A COMPARATIVE STUDY OF IMPORT TARIFFS IN ELECTRONICS 2023

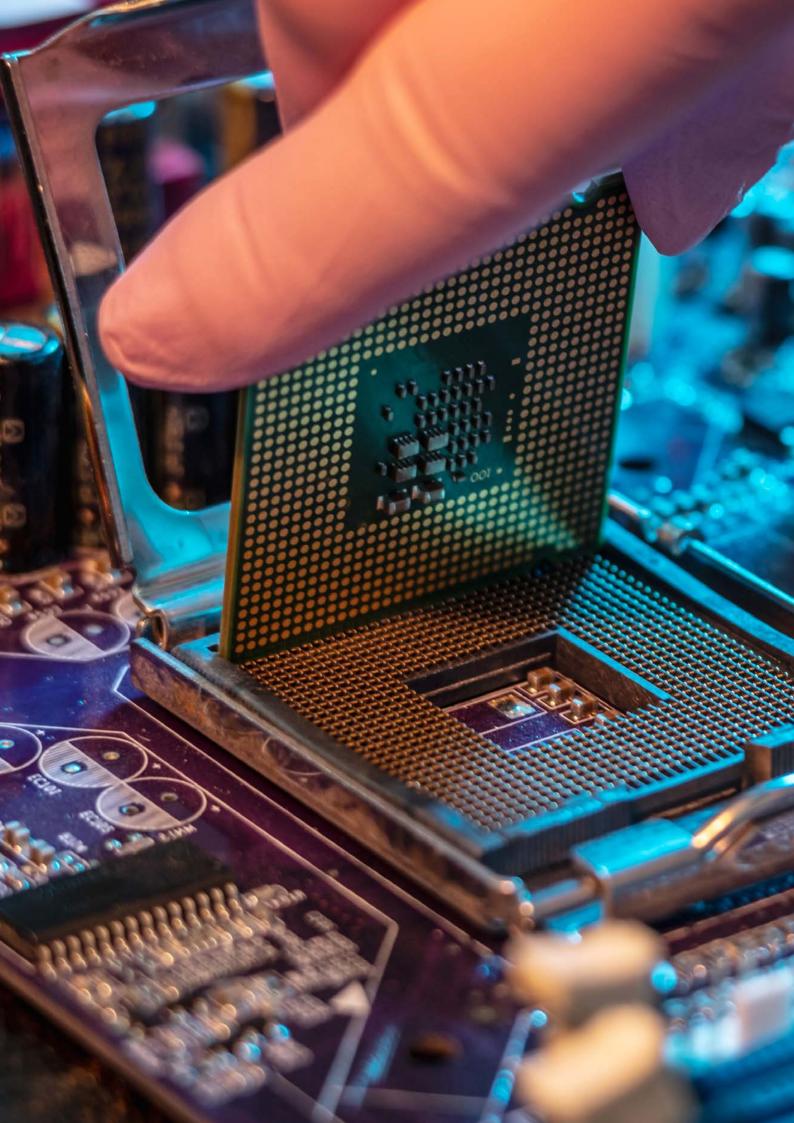
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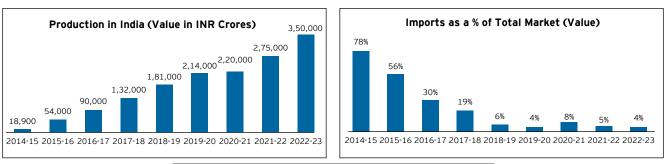
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Executive Summary



Executive Summary

The mobile phone manufacturing industry has delivered a stellar performance since 2015. Manufacturing value has grown 14.6 times in USD terms in seven years, from Rs.18,900 Crores (USD 3 billion) in 2014-15 to Rs.3,50,000 Crores (USD 44 billion) in 2022-23. From a situation where 80% of the domestic demand was supplied by CBU¹ imports, India has come a long way as exports of mobile phones have hit Rs.90,000 Crores (USD 11.1 billion) in 2022-23, which is evident from the export chart as given below:



Mobile Phone Production, Imports and Exports 2014-2023



Source: ICEA

Mobile phone import has shrunk from 78% and India has become a net exporter of mobile phones. The current level of imports is only approximately 10,000 Crore per annum.

India is now not satisfied with this stellar achievement and want to sit on the high table of exporting nations of mobile phones and electronics.

Electronics products are among the top ten export items for a number of countries which have become relatively large exporters in the world. India too has identified electronics, and within that the mobile phone sector as the priority sector for investment and exports. The Vision Document on electronics¹ targets growth of Indian electronics to US\$ 300 billion by 2025-26. Of the US\$300 billion production, exports are expected to contribute around US\$ 105 to US\$ 130 billion or 35% to 43% of the total output. This Document also emphasizes that high growth in electronics production and exports can be achieved, provided the relevant supportive policy regime is in place for India's producers/ exporters.

For sustaining India's production and exports target for 2025-26, the growth rate of exports has to be even higher (64.5% to 76.6%) than the highest annual growth rate (55.5%) achieved during the

¹ Completely bulit unit in this case mobile phones

² https://icea.org.in/blog/wp-content/uploads/2022/01/FinalReport_VisionDocument_24012022.pdf

period 2015 to 2022-23. Very focused attention and policy support is therefore required to ensure achieving the targeted growth of the electronics sector.

The focus of this report is on mobile phones as they account for 40% of electronics production, and a very significant momentum for export growth is expected to come from mobile phone exports. Therefore, it is very important to examine the global competitiveness of Indian mobile phone supply chain and some of the key electronics products including laptops/tablets and components. This report assesses the relative impact of tariffs on costs for India vis-a-vis the competing economies.

Policy Support for achieving export targets

The Vision Document mentions specific policy measure for the package for shifting the ecosystem to enable high growth levels. These measures include **"stability in import tariffs (for the existing ecosystem)**, **... decrease in import tariffs (for components with no manufacturing base in India)**, **... encourage major foreign manufacturers to set up components ecosystems in India**, **... clarity in foreign investment policies**, **... development of skillset**".

The Government on 6 October 2020, launched the Production Linked Incentive (PLI) Scheme for Mobile Phones which offers incentives of 4-6% on incremental sales over a period of 5 years. Under the scheme over the next 5 years, the approved companies are expected to produce more than INR 10,50,000 crore (INR 10.5 lakh crore). Out of the total production of INR 10,50,000 crore in the next 5 years, around 60% will be exported. The companies approved under the scheme in next 5 years are expected to generate more than 2 lakh direct employment opportunities along with creation of additional indirect employment of nearly 3 times the direct employment. The growth of the ecosystem subsequently will add significantly higher numbers. The Domestic Value Addition is expected to grow from the current 15-20% to 35-40% in case of Mobile Phones.

Similarly, the government has also notified the PLI 2.0 scheme for IT Hardware, on 30 May 2023. This Scheme increased the cumulative financial outlay from Rs. 7,325 crore to Rs. 16,939 crore with an average incentive of more than 5% over six years. This revised scheme is expected to create 75,000 direct jobs and over 2,00,000 indirect jobs.

However, increasing tariffs on inputs increases the cost of production of finished products, thereby reducing competitiveness vis-a-vis countries that are in competition with India in the global markets **for both finished products or inputs in global value chains**. Furthermore, increasing tariffs on inputs also **negate** the support provided under the PLI scheme for large electronics. Therefore, since the strongest momentum has to come from exports, the increase in costs becomes a major policy issue to keep in mind. Despite the instruments available for duty free imports for exports, higher tariffs may perpetuate imports rather than substitute imports for exports. Hence they may work against indigenisation rather than promote indigenisation.

Tariff is an important policy of India which differs from competitors

The past tariff policy was instituted when mobile manufacturing was nearly at ground zero. In general, the countries competing with India in the global electronics market rely on industrial policy measures which have an orientation largely similar to India, wherein the policy measures aim to support and facilitate operations within their economies for all producers. However, there is one major exception - the tariff policy.

Like India, its competing economies have also relied upon a combination of trade and investment policies, with an emphasis on improving domestic participation in global value chains. They

have also focused on attracting investment through subsidies, facilitating trade and improving operational conditions for investors and domestic producers. The major difference is that when compared with China, Mexico, Thailand and Vietnam, the policy package of India has higher tariffs. Furthermore, over time India has relied much more on increasing tariffs in comparison to its competing economies.

Comparing India's tariffs with top global exporters- Selecting Comparator Countries

The top electronics exporting nations include countries such as China, Malaysia, Mexico, Philippines, Thailand and Vietnam. Of these China, Mexico, Thailand and Vietnam have been chosen for comparison as these countries rose to occupy major share in electronics exports from a very small base and over a relatively short span of time.² In 1980, China's rank as an exporter was close to that of India (45 and 50th respectively) but today it is the largest exporter of electronics. It is noteworthy that in 1980, Thailand's exports were lower than those of India, and Vietnam's exports of these products only began in the late 1990s. From no exports for much of the 1990s, Vietnam is now the 8th largest exporter of these products. Mexico and Thailand also showed a major spurt and presently maintain their position among the top 15 exporters. Vietnam in particular is an interesting country for comparison as starting in late 1990s, it had overtaken India by 2008, and by 2018 its export levels were higher than India's total production of electronics in 2021-22.

120 Tariff lines for India are selected for the supply chain

For the 120 tariff lines selected for this study, **70% of the tariff lines have tariffs of 8.25% or more. Of these, about 58% have tariffs above 10%**. India's peak tariffs on imports among these lines is 27.5%. At the other end, **26.6% of the selected lines have zero tariffs in 2023** (32 lines).

No close link between the level of tariff and import share under the tariff line

High tariffs are normally imposed to reduce imports and promote domestic market production. An implicit presumption is that lower the tariff, higher the imports, and likewise higher the tariff, lower the imports. However, this conclusion is not evident at the overall level. Comparing the import shares of individual tariff lines with the tariffs imposed on them shows that both low and high tariffs are imposed on tariff lines with high import shares as well as lines with low import shares. Thus, the impact of tariffs on imports is indeterminate, and raising tariffs may not necessarily decrease imports, particularly if the product is not made in India. Instead, a higher tariff would then merely raise costs.

Comparing India's Tariffs with comparator countries

For MFN tariffs:

- (a) Each competing economy has many more tariff lines at zero duty than India.
- (b) For the 120 tariff lines, a much larger proportion of imports of the competing economies enters duty free compared to India.
- (c) A majority of India's MFN tariff lines (about 58%) have higher than 10% tariffs.

² Data for electronics exports are not available prior to 2000. For a longer-term perspective from 1980 onwards, data is available for the category Office and Telecom Equipment. These products include: electronic data processing and office equipment; telecommunications equipment; and integrated circuits and electronic components. All these are electronics products and their trends are close to those for electronics.

- (d) In contrast, the competing economies have comparatively much lower share of MFN tariff lines above 10%, ranging from about 1% (China) to 27.5% (Vietnam).
- (e) Bulk of the MFN tariffs of competing economies, ranging from 53% (Thailand) to 78% (Mexico), are between zero to 5%..
- (f) The competing economies have lower peak tariffs than India.

The same result holds for priority products identified in the electronics sector. **The comparatively** higher Indian tariffs on inputs (sub-assemblies and components) result in an increase in cost of production of India, creating a competitive disadvantage with competing economies for priority products as well.

Over 80% of Vietnam's electronics imports are from countries with which it has free trade agreements (FTA), most of them duty free or with tariffs between 0 to 5%. Therefore, the correct comparison of India with Vietnam is not in terms of MFN tariffs, but with FTA weighted average tariffs which take account of share of imports under FTA and MFN tariffs. The MFN average tariffs for India and Vietnam are 9.7% and 5.6%, but the FTA weighted average tariffs for these two countries are 7% and 1.1% respectively. These 2022 average tariff rates for India remain valid for India in 2023 as well, because the decrease of tariff from 2.75% to 0% in one line i.e. Camera Lens, does not substantively impact the overall average tariff estimate for 120 tariff lines.

Comparison of trends in tariffs, trade and trade deficits

Comparing the average MFN tariffs for individual 6-digit tariff lines of electronics across countries from the year 2015 to 2021 shows that:

- (a) India is the country which had virtually **no average tariff reduction for 6-digit lines in 2021 compared to 2015;**
- (b) India is the country for which the **largest number of HS 6-digit lines registered an increase** in tariffs.
- (c) Except China, India has the **lowest number of tariff lines for which the tariffs in 2021 remained unchanged when** compared with the year 2015.
- (d) China had lower number of tariff lines with unchanged tariffs because a large share of its tariff lines saw a decline in tariffs in 2021 compared to 2015.
- (e) The results for the competing economies contrasted with the experience of India. They had in general:

(e.1) A larger share of tariff lines for which the average tariffs of 6-digit lines remained unchanged in 2021 compared to 2015.

(e.2) Several tariff lines for which the tariffs in 2021 were lower than in 2015.

(e.3) Relatively fewer tariff lines for which average tariffs were higher in 2021 compared to 2015.

The same results are valid for 120 tariff lines and for priority products too.

When compared with the four competing economies, India has the lowest level of exports. India's import levels are second-lowest, as Thailand's imports are lower. It is noteworthy that the exports

of China, Mexico and Vietnam are higher than even the total domestic production of electronics by India. The ratio of imports to exports of the competing economies is lower than that for India. This implies that the value of imports required for a specific export volume is lower for competing economies than India. This is true across the range of economies, i.e., large economy (China), medium (Mexico), and smaller economy (Vietnam).

Even though tariffs of competing economies have declined during 2015 to 2021, their exports of electronics exceed the exports of India. The excess of electronics exports over India's electronics exports increased very significantly for China and Vietnam during 2015 to 2021, and by a small amount for Mexico and Thailand.

China, Thailand and Vietnam have registered trade surpluses during 2015 to 2021. India and Mexico in contrast have registered trade deficit during this period. India's trade deficit is much larger than that of Mexico. Furthermore, compared to Mexico, India's trade deficit in 2021 was much larger than in 2015. These results for electronics are valid also for 120 tariff lines as well.

India more open than the competing economies in 2022?

The main comparative changes in 2022 compared to 2021 were:

- (a) The number of tariff lines in India with zero tariffs in 2022 were lower than in 2021.
- (b) For the four competing economies tariff lines with zero tariffs increased in 2022 compared to 2021.
- (c) China, Thailand and Vietnam had lower tariffs in 2022. Mexico saw some increase in tariffs but its overall tariff level remained significantly below that of India.
- (d) The peak tariff for India increased in 2022 compared to 2021.
- (e) India has more MFN tariffs in the higher tariff range, in 2022 compared to 2021 i.e., above 20%.
- (f) In general, India moved towards higher tariff levels in 2021 and 2022.
- (g) Similar to 2022, the highest tariff category saw an increase in the number of lines in 2023 compared to 2021. This general result for 2022 report remains valid for 2023 as well.

Priority Products: The increase in India's tariffs for priority products, particularly for inputs, implies an increase in costs. For India and Mexico, costs increased for relatively more tariff lines of priority products than the others, though the overall level of competitiveness of Mexico remains higher than India. China, Thailand and Vietnam have seen a relative increase in their competitiveness for priority products in 2022 because of a reduction of tariffs for a number of lines compared to 2021. The relatively higher costs of producing priority products in India continues to be valid in 2023 as well. The small impact of a decline in tariff for one line from 2.75% to 0% in 2023 does not make India significantly competitive compared to 2022.

Impact of higher tariffs on the cost of production of mobiles

Higher tariffs would increase costs and make mobile phones more expensive to produce in India versus other competing manufacturing nations. The estimates in this report suggests that the cost of production of mobiles would increase by about 4% for total production, which would be more than the support provided by the PLI, since PLI is provided on incremental production and its full

implementation has yet not taken place. The domestic market which thrived for over a decade and half with the lowest (nearly zero) tariffs and lowest rates of VAT @ 4% is under great stress because of 18% GST instead of 12% since March 2020.The impact of higher tariffs along with high GST has depressed domestic demand.

Further, domestic prices of major inputs increase both because of tariffs and the rent seeking behavior of producers in India. With availability of different windows for exporters to import duty free inputs such as MOOWR, EOU, SEZ, Advance Authorisation and duty drawback, the impact of tariffs on inputs of the exported product would be mitigated, though not entirely (for more analysis of this point, see Section 7.2). The imposition of tariffs orients a significant share of production towards the domestic market, and also leads to higher prices for inputs as well as final products. A simple example is that if the value of an input is 100, and the duty on it is 15, the domestic producer of this input would price it at 114, i.e., closer to the import value. Therefore, an exporter importing inputs under the schemes mentioned above would tend to continue to do so from an established vendor rather than buying at a higher price from domestic producers.³ **High tariffs induce a rent seeking behaviour and create conflicts between GVC's lead firms and even their global manufacturers who are forced by their CFO's to try and skim the market as long as high tariffs sustain. This leads to some key parts of the PMP failing to develop optimally e.g. mechanics, display assembly.⁴**

In many verticals in India, tariffs have stymied the potential of possible growth in manufacturing. A case in point is the display assembly segment which has developed to some extent for mobile phones but is at a standstill as far as Colour TVs are concerned essentially because of import duty on components and raw materials.

A careful study of inverted duties in all verticals of electronics needs to be made immediately. For ITA products all the parts, components and raw materials should be imported at zero duty.

While schemes such as Advance Authorization reduces the cost of tariffs on imported inputs for exports, its wider impact on costs would require a much larger ratio of exports to domestic production than is currently the case for India. Such an increase in exports requires scale and cost-competitiveness. Therefore, imposition of tariffs works against both these objectives.

For investors to locate within any country, exports produced there have to be internationally competitive. This depends on the policies that impact costs of production, of which tariffs is an important policy measure. For instance, if India had the same tariffs as Vietnam, Indian mobile phones would be on an average be more competitive by about 4%. This implies that the tariff regime of India leads to a lower competitiveness of about 4% compared to Vietnam. With such a cost burden, an investor would consider locating in a place where policies such as tariff policies do not result in cost disabilities for production.

³ ICEA letter to Secretary, MEITY, Ref.: ICEA/MeitY/2022/028 February 01, 2022 4 Ibid.

