

Strengthening Regional Value Chain between India and South Korea: Emerging Opportunities for Trade and Investment Cooperation

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I. Introduction

The changing dynamics of supply chains and their impact on shaping international relations in East Asia have become crucial issues for scholars and policymakers. Asia's two major economies, India and South Korea, are reassessing their strategy on the changing dynamics of the supply chain. India is to redesign its developmental strategy to establish India-centric supply chains in key industries. India has stressed its endeavour to become a self-reliant economy by introducing a highly ambitious Production-Linked Incentive (PLI) scheme to attract FDI in strengthening and establishing the supply chain linkages in India, whereas South Korea has adopted a strategy

to mitigate supply chain-related risk through greater emphasis on developing strong self-reliance and promoting economic diversification by enhancing its economic ties with India. In addition, the pandemic-induced supply chain disruptions further reinforced South Korea toward diversification and resilience of its supply chain.¹ South Korea's development experience and deep investment relations with India can explore the untapped potential of bilateral trade and investment linkages. To ensure supply chain resilience both India and South Korea focus on critical sectors such as semiconductors, steels, secondary batteries and chemicals, along with new technology areas

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¹ Refer to, for example Kumar (2021)

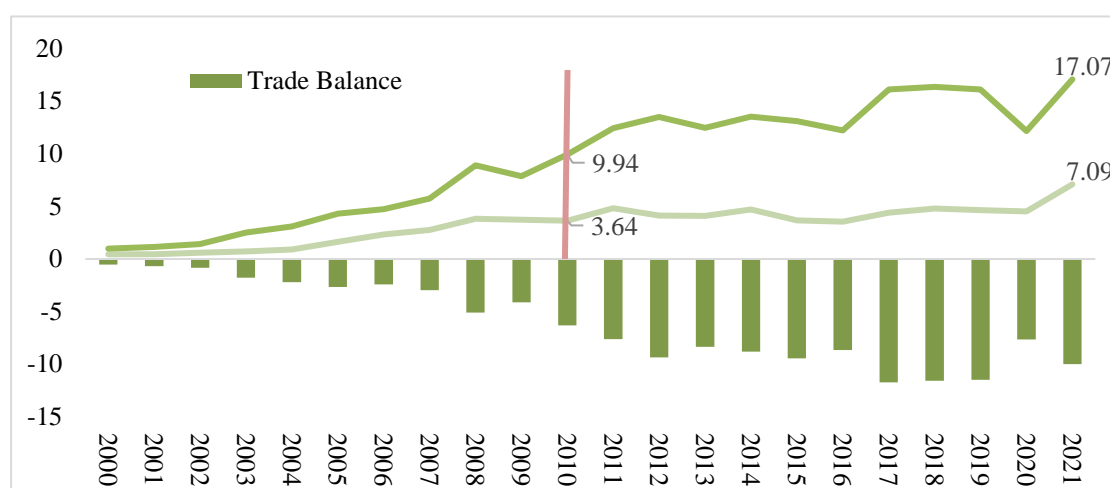
like AI, 6G, Digital Infrastructure and renewable energy for cooperation.² In this regard, the study explores the trade and investment relationship between India and South Korea and identifies the potential sectors to engage in the sustainable value chain between them.

II. Trends in Value Chain Linkages between India and South Korea

The trade relationship between India and South Korea has been growing since the implementation of CEPA in 2010.³ For instance, India's exports have grown from US\$3.64 billion to US\$7.09 billion in 2021. In the case of India's imports from South Korea,

it has grown from US\$9.96 billion to US\$17.07 in 2021. The trade deficit between India and South Korea has almost maintained about US\$ 8.5 billion in favour of South Korea. The number of products traded between India and South Korea has grown since 2001. For instance, India exported about 1,953 products in 2001 against 3,564 products in 2022. Meanwhile, India imported about 3,016 products in 2001 against 3,611 products in 2022 from South Korea. Both India and South Korea have a huge potential to expand trade in terms of the value of goods traded. Despite the higher number of products traded between India and South Korea, only a few products which have a major trade value of more than US\$10 million are traded (see Table 1).

Figure 1. Bilateral Trade between India and South Korea



Source: DoTS, IMF

² Amb. Amit Kumar, Ambassador to South Korea during the forum organized by CII in jointly with Korea International trade Association (KITA) on November 10 2022.

