



INDIA'S CRUCIAL GVC OPPORTUNITY

INDIA MUST AIM TO ADD \$1.2 TRILLION TO ITS FOREIGN TRADE VIA DEEPER PARTICIPATION IN GLOBAL VALUE CHAINS BY 2030

A GTRI REPORT

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India's Crucial GVC participation Opportunity:

India must aim to add \$1.2 Trillion to its Foreign Trade via deeper participation in Global Value Chains by 2030

Global Trade Research Initiative

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Preface

This report elucidates the imperative for India to unlock its export potential through active engagement in Global Value Chains (GVCs), targeting a substantial increase of US\$1.2 trillion in foreign trade by 2030.

With a focus on streamlining trade infrastructure and embracing the 'Servicification of manufacturing,' India's journey towards realizing its export ambitions is unveiled in the following pages.

We would be happy to receive your feedback at ajay@centrefortrade.com

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Executive summary

This report underscores the imperative for India to bolster its foreign trade by an ambitious US\$1.2 trillion by 2030, with a specific focus on actively engaging in higher-value segments of Global Value Chains (GVCs).

This endeavour entails increasing merchandise exports by US\$400 billion and services exports by US\$300 billion.

Currently, India's limited participation in GVCs hampers its export potential, despite possessing substantial manufacturing capabilities across various GVC-relevant product categories.

Approximately 70% of global trade operates within GVCs, encompassing a wide range of products, from electronics and machinery to pharmaceuticals and apparel.

India's weak GVC integration can be attributed to poor trade infrastructure, causing delays at ports and customs, which are detrimental to the timely flow of goods in these intricate value chains.

Other leading nations like China, Japan, South Korea, Thailand, and Malaysia have excelled in GVCs due to investments in quality trade infrastructure.

To actualize these goals, India should consider the following key steps:

- **Streamline Port and Customs Operations:** Automate procedures and implement green channel clearances for efficient handling of shipments.
- **Improve Ship Turnaround Time:** Match global best practices to reduce queues and optimize infrastructure use.
- **Establish a National Trade Network (NTN):** Create an online platform for export-import compliance processes.
- **Ensure International Quality Standards:** Strengthen adherence to global quality standards and certification systems.
- **Target High-Value GVC Segments:** Focus on product conceptualization, design, prototype development, and after-sales services.
- **Attract Top Global Firms:** Invite anchor manufacturers in priority sectors to drive innovation and technology adoption, replicating success stories like Maruti-Suzuki's impact on India's automobile sector.

By undertaking these measures, India can enhance its participation in GVCs, realize higher export values, and propel its economy towards the desired US\$1.2 trillion foreign trade target by 2030.

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India must aim to add \$1.2 Trillion to its Foreign Trade via deeper participation in Global Value Chains by 2030

1-The GVC promise

India must aim to boost its foreign trade by US\$1.2 trillion by 2030 by actively engaging in higher-value segments of Global Value Chains (GVCs). This involves increasing merchandise exports by US\$400 billion and services exports by US\$300 billion.

Currently, India's limited involvement in GVCs hampers its export potential, despite possessing substantial manufacturing capabilities in various GVC-relevant products. India stands at a pivotal juncture as numerous GVCs are reorganizing and looking to diversify away from China.

2-GVC basics

GVCs involve the collaborative production of goods and services across different countries, where each country specializes in specific stages of the production process. Major multinational companies lead this process, strategically allocating tasks such as design, manufacturing, assembly, distribution, and after-sales services to countries with efficient and cost-effective capabilities.

Today, approximately 70% of global trade operates within GVCs. These chains encompass a wide range of products, including electronics (like laptops, tablets, TVs, washing machines, and refrigerators), complex machinery, pharmaceuticals, automobiles, petroleum products, as well as simpler items like clothing and shoes.