Recommendations

Overall, the importance of tariff rationalization increases with complex GVCs. The increase in scale and higher participation in GVCs takes time and will happen provided tariffs are rationalized. A relatively larger scale is possible if export oriented rather than domestic market-oriented operations are the focus. A tariff increase works against such a vision. Thus, it is recommended that;

- a. Policy makers should be aware that different windows for exporters to import duty free inputs such as MOOWR, EOU, SEZ, Advance Authorisation and duty drawback, do not compensate exporters for increased tariffs on inputs. The imposition of tariffs orients a significant share of production towards the domestic market leading to higher prices for inputs as well as final products.
- b. Tariffs need to be rationalized for achieving both scale and export objectives. Shifting of GVCs is much more likely when tariffs are rationalized.
- c. The Government should engage in a detailed exercise on improving competitiveness vis a vis Vietnam and then accordingly make Indian tariffs more competitive with a view to reduce them.
- d. Tariffs should include a consideration of India's ambitions of self-sufficiency and transitioning to a global hub for manufacturing and exports. Furthermore, the government should also engage in industry wide consultation along with its nodal ministry before any tariffs are decided.
- e. Government should move to evidence-based tariff setting as the way forward, wherein comparisons must be made with competing manufacturing economies such as China, Mexico, Vietnam, Thailand etc., as India is trying to acquire higher global market shares.
- f. Duties which are stymieing the development of manufacturing as is the case in many areas like open cell assembly in colour TVs should be rationalized immediately.
 - a. A review of all duties imposed in the past 5 years, their current relevance or irrelevance should be evaluated.
 - b. As the Indian rupee has fallen against the dollar by nearly 11% resulting in an increase in the cost of imported inputs, to retain competitiveness India must keep its tariff low.



01 Background



1. Introduction

1.1 Electronics: A Major Export Item for Many Countries in Global Export Markets

The electronics sector has been a major contributor to exports for a number of countries that are important competitors for India in the global markets. For India too, electronics is a major area of emphasis, as shown for instance by the first set of Production Linked Incentive (PLI) Schemes announced in March 2020.⁶ The honourable Prime Minister Modi in his speech on 6th August 2021 laid out a vision for manifold increase in India's exports and participation in global value chains.⁷ Table 1.1 shows the importance of electronics exports for most countries. Almost 15% of global merchandise exports are electronics and it contributes to major parts of a growing services exports base. It is significant that for the largest exporting nation, China, contributing over 20% of global exports of all products, electronics is the top most export category.

Country	Number of Top Ten 6-Digit HS Export Categories Which Are Electronics Items	HS 6-Digit Electronics Category is the Top-Most Export Category
China	8	Yes
Vietnam	7	Yes
South Korea	6	Yes
Malaysia	4	Yes
Mexico	4	No
Singapore	3	Yes
Japan	3	No
Thailand	1	Yes

Table 1.1. Number of Electronics Items in Top 10 Exports Items at HS 6-Digit Level

Source: ITC Trade Map

1.2 Bringing the Vision to Reality

1.2.1 High Growth of Electronics Sector Is Possible for India

The Vision Document,⁸ whose estimates have concurrence of the Government,⁹ has specified a growth path for the electronics industry in India. It projects India's electronics production to grow to US\$300 billion by 2026. Of the US\$300 billion production, exports are expected to increase from US\$10.6 billion in 2020-21 to US\$120 billion by 2026 (See Table 1.2 and Exhibit 4 of the Vision Document). Electronics exports of India have already registered a significant increase of about 42% in 2021-22 to reach US\$15 billion.

⁶ See https://www.pib.gov.in/PressReleasePage.aspx?PRID=1710134

⁷ https://pib.gov.in/PressReleseDetail.aspx?PRID=174343

⁸ https://icea.org.in/blog/wp-content/uploads/2022/01/FinalReport_VisionDocument_24012022.pdf

⁹ https://pib.gov.in/PressReleasePage.aspx?PRID=1792189

	2020-21 (US\$ Billion)	2025-26 (US\$ Billion)	Projected Increase During the Period
Mobile Phone Exports	3.1	52 - 58	16.8 - 18.7 Times
Electronics Exports	10.6	105 - 130	9.9 - 12.3 Times
Mobile Phone Domestic Sales	27	63	2.3 Times
Electronics Domestic Sales	65	150 - 180	2.3 - 2.8 times
Mobile Phone Production	30	126	4.2 Times
Total Electronics Production	74.7	300	4 Times

Table 1.2. Projected Growth in Mobile Phones and the Electronics Sector

Source: Exhibits 2, 4 and 7 of the Vision Document https://icea.org.in/blog/wp-content/uploads/2022/01/FinalReport_ VisionDocument_24012022.pdf

Table 1.2 shows that exports are the most dynamic parts of the growth story, and within this the exports of mobile phones are likely to grow more rapidly than the electronics sector as a whole.

Important policy measures of the Government to support and facilitate operations (such as PLI and ease of doing business) have helped provide a growth momentum in recent years. For instance, the 2021-22 Annual Report of the Ministry of Electronics and Information Technology (MeitY) states that: "India has become the second largest mobile handset manufacturing nation globally and India has also become the second largest smart phone market in the world thus making India the fastest growing smart phone market in the world."¹⁰

1.2.2 Achieving High Growth of Electronics Requires Specific Policy Approach

The Vision Document which specifies targeted levels of Electronics' growth also mentions that the target: "aims for a 400% increase from the current level. This will still require significant and persistent policy initiatives, through incentives and efforts to create a conducive electronics manufacturing ecosystem. Removing cost disabilities to ensure global competitiveness in order to be able to manufacture products at scale is also critical to achieve this target. Considering the relatively small size of India's domestic market of US\$75 billion vis-à-vis global markets for electronics, India should set its sight on expanding its share in the global markets to reach the target figure of US\$ 300 billion by 2025-26."¹¹

Specific policy measures recommended by the vision document include **"stability in import** tariffs (for the existing ecosystem, ... decrease in import tariffs (for components with no manufacturing base in India), ... encourage major foreign manufacturers to set up components ecosystems in India, ... clarity in foreign investment policies, ... development of skillset".¹²

¹⁰ Page 115 of https://www.meity.gov.in/writereaddata/files/MeitY_AR_English_2021-22.pdf

¹¹ Page 6 of https://icea.org.in/blog/wp-content/uploads/2022/01/FinalReport_VisionDocument_24012022.pdf

¹² Page 34 of https://icea.org.in/blog/wp-content/uploads/2022/01/FinalReport_VisionDocument_24012022.pdf

Increasing tariffs on inputs increases the cost of production of finished products, thereby reducing competitiveness vis-a-vis countries that are in competition with India in the global markets **whether for finished products or input in global value chains**. Since the strongest momentum has to come from exports, the increase in costs becomes a major policy issue to keep in mind.

1.3 India's tariff policy for electronics is driven by domestic market rather than export opportunities in global markets

In general, the countries competing with India in the global electronics market rely on industrial policy measures which have an orientation largely similar to India, in that all these measures aim to support and facilitate operations within their economies for all producers. The one major exception in the policy approaches of India and the competing economies is tariff policy. Therefore, it is important to compare the tariff policy of India with some of its global competitors. India's tariff policies for electronics, which is a priority sector for India,¹³ appears to be driven by the domestic market rather than export opportunities in global markets, in contrast to its competing economies. This is because an important impact of higher tariffs is that they orient the approach of investors and domestic producers away from exports towards the domestic market.

Mobile phones are a very significant part of the electronics production in India (40% of electronics production - see Table 1.3.1 below), and a very significant momentum for export growth is expected to come from mobile phone exports. (See Table 1.2 above) Therefore, it is very important to examine the comparative tariffs on mobile phone supply chain and some of the key electronics products including laptops/tables and components, to assess the relative impact of tariffs on costs for India and the competing economies.

Item	2020-21 (US\$ Billion)	2021-22 (US\$ Billion)
Mobile Phones	30	38
IT Hardware (Laptops and Tablets)	3	4
Consumer Electronics (TV and Audio)	9.5	10
Strategic Electronics	4	4.25
Industrial Electronics	10.5	11
Wearables and Hearables	-	0.25
PCBA	0.5	0.6
Auto Electronics	6	7
LED Lighting	2.2	2.5
Telecom Equipment	-	0.25
Electronic Components	9	9.5
Total Electronics	74.7	87.35

Table 1.3.1 Electronics Production in India, 2020-21 and 2021-22

Source: ICEA estimates

¹³ High priority given by India to electronics, including the mobile phone sector, is shown by the fact that it was among the first selected for PLI support and that it was specifically mentioned by Prime minister Modi in his speech of 6th August 2021.

In 2021, a detailed evaluation was conducted by a Tariff Report that compared India's tariffs on the mobile phone supply chain and some other key electronics items.¹⁴ The Tariff Report 2021 compared India's tariffs with those of China, Mexico, Thailand and Vietnam. The same countries are being selected for this report again. Chapter 2 explains the reasons for selecting these countries.

Like India, these competing economies have also relied upon a combination of trade and investment policies, with an emphasis on improving domestic participation in global value chains. They have also focused on attracting investment through subsidies, facilitating trade and improving operational conditions for investors and domestic producers. **The major difference is that when compared with China, Mexico, Thailand and Vietnam, the policy package of India has higher tariffs. Furthermore, over time India has relied much more on increasing tariffs compared to its competing economies (see Chapter 5 for a more detailed discussion).**

1.4 India is a Comparatively Higher Tariff Economy

The analysis in Tariff Report 2021 showed that India's tariffs are relatively higher than those in its competing economies, both in general as well as for the electronics sector. Three different types of overall tariff comparisons are shown in Tables 1.4.1 to 1.4.3. These tables show that India is comparatively a higher tariff economy. Table 1.4.1 shows this for simple average tariffs for all merchandise imports. Table 1.4.2 focuses on average tariffs for non-agricultural products. Both comparisons give the same result, i.e., that India has relatively higher tariffs. It is noteworthy that while the tariffs of South Korea were closer to India for all products, they are considerably lower when only non-agricultural products are considered.



¹⁴ https://icea.org.in/blog/wp-content/uploads/2022/01/Report-by-ICEA-on-Detailed_Tariffs-Drive-Competitivenessand-Scale_06022022.pdf

Table 1.4.1 Average Most Favoured Nation (MFN) Applied Tariffs for All Merchandise Products in Selected Countries, 2021 (%)

India	South Korea	Thailand	Vietnam	China	Mexico	Malaysia	EU	USA
18.3%	13.6%	11.5%	9.6%	7.5%	7.1%	5.6%	5.2%	3.4%

Source: WTO. https://stats.wto.org/

Table 1.4.2. Average MFN Applied Tariff for Non-Agriculture Products in Selected Countries, 2021 (%)

India	Vietnam	Thailand	South Korea	China	Mexico	Malaysia	EU	USA
14.9%	8.4%	7.1%	6.6%	6.5%	6%	5.2%	4.1%	3.1%

Source: WTO. https://stats.wto.org/

Another way of comparing the openness of markets is to examine the proportion of tariff lines with zero tariffs. Table 1.4.3 shows that even for Zero tariff lines, other economies are more open than India. With zero tariffs on a large proportion of their tariff lines, these countries enable easier access to inputs for production linked to the global value chain.

Table 1.4.3 Percentage of Total Number of Tariff Lines for Non-Agriculture Products with Zero MFN Applied Tariffs in 2021 (%)

India	China	South Korea	EU	Vietnam	Thailand	USA	Mexico	Malaysia
1.8%	8.6%	18.9%	28.6%	38.6%	40.9%	50%	52.3%	65.2%

Source: WTO. https://stats.wto.org/15

1.5 Summary of the Results of the Tariff Report 2021

The 2021 comparison of India's tariffs on the main electronics products with China, Mexico, Thailand and Vietnam, showed that:

- (1) India had higher average tariffs in electronics, fewer zero tariffs, and higher tariff peaks.
- (2) An additional feature of tariffs in Vietnam is that its Free Trade Agreements (FTAs) result in its critical inputs coming in at zero tariffs.
- (3) Compared to the competing economies, India's tariffs increased more than others since 2014 while the increase in its exports was lower than the comparator economies.
- (4) Despite lower tariffs, the competing economies have performed better than India in terms of their exports and trade deficit for electronics.

¹⁵ These are MFN tariffs for all non-agricultural products and do not include ITA 1 tariffs.

- (5) Since 2014, China and Vietnam have registered a surplus in electronics trade while India has registered large deficits.
- (6) The competing economies have incrementally built their domestic ecosystem for electronics.
- (7) In the absence of domestic capacity, the cost of production increased due to tariffs on inputs in the supply chain.
- (8) The increase in tariffs on inputs since 2019-20 negated the support provided under the Production Linked Incentive (PLI) scheme for large electronics.
- (9) Since electronics account for a large part of the cost of inputs for some other important sectors (e.g., automotive products, medical devices), a rise in tariffs led to lower output and exports of these other sectors as well.

This Report updates the analysis by comparing the relevant tariffs for 2022 and also considers the impact of one tariff change made by India in 2023. The general conclusions of 2021 remain valid in 2022 and 2023. The relatively lower cost-competitiveness of India due to its higher tariffs became even worse because of the rise in its tariffs in 2022. The change in one tariff line from 2.75% to 0% in 2023 does not change the adverse situation because of the very small impact of that change.

1.6 Some Methodological Issues When Comparing Tariffs Across Countries

Similar to the Tariff Report 2021, this study conducts a detailed comparison of tariffs on products in the supply chain of mobile phones, and some other important electronics products (e.g., laptops/Tablets, PCBA). The products selected for this study account for a large proportion of the electronics production in India (see Table 1.3.1 above). In addition, the study examines the average tariffs and trade performance in the electronics sector for India and the competing economies.

The supply chain has electronics as well as non-electronics products

The tariff items considered for comparison include the main electronics items, primarily mobile phone, laptop, tablets, hearables and audibles, and their main inputs (see Annex 4.1 for the list of HS 8-digit lines considered). This list includes the main items in the supply chain for mobile phones, which cover both electronics items as well as a number of non-electronics items. The electronics items in this list of 120 tariff lines accounted for about 80% of total Indian electronics imports in 2022-23.

Three important points to note for tariff comparison

- (a) Some tariff categories have been changed in 2022 compared to 2021. This has resulted in a total of 118 tariff lines to be compared.
- (b) Two of the tariff lines in 2021 had more than one tariff. Therefore, for the tariff comparison, this study takes account of 120 tariffs.
- (c) In this situation, whenever export or import shares are discussed, 118 tariff lines are considered.

Tariffs for a shorter list of priority products are also compared

In addition to the 120 tariff lines, the industry has identified a smaller group of 30 tariff items as their priority products. These products are included within the longer list of 120 tariff lines. The tariffs for the priority products are examined separately as well as together with the 120 tariff lines.

Addressing the issue of non-concordance between Indian national tariff lines and those of the comparator countries

A complex feature of the tariff comparison with other countries is that for any specific HS 8-digit category of India, there could be more than one corresponding national tariff line of the competing economy. The tariff comparison in the report is based on a careful consideration through discussion with the industry to specify the corresponding tariff line for the competing economy. In the situation where the Indian tariff line corresponds to more than one tariff level in the competing economy, the highest tariff of the competing economy is considered for the comparison.

An important correction for getting the real picture for tariff comparison

The starting point of the tariff comparison is the most favoured nation (MFN) tariff which applies to all nations in general. The actual tariff imposed on imports however are lower for those imports which are supplied by countries that are part of Free Trade Agreements (FTAs). Among the countries being compared, Vietnam has the most significant extent of FTA imports.

The 2021 comparison of tariffs for India and Vietnam had made a correction to the most favoured nation (MFN) tariffs by considering the impact of Free Trade Agreements of the two countries. This methodology is used for this year's comparison as well, with additional explanations of the basis of comparison (see Chapter 6 and Annex 6.2 for more detail). In addition, this year's report has estimated FTA weighted average tariffs for India and Vietnam, based on MFN and FTA tariffs and the shares of imports subject to these tariffs (see Chapter 4 for more detail).



1.7 Structure of the Report

More detailed discussion is conducted from Chapter 2 onwards.

Chapter 2 provides a basis of selecting the four competing economies. It begins by considering the major exporters of electronics and then explains the choice of the four competing economies. While a more detailed assessment of tariffs of these economies is carried out in Chapter 4, the tariffs of certain other countries (Malaysia and Philippines) are also examined in summary to finalize the set of competing economies.

Chapter 3 provides information on the structure of India's tariff lines selected in terms of the import shares and range of tariffs across these lines.

Chapter 4 gives a detailed comparison of tariffs on 120 electronics tariff lines for 2022. The comparison is between India and four competing economies, i.e., China, Vietnam, Mexico and Thailand. This comparison is conducted for both 120 tariff lines as well as a smaller group of priority products identified by the industry for specific emphasis. The priority list is further assessed for sub-groups of final products, sub-assemblies and components.

Chapter 5 looks at electronics trade and the trend of tariffs on electronics products over time (2015 to 2021). This provides an insight into an important underlying aspect of Indian tariff policy. An implicit reasoning for raising India's tariffs is the view that India has a large domestic market that will attract FDI, which in turn will increase domestic production and exports. The Tariff Report 2021 had shown that India's domestic market is not very large compared to the global market. Moreover, the comparison with competing economies suggests that the size of the domestic market does not necessarily result in higher exports or deeper links with GVCs. For example, the electronics exports of Vietnam are significantly larger than the domestic production of electronics by India. The production in Vietnam is primarily for the global market, which is about 20 times the size of the domestic market of India.

Chapter 6 compares the tariffs in 2021 and 2022 for India and the competing economies. This shows that the Indian tariff regime has become more restrictive in 2022 compared to 2021, while the tariffs in the competing economies created a more open regime in 2022 compared to 2021. The change in one tariff line made in 2023 by India does not alter the overall conclusions of the tariff comparison for 2021 and 2022, i.e., compared to 2021 India's tariffs are higher than the competing economies in 2023 as well. Compared to 2021, the relatively lower cost-competitiveness in 2022 continues to be valid in 2023 as well.