³ South Korea and India signed the Comprehensive Economic Partnership Agreement on 7 August 2009 and CEPA has become operational from 1 January 2010. The trade deal commits the two countries on lowering

or eliminating import tariffs on a wide range of goods over 8 years period and helps expand opportunities for investments and trade in goods as well as services. Korea is to phase out or reduce tariffs on 90 percent of Indian exports while India will phase out or cut tariffs on 85 percent of Korean exports. Refer to AIC and RIS (2015) for more details.

Though India experiences a huge trade deficit with South Korea, in terms of parts and components (P&C) trade, both countries complement each other in recent years. For instance, in 2001 India's exports of P&C was about US\$15 million and India's imports of P&C about US\$131 million. Whereas, in 2022, both India's exports and imports are now close to US\$2.35 billion. This indicates an increase in value chain linkages between India and South Korea. In terms of the number of P&C products exported to South Korea, this has significantly doubled since 2001. More or less, both India and South Korea are trading about 400 products related to P&C goods in 2022. For instance, India's exports to South Korea have

increased from 188 in 2001 to 362 in 2022 (about a 10.2 per cent share in India's total exports to South Korea in 2022), whereas India's number of P&C products imported from South Korea remains almost the same in both 2001 and 2022, respectively, holding a share of about 11.5 per cent in 2022 in total imports from South Korea. Overall, about 11 per cent of products, which has a trade value of about 14 to 19 per cent in 2022, are traded between India and South Korea (see Table 1). This shows that value chain linkages between India and South Korea are very strong and growing in recent decades due to technological changes and greater trade openness.

Table 1. Trends of Value Chain Trade between India and South Korea

	2001		2011		2022	
	Exports (IND to KOR)	Imports (IND from KOR)	Exports (IND to KOR)	Imports (IND from KOR)	Exports (IND to KOR)	Imports (IND from KOR)
Bilateral Trade						
Total Value Traded (US\$ Million)	471	4,352	8,084	1,140	12,811	17,477
Total No. of Products Traded	1,953	3,016	2,953	4,348	3,564	3,611
No. of Products Traded More than US\$ 10 Million	7	20	48	206	82	276
Share of No. of Products Traded	0.4	1.6	2.3	0.7	4.7	7.6
Value of Products Traded More than US\$ 10 Million (US\$ Million)	123.5	3,413.7	6,422.8	376.1	10,001.8	14,684.5
Share of Value of Products Traded More than US\$ 10 Million	26.2	78.4	79.4	33.0	78.1	84.0
Bilateral Value Chain Trade						
No. of Parts and Components (P&C) of Products Traded	188	411	310	457	362	417
Share of No. of (P&C) Products Traded	9.6	10.5	10.2	13.6	10.5	11.5
Total Value of (P&C) Traded (US\$ Million)	15	131	316	243	2,391	2,414
Share in Total Value Traded	3.3	3.0	3.9	21.3	18.7	13.8

Source: Export-Import Data Bank, Ministry of Commerce and Industry, Govt. of India.

The major P&C sectoral trade at the SITC level are electrical equipment, industrial equipment and special machine, metal manufacturing, power generating equipment and automobiles (see Table 2). Jeong Dae-jin, Deputy Minister for Trade, Ministry of Trade, Industry and Energy (MOTIE), Republic of

Korea said, “If Korea’s outstanding manufacturing foundations such as electronics, automobiles, and steel, are combined with India’s world-class ICT capabilities, this will contribute to the development of future industries, including EVs and batteries, as well as strengthen the resilience of regional supply chains”.⁴

Table 2. Trade in Parts and Components between India and South Korea
Based on SITC Category

(US\$ Million)

SITC 3	India's Exports to South Korea			India's Imports from South Korea		
	2001	2011	2021	2001	2011	2021
Electrical equipment	6.01	24.85	64.14	65.69	234.86	508.61
Industrial equipment	2.69	24.79	66.34	33.28	284.03	380.22
Industry special machine	0.46	10.07	21.12	8.55	179	208.47
Metal manufactures	0.22	3.65	2.34	4.77	96.29	155.13
Metalworking machinery	0.91	0.66	2.68	3.65	59.05	37.34
Office/data proc machines	0.16	0.58	0.16	5.63	56.16	20.79
Power generating equipment	0.29	29.93	52.08	12.81	415.1	229.99
Railway/tramway equipment	0.23	1.06	2.29	0	35.44	6.09
Road vehicles	3.93	20.84	98.02	57.74	782.69	775.09
Rubber manufactures	0.18	7.5	2.35	1.28	31.2	6.33
Scientific/etc. instrument	0.18	2.49	3.03	5.54	51.67	32.71
Telecommunication equipment	0.15	3.8	0.99	43.96	159.17	49

Note: Standard International Trade Classification (SITC) Revision 3.

