialisation. The primary reason was that countries in East Asia adopted an outward oriented model which attracted Foreign Direct Investment (FDI) into these export processing zones (EPZs) that offer low-cost laborers who are easy to train³. This also created many jobs in the newly industrialised states like the Republic of Korea, Taiwan, Hong Kong, and Singapore. This approach was taken up by other economies like Thailand, Malaysia and other Southeast Asian countries

which made them the famous ‘Asian Tigers’. Another reason for this has been the catalytic effect of Japan’s policies. In the light of the Plaza Accord in 1985 which aimed at depreciating the dollar³, Japanese companies started to re-locate in its electronics and labour-intensive sectors to South East Asia and Korea, which further expanded the base for these economies. Lastly, it was China’s rise as a giant in the international arena and in the world trading system made possible by its reforms and opening policy along with China’s membership at the World Trade Organization that allowed these economies to have the lead. The coastal regions in China ended up becoming the hub for global supply chains mainly because of the liberal investment policies, incentives for FDIs, high standard infrastructure, better logistical facilities, and abundant supply of labour at a reasonable price. All these factors made it possible for East Asia to dominate the supply chain systems⁴.

Is Relocation a Solution?

The pandemic was not the sole reason that pushed these countries out of China, it was a volume of concerns that bothered investors. The internal dynamics of China are rapidly changing and the regulations are becoming tighter. There is also a revised rate of labour market which is working as a driver for FDIs to move out. Moreover, the external pressure, especially China's perpetual trade wars with the United States and the never-ending exchange of tension filled statements affects the security and trade markets. Investors do not want to risk their money in a country which is war prone, or advocates for protectionism. Hence, investments started sliding to other South-east Asian nations like Indonesia, Cambodia, Malaysia, Thailand, and Vietnam, while in South Asia this lead was taken by India. During the Trump Administration, it criticised China for pursuing unfair trade policies and pushing for protectionism. This further resulted in the Trump administration imposing tariffs on China which compelled American industries to re-locate activities to the US or other friendly nations, a term known as ‘friend-shoring’. The matter only escalated from here and the two major powers were seen in a bitter battle at the WTO along with the introduction of foreign technology restrictions. A truce was signed between the two in 2020 with the ‘Phase One Deal’ where both of them agreed to pull back tariffs, and there was a renewed understanding achieved on technology transfer, trade purchase, intellectual property and currency practices. Despite the mediation, the tensions between the two economic giants continued to simmer. The pandemic only escalated it, and as the administration shifted to the volley of President Biden, the situation further deteriorated for China. In 2022, President Biden imposed massive export controls, which also included directions to cut China from some semiconductor chips that were made with US tools. This move was noted by many as an attempt of the US to hamper China’s progress especially in technology and military. Internally, China followed strict covid policies like complete shutdown, zero-covid policy and tightening of technology markets which affected its own state companies. Apart from China, the world too is on a journey of economic recovery at its own pace. The domino effect of the pandemic is gradually unfolding and all the economies had hit some low during and after the tragic events of the Pandemic. This poses a grave challenge against the supply chains. Moreover, the condition of the