3-Understanding true GVC linkages

Countries participate in GVCs by engaging in either backward or forward linkages. Backward linkage is when, for instance, India imports cotton fabric from Italy to make and export shirts. Forward linkage occurs when India supplies auto components to a German automaker for use in car production. However, these transactions fit within the GVC framework only when a leading company oversees the supply chain, and goods move under strict time constraints. Transactions between isolated buyers and sellers do not qualify as genuine GVC operations, a point often overlooked by academics and researchers.

4-Why is India's GVC integration weak?

Poor trade infrastructure is the main reason India struggles to participate effectively in Global Value Chains (GVCs), despite its diverse manufacturing capabilities. In GVCs, smooth and swift movement through ports and customs is crucial, as any delay can disrupt the entire production process.

GVCs often require tight production schedules. For instance, smartphones and laptops need rapid production to keep up with technology trends. The fashion industry faces time limits due to changing consumer tastes. Car assembly lines rely on timely parts delivery to minimize costs. During health crises, medical products like vaccines and diagnostic kits have strict time constraints, demanding efficient production and supply schedules, overseen by the lead firm.

Delays at ports or customs can jeopardize the entire production chain, leading to firms and even countries being excluded from the network. Countries like China, Japan, South Korea, Thailand, and Malaysia have become high-tech manufacturing leaders by investing in quality trade infrastructure. India, however, falls short in ensuring efficient entry and exit at most ports and customs.

This issue is reflected in export data. Although India's overall share in world trade is 1.8%, its share in electronic, telecom, and high-tech products is less than 0.5%. This limitation restricts India's manufacturing and export potential. GVC participation is crucial to improve exports in these sectors.

India does export garments, engineering products, and generic medicines in significant volumes, but these exports typically don't operate within GVCs. They lack strict time constraints, resulting in lower unit values. Exporting these products within GVCs would yield higher foreign exchange earnings and more significant business opportunities. For example, Bangladesh's garment industry, despite not producing fabric, outperforms India due to its alignment with GVC lead firms

5-Target products for enhanced GVC participation

India has deep capability to produce and export the following products, but a large part of exports is outside the true GVC principles of having a lead firm and just-in-time supplies.

- Pharmaceuticals including active pharmaceutical ingredients (APIs) and finished pharmaceutical products.
- Automotive Components such as engines, transmissions, electronics, and precision components.
- Textiles and Apparel for fashion and retail sectors.
- Electronics and Consumer Electronics including smartphones, TVs, and appliances.
- Chemicals and Petrochemicals
- Engineering and Machinery including equipment, and industrial products that are used in various industries globally.
- IT hardware products like laptops, tablets, and computer peripherals

India should endeavour to increase the share of exports under GVC for these products to realise high values

6-How Indian services sector can promote participation in GVCs?

The Indian services sector can boost its participation in Global Value Chains (GVCs) by aiding integration with new technologies and offering essential services, particularly as the trend of 'Servicification of manufacturing' gains prominence in GVCs.

India's expanding service capabilities can assist GVCs in adopting technologies like the Internet of Things (IoT), artificial intelligence (AI), and blockchain to improve supply chain visibility and efficiency. Business services, such as auditing, accounting, R&D, consulting, and the development of digital and AI capabilities, account for 25% of India's services exports. These services are often delivered through 1500 Global Capability Centres (GCCs) established by multinational corporations, which already provide services to various GVCs.

Servicification of manufacturing highlights the growing importance of services within the manufacturing sector. As products become more complex, they require additional services for support and maintenance. For example, General Electric offers maintenance, repair, and consulting services to support its industrial products, while Siemens provides installation, commissioning, and maintenance services for its industrial products. India, with its active GCCs in R&D, design, branding, and retail services, can play a more significant role in manufacturing GVCs

7-Steps to boost India's GVC participation

India can boost its participation in Global Value Chains (GVCs) by taking six key steps:

1-Streamline Port and Customs Operations: Automate port and customs procedures, and implement green channel clearances for 99% of shipments. Start by analyzing the top 10,000 exporters responsible for 85% of India's exports.