Source: Export-Import Data Bank, Ministry of Commerce and Industry, Govt. of India.

⁴ During the forum organized by CII in partnership with

Korea International trade Association (KITA) on November 10 2022.

III. India and South Korea Investment Relations

Kim (2019)⁵ examined the differential form of traditional investment strategy to GVC investment strategy in the age of 4IR. In today's world, foreign firms have more choices to choose the strategic location to produce a good to optimize the global scale to improve efficiency and meet the global competition.⁶ Particularly, South Korea is already well integrated through investment relations with India. India's investment strategy has shifted from manufacturing to process upgrading to enter the GVC. Indian governments have continuously liberalized the national foreign direct investments (FDI) regulatory framework in ambitious drives towards attracting FDI. These have been carried out presumably for achieving East Asian-like industrial development growth, which was perceived as FDI-driven export-led growth under passive industrial policies. India's FTAs, especially with the East and South-east Asian economies, were argued to offer mutually beneficial linkages to the partner countries through dynamic industrial restructuring within the region. The ensuing production restructuring was expected to lead to greater com-

petition and improved efficiency; as well as gains from greater inter- and intra-industry specialization, economies of scale, and learning-by-doing.

India's investment in South Korea is very minimal compared to South Korea's investment in India. South Korea's investment in India is four times (US\$ 4 Billion between 2010 and 2021) higher than India's investment in South Korea. Most of India's investments in South Korea are in Automobile and Automobile Components (33 per cent); the Services sector (13 per cent); Iron and steel (11 per cent), Construction (7 per cent), and Electrical equipment (5 per cent). Some of the major Indian firms are Mahindra Pvt. Ltd, Tata Dae-woo Commercial Vehicle Co. Ltd., Tata Consultancy Service, Jindal Stainless Limited, L&T Infotech, Wipro Technologies, etc. In the case of the sectoral composition of South Korea's investment in India, about 50 per cent of the firms invested in Manufacturing, 20 per cent in financial services, and about 10 per cent in transport and allied services. The prominent South Korean firms in India are Hyundai, POSCO, Samsung, Kia Motors, LG, etc.

⁵ Refer to, for example, Kim (2019).

⁶ Refer to, for example, Chung (2016).

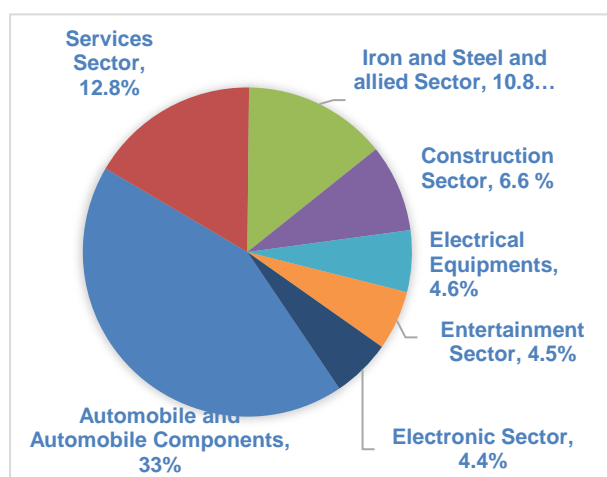
Table 3. Investment Relations between India and South Korea

	South Korean Firms Invested in India	South Korea's FDI Inflow to India	Indian Firms Invested in South Korea	India's FDI Outflow to South Korea
	<i>in Numbers</i>	<i>US\$ in Million</i>	<i>in Numbers</i>	<i>US\$ in Million</i>
2010	36	159.19	1	0
2011	42	64.72	4	463
2012	39	352.66	3	2
2013	43	27.76	4	76
2014	36	72.78	5	1
2015	71	46.72	8	2
2016	363	862.52	1	0
2017	185	365.81	2	0
2018	438	998.77	3	0
2019	275	426.96	5	47
2020	258	442.02	5	271
2021	175	238.29	2	0
Total (2010-2021)	1961	4058.2	43	862