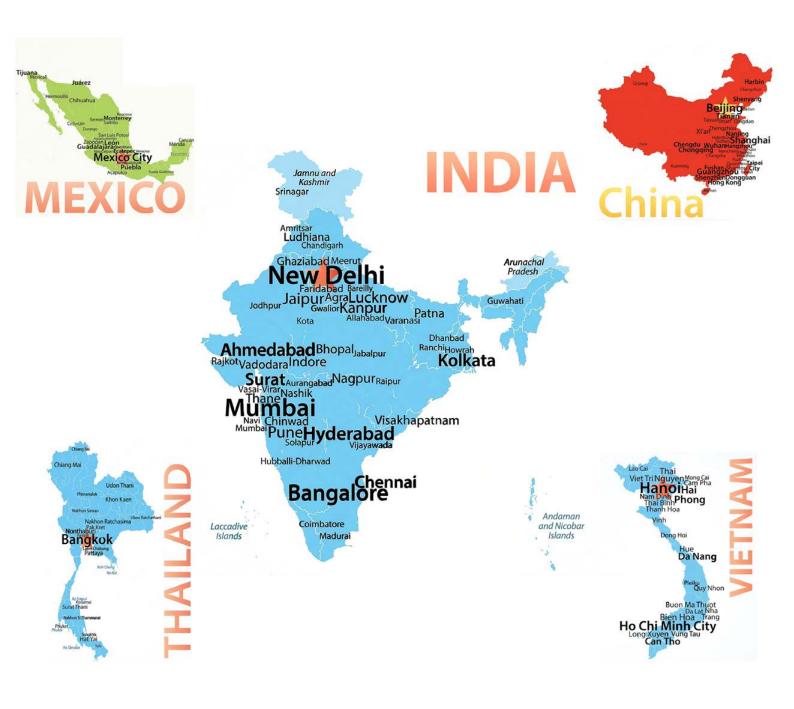
Chapter 7, using very basic tools such as the share of the components used in producing a mobile phone, examines the cost impact of recent tariff increases. The focus in this Chapter is on Mobile phones. The discussion takes account of two contrasting developments over time. One is the Government's intent and initiatives to support the mobile sector from mid-2019 onwards, leading to provision of the PLI for the sector. This support however is eroded by the second factor, namely the increase in tariffs which led to an increase in costs for the sector. Considering the tariff changes since the Budget of 2020, this Chapter shows that the cost increases due to tariffs on inputs considerably dilute (even erode) the supportive role of PLI. The discussion begins with a simple analysis of cost impact based on tariffs and share of the relevant inputs in cost. This is extended further by estimating the increase in the price of domestically provided inputs, using input output tables of India. The report thus shows that tariffs on inputs work against cost competitiveness vis-à-vis other countries and reduces the incentive for scale as well as exports, thus weakening the

positioning of India as part of a GVC. It also takes account of the 11% currency depreciation of the Indian currency in estimating the cost effects of tariffs.

Chapter 8 shows the major conclusions on the basis of the analysis conducted in the report. It also draws out recommendations to avoid some of the cost distorting effects of tariffs.



02 Selecting Competing Countries for Comparison with India



2.1 Introduction

The Tariff Report¹⁶ 2021 had explained the basis for choosing the competing economies. The significance and progress of these competing economies is shown by the fact that they have performed very well in the past few decades to emerge as leading exporters of electronics.

Table 2.1 shows the top 15 economies ranked in terms of exports of electronics in 2021, together with their ranks in 2015. For comparison, the ranking of India is also provided for the two years, 2015 and 2021. Since 2015, India's electronics exports have been increasing, with its global rank improving over time. However, a move towards higher levels would require a very large and focused policy effort. This requires both formulation as well as effective implementation of relevant policy measures.

Country	Rank as Gl	obal Exporter I	US\$ Billion ↓
	2015	2021	Electronics Exports, 2021
China	1	1	902.7
Hong Kong, China	2	2	452.4
Taiwan	6	3	252
USA	3	4	219
South Korea	4	5	205.8
Singapore	5	6	186.3
Germany	7	7	160.7
Vietnam	12	8	131.2
Japan	8	9	117.6
Malaysia	10	10	116.9
Netherlands	11	11	93.1
Mexico	9	12	90.5
Thailand	13	13	53.8
Czech Republic	16	14	44.8
Philippines	21	15	41.4
India	32	26	14.3

Table 2.1. Top Exporters of Electronics in Calendar Y	'ear 2021 and Their Rankings In 2015 and
2021	

Source: ITC Trade Map and TDM

Note: The competing economies selected for comparison with India in this report are highlighted in the Table.

¹⁶ ICEA Report titled 'A Comparative Study of Import Tariffs in Electronics: India, China, Vietnam, Thailand, Mexico', released in December 2021.

The successful exporting economies have much higher export levels than those achieved by India. For example, in 2021 electronics exports of **Vietnam, Mexico and Thailand** were respectively **9.2** times, **6.3** times and **3.8** times those of India. Thus, a 1 percentage growth in exports of these economies would be equivalent to a significantly larger export growth for India. Nonetheless, India has embarked on a journey reflecting its desire to achieve a sustained high growth in its electronics sector.

2.2 An Illustration to Show the Huge Effort Required to Achieve India's Targets

Indian Government's goals regarding electronics and mobile phones exports are shown in Table 1.2 in Chapter 1. Achieving those goals requires a specific minimum growth rate that must be attained for this purpose. In 2022-23, India's electronics exports were US\$ 23.6 bn. To reach the target of US\$ 105 to US\$ 130 billion in 2025-26, an average annual growth rate of **64.5% to 76.6% per annum** is required. This is much higher than the rates of annual growth actually achieved by India during the calendar/ financial years for the period from 2015 to 2022-23. The highest annual growth rate achieved during this period was **55.5% per annum**, a growth rate achieved during 2022-23.¹⁷

In Table 2.2.1 below, three different annual rates of growth are applied to exports in 2022-23, namely, 55.5%, 64.5% and 76.6% to project growth in exports under three different situations. If the highest annual growth rate achieved since 2015 is maintained each year during the next three fiscal years, then India's electronics exports would reach about **US\$ 89 billion in 2025-26**, i.e., just about three-fourths of the targeted export level shown in Table 1.2. During the next year, i.e., 2026-27, India would achieve the electronics export target if it continues to growth at the highest annual growth rate achieved till now; the electronics exports in this situation would be **US\$ 138 bn in 2026-27**.

Thus, for sustaining India's production and exports, the growth rate of exports has to be even higher than the highest annual growth rate achieved during the period 2015 to 2022-23.



¹⁷ For calendar years, the highest growth rate was 41.8% in 2019. For fiscal years, the highest rate of 40.1% was achieved in 2021-22.

	Electr	Electronics Exports of India							
Fiscal Year	If Highest Annual Growth Rate During Years 2015 to 2022-23 (55.5%) Is Achieved Each Year (US\$ Bn)	lf Annual Growth Rate of 64.5% Is Achieved Each Year (US\$ Bn)	lf Annual Growth Rate 76.6% Is Achieved Each Year (US\$ Bn)						
2022-23	(23.6)	23.6	23.6						
2023-24	36.7	38.8	41.7						
2024-25	57.1	63.9	73.6						
2025-26	88.7	105.1	130						

Table 2.2.1. Export Performance Required to Meet High Export Growth

Source: ICEA for 2022-23 Exports Data Note: Figures rounded up to one decimal point.

For further comparison, Table 2.2.2 illustrates the projected performance of Vietnam, under conservative assumptions, i.e., the export performance projected for Vietnam is based on the average annual growth rate (14.4%) achieved by Vietnam during the calendar years 2015 to 2021 (excluding one extreme outlier performance of 33.7% growth in 2017). In such a situation, India's electronics exports would catch up with those of Vietnam by 2028-29 and overtake Vietnam's exports by 2029-30.

However, maintaining the high export growth rate each year for India would be very difficult. Further, the increase in exports arising from the high exports would shift the share of others in global markets, resulting in iefforts by those countries to retain their shares through cheaper exports. The illustrative points in the Tables above show the crucial need for continued careful attention on improving India's electronics export performance to steadily move towards the electronics export targets by the latter part of this decade. This requires ensuring that the facilitative policies which increase competitiveness should be emphasized and those which reduce competitiveness (like tariffs on key inputs) should be removed.

Calendar/ Fiscal Year	India: With Highest Annual Growth (55.5%) Applied Each Year (US\$ Bn)	Vietnam: With Average Annual Growth (14.4%) (US\$ Bn)
2021-22	15.18	131.2
2022-23	23.6	150.1
2023-24	36.7	171.7
2024-25	57.1	196.4
2025-26	88.7	224.7
2026-27	138.0	257.1
2027-28	214.6	294.1
2028-29	333.7	336.4
2029-30	518.8	384.9

Table 2.2.2. Export Growth Required to Catch Up with Vietnam

Source: Author's Calculations

2.3 Past Experience of Competing Nations Suggests Large Improvements are Possible with Appropriate Policy Reforms

Table 2.1 shows that among the developing economies (i.e., excluding the high-income economies),¹⁸ the top electronics exporting nations include countries such as China, Malaysia, Mexico, Philippines, Thailand and Vietnam. These countries have shown remarkable growth in electronics exports within a period of about two to three decades of their initial foray as an electronics exporter. Some of them, like Vietnam, started exporting electronics products only in the second half of the 1990s.

Data on electronics exports as a combined category is not easily available prior to 2000. However, data for a long period is available for another category which covers most of the important electronics products. This category is called "Office and Telecom Equipment", which covers "electronic data processing and office equipment", "telecommunications equipment, and "integrated circuits and electronic components". These are the key electronic products exported by India and by its major competing economies.

Using this data, the journey of these countries can be illustrated for a longer period of time, say from 1980 onwards. The remarkable journey of China is shown by the fact that in 1980 its rank as exporter was close to that of India but today it is the largest exporter of Office and Telecom Equipment; the respective ranks of India and China in 1980 were 40th and 35th in the world (Table 2.3.1). It is noteworthy that in 1980, Thailand's exports of Office and Telecom Equipment were

¹⁸ In relation to the economies in Table 2.1, it is worth noting that according to the World Bank, Singapore, South Korea and Taiwan are classified as "High Income Economies", India, Philippines and Vietnam are "Lower Middle-Income Economies", and Malaysia, Mexico and Thailand are "Upper Middle-Income Economies". See https://datahelpdesk. worldbank.org/knowledgebase/articles/906519

lower than those of India, and that Vietnam's exports of these products began in 1997. From no exports for much of the 1990s, Vietnam is now the 8th largest exporter of these products. Mexico and Thailand also showed a major spurt and presently maintain their position among the top 15 exporters.

	1980	1990	2000	2010	2020
India	40	38	47	34	29
China	35	20	11	1	1
Mexico	37	16	12	11	11
Thailand	46	18	17	12	13
Vietnam	No exports	No exports	41	28	8

Table 2.3.1. Rank of China, India and Selected Others as Exporters of Office and Telecom Equipment, 1980 to 2020

Source: WTO

Figure 2.1 below shows the level of exports of these economies (other than China), including Malaysia and Philippines. Malaysia was a significant exporter even in 1995. Mexico has shown a strong increase in its level of exports, Thailand has shown an increase post 2000, to overtake Philippines. China (not shown in Figure 2.1) had a major growth in its exports of Office and Telecom Equipment after 2000. China's exports in US\$ billion were respectively 0.07, 3.13, 14.51, 43.50, 225.96, 449.34, 588.44 and 690.12 for the eight years selected from 1980 to 2020.



Figure 2.1. Exports of Office and Telecom Equipment by Selected Countries, 1980 onwards (US\$ Bn)

Source: WTO

The growth of Vietnam's exports of Office and Telecom Equipment is very impressive. Staring late in 1990s, it had overtaken India by 2005, and by 2020 its export levels now dwarf the performance of India (see Figure 2.2). This rapid increase in exports has placed Vietnam among the top electronics exporters in the world.

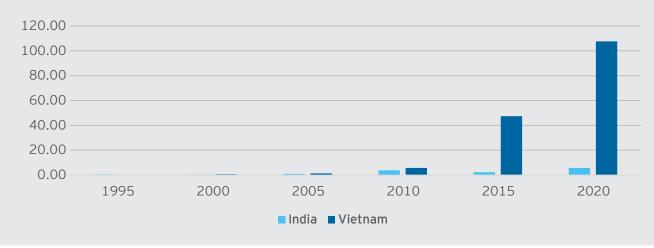


Figure 2.2. Exports of Office and Telecom Equipment by India and Vietnam 1995 onwards (USD Mn)

Source: WTO

2.3 Identifying Competing Economies for Tariff Regime Comparisons with India

China and Vietnam are clearly countries whose performance shows that it would be useful to compare their policies with India.

Among the other economies in Figure 2.1, this Study will also take a closer look at Mexico and Thailand. Therefore, a detailed tariff comparison of India will be made with four competing economies, namely China, Mexico, Thailand and Vietnam. By focusing in detail on the four competing economies, this Report will give continuity to the work done in 2021. In addition, a summary comparison of India's tariffs is also conducted with tariffs of Malaysia and the Philippines for the 120 lines selected for this study. The main result of this comparison is the same as that for comparison of India's tariffs with China, Mexico, Thailand and Vietnam, i.e., a large proportion of India's tariffs among the 120 tariff lines have higher tariffs than the corresponding tariff lines for Malaysia and the Philippines (see Annex 4.2 in Chapter 4 for more detail).

Conclusion

If India has to meet its targets for high export levels that could be achieved provided the relevant policy environment is created, its export growth has to be much higher than it has been in the past. As indicated earlier in Chapter 1, the major policy difference between India and its competing economies is in the realm of tariff policy. The competing economies were chosen as they have high global ranking in terms of exports and have shown their dynamic performance over a relatively short span of time.



03 Main features of India's Tariffs and Import shares



3.1. Introduction

An interesting feature of the comparison is that a small number of 8-digit HS tariff lines account for a large import share in all the countries considered for this study. The discussion below takes a closer look at the national tariff lines of India for the 120 HS 8-digit lines selected for this Study. As indicated in Chapter 1, for import shares, the relevant number of tariff lines is 118, while for tariff comparison there are 120 lines because two of the lines have more than one tariff each. The import shares of 118 lines in terms of different tariff levels are shown in Table 3.1.1. The number of lines and the import shares for different ranges of tariff categories are shown by Table 3.1.2.

In 2021-22, India's imports under these tariff categories were US\$60,665 million. Only 4 tariff lines accounted for 44% of the imports of these products. The two groups of the next 5 lines and 12 lines respectively had import shares of 18% and 17%. On the other hand, 97 tariff lines together accounted for only 21.2% of the import share (see Table 3.1.1 below).

Individual HS Tariff Category's Share in Total Imports of 120 Tariff Lines	No. of Tariff Lines	Import Share of the Tariff Lines, 2021
Total Number of Tariff Lines	118	100%
Import Share more than 5%	4	44.2%%
Import Share 2% to 5% of total	5	18%
Import Share 1% to 2% of total	12	16.8%
Import Share above 0.5% to 1% of total imports	14	10%
Import Share of 0.01% to below 0.5% of total	78	11%
Import Share of 0% to below 0.01% of total	5	O%

Table 3.1.1. Summary Profile of HS 8-Digit Tariff Lines Selected for the Study, 2021-22

Source: Department of Commerce, Government of India and TDM

Table 3.1.2. Distribution of India's 120 MFN Tariff Lines in Different Ranges of Tariffs 2022 (Number of Lines and % of Total Lines)

(1) Tariff Range	(2) Number of Lines	(3) Percentage Share in Number of Lines	(4) Share of Imports (%)	(5) Average Import Share Per Tariff Line [Column (4) Divided by Number of Tariff Lines in the Category (Column 2)]
Zero Duty	31(32)	25.8% (26.7%)	47.2	1.52%
Above 0 to 5%	2 (1)	1.7% (0.83%)	1.1	0.55%
Above 5 to 10%	18	15%	5.1	0.28%
Above10 to 15%	38	31.7%	8	0.21%
Above15 to 20%	16	13.3%	24.2	1.51%
Above 20 to 25%	14	11.7%	14.9	1.06%
27.5%	1	0.8%	0.3	0.3%

Source: Government of India and TDM

Note: The number in brackets are for 2023, and reflect the reduction in one tariff for from 2.75% to 0%

A large share of MFN tariff lines (about 58%) has relatively high tariffs, i.e., tariffs above 10%. The largest number of tariff lines are in the category "10% to 15%". The highest tariff of India is 27.5%, imposed on one line.

Among the tariff lines of India considered for this study, 31 lines had zero tariffs in 2022 (Table 3.1.2). This number increased to 32 in 2023. However, the tariff line for which the tariff decreased in 2023 has an import share of less than 1% and there was a very small change in its tariff level, from 2.75% to 0%. Therefore, the general picture for India regarding tariff levels and import shares does not change for 2023.

3.2. No close link between the level of tariff and import share under the tariff line

High tariffs are normally imposed to reduce imports and protect the domestic market. An implicit presumption is that lower the tariff, higher the imports, and likewise higher the tariff, lower the import. However, this conclusion is not evident at the overall level. Column 5 of Table 3.1.2 shows the average import share per line for different tariff categories. This shows that on an average, per line import share is high for zero tariff as expected, but also for the tariff category "15% to 20%" (as is not to be expected). Thus, high import share per line is valid for both high and low tariffs across the entire tariff range for India.

Likewise, Table 3.1.2 shows that per line import share is relatively low for tariffs above zero and up to 15%, i.e., from low tariff to somewhat high range of 11% MFN tariff. **This assessment shows that there is no simple link between the level of tariff and import share of the product.**



Thus, tariff per se is not sufficient to reduce imports, especially if either the product is an important input or domestic capacity is inadequate to meet demand for the input. Without any adequate domestic response from production, high tariffs would create significant inefficiencies for production of domestic output.

Conclusion

Some important conclusions from this chapter are:

- 1. For the tariff lines selected for this study, **70% of the tariff lines have tariffs of 8.25% or more. Of these, about 58% have tariffs above 10%**.
- 2. India's peak tariffs on imports among these lines is 27.5%.
- 3. At the other end, **26.6% of the selected lines have zero tariffs** (32 lines). Chapter 4 shows that this is much less than the number of zero duty tariff lines in the competing economies.
- 4. The impact of tariffs on imports is indeterminate. Raising tariffs may not necessarily decrease imports, particularly if the product is not made in India. Instead, a higher tariff would merely raise costs.



04 Comparison of Tariffs in India with Competing Economies

120 Tariff Lines

0 0

Introduction

There are a number of ways to assess the main features of a country's tariff regime. The discussion in this Chapter makes a comparison of tariffs in India with competing economies in terms of:

- (a) The simple tariff average;
- (b) The proportion or number of tariff lines which have zero tariffs;
- (c) The distribution of the tariff lines across different tariff categories; and
- (d) Comparison of tariffs for each individual tariff line.