international domain continues to suffer due to the sudden outbreak of the Russia-Ukraine war, and now the battle between Hamas and Israel. The unfolding of global tensions in the form of arms conflict affect the geopolitical understanding and status quo of nations, and as they step into war, they pull back resources from breads for guns, which ultimately disrupts the world economy. All the major economies at present are dealing with economic downturns clubbed with high inflation rate and massive unemployment. Central banks are increasingly toughening their monetary policies and the interest rates are rising globally. This demotivates investors and pulls them back, which eventually keeps the economy on a slow pace. Moreover, there has been a shortage of shipping containers which are a crucial component in the supply chains, therefore, the freight costs have increased, further hampering the global trade supply. These disruptions resulted in a decrease of exports of intermediate goods. In the post-covid world, the lead of East Asia and China is still there, however, the numbers have gone down up to some extent. Whereas, India has still not managed to be in the list of top 15 exporters of intermediate goods. Hence, it would be too early to assume that China has moved out of the supply chain lead. This lead has survived due to the nature of products that the Chinese economy dominates. They supply important electronic components ranging from integrated circuits, memories, processors, high tech machines, photovoltaic cells, accessories for phone sets, and other crucial electrical components. The kind of infrastructure that is required for these goods is costly, and time consuming. Therefore, to move completely out of China would require a proper plan on the part of companies, with equally if not better facilities. Majority of these factories cannot afford the capital required for complete relocation, train an entirely new set of labourers, and change the network of their vendors. The entire activity is like a web knit with extreme precision, where even a single disturbance would affect the entire structure. China offers a well-built structure of trade, highly skilled labour, giant factories, integrated network of highly skilled sub-contractors, economic zones along with coastal access, efficient container ports, subsidies, and incentives. If India, or for that matter, any other South Asian nation would like to replace China, they would also have to compete on these grounds. Presently, only few Asian economies have conducive conditions for this scale of manufacturing and production. MNCs make their decision keeping in mind the primary consideration of profit and not national security considerations. However, the exchange of Dialogue between major powers often creates tensions at some level but it never fully translates into a complete upturn. In addition, China has been continuously investing in its R&D to bridge the technological gap that exists with the developed countries, whereas, India has brought down its already meagre spending on R&D from 0.76 % to 0.70%. This investment is coupled with policies that are aimed to make China a leader in high-tech manufacturing globally. For instance, the ‘Made in China 2025’ was launched along similar lines, it plans to use subsidies used by the government and mobilizing state enterprises to pursue acquisition of intellectual property and match the level of Western world in technological development⁶. This way, the base of the Chinese economy would expand and it would be able to offer a complete market solution at the most affordable prices. No other Asian economy so far has such a

far-sighted plan, although India is trying to match such advances and have floated schemes like 'Make in India' but the progress made is far from satisfactory. The main reason behind the failure of such schemes is lack of investments and planning from the end of government, and more incorporation of the private sector by reducing the hurdles in trade. In Asia, only Japan, and up to some extent Korea, managed to achieve this scale in economy through domestic value-added growth coupled with innovation capabilities. It is expected that China will expand the base of its global supply chains to include robotics, internet connectivity development, artificial intelligence, miniaturization, and innovation. Hence, it is all set to lead the new wave of tech-supply chains. China resembles the model of hub-and-spoke in context of its supply chain mechanism. It works as a centre where high tech industries are available, while other states in Asia facilitate its central position in global supply chains. Through this setup, the neighbouring countries in Asia become dependent on China for better job options. However, China has not brought South Asian countries in this scheme. Although it has invested in countries like Sri Lanka and Pakistan through its Belt and Road Initiative, the investment in the manufacturing sector has been little. In the Chinese calculations, South Asia is more suitable as a market for its exports and customers in terms of loans for commercial infrastructure. For this reason, China has in operation banks like the Export Import Bank of China and the China Development Bank. Another reason for limited Chinese access into these spaces is because of the policies that states like India have in place, which do not allow Chinese investments in their country due to geopolitical calculations.

If Not China, then Who?

From afar, South Asia seems like an interesting and potential location to make the big shift of global supply chains from China. They offer an attractive and affordable labour market along with assembly line operations with a strategic location in the Indian Ocean Region and the important East West Sea route. However, a careful analysis of South Asia's profile only tells us that it has not expanded its base, it has limited itself to garments and textile dominated⁷ by Bangladesh, India, and Sri Lanka. The rate of their diversification has been slow. The reasons for this snail-paced growth are that the South Asian region is relatively a small player in the intermediate goods chains, and majority of this is centred around India. The penetration to the rest of the region has been marginal. Moreover, intra-regional trade within the South Asia region is also very low. This suggests that the region is highly fragmented and there is no seamless connection. A reason for this could be the perpetual enmity that exists amongst states at all levels. In addition, if we compare the country profiles of South Asia and East Asia, it becomes explicit where the countries lack. For instance, the conditions in South Asia do not invite much investments, the business environment is not suitable for FDIs. The major indicators to determine this suitability are labour, their wages and productivity, cluster development, logistical support including connectivity, ports and infrastructure, and regulations for businesses. In terms of wages, most South Asian nations have an edge over China. They offer cheaper labour, this includes India, Pakistan, Bangladesh, and Sri Lanka; while wages in Maldives and Nepal are relatively high. Thus, making them