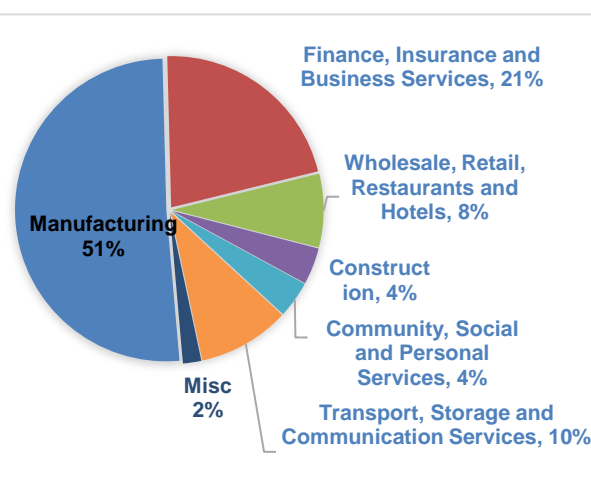
Sources: Authors' own based on Indian Overseas Investment, Reserve Bank of India (RBI) and SIA Newsletter, Foreign Investment Promotion Portal, Ministry of Commerce and Industry, Govt. of India.

Figure 2. Industry-wise Share of Firms Investment between South Korea and India

(a) Major Industry-wise Indian Firms Investment in South Korea (2008 – 2021)



(b) Major Industry-wise South Korean Firms Invested in India South Korea (2010 – 2021)



Sources: Authors' own based on Indian Overseas Investment, Reserve Bank of India (RBI) and SIA Newsletter, Foreign Investment Promotion Portal, Ministry of Commerce and Industry, Govt. of India.

IV. Moving towards Sustainable Value Chain between India and South Korea

A sustainable supply chain is a way forward. To move in this direction, resiliency in supply chains is necessary. To facilitate trade and value chain integration, most countries have given significant weight to the supply chain resilience factor, among other things. To improve the regional and global value chains, India has extended a priority to infrastructure efficiency and supply chain visibility. India has introduced Production Linked Incentives (PLI), which aim to enhance global value chain participation, foster building domestic capabilities with its investment incentives, make it a pertinent part of the global supply chain and promote India's export by incentivizing domestic and foreign manufacturers in the key sectors.⁷ The PLI scheme was instituted in April 2020 to boost the manufacturing of specified electronic components, and in November 2020, it was further extended to ten other sectors including food processing, textiles, telecom, automobiles and auto components, especially steel, electronics, solar photovoltaic modules, and white goods. It provides an incentive of 4 to 6 per cent on incremental sales of goods manufactured in India and covered under target segments for five years.

The scheme targeted 14 key sectors and implemented a \$27-billion incentive scheme to

help the country build a solid manufacturing base.⁸ It expects to generate \$520 billion in manufacturing output over the next five years. The key focus of the PLI scheme is to incentivize the manufacturing of parts and components and not incentivize the manufacturing or assembling of finished goods. The purpose of PLI schemes is to cover more products under non-tariff measures to make imports more expensive and thus revive the indigenous companies' production and the demand for their product, besides establishing backward linkages with the MSME sector in the country. The government is also planning to extend the PLI scheme to bicycles, footwear, some vaccine materials, shipping containers, and certain telecom products.⁹

India has invited leading South Korean companies to participate in the PLI schemes, particularly, Samsung (mobile manufacturing), LG Chemical (battery manufacturing) and Hyundai (automobile manufacturing) were invited to take advantage under the PLI scheme (The Guru 2020). Hence, it is clear that in collaboration with multinational corporations (MNCs) from like-minded countries such as Korea, India wants to establish an India-centric electric vehicle battery supply chain. Apart from conglomerates, South Korean SMEs have enhanced their presence in India and become an important partner in India's effort to become a hub of the global supply chain in critical industries.

⁷ Refer to PIB (2020).

⁸ *ibid.*

⁹ Refer to ETGovernment (2022).

South Korea has adopted a new developmental plan to secure the supply chain in key strategic sectors, to reduce Korean companies' over-dependence on its leading economic partner, and to diversify the country's economic relations by deepening Korea's economic ties with Southeast Asia and India under the New Southern Policy (NSP). Geopolitical and geo-economic factors have played a key role in shaping South Korea's regional economic strategies (Kumar 2015). Recently South Korea unveiled its Indo-Pacific Strategy,¹⁰ which has emphasised expanding regional economic security networks for stable and resilient supply chain management in the Indo-Pacific. The strategy also outlines that *“India presents great potential for growth.....while strengthening the foundation for enhanced economic cooperation by upgrading the ROK-India Comprehensive Economic Partnership Agreement (CEPA)”* pg.16.¹¹ Therefore, the strategy would have scope to further strengthen the value chain linkages between India and South Korea.