Tariffs for 120 HS categories of India in 2022 were compared with those in competing economies. The starting point of the comparison is MFN tariffs. However, the actual tariffs paid by importers could be much lower than the MFN tariffs if the nation concerned has a significant portion of its imports under a Free Trade Agreement (FTA). For Vietnam, an appropriate comparison would be between FTA weighted average tariffs for each line, based on the share of imports under MFN and FTA tariffs. The estimates of the FTA weighted average tariffs for Vietnam and India are provided in Annex 4.1.

One tariff line of India saw a small decrease in tariff from 2.75% to 0% in 2023. In addition to the small change in tariffs for a single line, the shares of this tariff category in costs and imports are also very small. Therefore, this tariff change in 2023 does not change the overall conclusions from the study, namely that India's tariffs are much higher than those of the comparator countries (China, Mexico, Thailand and Vietnam), and the higher tariffs on inputs result in lower cost competitiveness of India's mobile phone sector. Given the large export levels which could potentially be achieved with appropriate support policies, this is an important area for policy improvement.

4.1 Comparing India's Tariffs with Vietnam: Adjusting for FTAs

Among the economies considered in this Report, Vietnam has the largest coverage of its trade under FTAs, with major trade agreements with China and Korea, within ASEAN through ATIGA,¹⁹ with ten CPTPP partners,²⁰ EU, UK, India, Hong Kong, and the Eurasian Economic Union. Figure 4.1.1 shows the share of imports under FTAs and MFN tariffs for India and Vietnam, for electronics as a whole for the 120 tariff lines considered in this Report. It is evident that for Vietnam, FTA tariffs are a major part of its import trade regime.

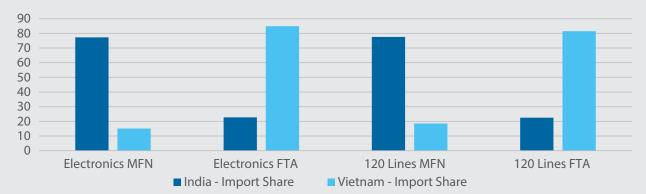


Figure 4.1.1 Share of Imports of India and Vietnam Under MFN Tariffs and Tariffs under FTAs (%) for Calendar Year 2021

Source: ITC Trade Maps, TDM, and Tariff Schedules of Countries

¹⁹ ATIGA is ASEAN Trade in Goods Agreement.

²⁰ These ten are Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru and Singapore,

The high FTA import coverage for Vietnam implies not only that the MFN tariffs apply to a very small proportion of their total imports, but most of its tariff lines are in effect either at zero or close to zero. Thus, the comparison of tariffs between India and Vietnam has been extended to take into account the FTA weighted average tariffs for each tariff line based on the ratio of imports under FTA tariffs and MFN tariffs. Since the comparison of FTA weighted average tariffs must be with similar tariffs of India, FTA weighted average tariffs have been estimated for both the countries. The FTA weighted averages for specific tariff lines are given in **Annex 4.1**.

4.2 Comparison of National Tariff Lines

An important point about comparison of national tariff lines: HS tariff lines across nations are common up to the 6-digit level. Beyond that, the national tariff lines in different countries do not follow the same HS system. However, the comparison of tariffs must be made at the more detailed HS level because the national tariffs are at such levels of detail. For the tariff comparison, the starting point is India's national tariff line whose tariffs are then compared with the national tariff lines of the competing economy. For situations where the tariffs of the competing nation at the national tariff line level are not the same as at the 6-digit HS level, the specific corresponding national tariff line for competing economies is determined based on discussions with the industry. Whenever there are two or more tariffs for the competing economy is taken as the relevant tariff corresponding to the Indian tariff line. Therefore, the tariffs of competing economies in certain cases are likely to be over-estimates of the actual tariff in effect. Since the result of the comparison is that in general Indian tariffs are higher than the four competing economies, that conclusion remains valid.

4.2.1 Comparing Simple Average MFN Tariffs for Competing Economies, and the FTA Weighted Average Tariffs for India and Vietnam

Table 4.2.1 provides a comparison of the simple average MFN tariffs for the 120 lines across four competing countries. Taking into account the discussion of FTA tariffs and import shares, Table 4.2.2 shows the tariff average of FTA and MFN trade weighted averages for India and Vietnam. The small change in one tariff line for India in 2023 (tariff reduction from 2.75% to 0%) does not change the average tariffs estimates for 2023 in comparison to 2022, for both the simple tariff average and the weighted tariff average mentioned in the Tables below.

	MFN Tariff Average
India	9.7%
China	3.2%
Mexico	3.5%
Thailand	5%
Vietnam	5.6%

Table 4.2.1. Simple Averages of MFN Tariffs for India and the Competing Economies, 2022

Source: Tariff Schedule of Countries

Table 4.2.2. FTA Weighted Average Tariffs of India and Vietnam Based on Shares of Imports Under FTA and MFN Tariffs, 2022

	FTA Weighted Average Tariff Average
India	7%
Vietnam	1.1%

Source: Calculated from Tariff Schedule of Countries, ITC Trade Maps, and TDM.

Three features of the Indian average tariff are noteworthy:

- (a) India's average MFN tariff is much higher than the tariffs of the competing economies.
- (b) Even though India's FTA weighted average tariff is lower than its MFN tariff, it is still higher than the MFN tariff averages of the other countries.
- (c) Vietnam's FTA weighted average tariff is much lower than its average MFN tariff. It is close to 1% because a large share of its imports come under FTAs at near zero tariffs.

4.2.2. Distribution of 120 Tariff Lines Across Different Tariff Levels

Figure 4.2.1 shows the distribution of tariffs across different tariff levels. All the references in this report for tariff categories such as "0 to 5%" mean "above zero and up to 5%".

An immediate conclusion from Figure 4.2.1 is that compared to the others, India has fewer zero tariff lines. It is worth recalling that zero tariffs are important for facilitating and linking with GVCs, especially for inputs. More than half of India's 120 MFN tariff lines have tariffs higher than 10%, while in contrast a majority of the tariff lines of the competing economies have tariffs ranging from zero to 5%.

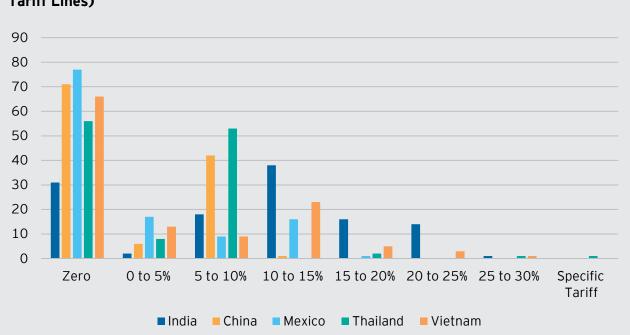


Figure 4.2.1. Distribution of India's MFN Tariffs with Competing Economies (Number of Tariff Lines)

Source: Tariff Schedule of Countries

FTA Weighted Average Tariffs: Almost all (96%) the 120 tariff lines of Vietnam have FTA weighted tariffs ranging between Zero to 5%. In contrast, the corresponding share for India is 34%. A significant number of India's weighted average tariff lines (24%) have tariffs above 10%. These conclusions are the same for 2022 and 2023. In 2023, India reduced tariff on one line with a weighted average tariff of 2.43% to 0%. In essence, the picture in 2022 and 2023 remains unchanged with respect to the distribution of FTA weighted average tariffs of India and Vietnam.

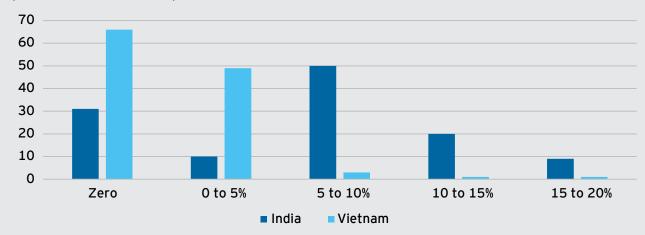


Figure 4.2.2. Distribution of FTA Weighted Average Tariffs of India and Vietnam, 2022 (Number of Tariff Lines)

Source: Tariff Schedules of India and Vietnam, ITC Trade Map and TDM

The impact of Vietnam's FTA tariffs becomes clearer when the FTA average weighted average tariffs for the two countries are compared. For the 120 products as a whole, Vietnam's average FTA weighted tariff is 1.1% versus India's 7% (Table 4.2.2 above).

Comparison of Tariff Peaks: India's MFN tariffs range from 0% to 27.5%. In comparison, with the exception of one tariff line for each, China's highest MFN tariff rate is 10% and Mexico's is 15%. Thailand's peak MFN tariff is 20%. One tariff line of Thailand has specific tariffs, for which an ad valorem rate is not easy to compute. Vietnam has one tariff line with an MFN tariff rate of 30%. However, the actual tariff for this line is much lower, because 99.95% imports under this line are from FTA countries. For this tariff line, 86% of Vietnam's imports enter at FTA tariffs of zero and 13.7% are at FTA tariffs of 5%.

The above comparison of tariffs shows that **the four competing economies are much more open than India** for the 120 electronics products considered for this analysis, and the higher tariffs of India result in lower cost-competitiveness for its producers. Key features of the tariff regimes include:

- (a) For the 120 tariff lines, a much larger proportion of imports of the competing economies enters duty free compared to India.
- (b) A majority (about 58%) of India's MFN tariff lines have higher than 10% tariffs.
- (c) In contrast, the competing economies have comparatively much lower share of MFN tariffs above 10%, ranging from about 1% (China) to 27.5% (Vietnam).
- (d) Bulk of the MFN tariffs of competing economies, ranging from 53% (Thailand) to 78% (Mexico), are between Zero to 5%.
- (f) The competing economies have lower peak tariffs compared to India.

4.2.3 Comparing Individual Tariff Lines

With this background, individual tariffs for each line are compared below to assess for how many lines Indian tariffs are:

- (a) Higher than the competing economies;
- (b) Same as the competing economies;
- (c) Lower than the competing economy.

Table 4.2.3. Distribution of MFN Tariffs for India and the Selected Competing Economies For 2022

MFN Tariff↓	India	China	Mexico	Thailand	Vietnam
Zero	31 (32)	71	77	56	66
0 to 5%	2(1)	6	17	8	13
5 to 10%	18	42	9	53	9
10 to 15%	38	1	16	0	23
15 to 20%	16	0	1	2	5
20 to 25%	14	0	0	2	4
25 to 30%	1	0	0	0	1
Specific Tariffs	0	0	0	1	0

Note: The numbers in brackets for India show the change due to the reduction of tariffs on one line in 2023 for India.

Comparison of Tariffs on Those Lines for Which India has Zero Tariffs

An important point in the comparison of zero tariffs is that each of the competing economies has many more lines with zero tariffs than India (see Figure 4.2.1 above).

Of the 120 lines, India had zero tariffs for 31 lines in 2022. The MFN tariffs of Thailand and Vietnam are zero for all these 31 lines. In the case of China and Mexico, one tariff line of each has a higher tariff than zero.²¹ All other lines of China and Mexico have zero tariffs similar to India.

The decrease in tariff from 2.75% to 0% for one line increased the number of India's zero tariffs to 32 (see Table above). The number of lines of India with zero tariffs remain small in comparison to the comparator countries. The MFN tariffs for China, Thailand and Vietnam on this tariff line are not zero; however, the different in cost-competitiveness due to the drop in this one tariff line is small because of the small tariff decline and the low share of this tariff line in costs of producing the mobile phone.

Comparison of Tariffs on Those Lines for Which India Has Non-Zero Tariffs

India had non-zero tariffs for 89 tariff lines in 2022. In 2023 the number on non-zero tariff lines of India is 88. In general, the Indian MFN tariffs on these lines are higher than the corresponding tariffs for the competing economy. The percentage of tariff lines of India (taking account of the tariff change in 2023 for India) that have a higher tariff than the corresponding lines of comparator countries are: 90% (Thailand), 91% (Mexico), 93% (China), 71% (Vietnam for MFN tariffs), and 97% (Vietnam - comparison of weighted average tariffs).

²¹ China has a 6% MFN tariff for "Other articles of nickel - other: other articles of nickel and nickel alloy", and Mexico has 15% MFN tariff for "Set top boxes for gaining access to internet".

Annex 4.2 provides a similar comparison for India's MFN tariffs with Malaysia and Philippines. The general result of India's tariffs being higher remains valid even for a comparison with tariffs of Malaysia and Philippines.

4.3. Comparison of Tariffs on Products Considered as Priority by the Industry

In addition to the 120 tariff lines, the industry has provided a smaller list of products which they consider as high priority to them. These products cover 31 tariff lines, though in terms of HS 8-digit tariff lines there are only 29 lines. The reason for considering them as 31 lines is that two tariff lines have two different tariff levels 85176290 and 85177990).

The conclusions reached from the larger set of tariffs remain valid for the priority products as well. India's MFN tariffs are higher than those of the competing economies, in fact more so for the priority products.

Simple Average Tariffs: The simple average tariffs for priority products show a much larger gap between India and the competing economies, compared to the average for 120 tariff lines as a whole (see Table 4.3.1). India's average tariffs for priority products and for the three subcategories are higher than the average tariffs for 120 lines. In contrast, China, Thailand and Vietnam's average tariff for priority products is less than that for their 120 lines. Mexico has slightly higher average tariffs for its priority products than its average for 120 products, but its average tariff is still significantly below that of India. This shows that the competing economies have kept their tariff regimes more open than India for these important products.

This result remains valid for 2023 as well, because the change in tariff for Camera Lens is in only one tariff line i.e., from 2.75% to 0%. The product for which the tariff in 2023 has declined is under the category of "sub-assemblies". Compared to the estimates given in Table 4.3.1 below, the 2023 tariff decline results in India's average tariffs changing to 12.77% for total priority products, and that for sub-assemblies at 12.8%. However, the overall comparison gives similar results because the average tariffs of India for each category in Table 4.3.1 remain much higher than those for the comparator nations.

Simple Average Tariff for:	India	China	Mexico	Thailand	Vietnam	India Wtd. Avg.	Vietnam Wtd. Avg.
Total Priority Products	12.86	1.45	3.83	2.75	2.83	8.75	0.95
- Final Products	14.14	0	4.29	0	0	8.84	0
- Sub-Assemblies	13.1	1.71	3.33	4.38	2.17	11.08	0.59
- Components	11.92	1.92	3.75	2.50	5.75	6.84	1.81
Memo Item:							
Simple Average Tariff for 120 Tariff Lines	9.7	3.2	3.5	5	5.6	7.01	1.06

Table 4.3.1 Simple Average MFN Tariffs for Priority Products, 2022 (%)

Note: The number of tariff lines for total products is 30, but for the sub-categories the total is 31 because one tariff line with the same tariff occurs twice, once for sub-assemblies and again for components.

4.3.2. Distribution of Tariffs Across the Tariff Range for Priority Products

Table 4.3.2 below shows that most tariffs for priority products are in the higher range for India, while for competing economies most are zero. **India is the only country among the five being compared, that has MFN tariffs above 15% for priority products.**

Most of the tariffs considered for priority products apply to inputs (sub-assemblies and components). Table 4.3.3 shows that a large proportion of the tariffs on inputs are at zero for the competing economies, while in contrast a large share of India's tariff lines is above 15%. This implies a loss of competitiveness for India.

	Zero	0 to 5%	5 to 10%	10 to 15%	15 to 20%	20 to 25%
India	8 (9)	1 (0)	0	4	7	11
China	25	1	5	0	0	0
Mexico	21	3	1	6	0	0
Thailand	22	1	8	0	0	0
Vietnam	22	2	2	5	0	0

Table 4.3.2. Distribution of MFN Tariffs for Priority Products, 2022

Note: the number in brackets for India shows the number of lines for 2023, due to a tariff decrease in one line from 2.75% to 0%.

Table 4.3.3 Sub-Assemblies and Components (Inputs): MFN Tariff Lines with Zero Tariffs and Tariffs Above 15%, 2022

	Total Number of Tariff Lines for Inputs	MFN Tariff 0% (Number of tariff Lines)	MFN Tariff Above 15% (Number of tariff Lines)
India	24	6 (7)	14
China	24	18	0
Mexico	24	16	0
Thailand	24	15	0
Vietnam	24	15	0

Source: Tariff Schedules of Countries

Note: the number in brackets for India shows the number of lines for 2023, due to a tariff decrease in one line from 2.75% to 0%.

4.3.3 Tariff Line-Wise Comparison for Priority Products

Like the assessment for 120 tariff lines, the tariff line-wise comparison for priority products begins with tariff lines on which India has zero tariffs. This is followed by a comparison of the lines for which India has non-zero tariffs.

For the priority products as well, the competing economies have a relatively much larger portion of their tariff lines at zero tariffs than for India. About 70% to 83% of the tariff lines for priority products have duty free imports for competing economies, which are about two and a half times the duty-free lines for India.

Tariff Line-Wise Comparison for Lines on Which India Has Non-Zero MFN Tariffs

For priority products, India had non-zero tariffs on 22 lines in 2022, and on 21 such lines in 2023. In 2023, India has higher tariffs for each such line except for one line in comparison to Vietnam. **Thus, for 95% of the non-zero lines considered, India's tariffs were higher than each competing economy in 2023.**

Conclusion

The conclusion from the above analysis is that for the 120 tariff lines as well as for priority electronic products, India's tariffs are in general higher than those applied by the competing economies. Moreover, these higher tariffs imply a loss in competitiveness for India compared to the competing economies. This situation remains similar in 2023, because of the reduction in tariff for Camera Lens (only one tariff line) from 2.75% to 0%, which has a marginal effect on competitiveness.

With high tariffs, domestic production would be oriented towards meeting domestic demand rather than exports. Imposing higher tariffs is an import substitution strategy, not an exportoriented one. For achieving higher exports in such a situation, additional support policies are needed, such as PLI, adequate RODTEP etc. A significant result of this Study (and the previous one in 2021) is that costs increased by high tariffs on inputs negates the impact of such incentive policies like the PLI.

The next Chapter (i.e., Chapter 5) examines the trade performance of India and the competing economies from 2015 to 2021, a period during which India's tariffs for electronics and the 120 tariff lines have been increasing, while those of the competing economies have been decreasing.