uncompetitive and less attractive for the supply chain ecosystem. However, when it comes to labour productivity, that is GDP per hour worked, is less than China for almost all South Asian countries including India, Bangladesh, and Pakistan. Although, Sri Lanka has managed to stay out of this league by introducing productivity measures. This is something that other countries can learn from and implement it in their respective domains, or else, it would be extremely difficult to match the productivity level of China. If companies relocate it would cost them quality, price, and standards. The most important reason that draws companies to China is the vast and attractive pool of industrial suppliers it offers. This allows buyers to exercise their negotiating power and bring down prices while maintaining the competitive edge. Furthermore, suppliers in China willingly take small orders and offer custom made services as well. This keeps the flow of all kinds of investors coming. In addition, it has a cluster development facility, which others lack. China's sea ports and infrastructure logistics also keeps it ahead of its peers. The availability of soft and hard trade related infrastructure helps in reducing the cost of transportation and the process of movement of goods from one destination to the other on the supply chain becomes seamless. Lastly, the time involved in starting a business makes it a determinant for the MNCs. China has a streamlined, hustle free mechanism to start a business, and it takes a maximum of 9 days to get things started. Whereas, countries in South Asia including India have not been able to remove hurdles in the way of ease of business. Their process is cumbersome and complicated which demotivates the investors. There have been high import restrictions, the charges for cross border logistics are high, the facilities of warehouses and other infrastructure necessities are not up to the mark. Although, India has performed significantly well in its digital connectivity which facilitates coordination in supply chains. The key measures for this include access to high quality broadband at an affordable price, building of digital public platforms along with boosting the digital finance services setup. This has worked in favour of India at many levels, a point the paper would further explore in the following section.

Can India Fill the Vacuum?

South Asia does not feature in the top 15 of WTO's list of world exporters in terms of intermediate goods. However, India is the fifth largest importer of such goods. This indicates the size of the consumption market that India has to offer, and the way it can benefit the MNCs. Tech firm Apple shifted part of its production to India from China in 2022. This is the first time when Apple phones were not assembled in China and released in the same year. While the plan has started with an assembly line, Chennai's factory is all set to produce a fraction of all the iPhone in India by 2025. This move comes as a part of plan to decouple manufacturing operations from China in the light of its zero-covid policy that had given its supply chains a jolt accompanied by escalated trade tensions between China and the US. Furthermore, this action by a big firm like Apple had an influence on another corporation as well. Likewise, another anecdotal evidence comes from the Mercedes Group, which made early transfer of technology in the cycle of production of the advanced Mercedes Benz EQS to India. This is one of its kind luxury sedan in electric mode from the Mercedes⁸. While the car is designed in Germany,

assembled in Sindelfingen, its components are sourced from various parts of the world. It has been a remarkable achievement for India, as it joined this chain and emerged as a manufacturing centre in Asia, and the assembly line started in Pune for delivery in the Indian market along with planned export projects. Another project in the pipeline that signals India's lead in South Asia as a manufacturing alternative to China has been the recent collaboration between Foxconn Technology Group partnerships with Vedanta to develop a chip-making fabrication unit worth \$19.5 billion in the Indian state of Gujarat. This would be the first semiconductor plant in India, and could prove to be a game changer in times to come, owing to the importance of chip and semiconductor industries and their increased importance. These new developments will also boost the Indian economy as it provides employment to the educated chunk of population, while the firms get an affordable work force. These examples also signal the fact that India is rapidly taking up China's space, and new foreign investors are willing to set up factories in India. Moreover, none of these industries have announced any new plans for manufacturing units in China, which clearly indicates that the shift is underway. India has the chance to complement, if not replace China's lead in the manufacturing and supply chain structure, and make gains from technology transfer, skill upgradation, get foreign exchange from exports and at the same time offer jobs at local level to all brackets of people. The manufacturing factories are gaining good currency in India, and sectors like pharmaceuticals, automotives and electronics assembly are already functioning smoothly. Foreign investors are increasingly finding India as an attractive option because of both economic and geopolitical factors. Even if the companies try, they cannot keep themselves aloof from the geopolitical dynamics. This has been true for firms like Apple, which followed the call given by President Joe Biden in its Indo-Pacific Economic Framework (IPEF). POTUS sought a strategy to decouple supply chains from China and shift the lines to more trusted, and if possible, democratic partners like India and other Southeast Asian economies. This also indicates that the US considers China its direct strategic and trade competitors. Hence, MNCs often fear that an escalation between these two can directly affect their trade. Therefore, they are equally inclined to shift bases to a more stable zone¹⁰. The IPEF has been trying to make this trade rivalry with China more systematised, as they have started to organize more ministerial level meetings. Although, India has been in consonance with their outcome, it has refrained from signing any trade related policy. However, a successful unfolding of IPEF would bring best practices in supply chain resilience, bring more FDI and strengthen the regional supply chains along with bringing investments for supply chain logistics, advance digital connectivity and improve the cyber security capabilities of major firms and IT sector. The economic front in the supply chain calculations in India offers a great deal of incentives for the investors due to the size of the Indian economy. It offers a low-cost workforce which is a trainable and humungous middle class whose purchasing and investing capabilities are growing, which in turn, expands the consumer pool of an economy. Furthermore, India has been coming to terms with the changed realities of the world and making changes to its trade policies. Increasingly, it is trying to unfold policies