V. Concluding Remarks

India and South Korea have been attempting to improve supply chain linkages as well as searching for resilient and long-term value chains. India's economic potential, market power, and the quest to build an India-centric

supply chain can provide enormous opportunities for South Korean companies to grow and diversify their supply chain. India and South Korea may consider engaging in supply chain resilience in the context of strengthening supply chains through exploring alternative sources of supply of raw materials and attracting investment for sustainable supply chain in the focused areas of automobiles, electrical, electronics, iron and steel and food processing.

India and South Korea may devise policies and incentives for multinational corporations (MNCs) to promote local-affiliate manufacturing, local sourcing of parts and components, and technology transfer to local manufacturers, allowing for maximum spillover benefits for supply chain resilience. For instance, the PLI schemes and *“Make in India for the world”* initiatives aim to improve domestic production while also attracting foreign direct investment. Such an incentive is worth replicating for strengthening the value chains between India and South Korea.

India is becoming an attractive destination for South Korean startups that are eyeing overseas expansion, given the country's vast population and diverse markets offering rich opportunities for potential investors. With the rising popularity of K-culture such as KPop, Kdramas, and K-beauty, Indians are welcoming Korean products and want to experience them.

¹⁰ Refer to for more details on the government of the Republic of Korea (2022) strategy, which has drawn nine core lines of effort. The fifth core line on 'Build Economic Security Networks' aims to build supply chain

resilience networks and economic partnership with the partners of Indo-Pacific.

¹¹ Ibid.

As a facilitator, we see exciting growth opportunities for both Indian and South Korean companies to work together and complement each other. The Circle: Founders Club assisted 13 South Korean startups in EduTech, Healthcare, E-Commerce, AI and Cybersecurity.¹² India-Korea Startup Hub (21 February 2019) is a one-stop platform to facilitate innovation and promotes self-employed youths, and micro-entrepreneurs to share knowledge, ideas and innovations between the two economies.¹³ IIT Kanpur has signed an MoU with Korea Startup Forum, COME Up Startup Festival, 2022 to provide opportunities for co-incubation and technology exchange. Several Korean Startups are operating in the Indian market, such as GOT TEA, a Bubble Brew Company which offers bubble tea in India and has set up multiple stores in Delhi NCR, India; True Balance, offering financial services; SPIGEN, selling mobile accessories through e-commerce platforms in India; Duru Corporation, which offers consultancy services; and I-KETS and MsoStudy, which offer EduTech Solutions.¹⁴

Most of the startups in India are in the Services sector. Further ease of doing business environment is required to promote start-ups in the manufacturing sector. Creating a single-window system, easy accessibility of credit support from financial institutions, less bureaucratic intervention, and incentives for new ideas and innovation, R&D would encourage self-employed youths and entrepreneurs from both countries.

A dedicated Industrial Zone¹⁵ for South Korean investors in other regions of India would attract Korean SMEs. Punjab State in India has already shown interest to set up an Industrial Park and is seeking South Korea's support for the development of smart cities in Punjab. The ongoing Comprehensive Economic Partnership Agreement (CEPA)¹⁶ negotiations between India and South Korea shall take into consideration strengthening value chain linkages between the countries. Thereby, negotiations should comprehensively adopt an integrated approach in terms of trade in goods and services and investment policies to ease and promote the supply chain. **KIEP**

¹² Refer to Bora (2023).

¹³ https://www.startupindia.gov.in/content/sih/en/international/India_Korea_startup_hub.html

¹⁴ Refer to NDTV (2022) for more details.

¹⁵ PM Modi during his visit to South Korea in 2015 announced "Korean Plus" and launched in June 2016 the dedicated mechanism for handling of Korean investors. Korean Industrial Park in Rajasthan – Rajasthan State Industrial Development and Investment Cooperation (RIICO) and South Korean Trade Promotion Agency (KOTRA) signed an MoU in March 2013. But South Korean investors did not show much interest due to high land price and issues related to land agreement.

¹⁶ Bilateral negotiations with India on upgrading CEPA have resumed after three years. The 9th round of upgradation negotiations was held on 3-4 November 2022. The 10th Round will be hosted in India in early 2023. Growing trade deficit between the two countries is a concern for India. Exploring a win-win approach – forward looking and outcome-oriented to strengthen and deepen the economic cooperation between India and South Korea, will be necessary. Issues related to sub-groups on Trade in Goods, Services, Rules of Origin, Investment, Non-Tariff Measures (SPS/TBT) are a major part of the discussion. Refer to PIB (2022) for more details.

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