Annex 4.1

Weighted Average Tariffs of Vietnam and India, Based on Import Shares under MFN and FTA Tariffs and the Levels of MFN and FTA Tariffs for Individual Tariff Lines Compared in This Study, 2022 (Note: The number in brackets is the estimate for 2023)

HS Category	Vietnam Wtd. Avg Tariff	India Wtd. Avg Tariff	HS Category	Vietnam Wtd. Avg Tariff	India Wtd. Avg Tariff
32089090	3.77	7.37	74102100	0.00	5.14
34039100	2.20	4.11	75089090	0.00	0.00
35069999	3.14	8.71	76169990	0.57	8.99
39039090	0.66	4.28	83113010	0.28	8.31
39079900	0.00	5.03	84713010	0.00	0.00
39089000	0.00	8.49	84713090	0.00	0.00
39191000	4.08	8.27	84715000	0.00	0.00
39199010	0.84	7.33	84716040	0.00	0.00
39199090	0.85	7.33	84716050	0.00	0.00
39209999	0.91	2.43 (0)	84716060	0.00	0.00
39232990	1.75	13.13	84717020	0.00	0.00
39235090	1.50	12.68	84718000	0.00	0.00
39239090	0.85	13.11	84733020	0.00	0.00
39269099	10.13	12.75	85011011	2.25	7.76
40169320	0.75	7.11	85042100	1.86	10.33
40169990	1.67	6.62	85043100	1.87	9.08
42023190	15.91	6.57	85043200	2.60	9.01
48191090	0.74	7.47	85044010	0.00	18.84
48192090	1.04	7.54	85044030	0.00	18.84
48211020	2.80	9.24	85044090	0.00	18.84
48211090	2.80	9.24	85045010	0.00	6.31
48219010	4.55	9.98	85045090	0.00	6.31
48219090	4.55	9.98	85049010	0.00	9.01
48239090	1.14	8.86	85049090	0.00	13.53
49019900	1.58	9.45	85051190	0.00	2.36
49111090	1.30	9.43	85076000	0.00	14.46
59119010	0.00	9.70	85079090	0.28	4.33
73181500	3.81	9.46	85171211	0.00	13.12
73181600	2.66	8.89	85171219	0.00	13.12
73269099	1.64	10.82	85176100	0.00	2.56

HS Category	Vietnam Wtd. Avg Tariff	India Wtd. Avg Tariff	HS Category	Vietnam Wtd. Avg Tariff	India Wtd. Avg Tariff
85176290	0.00	16.23	85361060	2.38	6.77
85176290	0.00	16.23	85361090	2.38	6.77
85176960	0.00	0.00	85365090	1.86	7.04
85177010	0.00	19.13	85366990	3.46	7.95
85177090	0.17	14.35	85369010	0.00	7.19
85177090	0.17	14.35	85369090	0.00	7.19
85181000	3.43	7.70	85371000	1.28	5.78
85182200	5.59	18.00	85372000	0.57	6.22
85182900	0.00	13.69	85381010	0.37	7.02
85183000	0.36	17.46	85381090	0.37	7.02
85189000	0.49	9.59	85389000	1.52	12.00
85198940	5.25	10.04	85411000	0.00	0.00
85235100	0.00	6.05	85412100	0.00	0.00
85235210	0.00	0.00	85412900	0.00	0.00
85258020	0.00	11.19	85414011	0.00	0.00
85258090	6.02	5.59	85414020	0.00	18.91
85271300	0.70	10.29	85416000	0.00	0.00
85287100	0.00	3.20	85423100	0.00	0.00
85299090	0.00	14.83	85423200	0.00	0.00
85322200	0.00	0.00	85423900	0.00	0.00
85322300	0.00	0.00	85439000	0.00	7.25
85322400	0.00	0.00	85444299	0.00	13.29
85322500	0.00	0.00	85444910	2.03	8.99
85322990	0.00	0.00	85444999	2.03	13.49
85332119	0.00	0.00	85469090	0.00	7.81
85332129	0.00	0.00	90142000	0.00	6.10
85333120	0.00	0.00	90181990	0.00	7.13
85334030	0.00	0.00	90223000	0.00	4.89
85334090	0.00	0.00	90328910	0.00	4.30
85340000	0.00	0.00	90328990	0.00	4.30

Annex 4.2

Comparison of MFN Tariffs of India with Malaysia and the Philippines

Annex Table 4.2.1. Comparison of Average MFN Tariffs of India, Philippines and Malaysia, 2022

	India	Malaysia	Philippines
Average Tariff for 120 Tariff Lines	9.7%	5.2%	3.9

Source: Tariffs Schedules of Countries

Annex Table 4.2.2. Comparison of MFN Tariffs for 31 HS 8 Digit Lines of India with Zero Tariffs in 2022

	India's MFN Tariffs Same as Competing Country's MFN Tariff	India's MFN Tariff Lower Than Competing Country's MFN Tariff
Malaysia	31(32)	0
Philippines	30	1

Source: Tariffs Schedules of Countries

Note: The number in brackets shows the estimate for 2023

Annex Table 4.2.3. Comparison of 89 Tariff Lines for Which India Has Non-Zero MFN Tariffs, 2022

	Proportion of Tariff Lines India's MFN Tariff Lines Above MFN Tariffs of Malaysia and Philippines
Malaysia	68.5% (68.1%)
Philippines	89.9%

Source: Tariffs Schedules of Countries

Note: The number in brackets shows the estimate for 2023

Note: # = 65% of Malaysia's imports come from FTA countries, much more than for India. Therefore, its FTA weighted average tariff would be much lower than the MFN tariff.





Trends in Tariffs, Exports and Imports for India and Competing Countries



5.1 Introduction

The chapter begins with an examination of the trends in average tariffs at HS 6-digit level from calendar years 2015 to 2021, applied on 120 tariff lines and also on electronics products,22 by India and the four competing economies. This is followed by a comparison of export, import and trade balance for electronics from 2015 to 2021 for India and the four competing economies. The data shows that tariffs for India in 2021 were higher than in 2015, while those for the competing economies fell during this period. This Chapter then compares the trade performance of India and the four competing economies. India's tariffs have increased during the years 2015 to 2021, its trade performance has not improved compared to competing economies, while compared to India the tariffs of these economies have decreased during the same period.

5.2 Comparison of average MFN tariffs during the period 2015 to 2021

From 2015 to 2021, Indian tariffs have increased while those of the competing economies have decreased. Table 5.2.1 summarizes the tariff developments for individual HS 6-digit categories corresponding to the 120 tariff lines from the year 2015 to 2021. The main conclusions are that:

- (a) India is the only country where there was **no reduction in average tariffs at 6-digits between 2015 to 2021**;
- (b) India has increased tariffs for the largest number of the HS 6-digit lines between 2015 to 2021, compared to the four other competing economies.
- (c) India has the lowest number of tariff lines for which the tariffs in 2021 remained unchanged when compared with the year 2015.
- (d) In contrast, for the average tariffs at HS 6-digits of competing economies:
 - (d.i) remained unchanged for a significant share of tariff lines between 2015 and 2021;
 - (d.ii) were lower in 2021 than 2015 for several lines; and
 - (d.iii) in a relatively few cases, the average tariffs were higher in 2021 compared to 2015.

²² The coverage of electronics is defined by India in terms of HS 8-digit tariff lines. However, to compare these across different countries, these lines have to be converted to HS 6-digit tariff lines because only HS categories at 6-digit can be used for international comparisons across countries.

Total HS 6-Digit Tariffs Lines That:	India	China 2015 to 2021	Mexico 2015 to 2021	Thailand 2015 to 2021	Vietnam 2015 to 2021
	97	97	97	97	97
(a) Increased	49	3	16	6	13
(b) Decreased	0	32	11	17	7
(c) Remained Unchanged	48	62	70	74	77

Table 5.2.1 Increase/ Decrease in MFN Tariffs in 2021 Compared to 2015 for 120 Tariff Lines

Source: WTO

Note: The comparison is in terms of the average tariffs for the individual 6-digit HS categories.

A similar result is valid also for the changes in tariffs for electronics as a whole, as shown by Table 5.2.2 below. India has the largest number of tariff lines for which tariffs increased between 2015 and 2021, and the smallest number for which tariffs decreased during this period. India's tariff lines for which tariffs remained unchanged is lower than all except China. However, **China has fewer tariff lines with unchanged tariffs from the year 2015 to 2021 because of the relatively large number of tariff lines for which tariffs decreased during this period.**

Table 5.2.2 Increase/ Decrease in MFN Tariff for Electronics As A Whole at HS 6-Digits, 2021 Compared to 2015

Total HS 6-Digit Tariffs Lines That:	India	China 2015 to 2021	Mexico 2015 to 2021	Thailand 2015 to 2021	Vietnam 2015 to 2021
	210	210	210	210	210
(a) Increased	68	6	14	3	13
(b) Decreased	1	108	9	33	5
(c) Remained Unchanged	141	96	187	174	192

Source: WTO

Note: The comparison is in terms of the average tariffs for the individual 6-digit HS categories.

5.3 Trends in Electronics Trade for India and Competing Economies

Exports and imports of electronics from the year 2015 to 2021 for India and the four competing economies are shown in Table 5.3.1. When compared with the four competing economies, **India** has the lowest level of exports. India's import levels are second lowest, as Thailand's imports are lower. This reflects the impact of India's domestic demand on imports. While only about 14% of India's domestic production of electronics is exported, Thailand's electronics exports account for 90 to 95% of its domestic production.²³

²³ https://www.krungsri.com/en/research/industry/industry-outlook/Hi-tech-Industries/Electronics/IO/io-Electronics-21

Exports	2015	2016	2017	2018	2019	2020	2021
India	5.71	5.94	6.03	7.88	11.18	10.08	14.26
China	719.81	658.01	714.32	789.46	772.36	818.22	902.71
Mexico	80.04	77.85	84.58	88.91	88.65	84.74	90.53
Thailand	44.01	43.22	48.06	49.12	47.06	46.61	53.78
Vietnam	50.12	58.97	78.82	89.55	98.63	113.79	131.23
Imports	2015	2016	2017	2018	2019	2020	2021
India	41.07	41.14	52.29	57.53	55.92	48.89	65.51
China	507.77	479.43	518.25	590.46	562.62	616.26	676.15
Mexico	87.66	86.07	86.34	94.50	97.00	88.33	105.66
Thailand	38.70	38.03	42.57	45.63	43.62	43.00	52.11
Vietnam	39.48	45.01	61.28	65.80	74.43	89.99	108.8
Exports Minus Imports	2015	2016	2017	2018	2019	2020	2021
India	-35.36	-35.2	-46.26	-49.65	-44.74	-38.81	-51.25
China	212.04	178.58	196.07	199	209.74	201.96	226.56
Mexico	-7.62	-8.22	-1.76	-5.59	-8.35	-3.59	-15.13
Thailand	5.31	5.19	5.49	3.49	3.44	3.61	1.67
Vietnam	10.64	13.96	17.53	23.76	24.23	23.8	22.2

Table 5.3.1 Trade in Electronics of Competing Economies Based on HS 6 Digit Lines (US\$ Bn) in Calendar Years 2015 to 2021

Source: ITC Trade Map, and TDM

5.4. Trade Performance

In the background of higher tariffs, it is useful to examine trade performance of the five countries. India is particularly focused on export performance and trade deficit. Developments in these two areas are examined below.

(a) **Exports of Electronics**: For each year from 2015 to 2021, all the competing economies have higher electronics exports than India (Table 5.3.1). Furthermore, the excess of their electronics exports over India's exports has increased during 2015 to 2021. This increase was very significant for China and Vietnam, and relatively small for Mexico and Thailand (see Table 5.4.1 below).

Exports of China, Mexico and Vietnam are higher than even the total domestic production of electronics by India (compare Table 5.3.1 with India's production given in Table 1.1). Further, the ratios of imports to exports of the competing economies are lower than that for India. This implies that the value of imports required per unit exports is lower for competing economies than India. This is true across the range of economies, i.e., large economy (China), medium (Mexico), and smaller economy (Vietnam).

Table 5.4.1. Electronics Exports of Competing Economies Minus Electronics Exports of India	
for Calendar Years 2015 to 2021 (US\$ Bn)	

Exports	2015	2016	2017	2018	2019	2020	2021
China	714.1	652.07	708.29	781.58	761.18	808.14	888.45
Mexico	74.33	71.91	78.55	81.03	77.47	74.66	76.27
Thailand	38.3	37.28	42.03	41.24	35.88	36.53	39.52
Vietnam	44.41	53.03	72.79	81.67	87.45	103.71	116.97

Source: ITC Trade Map, and TDM

(b) Exports Minus Imports (Trade Surplus/ Deficit): China, Thailand and Vietnam had a trade surplus for electronics each year from 2015 to 2021. In contrast, India and Mexico had trade deficits each year. India's trade deficit for electronics has been higher than that of Mexico. Significantly, the excess of India's trade deficit over that of Mexico was higher in 2021 than in 2015 (Table 5.4.2 below).

Table 5.4.2. Excess of India Electronics Trade Deficit Over Trade Deficit of Mexico, CalendarYears 2015 to 2021

2015	2016	2017	2018	2019	2020	2021
27.7	27.0	44.5	44.1	36.4	35.2	36.1

Source: ITC Trade Map

The results regarding exports and trade deficit for electronics are also valid for the 120 tariff lines compared earlier in this Report.

(c) A closer look at relative export performance of India and Vietnam

It is notable that even a small economy such as Vietnam has a trade surplus in electronics which is **one and half times to more than double the** <u>total electronics exports</u> of India (see Figure 5.3.1 below). This shows that relevant policy approach makes a big difference, a point which has been emphasized by the Vision Document that projects a high export potential for India. Tariff is an important policy measure in that context. Therefore, a careful analysis is needed if tariffs are to be increased, to ensure that the higher tariffs on inputs do not result in "cost disabilities", or that the cost disadvantage does not negate the beneficial impact of support policies like PLI or ease of doing business.





Source: ITC Trade Map, and TDM

5.5 Comparison for Priority Products

Annex Tables 5.1.1 and 5.1.2 provide a comparison of tariffs and trade for priority products from 2015 to 2021. During the period 2015 to 2021, tariffs on the largest number of tariff lines increased for India compared to the competing economies. Regarding exports of priority products, India's performance is the lowest among all the economies compared. Further, China, Thailand and Vietnam have trade surpluses and India and Mexico have trade deficit. India's deficit is larger than that of Mexico, and the "burden" of trade deficit (i.e., ratio of trade deficit to exports) for India is 8 times that for Mexico in 2021.

Conclusions

During 2015 to 2021, India's average tariffs increased for most lines while those of the competing economies have decreased. In this period, the trade performance of India has remained comparatively less impressive than the competing economies. India's exports are the lowest amongst the five economies compared, and it has a high trade deficit. In comparison, China, Thailand and Vietnam have had trade surplus for electronics. Both India and Mexico have registered trade deficits, but when the respective trade deficits are assessed in terms of the relative "burden" they impose (i.e., ratio of trade deficit to exports), India's burden from the deficit is far higher than that of Mexico. This burden will be addressed not so much by a reduction in imports as by an increase in exports. Thus, India needs to reduce tariffs, particularly for inputs so that the "tariff disability" and reduction in competitiveness is addressed in the near term to achieve the targets of a high level of exports for electronics.

Annex 5.1

Tariff Trend and Trade of Electronics Priority Products

The situation for priority products is like the comparison of electronics as a whole (see Table 5.4.1). All competing countries have higher trade than India. Once again, China, Thailand and Vietnam have trade surpluses, while India and Mexico have trade deficits. Likewise, the tariffs for priority products are lower in the competing countries than India.

Annex Table 5.1.1. Number of Tariff Lines for Which MFN Tariff Increased/ Decreased in 2021 Compared to 2015 Tariff Levels for 120 Tariff Lines

Total HS 6-Digit Tariffs Lines That:	India 2015 to 2021	China 2015 to 2021	Mexico 2015 to 2021	Thailand 2015 to 2021	Vietnam 2015 to 2021
	24	24	24	24	24
(a) Increased	17	0	5	2	4
(b) Decreased	0	9	1	4	3
(c) Remained Unchanged	7	15	18	18	17

Source: WTO

Note: The comparison is in terms of the average tariffs for the individual 6-digit HS categories corresponding to the tariff lines for priority products.

Exports	2015	2016	2017	2018	2019	2020	2021
India	3.2	3.4	3.6	5.1	7.8	7.1	10.5
China	460.5	430.1	476.6	528.7	495.6	523.4	566.6
Mexico	38.74	40.98	45.61	50.05	47.64	45.25	47.07
Thailand	24.09	22.11	25.53	27.04	25.14	25.57	30.42
Vietnam	39.8	44.5	57.7	67.1	72.4	84.2	129.4
Imports	2015	2016	2017	2018	2019	2020	2021
India	27.6	26.2	34.1	35.3	31.4	30.0	38.1
China	139.6	129.8	138.2	152.8	142.2	147.5	163.8
Mexico	50.25	50.87	49.65	54.33	54.98	51.61	62.28
Thailand	19.85	18.68	21.26	22.14	20.38	19.38	23.47
Vietnam	21.5	22.1	31.5	30.5	31.5	38.1	45.9

Annex Table 5.1.2. Trade in Priority Products Based on HS 6-Digit Lines (US\$ Bn)

Exports Minus Imports	2015	2016	2017	2018	2019	2020	2021
India	-24.4	-22.8	-30.5	-30.2	-23.6	-22.9	-27.6
China	320.9	300.3	338.4	375.9	353.4	375.9	402.8
Mexico	-11.51	-9.89	-4.04	-4.28	-7.34	-6.36	-15.21
Thailand	4.24	3.43	4.27	4.9	4.76	6.19	6.95
Vietnam	18.3	22.4	26.2	36.6	40.9	46.1	83.5

Source: ITC Trade Map, TDM





Tariff Comparisons



6.1. Introduction: The Distribution of MFN Tariffs Across the Tariff Range

This Chapter compares India's tariffs in 2021 with the competing economies, and analyses whether and how this has changed in 2022. The substantive situation in 2023 has not changed in India because tariff was reduced on only one tariff line, from 2.75% to 0%. The small impact of this change is shown in context of the specific issues discussed in this Chapter.