that make India a desirable destination for foreign investors. India's supply chain determinants like cluster development, skill labour availability, competitive prices, ports facilities, etc are rapidly moving up and matching the scale of China. In addition, India also has a well-developed service sector and ICT support along with a range of services including finance, transport, and logistics. India can further develop these areas by investing more in research capacity for the service sector, R&D, and by participating in more trade agreements with the advanced economies. Prime Minister Modi has been keen on developing the trade ties and placed a renewed emphasis on preferential trade, and more bilateral trade deals. A prime example of this is the UAE-India Comprehensive Economic Partnership Agreement that came into force in 2022¹¹, along with Australia-India FTA talks, likewise, negotiations are going on for a trade deal between India and the UK. In the post-Brexit era, the UK is looking for renewed ties with potential partners, and India is one such lead. There were six rounds of talk to close the deal with the UK indicating the attention and enthusiasm India is showing to get the trade deal signed¹². India's trade talks with the European Union (EU) are also being revived. They have covered nearly 23 areas, and if it gets concluded it would give a great boost to the Indian economy, owing to the fact that after the US, the EU is India's second largest trading partner. Hence, the potential is huge. Moreover, the EU is equally involved in global supply chains and is in consonance with East Asian economics in terms of intermediate goods export. An agreement between India and EU would reap benefits for both the parties, and give greater market access, less traffic, barrier free trade and ease of movement for professional and business purposes. India is motivated to get these deals through as they are with the Western economies, and offers a strategic edge to India in the wake of growing protectionism, and geopolitical tensions in the region¹³. India aims at establishing deep economic integration, and projects itself as a force to reckon with. However, to fully realise these achievements, Indian businesses would need to change their strategies and include measures to raise productivity and standards of their goods, and prepare for a global competitive edge. These challenges have been acknowledged by the Indian government and they have announced a plan in August 2022 to restructure the Department of Commerce and address the amounting issues¹⁴. This must be accompanied by implementing the long due second-generation economic reforms and taking measures to eradicate red tapism, bureaucratic hurdles, push for green alternatives, provide effective power supply, invest in quality education and research, promote more skill-oriented ventures, and make the best use of the population as a resource¹⁵. Lastly, the factors of intellectual property and legalisation must be taken into account and the gap between public and private sector has to be bridged for the system to work efficiently. Unlike in countries like the US or China, the gap between India's government and private sector is extremely significant and this has affected the potential of an encompassing holistic development. This can be rectified if the government engages in more dialogue with private domestic stakeholders, remove barriers and make data sharing more hustle free. This way, the output would be more, and the economic progress would be there.

What is in Store for South Asia?