2-Improve Ship Turnaround Time: Match global best practices for ship turnaround times, reducing queues, speeding up transactions, and optimizing infrastructure use. Enhance communication between traders and shipping companies, port operators, and Container Freight Stations (CFS).

3-Establish a National Trade Network (NTN): Create an online platform for all export-import compliance processes. NTN enables exporters to submit all required information and documents in one place, eliminating the need to interact separately with customs, DGFT, shipping companies, ports, and banks.

4-Ensure International Quality Standards: Strengthen adherence to global quality standards and certification systems to meet international market demands. Work towards standard convergence and interoperability, establish an institution for standard development, set up internationally accredited testing laboratories, and sign Mutual Recognition Agreements (MRAs) with partner countries.

5-Target High-Value GVC Segments: Focus on high-value segments of GVCs, such as product conceptualization, design, prototype development, and after-sales services. Notable countries like the US, Germany, Japan, Taiwan, and South Korea excel in R&D expertise at the high end, while China specializes in final assembly at the lower end.

6.Invite top global firms to become anchor manufacturers in priority sectors. We know their names. Apple and Micron are a good beginning. With thousands of manufacturing units in most sectors, India needs a few large anchor firms in each sector. Their use of innovation and technology will result in gains for all firms in the entire sector – the way Suzuki did to India's automobile sector in the early 1980s. Suzuki's technology and India's expertise in casting, forging and fabrication were crucial factors. In less than 20 years, the sector's productivity, and not just Maruti-Suzuki's productivity, went up by 250%. Mainly due to competitive pressures set off by Suzuki. Today the automobile sector contributes to the fourth of the manufacturing GDP. We need a repeat of the Maruti story for a few other sectors for enhanced GVC participation.

Annexure

8-How iPhones, Laptops, are produced under GVCs?

Apple's iPhone. R&D and critical component design in the USA. Taiwan produces semiconductor chips. South Korea makes OLED displays and semiconductor components. Japan manufactures memory chips, capacitors, and sensors. Malaysia, Vietnam, and Thailand produce specific components or assemblies. All these components and subassemblies are sent to China, where final assembly takes place in facilities operated by Foxconn, Pegatron, and Wistron. Apple manufactures iPhones in India, and its supply chain involves various countries for different components. Here's a simplified process:

Laptops. Taiwan produces processors and semiconductors, South Korea makes displays, memory chips, and storage devices, and Japan manufactures batteries, sensors, and some semiconductor components. Malaysia, Thailand, Indonesia, and the Philippines provide labor and assembly services, along with making components for specific brands. Vietnam handles assembly operations for a few brands. China is where 90% of laptops are ultimately assembled, with major manufacturers like Lenovo, Dell, Acer, and ASUS having manufacturing facilities there

Simple products made under GVCs. GVCs don't only apply to complex electronics; they also involve simple products like shirts, chocolates, and bicycles.

For a shirt, yarn from India goes to China for fabric production, which is then sent to Spain for dyeing. The dyed fabric is further processed in Morocco, Bangladesh, or Vietnam, where it's cut and sewn into shirts before being shipped worldwide.

Belgian chocolates include hazelnuts from Turkey, palm oil from Malaysia, cocoa from Ghana, sugar from Europe, and vanilla from the US in their production.

High-end bicycles feature components from various countries: brakes and pedals from Japan, wheels and frames from China, and saddles from Italy.

The brief is prepared by Ajay Srivastava

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About Global Trade Research Initiative

GTRI aims to create high-quality and jargon-free outputs for governments and industry on issues related to trade, technology and investment from the perspective of development and poverty reduction.

Mr Ajay Srivastava is the co-founder of GTRI. He took VRS from the Government of India in March 2022. He is an Indian Trade Service officer with experience in trade policy making, WTO and FTA negotiations. He did MBA from Indian School of Business.

Feedback

Your feedback on this report is most welcome. Please email at ajay@centrefortrade.com.

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