The distribution of tariffs in Table 6.1.1 shows that:

- (a) While the number of tariff lines with zero tariffs in 2022 were lower than in 2021 for India, the four competing economies have increased the number of their zero tariff lines in 2022 compared to 2021.
- (b) The peak tariff for India has increased in 2022 compared to 2021.
- (c) Compared to 2021, India has more MFN tariffs in the higher tariff range, i.e., above 20% as shown in Table 6.1.1 below. More detail on the distribution of tariffs is provided in Annex Tables 6.1.1 and 6.1.2.
- (d) Table 6.1.1 also shows that for India, the tariff range "10 to 20%" saw a decrease in the number of tariff lines in 2022 compared to 2021. This decrease is the same as the increase in tariff lines in the higher tariff category.
- (d) A very small change to reduce the general incidence of tariffs in 2022 was made by Thailand, which was significantly smaller than China and Vietnam.
- (e) The changes in 2022 for both China and Vietnam show that in general these countries have reduced their tariffs compared to 2021. These tariff changes will enable easier linkages with Global Value Chains (GVCs).
- (f) The overall direction of change for India is in the opposite direction, with the distribution of tariffs moving more towards higher tariff levels in 2022 compared to 2021. This is despite the fact that India reduced a number of its MFN tariffs and is a reflection of the increase in the number of lines with tariffs above 20%.
- (g) In India the change in one tariff line i.e. for Camera Lens from 2.75% to 0% in 2023 has had a marginal impact as shown in Table 6.1.1 below for two categories (Zero, and 0 to 10%). The 2023 numbers for India are shown in brackets in the Table. These numbers show that compared to 2021, India's tariffs in the highest tariff category are higher for 2022 and 2023. Thus, the general conclusion that there has been a rise in the tariffs for India remains valid for 2023 as well.

	Zero		0 to 10%		10 to 20%		Abov	e 20%
	2021	2022	2021	2022	2021	2022	2021	2022
India	32	31 (32)	19	20 (19)	60	54	9	15
China	53	71	66	48	1	1	0	0
Mexico	74	77	31	26	15	17	0	0
Thailand*	55	56	62	61	2	2	0	0
Vietnam	59	66	23	22	30	28	8*	4*

Table 6.1.1. Distributions of MFN Tariffs Across Aggregated Tariff Groups, 2022 Compared to 2021

Source: Tariff Schedules of countries

Note: * = One tariff line of Thailand has had specific tariff for both 2022 and 2021. The Table shows only ad valorem tariffs. Note 2: The numbers in brackets for India show the change due to the reduction of tariffs on one line in 2023 for India.

6.2. Comparison of 2021 and 2022 for Indian Tariffs Lines with Zero Tariffs

Table 6.1.1 in Annexure 6.1 has shown that for each of the four competing economies for 2021 and 2022, wherein the number of zero tariffs are far larger than those for India. Lower tariffs make it easier for these countries to link up with GVCs. India's reduction in one tariff line i.e. for Camera Lens has been considered in this table as well.

Comparison for tariff lines for which India has zero tariffs: in 2021, three of the competing economies had positive tariffs on the tariff lines for which India had zero tariff. In 2023, for India's lines with zero tariffs, two tariff lines of China have positive tariffs. The other three comparator each have positive tariffs for one line with zero tariffs in India. In contrast, the comparator countries have several tariff lines with zero tariffs for which India has positive tariffs, i.e., 24 lines for Thailand, 34 lines for Vietnam, 39 lines for China, and 47 lines for Mexico.

6.3. Comparison for India's Tariffs Lines with Non- Zero Tariffs

In 2023, India has the same number of tariff lines with zero tariff lines as in 2021, one more than in 2022. The number of tariff lines with non-zero are thus also the same in 2021 and 2022, i.e. 88 tariff lines.

The comparison for non-zero tariff lines of India with the four competing economies shows that in 2022 many more tariffs of India were higher than those of competing economies except for a small decrease for China (Table 6.3.1).

Nonetheless, it is noteworthy that more than 93% of the tariff lines of China had tariff below those of India in 2022, and the situation is similar in 2023 as well (see Table 6.3.1 below).

In terms of MFN tariffs, Indian tariffs in 2022 were more than those of the competing economies for about 71% (Vietnam) to 93.3% (China). However, in case of Vietnam, the correct comparison would be one that takes account of the FTA tariffs.

Comparison of weighted average tariffs based on FTA and MFN tariffs show that about 98% of India's tariffs in this category have higher tariffs than Vietnam in 2022. Table 6.3.1 also shows a method of comparison for Vietnam that was used in 2021, i.e., "Vietnam - Considering High FTA Import Categories". This method allows a comparison of the impact of Vietnam's FTA tariffs in 2021 and 2022. An explanation of this methodology is provided in Annex 6.2. The small change in India's tariffs in 2023 shows that the situation in 2023 is similar to that in 2022, i.e., for India's tariff lines with non-zero tariffs, the Indian tariff is higher than that of the four competing economies for about 90% or more lines.

Table 6.3.1. Percentage of Indian Non-Zero Tariff Lines with Tariffs Higher Than that of the Competing economies, 2021 and 2022

	2021	2022
	Percentage of India's MFN Tariff Higher than the Competing Country's Tariff in 2021 (For 88 Tariff Lines)	Percentage of India's MFN Tariff Higher than the Competing Country's Tariff in 2022 (For 89 Tariff Lines)
China	95.5%	93.3% (94.5%)
Mexico	88.6%	92.2% (92%)
Thailand	85.2%	89.9% (90.9%)
Vietnam - MFN	67%	70.8% (71.6%)
Vietnam FTA Weighted Average	Not Calculated in 2021	97.8% (97.7%)
Vietnam - Considering High FTA Import Categories	85.2%	89.9% (89.8%)

Source: Tariff Schedules of Countries

Note: The numbers in brackets show the result changing due to decline of tariff in 2023 for one tariff line of India, from 2.75% to 0%

Thus, the key result for a comparison of India's non-zero tariff lines is the overwhelming proportion of India's lines that have higher tariffs than the competing economies in both 2022 and 2023. This results in higher costs of production and higher obstacles in connecting with the global value chains.

6.4. Comparison of Tariffs for Priority Products

The Table 6.3.1 in Annex 6.3 provides the tariffs for priority products in 2022. Similar information for tariff on priority products for 2021 is provided in Annex Table 2.1 of the previous year's Tariff Report.

The broad picture on comparison of tariffs on priority products tariffs remains largely the same as for the comparison of 120 tariff lines.

Zero Tariffs of India: In 2022, the number of zero tariffs for India was one less than in 2021; this changed in 2023 and the number of lines with zero tariffs have become the same as in 2021. The competing economies have many more tariff lines with zero tariffs than India. The competing economies have 70% (Mexico) to 83% (China) of the priority product lines with zero tariff. In comparison to India with zero tariff on only 26.7% lines in 2022 (and 29% lines in 2023).

A line-wise tariff comparison for 2022 (Table 6.3.1) showed that in the case of tariffs lines for which India had zero tariffs, all comparator countries other than Mexico also had zero tariffs. For these lines, in case on one tariff line, Mexico had a positive tariff. In 2023, India has one additional line with zero tariff. As a result, for those lines for which India has zero tariffs, each one of the four competing economies have one line with positive tariffs. However, since the competing economies have many more lines with zero tariffs compared to India, India has positive tariffs for many more lines for which the comparator countries have zero tariffs, i.e., 10 for Thailand, 13 for Mexico, 15 for Vietnam, and 17 for China.

¹⁸ See page 53 of https://icea.org.in/blog/wp-content/uploads/2022/01/Report-by-ICEA-on-Detailed_Tariffs-Drive-Competitiveness-and-Scale_06022022.pdf

Non-Zero Tariffs of India: In 2022, for tariff lines of India positive (or non-zero) tariffs, India had higher tariffs in every line with respect to Mexico, for all but one tariff line in the case of China and Thailand, and two tariff lines in the case of Vietnam. In 2023, with one tariff line for India going down to zero, for lines in which India has non-zero tariffs, India has higher tariffs for all lines in comparison to all these lines for China, Mexico and Thailand, and all but one line for Vietnam. **The fact that India still has the highest tariffs for most lines of inputs (sub-assemblies and components) implies that the increase in its cost of production due to tariffs remains the highest compared to the competing economies.**

Conclusion

The relatively higher tariffs of India in 2022 compared to 2021 imply that while India's competitiveness has become lower, while that of the competing economies has improved. The situation remains substantively similar in 2023 as well.

In overall terms India continues to have higher tariffs than others for a large share of its tariff lines. In comparison to Mexico, Thailand and Vietnam, India's situation in 2022 is worse than in 2021. The small improvement with respect to China still shows 93% of India's tariff lines with higher tariffs. Combine with this the fact that China has zero tariffs on 71 lines in 2022 in comparison to 53 lines in 2021, the improvement in overall competitiveness and facility to better link up with GVC continues to be an important part of China's tariff regime.

	Zero	0 to 5%	5 to 10%	10 to 15%	15 to 20%	20 to 25%	25 to 30%	Specific Tariff
India	31 (32)	2(1)	18	38	16	14	1	0
China	71	6	42	1	0	0	0	0
Mexico	77	17	9	16	1	0	0	0
Thailand	56	8	53	0	2	0	0	1
Vietnam	66	13	9	23	5	3	1	0

Annex 6.1

Annex Table 6.1.1. Distributions of MFN Tariffs of the Five Countries Compared, 2022

Source: Tariff Schedules of countries

Note: The numbers in brackets show the result changing due to decline of tariff in 2023 for one tariff line of India, from 2.75% to 0%

Annex Table 6.1.2.	Distributions	of MEN Tariffs	of the Five	Countries Con	anarod 2021
Alliex I able 0.1.2.	DISTUDUTIONS		of the Five	Countries Con	ipareu, ZUZI

	Zero	0 to 5%	5 to 10%	10 to 15%	15 to 20%	20 to 25%	25 to 30%	Specific Tariff
India	32	2	17	41	19	9	0	0
China	53	21	45	1	0	0	0	0
Mexico	74	23	8	14	1	0	0	0
Thailand	55	8	54	0	2	0	0	1
Vietnam	59	12	11	22	8	7	1	0

Source: Tariff Schedules of countries

Note: The numbers in brackets show the result changing due to decline of tariff in 2023 for one tariff line of India, from 2.75% to 0%

Annex 6.2

"Vietnam - Considering High FTA Import Categories"

In 2021, the methodology focused on those tariff lines of India for which the MFN tariff of Vietnam was more than that for India. The shares of FTA imports of India and Vietnam were compared for these lines. Then the following process was followed for the comparison, which incorporated the idea that a very significant part of imports enters into Vietnam at FTA tariff rates which are below those imposed by India.

- (a) If the FTA share of Vietnam is close to 100%, or if the share of imports at zero duty (or 0 to 5% duty) under FTA is above 90%, then for that line the tariff of Vietnam is considered in effect to be below that of India. The relevant tariff lines are shown in Annex Table 6.2.1 below.
- (b) In the case of those lines for which Vietnam's FTA import share in total imports is less than 90%, two criteria are used to determine that Vietnam's tariffs are in effect less than those for India. One, the difference between India and Vietnam's MFN tariff is less than 10%. Two, tariff lines for which India's FTA imports are less than 35% (i.e., MFN imports are more than 65%),

These criteria are used to provide the list in Annex Table 6.2.3 below, with two exceptions.

One is a tariff line for which Vietnam has 99.4% of its imports under FTA (HS category 42023190), Vietnam's tariff is not considered to be below India's because the FTA share of India is also large, i.e., 60.6%. In this case a large share of India's exports also come in at FTA tariffs and thus there is no clearcut basis to consider that tariffs on a major part of Vietnam's tariffs lines are lower tariffs than India. Another is a tariff line for which India's FTA share is 35.98%. It is nonetheless included in Table 6.3.3 because the difference between the MFN tariff of India and Vietnam is relatively small, about 90% of Vietnam's FTA imports come in at tariffs of 0 to 5%. In comparison, 64% of India's imports come in at the MFN tariff of 11%.

		FTA Imports in Total Imports		MFN Tariffs		Share of Vietnam's Total Imports Subject to Tariffs		
	HS Category	Vietnam	India (%)	Vietnam (%)	India (%)	Zero (%)	0 to 5 (%)	0 to 10 (%)
1	39199010	93.86	33.38	12	11	92.73		93.86
2	39199090	93.86	33.38	12	11	92.73		93.86
3	42023190	99.4	60.16	25	16.5	99.4		
4	48191090	96.33	32.07	15	11	93.07	95.89	96.33
5	48192090	95.56	31.46	15	11	89.49	94.1	95.56
6	48239090	94.29	19.41	20	11	94.29		
7	49111090	93.47	14.24	20	11	93.47		
8	76169990	96.21	18.27	15	11	96.21		

Annex Table 6.2.1. HS Lines Where Tariff of India is Less Than the Tariff of Vietnam for 2022: Categories for Which Vietnam's FTA Tariffs/Imports Imply Zero or Near Zero Effective Tariffs

		FTA Imports in Total Imports		MFN Tariffs		Share of Vietnam's Total Imports Subject to Tariffs		
	HS Category	Vietnam (%)	India (%)	Vietnam (%)	India (%)	Zero (%)	0 to 5 (%)	0 to 10 (%)
9	85043100	96.61	17.45	15	11	71.34	94.26	96.61
10	85181000	96.96	29.99	15	11	42.81	91.56	96.96
11	85198940	94.09	8.77	20	11	7.18	94.09	
12	85271300	99.95	6.49	30	11	86.21	99.95	
13	85371000	94.15	29.93	10	8.25	86.56	94.15	

Source: WTO, TDM and the Tariff schedules of India and Vietnam.

Note: The import share of Vietnam is calculated for tariff lines at the HS 6-digit level.

Annex Table 6.2.2. Comparison of FTA imports in Total Imports for Vietnam and India for HS Lines Where MFN Tariff of India is Less Than the MFN Tariff of Vietnam

	HS Categories for Which Vietnam's FTA Tariff Does Not Replace the MFN Tariff in the Comparison					
		FTA Imports in	n Total Imports	MFN	Tariffs	
	HS Categories	Vietnam	India (%)	Vietnam (%)	India (%)	
1	35069999	87.46	20.81	14	11	
2	39191000	84.18	24.81	15	11	
3	48211020	84.62	15.96	15	11	
4	48211090	84.62	15.96	15	11	
5	48219010	80	9.28	20	11	
6	48219090	80	9.28	20	11	
7	85011011	91.75	29.44	25	11	
8	85258090	86.55	49.16	15	11	
9	85361060	92.18	38.41	15	11	
10	85361090	92.18	38.41	15	11	
11	85365090	94	35.98	15	11	
12	85366990	94.92	27.77	25	11	

Source: WTO, TDM and the Tariff schedules of India and Vietnam.

Based on the above information, Annex Table 6.2.3 below shows that with the methodology used in 2021, Vietnam has an additional 17 tariff lines for which tariffs are lower than those of India. The result of that comparison reiterates the conclusion reached earlier, namely that in 2022 India has more lines with higher tariffs compared to Vietnam than was the case in 2021.

Annex Table 6.2.3. Vietnam's Tariff Lines For Which Tariff is Lower Due to FTA Trade Shares, 2022

	HS Category of India	Share of India's Imports Under FTA	Share of Vietnam's Imports Under FTA With Tariff Up To 5%	India's MFN Tariff	Vietnam's MFN Tariff Minus Indian MFN Tariff	Imports Co	Vietnam's oming in at ariff of:
		%	%	%	%	Zero	0 to 5%
1	39199010	33.38	92.73	11	1	92.73 %	92.73 %
2	39199090	33.38	92.73	11	1	92.73 %	92.73 %
3	48191090	32.07	95.89	11	4	93.07 %	95.89 %
4	48192090	31.46	94.1	11	4	89.49 %	94.1 %
5	48211020	15.96	84.62	11	4	74.72 %	84.62 %
6	48211090	15.96	84.62	11	4	74.72 %	84.62 %
7	48239090	19.41	94.29	11	9	94.29 %	94.29 %
8	49111090	14.24	93.47	11	9	93.47 %	93.47 %
9	76169990	18.27	96.21	11	4	96.21 %	96.21 %
10	85011011	29.44	91.75	11	14	88.06 %	91.75 %
11	85043100	17.45	94.26	11	9	71.35 %	94.26 %
12	85181000	29.99	91.56	11	4	42.81 %	91.56 %
13	85198940	8.77	94.09	11	9	5.05 %	94.09 %
14	85271300	6.49	99.95	11	19	86.21 %	99.95 %
15	85365090*	35.98	88.55	11	4	80.31 %	88.55 %
16	85366990	27.77	94.92	11	14	51.13 %	94.92 %
17	85371000	29.93	94.15	8.25	1.75	86.56 %	94.15 %

Source: Author's Calculations from Tariff Schedules of Countries

Note: * = For 85365090, 94% of Vietnam's imports enter at FTA tariffs ranging from zero to 10%. In contrast, 64% of India's imports enter at MFN tariff of 11%.