India is at a better position in terms of establishing itself as a regional leader in South Asia at this time in history than ever. The two key indicators that determine the South Asian lead are the level of sophistication that the supply chain manufacturing has reached and the kind of national environment prevailing for the businesses. If we consider the country wise profile, then Pakistan is out of calculations in terms of regional supply chain race simply because its economy and domestic political environment both are unstable. Moreover, trade between India and Pakistan, despite being small, takes place through third party channels like UAE. Thereafter, countries like Nepal and Bhutan suffer a natural disadvantage that they are landlocked countries and the trade costs are high, this makes them an uninviting destination for FDIs. Maldives being sea-locked suffers from impediments of providing infrastructure and trade logistics, container ports and financial investments that match the world standards. Hence, it puts it out of the competition. The only suitable players that can complement India's supply chain lead in the region are Bangladesh and Sri Lanka. India's participation in the supply chains would have a spillover effect and a natural transmission way for Sri Lanka and Bangladesh. India is witnessing a dynamic culture in its start-up industry, there is increased venture capital finance and fintech capacity that can be helpful to get more young entrepreneurs from all the countries of South Asia¹⁶. This is a ripe time for India to make the most of this opportunity. For this the government should take firm steps to promote the regional supply chains channel, one is upscaling the initiatives like Make in India and transform it to a larger programme that includes South Asia. India must use finance as a tool and support manufacturing companies in Sri Lanka and Bangladesh. These countries excel in food processing, garments, textiles, and automotive and hence can be exploited by India¹⁷. India should try to push for a comprehensive FTA deal with Bangladesh and update the current FTA with Sri Lanka to facilitate a rule-based trade order in the region. These initiatives would facilitate the integration of these economies in the supply chain with India as the centre, and will reap mutual benefits in terms of industrialisation, job creation and income growth. The FTA between India and Sri-Lanka has shown good results as it liberalised import tariffs on major goods, and removed barriers. India needs to study and learn from the success of East Asian economies and their supply chain mechanism. The most crucial is the creation of a conducive environment for businesses and awareness about participation in supply chains. This means that the government should emphasize more on outward oriented strategies that are market friendly rather than pushing for alternatives. The government plays a crucial role in this kind of structure and more open trade investment, facilitating technology transfer, and keeping the market competitive are some of the things that the regime can push for. Moreover, cutting down on bureaucratic hurdles on all levels and allowing for more digitalisation in all the sectors makes businesses more attractive. The government should introduce a seamless process for taxation, customs, and business permits in all sectors. From the supply point of view, the government should promote more skill development, flexible labour market, development of competitive business approach, and encourage firms to collaborate with other geographical industries and compete globally. The potential of SMEs is

criminally underutilised in India, the government can help them by infusing easy loans, more finance, incentives, lower tax slabs, subsidies, and push for the organization of their industrial clusters¹⁸.

Another important learning is in the policy area. The recent trade wars, waves of protectionism have rekindled the debate around industrial policy and promotion of renewable energy, especially as the cause of climate change, and depletion of resources become a factor of concern for all the countries alike. Some East Asian economies have taken measures to fix market failure through industrial policies and intervention. For instance, Korea's success is attributed to the industrialisation policies and promotion of big conglomerate firms, while countries like Taiwan invested in the promotion of their SMEs for the same. China's success has come from factors like technology transfer, public ownership, subsidies in production and investment and better credit facilities clubbed with. However, while India needs to learn from the successes of these countries, it should also take lessons from its failures and not repeat them. For instance, Korea faced high losses in its heavy and chemical industry (HCI), China's 3G technology, and Malaysia's project for a national car called 'The Proton'. Hence, it is important to invest wisely, and South Asia should not copy the models directly. In India, there has been a huge pool of educated youngsters lying untapped due to their lack of skills. The government should reinvent the education policies and structures to include more skill-oriented programs along with promoting STEM education. India has better capacity to support these kinds of changes than Bangladesh and Sri Lanka¹⁹. Lastly, firms must be involved in the larger supply chains mechanism. This would not happen organically, and thus requires active push and involvement both by government and industries. Larger firms have a natural advantage because of their size and hence, their participation is more feasible. Businesses need to adopt smart business practices and should initiate mergers, acquisitions, collaborations with local businesses, clusters are a good way to move in this direction²⁰.

Conclusion

The paper made a modest attempt to analyse the changing realities of global supply chains in times of uncertainty in East Asia due to geopolitical challenge, and rising prospects for India, and South Asia as a region. The findings have been noteworthy and interesting. First, the role of supply chains that were found in more industries, and their ability to push low-income countries to the middle-income brackets, and in some case, to the high-income group as well. Second, although China and East Asian economies suffered due to the pandemic and their post covid policies along with trade war with the developed countries, their presence in the global supply chain is still significant and strong. For a downturn and shift to South Asia, a lot must be done at the part of these economies. Third, the coming of big firms to India has been a positive indicator and motivator for many other companies but for it to have better results, India would need timely intervention that remedies the loopholes. Fourth, India's lead in the supply chain will also support it at the geopolitical front and strengthen its position in the region as a leader, and would also benefit it in the unsaid competition that exists with China. Lastly, the government would need to strategize and pull together the private sector for optimum results. Businesses within

themselves also must push for better collaboration and conglomeration to enter and ace the supply chains. India is best placed to take the lead of supply chains, if it plays its cards right, it will dethrone China, and gain the strategic advantage that both its economy and politics need.

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