Annex 6.3

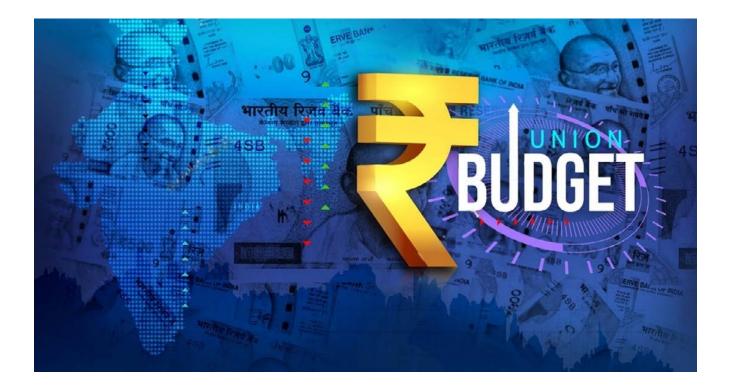
Annex Table 6.3.1. MFN Tariffs on Final Products, Sub-Assemblies and Components, 2022

			India	China	Mexico	Thailand	Vietnam
	HS New Category	Finished Products					
1	85171300	Mobile Phone	22	0	0	0	0
2	85171400	Mobile Phone (feature phone)	22	0	0	0	0
3	85176290	Smart Watch	22	0	0	0	0
4	85176290	Headsets for mobile phones	11	0	0	0	0
5	85287100	OTT Set Top Box/ Set Top Box	22	0	15	0	0
6	85176960	OTT Set Top Box/Set Top Box	0	0	15	0	0
7	84713010	Laptop	0	0	0	0	0
8	84715000	Desktop / PC	0	0	0	0	0
9	84713090	Tablet	0	0	0	0	0
10	85183000	Earphones	22	0	15	0	15
11	85182200	Speakers	22	0	15	0	15
		Sub-Assemblies					
1	85076000	Battery Pack	16.5	10	0	10	0
2	39209999	Camera Lens	2.75 (0)	6.5	0	5	6
3	85044030	Battery Charger	22	0	15	8.75	0
4	85044090	Adapter	22	0	15	8.75	0
5	85177990	Parts of Mobile Phones - Camera Module; Display Assemblies, Connectors, Vibrator Motor for Mobiles Phones	11	0	0	0	5
6	85299090	Others	11	4	5	10	0
7	85258900	Others - Camera Module	11	0	0	0	15
8	85177910	PCBA	22	0	0	0	0
9	85444299	Cables	16.5	0	5	10	0
10	85258100	Digital Camera	22	0	0	0	0

			India	China	Mexico	Thailand	Vietnam
	HS New Category	Finished Products					
		Components					
1	73181500	Mechanics	16.5	8	5	10	12
2	73269099	Mechanics (SIM Socket)	16.5	8	0	10	10
3	85176100	Base Station	22	0	0	0	0
4	85389000	Mechanics for Mobile Phones	16.5	7	0	10	12
7	85177990	Others	16.5	0	0	0	5
8	85235100	Flash Storage	11	0	10	0	0
9	85340000	Printed Circuits	0	0	0	0	0
10	84717020	Hard Drive	0	0	0	0	0
11	84718000	Graphics Card	0	0	0	0	0
12	84733020	Motherboard	0	0	0	0	0

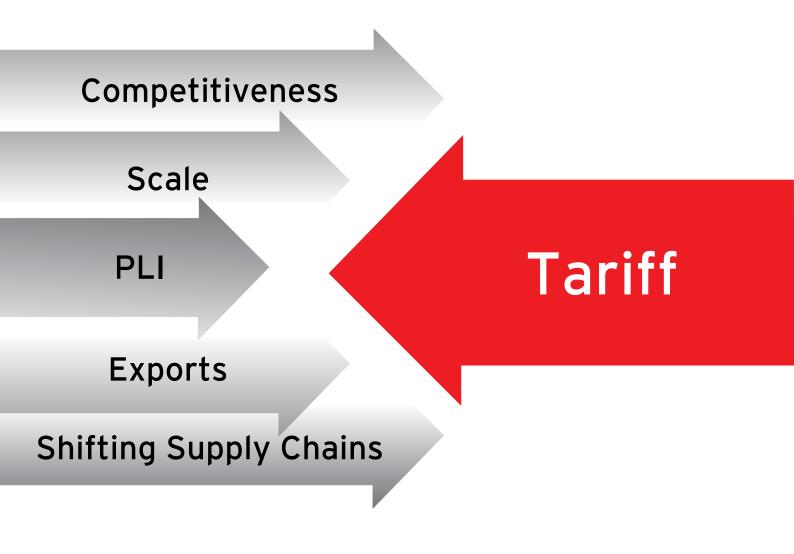
Source: Based on industry feedback and Country tariff schedules.

Note: The number in a bracket under the category "sub-assemblies" shows India's MFN tariff for 2023, which changed for one tariff line from 2.75% to 0%, as per Union Budget 2023-24.





Impact of Tariff Increase on the Mobile Phone Sector



Introduction

A well-known economic insight for many years is that a tariff on imports is a tax on exports. The impact of change in tariff on import demand depends on a variety of factors. These include the reaction of producers and consumers to price changes, the share of imports in domestic production and consumption of mobiles, the substitutability of imports for domestic products, and the degree of indigenization. Although tariffs on imported inputs will protect domestic producers, such tariffs will also increase the costs for domestic manufacturers who use those inputs.

The irony is that at least since 2019, the Government has considered this sector to be a priority sector and has even provided support through Production Linked Incentive (PLI), announced in April 2020. However, over the same period, the Government has imposed costs on this sector in the form of tariffs on inputs since 2020.

These costs are magnified especially in a global value chain (GVC) context and have adverse effects on multiple objectives. **GVC-related trade is defined as traded items that cross at least two international borders**²⁵. The impact of tariff increases in a GVC context will depend on the degree of efficient indigenization in the domestic economy. In general, global sourcing by firms implies that higher tariffs, usually imposed to protect domestic industry, can lead to higher input costs for domestic producers (shown below). The effects of higher tariffs may be magnified by GVCs, especially in the case of multistage production processes, where goods move in a sequential manner from upstream to downstream with value added at each stage.²⁶ GVC-related trade can be decomposed into the so-called backward and forward linkages. Backward linkages in GVC trade comprise the foreign content used to produce a country's exports. Sectors such as electronics, particularly mobiles, tend to rely more on backward linkages and hence magnification effects of tariffs are higher. Hence it is not incorrect to say that tariffs act as a tax on exports in the case of mobile phones.

One view is that tariff effects can be mitigated by setting up duty drawback schemes and export processing zones. But the effect is limited in time and scope because they compensate exporting firms for the additional production costs only when they use imported inputs. As the intention of the government is to increase domestic production, tariff increases even when combined with duty drawback could price-out Tier two domestic firms. These mitigating policies are only second-best alternatives to fully fledged tariff liberalization when it comes to deepening domestic inter-industrial links. Reducing tariff and nontariff trade costs globally through multilateral agreements is thus fully consistent with the interests of developing economies because it lowers their cost of GVC participation.²⁷

²⁵ GVC-related traded items are, therefore, re-exported at least once before being absorbed in final demand (Borin and Mancini, 2019). Such trade flows can be computed on the basis of inter-country input-output (ICIO) tables. This report uses the input output tables provided in the GTAP database for multiple countries. Borin, A., and Mancini, M., "Measuring What Matters in Global Value Chains and Value-Added Trade", Policy Research working paper, WPS 8804, World Bank, 2019.

²⁶ Such sequentially organised value chains are also referred to as "snakes". This is in contrast to supply chains sometimes labelled as "spiders", where multiple limbs (i.e., parts) come together to form a body (i.e., assembly) without a particular sequencing. Baldwin, R. and Venables, A.J.,2013, "Spiders and snakes: Offshoring and agglomeration in the global economy", Journal of International Economics, 90, Elsevier, Amsterdam, 2013, pp. 245-254.\

²⁷ https://www.wto.org/english/res_e/booksp_e/gvcs_report_2017_chapter4.pdf

This chapter uses a five-pronged approach, to calculate tariff impacts. **Section 1** shows a simple back of the envelop calculation using tariff increases and the percentage of that input in the total cost to estimate cost increases. Due to input output linkages and the consequent cascading effects, prices of inputs produced domestically will also increase. **Section 2** provides estimates of these price effects of tariffs for some critical inputs to mobiles. It is claimed that with a duty drawback scheme the impact of tariff increase is neutralized. **Section 3** will examine the veracity of this claim. **Section 4** benchmarks the impact of tariff increase of India with its main competitor - Vietnam. Using the preceding analysis, this section will analyse the cost effects of increase in tariffs on exports of mobiles vis-à-vis Vietnam. **Section 5** analyses the effects of tariffs. Finally, the concluding section will suggest a way forward.

7.1. Simple Calculation of Tariff effects on Costs

Using the percentage share of inputs in BOM and the tariff increase in 2020, Table 7.1.1 calculates the increase in costs due to tariff increases and shows the impact on the total bill of materials (BOM). The tariff increase is from the budget in 2020 when supportive measures such as PLI were already being discussed by the government.²⁸ Similarly, Table 7.1.2 shows the impact of tariff increases in 2021 on BOM.



²⁸ Notification no. M-18011/59/2019-DM &A, Niti Ayog, Government of India dated 2nd July 2019

S. No.	Product	HSN Codes	% in BOM*	Change in duty (by percentage points)	Net Impact on BOM of Mobiles		
	(1) Printed Circuit Board Assembly (PCBA)	8504, 8517, 8518, 8532	45%	11.00%	1.4% ²⁹		
1	(2) Camera module	85177090, 85258020, 85258090, 85299090	14%				
	(3) Connectors	85177090	1.50%				
2	Charger and inputs of chargers	8544, 8504, 8542, 8532	2%		0.11%		
3	Specified insulated wires and cables	85441990, 85444299, 85444999	0.60%	5.5%			
4	Vibrator Motor / Ringer	85177090, 85013119	1%	11%	0.11%		
5	Display assembly, Touch Panel and Cover Glass	85177090	15.50%	11%	1.71%		
6	Fingerprint reader/ Scanner for Mobile Phones	84719000, 84716050	0.50%	16.5%	0.08%		
Avera	Average increase						

Table 7.1.1. Impact of Tariff Increase in 2020

Source: ICEA

The difference between this table and the one for Tariff Report 2021 is that cess (SWS) of 10% of the tariff which imported products must pay is also included in the tariff.

²⁹ On account of complete assembly of PCBA, the effects have been calculated by the ICEA as follows:

⁽¹⁾ PCBA inputs on which duty was increased in 2020 was 7% of total costs. Impact of duty on small inputs in the PCBA work out to 0.2%

⁽²⁾Total value of imports on a base of around 10.8 billion USD worth PCBA was USD 535 million. This works out to around 5% of total PCBA produced in India. On these a duty of 22% was paid in 2022 so the total duty as a proportion of total cost was 1.2%

⁽³⁾ Adding the two together the total tariff cost of PCBA would be around 1.4%

S. No.	Product	HSN Codes	% in BOM*	Change in duty (by)	Net Impact on BOM
	(1) Printed Circuit Board Assembly (PCBA)	8504, 8517, 8518, 8532	45%	2.750%	
1	(2) Camera module	85177090,85258020 85258090, 85299090	14%	2.75%	0.39%
2	(3) Connectors	85177090	1.50%	2.75%	0.04%
2	Printed Circuit Board Assembly [PCBA] and Moulded Plastic for manufacture of charger or adapter	8544, 8504, 8542, 8532	2%	5.5%	0.22%
3	Inputs and parts [other than PCBA and moulded plastic] of mobile charger			11%	
4	Inputs, Parts and Sub-parts [other than PCBA and Li ion Cell] for manufacture of Lithium-ion battery and battery pack [w.e.f. 01.04.2021]	85076000	3%	2.75%	0.08%
5	Specified insulated wires and cables	85441990, 85444299, 85444999	0.60%	2.75%	0.01%
6	Inputs, parts, sub-parts for use in manufacture of Vibrator Motor / Ringer	85177090, 85013119	1%		O%
7	Inputs, parts, sub-parts for use in manufacture of display assembly	05177000		011	011
8	Inputs, parts, sub-parts for use in manufacture of touch panel/ cover glass assembly	85177090	15.50%	0%	O%
9	Fingerprint reader/Scanner for Mobile Phones	84719000, 84716050	1.50%		
10	Inputs for manufacturing of Connectors	85369090	1.50%		
11	Inputs on Mechanics, metal and plastic	39269099, 85049090	9.50%	18.64%	1.6
Total	cost increase				2.34%

Table 7.1.2. Impact of Tariff Increase in 2021

Source: ICEA

Tariffs were not increased for most inputs to mobiles in 2022. Hence the increase in 2022 is taken as negligible. In 2023 budget the tariff on inputs to the Camera Module was reduced to 0%. Camera modules as shown in Table 7.1.1 accounts for 14% of total BOM. Camera Lens as an input to Camera modules accounts for 40% of the total cost of the Camera Module, or 5.6% of BOM. Hence when these input tariffs are reduced to 0%, BOM costs would reduce by 0.15% (5.6%*2.75%).

Aggregating across the two years: **The increase in BOM costs due to tariff increases from 2020** to 2022 is equal to 3.4 + 2.34 = 5.74 or 3.7 of total costs. Since inputs to Camera modules were brought down to 0% in 2023, costs decreased by 0.15%. Aggregating over the years from 2020-2023, the impact of a tariff rise on costs has led to an increase of 5.74%-0.15%=5.59% of BOM cost, or 3.6% of total costs.

Thus, while the authorities have provided an incentive policy to the mobile phone manufacturing sector through the PLI scheme, it is supported through indirect revenue from increased indirect taxes from the same sector. Thereby, increasing costs for the same sector. The increase in the GST rate by 6 percentage points at the same time as when the incentive policy was introduced ended up contributing to more revenues while imposing the afore mentioned cost on the end consumer.

This cost has to be juxtaposed with the benefits and other support provided to the mobile producers, as shown in Table 7.1.3.

Cost Increases and benefits	PLI	Cost increase because of Tariffs	Cost increase because of GST to the consumer	Increase in BOM			
	4-6% on	Around 4% on an	6%	5.59%			

increasing scale as tariff costs cumulate every year that the tariff rises.

Table 7.1.3: Cost and Benefits to Manufacturers and Consumers, 2023

Source: Calculations explained above

sliding scale



While costs increase because of the cumulative effects of tariffs, PLI is provided on a sliding scale i.e., 6% sliding down to 4% over 5 years.³⁰ Further GST costs while borne by the end consumer, has a depressive effect on demand. Hence, in a very competitive market where the margins are only around 3% there is a pressure to reduce prices of final products. It is pertinent to mention that if 50% of total production is exported and the rest is sold in the domestic market, then the GST impact of additional 6% leads to a 3% additional revenue for the exchequer on account of the domestic market. This is in addition to other indirect revenue from import tariffs.

7.2 Domestic Price Effects of Tariffs

As tariffs on inputs increase the price of imported inputs, the cost to producers primarily producing for the domestic market also increases. Thus, domestic consumers are left paying higher prices as a result. Tariffs also reduce efficiencies by allowing companies to charge prices higher than international prices.

Tariffs are generally imposed when the international price of inputs is lower than the domestic price. The objective of increasing tariffs is to limit the volume of imports. Because of higher tariff most domestic companies would have the incentive to produce the input domestically, provided they have the capability and are willing to produce the imported input. However, the Indian domestic market for mobile phones is only about 5% of the global market. Hence to reap economies of scale Indian producers would need to look to the export markets. For increasing scale of operations and exports, tariffs need to be lower, as the price increase due to tariffs would make Indian firms globally uncompetitive which uses domestically produced inputs.

With availability of different windows for exporters to import duty free inputs such as MOOWR, EOU, SEZ, Advance Authorisation and duty drawback, the impact of tariffs on inputs of the exported product would be mitigated, though not entirely (for more analysis of this point, see below). The imposition of tariffs orients a significant share of production towards the domestic market, and also leads to higher prices for inputs as well as final products. While the previous section focused on the impact on tariffs on inputs of mobile phones, the imposition of tariffs increases the domestic price of the final products as well. A simple example is that if the value of an input is 100, and the duty on it is 15, the domestic producer of this input would price it at 114 closer to the import value. Therefore, an exporter importing inputs under the schemes mentioned above would continue to do so rather than buying at a higher price from domestic producers.

³⁰ Over the next 5 years, the approved companies under the PLI Scheme are expected to lead to total production of more than INR 10,50,000 crore (INR 10.5 lakh crore). Out of the total production, the approved companies under Mobile Phone (Invoice Value INR 15,000 and above) segment have proposed a production of over INR 9,00,000 crore. The approved companies under Mobile Phone (Domestic Companies) segment have proposed a production of about INR 1,25,000 crore and those under Specified Electronic Components segment have proposed a production of over INR 15,000 crore. The companies approved under the scheme are expected to promote exports significantly. Out of the total production of INR 10,50,000 crore in the next 5 years, around 60% will be contributed by exports of the order of INR 6,50,000 crore. The companies approved under the scheme will bring additional investment in electronics manufacturing to the tune of INR 11,000 crore. The companies approved under the scheme will bring additional investment in employment of nearly 3 times the direct employment. The Domestic Value Addition is expected to grow from the current 15-20% to 35-40% in case of Mobile Phones and 45-50% for electronic components.

The increase in price of the products on which tariffs were raised in 2020 and 2021 has been estimated using an input-output methodology and GTAP data base. The results are shown in Table 7.2.1 below. With a tariff decrease of 2.75% for the inputs in Camera modules in 2023, the domestic price 7.2.2 for Camera modules will increase only by nearly 10% in 2023, instead of 16% in 2022.

Under HS Code	Products Description	Price Increase from tariffs in 2020/2021 (in %)
391990	Display	11
850440	Battery Chargers	6.4
850440	Adapters	4.8
850450	Electrical Transformers, Static Converters (e.g., rectifiers) and Inductors – Other Inductors: Choke coils (Chokes)	11.6
854050	Electrical Transformers, Static Converters (e.g., rectifiers) and Inductors - Other Inductors: Other	13
851770	Mobile Phones but Not Including PCBAs Under Headings 8443, 8525, 8527 or 8528 - Parts - Populated, Loaded or Stuffed Printed Circuit Boards	18.5
852580	Camera Modules	16
852580	Transmission Apparatus	14.5
853610	Electrical Apparatus for Switching or Protecting Electrical Circuits, For a Voltage Not Exceeding 1,000 Volts - Fuses: Electrical Fuses	15.3
853690	Electrical Apparatus for Switching or Protecting Electrical Circuits,	17
854449	Insulated Wires and Cables, Conductors, Optical Fibers	21

 Table 7.2.1 Domestic price increase from Tariff Increase in 2020/2021

Source: Modelling results from input output analysis using a GTAP analysis and database

Table 7.2.1 shows that in each case when tariffs increase, domestic prices have also increased. Taking the case of mobile phones in the analysis, an increase of tariffs to 22% increases the price of a domestically produced phone by 18.5%.³¹ However, there is a caveat to this analysis. The model assumes that domestic producers can step up production when prices increase due to tariffs. To the extent such domestic supply response is not forthcoming, the price impact will be higher.

Empirical evidence from other studies suggests that when tariff increases the price, the reduction in demand leads to a lower level of production. For instance, a one percentage rise in upstream tariffs³² is associated with a decrease in downstream industrial production by one percentage point

³¹ This figure was arrived at from the input output modelling analysis which increased the price of inputs used in domestic production by the extent of tariffs.

³² This is a moderate increase in the tariff rate, of about 3.6 percentage points, that lies well within the standard range of the data. MACROECONOMIC CONSEQUENCES OF TARIFFS, Davide Furceri, Swarnali A. Hannan, Jonathan D. Ostry and Andrew K. Rose, October 2018, IMF, Key output and the data set are available at http://faculty.haas.berkeley. edu/arose

after three years. Subsequently, as further investment takes place over time, the level of output return to the previous level.³³

For an industry such as mobile phones in India which has a high import content, i.e., a high backward linkage in Global Value Chain (GVC),³⁴ the impact of tariffs on costs would be greater. Empirical results show that the sensitivity of trade to tariffs increases with higher foreign content of a product.³⁵ Therefore, these findings are consistent with significant magnification effects of tariffs in the presence of sequentially organized international supply chains.³⁶ Hence shifting of production and an increase in scale of production for global value chains to India is more likely if tariffs are kept lower rather than higher.

The important issue is whether India has the capacity to produce adequate levels of inputs of the required quality at prices comparable to international levels. If the domestic producers are able to produce inputs at internationally competitive prices, then the impact of tariffs would be lower. That situation however will take some time to emerge.

Therefore, increase in tariffs for inputs of mobile phones will raise the price of domestically produced inputs. This reduces the competitiveness of exports, despite availability of advance authorization mechanism for exports. These effects are stronger especially because of the high foreign content of India's exports. Replacing imported inputs would take time and several enabling conditions for the inputs production of GVCs to shift to India.

7.3. Impact of Duty Drawback or Advance Authorization

Tariffs on imports are not paid when the inputs subject to tariffs are part of the exported product. For illustration, consider the mobile phone production in India and the share of exports. Table 1.1 in chapter 1 showed that in 2020-21, the share of exports of mobile phones was 10% and by 2025-26, it could become about 45%. If the tariff impact is reduced due to exports, the maximum reduction would be as illustrated in Table 7.3.1. below. This Table illustrates two situations. One where no additional costs are incurred due to the processes involved in schemes such as Advance Authorization, and another situation which presumes that the process is not costless and the extent of the additional costs in the process are about 5% of the tariff level. The latter estimate is equivalent to a tariff of 0.5% to 1% for a range of tariffs from 10% to 20%.

³³ Jorda, O., "Estimation and inference of impulse responses by local projections", American Economic Review, 95(1), 2005, pp. 161-182.

^{34 «}Estimates of foreign value-added content of exports are often referred to as backward linkages in GVCs». See page 181 of https://www.oecd-ilibrary.org/docserver/sti_scoreboard-2017-33-en.pdf?expires=1662200504&id=id&accna me=guest&checksum=2502C13EA607C79BEDDAFAF19FAF814C

³⁵ Sectors with low backward linkages have been estimated with a tariff elasticity of close to -0.8, it amounts to around -1.4 for sectors with a medium degree of foreign content, and it jumps to -2.1 for trade flows with high foreign content.

³⁶ An elasticity of -1 suggests that a 10% increase in bilateral tariffs would lower bilateral exports by 10%. For more details, please refer to Johnson, R.C. and Moxnes, A., "GVCs and trade elasticities with multistage production", NBER Working Paper, No 26108, 2019.

Table 7.3.1. Increase in Mobile Phone Cost Due to Tariffs, Corrected for Share of Exports in Production

Ratio of Exports to Production $ ightarrow$	15%	20%	30%	40%	45%
Increase in Mobile Phone Cost Due to Rise in BOM Cost ψ					
(a) If the process of claiming duty remission/ drawback results in no additional costs $ ightarrow$	4.9% %	4.6 %	4 %	3.4 %	3.2 %
(b) If the process of claiming duty remission/ drawback adds a cost equal to 5 % of Tariff \rightarrow	5.1 %	4.8 %	4.2 %	3.6 %	3.4 %

Source: Calculated by author taking the base for BOM cost increase shown in Table 7.1.3.

An important aspect of the tariff exemption or remission scheme is that India's competitors also have the same kind of scheme, and the share of their exports in total production is significantly more than that of India. For instance, the ratio of exports to production of Vietnam is more than four times the current ratio for India. Further Vietnam imports most of its inputs from countries with which it has FTAs further reducing the tariff effects to 0 or negligible effects as shown in the next section. Therefore, the impact of tariffs on costs in Vietnam must be reduced much more than for India, in a situation where even initially Vietnam imposed a lower tariff on inputs.

Another reason why duty remission is not completely passed through to export costs is because the basis for calculating duty remission is old. In a modern and complex sector such as electronics which is subjected to various levels of tariffs for different inputs, it is very difficult to accurately estimate duty remission or update it regularly. Hence it is more efficient to keep tariffs at 0 rather than using duty remission schemes.

Furthermore, as shown in Table 4.2.3 in Chapter 4, India's competing economies have many more zero tariff lines than India, which results in easier (less costly) handling of imports compared to those tariff lines which have a positive tariff. In this situation too, the cost burden due to tariffs is higher in India than in its competing economies. Vietnam in fact imports more than 95% of its inputs at 0 tariffs.

7.4. Competitiveness Effects of Increase in Tariffs vis a vis Vietnam

The analysis above shows that higher tariffs on inputs increase the cost burden and reduce competitiveness. This section considers the "disability" introduced in India on account of tariffs on inputs, compared to Vietnam.³⁷ It illustrates the extent to which the cost burden would be reduced if the tariffs of Vietnam were used instead of Indian tariffs on some of the products discussed above. The MFN tariff comparison underestimates the extent of tariff-related disability vis-à-vis Vietnam because a much larger share of Vietnam's imports are from FTA economies compared to India. Therefore, in Table 7.4.1, the estimates are calculated for FTA weighted average tariffs of India and Vietnam, based on MFN and FTA tariffs and the shares of MFN and FTA imports of the two economies.

³⁷ A STUDY ON DISABILITIES AND SMART POLICY MEASURES INCLUDING REPLACEMENT OF MERCHANDISE EXPORT INCENTIVE SCHEME (MEIS) - REPORT ON MEIS FOR ICEA, Reports - IKDHVAJ.com

1	2	3	4	5	6	7	8
S. No.	Product	HSN Codes	% in BOM	FTA Weighted average Tariff in India	FTA Weighted average tariff in Vietnam	Difference	Cost dif- ferences (column 4 multiplied by column 7)
	(1) Printed Circuit Board Assembly (PCBA)	8504, 8517, 8518, 8532	45%	22	0	22	1.4 ³⁸
1	(2) Camera module	85177090, 85258020, 85258090, 85299090	14%	11	0	11	1.54
	(3) Connectors	85177090	1.50%	11	0.2	10.8	0.16
2	Charger and inputs of chargers	8544, 8504, 8542, 8532	2%	16.5	0	16.5	0.33
3	Specified insulated wires and cables	85441990, 85444299, 85444999	0.60%	16.5	0	16.5	0.1
4	Vibrator Motor / Ringer	85177090, 85013119	1%	11	0.2	10.8	0.11
5	Display assembly, Touch Panel and Cover Glass	85177090	15.50%	11	0.2	10.8	1.67
6	Fingerprint reader/Scanner for Mobile Phones	84719000, 84716050	0.50%	12.3	0	12.3	0.06
7	Inputs for manufacturing of Connectors	85369090	1.50%	6.75	0	6.752	0.1
8	Inputs on Mechanics, metal and plastics	39269099, 85049090	9.50%	12.7	5.0	7.7	0.75
Tota	1						6.21

Table 7.4.1	Competitiveness	Effects on l	ndia vs Vietna	im (in percentages)
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Source: ICEA

Note: * = After the decrease in tariffs on inputs of Camera modules (accounting to 40% of the total costs of Camera modules) impact on costs on Camera modules decreases to 0.9%.

38 See Table 7.1.1 for an explanation

A little adjustment should be made to this figure for the tariff decrease in the 2023 budget. The overall BOM costs of India because of the fall in tariffs of inputs to Camera Modules decreases by 0.64%, hence the cost difference between India and Vietnam would fall to 5.6% (i.e., 6.21-0.15). The cost effects on BOM are slightly higher if FTAs of Vietnam and India are taken into account. Since the actual trade comparison with Vietnam requires a consideration of the FTA imports, Table 7.4.1 implies that India's tariff- related disability vis-à-vis Vietnam would be about 3.6%, i.e., 5.6% multiplied by 65%.39 In addition, over 85% of Vietnam's domestic production is exported and is under a scheme similar to Advance Authorization, and many more tariff lines of Vietnam have zero tariffs due to zero MFN tariff and its FTAs. Thus, when a company decides to relocate to India it would consider a cost disadvantage of more than 3.6 % vis-à-vis Vietnam only due to tariffs. In a competitive market, this is a large cost disadvantage which PLI alone cannot compensate. Hence rationalization of tariffs and selectively increasing PLI on components would be an important policy combination to encourage exports and shifting of global GVCs.

7.5 Lower Tariffs shield economies from Currency Depreciation

Currency depreciation raises the cost of imports and the effective tariffs on imported inputs. Table 7.5.1 illustrates this for a 10% currency depreciation with different levels of tariffs. With zero tariffs, there will be no impact of currency depreciation on effective tariffs. Higher the tariff, higher the cost impact of any currency depreciation. This implies that the higher tariff levels of India compared to competing economies results in a relatively higher tariff impact of currency depreciation for India.

Tariff →	0%	5%	10%	15%	20	25	30%
Effective Tariff Due to 10% Depreciation	0%	5.5%	11%	16.5%	22%	27.5%	33%

Table 7.5.1 Impact of 10% Currency Depreciation on Different Tariff Levels

Table 7.5.2 shows the currency depreciation of the national currencies of India, China and Vietnam from the period 1 January 2022 to 31 March 2023. The largest currency depreciation was for China, and the smallest for Vietnam.

Table 7.5.2 Depreciation of Domestic Currencies of India, China and Vietnam vis a vis the US Dollar, 1 January 2022 to 31 March 2023

	Domestic Currency per US\$ 1 January 2022	Domestic Currency Per US\$ 31st March 2023	Percentage Currency Depreciation
India	74.51	82.21	10.33%
China	6.25	6.87	9.92%
Vietnam	22,855	23,470	2.69%

For the 120 lines considered in the Report, Table 4.2.3 shows that among the competing economies, India has the largest share of tariff lines with high tariffs. About 58% of India's MFN tariff lines are higher than 10%. China and Vietnam, in contrast, have a large share of their tariff

³⁹ This is based on the assumption that 65% of the total cost of mobile production is that of the BOM. It could be higher or lower depending on the Model.

lines with zero tariffs. Virtually all tariff lines of China are within the tariff range of zero to 10%. Likewise, 73% of Vietnam's tariff lines are within zero to 10%. The relatively lower tariffs for China and Vietnam reduce the impact of currency depreciation on their tariffs, while India's higher tariffs result in a larger impact of currency depreciation on its effective tariffs.

Currency depreciation has an impact on the prevailing tariff because its effective level in absolute terms increases. To the extent that these tariffs result in a higher cost of production, currency depreciation raises production costs. The impact of currency depreciation on effective tariffs depends on the tariff rate. Higher the tariff rate, higher the impact of currency depreciation on tariffs.

Table 7.5.3 shows the import shares under low and high tariff categories for India, China & Vietnam, calculated at HS 6-digit levels. India's tariff structure results in a larger share of its imports incurring higher tariffs than the competing economies. For instance, 86% to 90% of the imports of Vietnam and China come in at zero tariffs (Table 7.5.3). The impact of currency depreciation on these tariffs is 0. China's import share is only 0.2% for tariffs above 10%. Similarly, this share for Vietnam is 7.7%. In contrast, 46% of India's imports pay tariffs above 10%.(Table 7.5.3).

Table 7.5.3 Import Shares under different levels of tariffs (HS-6 digit level) for India, China
and Vietnam, 2022

	Zero Tariffs	Non-Zero Tariffs Up to 10%	Non-Zero Tariffs Above 10%
India	48.2%	5.8%	46%
China	90.4%	9.4%	0.2%
Vietnam	86.6%	5.7%	7.7%

Source: Tariff Schedules of Countries, and TDM

In this situation, as explained below, the impact of India's currency depreciation on tariffs and cost increase is much larger than either China or Vietnam, even though the extent of China's currency depreciation is the highest. The lower tariff levels of China shield it from the impact of currency depreciation, while the higher tariffs of India have led to an accentuated effect of currency depreciation.

7.5.1 Effective tariffs increase with currency depreciation

This can be illustrated by comparing the **import weighted average MFN tariffs** of India and China, which respectively are 7.5% and 0.6%. With these tariff averages, on **1st January 2022**, **India's import weighted average tariffs exceeded that of China by 6.9%**. Applying the currency depreciation rates shown in Table 7.5.2 India's effective tariff increases to 8.3% (i.e., 7.5 multiplied by 1.1033). Similarly, China's effective tariff increases 0.66% (i.e., 0.6 multiplied by 1.0992) due to currency depreciation. After currency depreciation, the difference between the effective tariffs of India and China is 7.6%, which is higher than the tariff difference before the currency depreciation took place. China's lower tariffs provide a shield against currency depreciation.

7.5.2 Higher tariffs decrease competitiveness with currency depreciation

Currency depreciation raises effective tariffs and increases operational costs. Consider the impact of currency depreciation on the cost difference between India and Vietnam calculated earlier in this Chapter for the period 1 January 2022 to 31 March 2023. The difference in BOM costs in India and Vietnam on account of higher tariffs was estimated to be 6.21%. (See Table 7.4.1). The respective currency depreciation rates for India and Vietnam are 10.78% and 8.62%. Using the calculation conducted above in Table 7.4.1, the BOM cost difference after currency depreciation increases to 6.2%, i.e., a rise of about 11% compared to the pre- currency depreciation level.⁴⁰ This works out to over a 4% difference in total costs between Vietnam and India post currency depreciation. These cost effects of currency depreciation are heightened by the relatively higher tariffs of India. Hence India would become even more uncompetitive than Vietnam after currency depreciation.

Conclusions

Tariffs are intended to protect local industries by making imports more expensive and driving consumers to domestic producers. However, there is a lack of domestic capacity to produce these products immediately. In fact, in the short-term tariffs would increase costs and make mobile phones more expensive to produce in India versus other competing manufacturing nations. Costs would increase by about 4% which is far more than the support provided by the PLI. The domestic market would be affected also because the consumers would have to pay the additional GST of 6% that has been imposed since 2020.

Further domestic prices of major inputs increase, both because of tariffs and the rent seeking behavior of monopoly input producers.

Even with the scheme of Advance Authorization, there is a pass-through of increase in input prices to exports. To the extent that Advance Authorization scheme reduces the cost of tariffs on imported inputs, its wider impact would require a much larger ratio of exports to domestic production than is currently the case for India. Such an increase in exports requires scale and cost-competitiveness. Imposition of tariffs works against both these objectives.

Exports have to be internationally competitive. Comparing the price effects vis-à-vis Vietnam, Indian mobile phones would be on an average uncompetitive by more than 4% if the disability analysis is based on input costs of Vietnam with FTA tariffs. This shows that a significant part of this cost burden plus more has been added by tariffs alone.

Currency depreciation raises effective tariffs and increases operational costs. These cost effects of currency depreciation are heightened by the relatively higher tariffs of India. Hence, India would become even more uncompetitive than Vietnam after currency depreciation. Lower tariffs act as a shield against cost increases associated with currency depreciation.

Overall, the importance of tariff rationalization increases with complex GVCs. The lower the level of efficient production, the higher is the domestic price increase. Increasing the scale of production is imminent for export promotion and improving competitiveness. Given that a relatively larger scale is possible if export oriented rather than domestic market-oriented operations are the focus, a tariff increase works against such a vision. Thus, tariffs need to be rationalized for achieving a higher scale of production and meeting export objectives. Shifting of GVCs is much more likely when tariffs are rationalized.

⁴⁰ Vietnam's costs because of low tariffs and currency depreciation increase by roughly 0.53%. However, India's tariffs and currency depreciation increases this impact by about 6.7%. Hence the difference in BOM costs between India and Vietnam post Depreciation is about 6.2%.



Introduction

India has begun to emphasize electronics, both for developing the domestic eco-system and exports. For example, this was one of the first three sectors selected for the Production Linked Incentive Schemes (PLI). India is aiming for a huge increase in the domestic production of electronics, from US\$ 74.7 billion in 2020-21 to US\$ 300 billion in 2025-26. Mobile phone production and exports form a large part of this vision, with its production expected to rise by 4.2 times from 2020-21 to 2025-26.

8.1. High Growth of Electronics Will Be Driven by Exports mostly of Mobile Phones

The large expected increase in electronics is to be driven by exports, and within that by the exports of mobile phones. Exports of electronics are expected to increase from 2020-21 by about 10 to 12 times by 2025-26, while exports of mobile phones are expected to rise by 17 to almost 19 times the level in 2020-21. This expected increase will raise the importance of mobiles exports in electronics from a share of about 28% in 2020-21 to about 45% to 50% in 2025-26 (see Table 8.1). In 2022-2023, the ratio of exports of mobile phones to total electronics was 47%, thus reaching the target envisaged for 2025-2026.

	2020-21	2025-26
Ratio of Electronics Exports to Electronics Production in India	14.2%	35% to 43%
Ratio of Mobile Phone Exports to Mobile Phone Production in India	10.3%	41% to 46%
Ratio of Mobile Phone Production to Electronics Production	40%	42%
Ratio of Mobile Phone Exports to Electronics Exports	28.4%	45% to 50%
Ratio of Mobile Phone Exports to Electronics Production in India	4.2%	17.3% to 19.3%

Table 8.1. The Large Role Played by Mobile Phones in Electronics Growth

Source: Calculated from Table 1.2

8.2. Significance of a Supportive Policy Environment

An appropriate policy regime is required because the annual rate of growth of exports required to achieve the vision at which India is aiming, is much higher than the highest annual growth rate of electronics exports registered during the past five years. **The relevant supportive and facilitating policies which improve competitiveness of Indian exporters are thus crucial.**

One of the important requisite policies identified by the Vision Report is a tariff regime that would underpin the high growth trajectory. In this context, it is significant that most parts of the industrial policies used by India's competing economies have a similar orientation as India. The major difference is for tariff policy, and comparison of the tariff regime in India with its competing economies is important to provide some relevant policy insights.

8.3. High and low tariffs are applied to both tariff lines with low and high import share

The tariffs on 120 lines of India show that there is no correlation between the level of tariff and import shares of the product. Tariff lines with both high and low import shares have high as well as low tariffs. This shows that a high tariff does not necessarily reduce imports. If the product is an important part of the value chain whose domestic production is inadequate, the tariffs mainly result in increasing costs and creating bottlenecks for the domestic producer.

8.4. India has significantly high MFN tariffs compared with 4 competing economies

Table 8.2 Simple Average MFN Tariffs for India and the Four Competing Economies

Simple Average of MFN Tar-iffs:	India	China	Mexico	Thailand	Vietnam
120 Tariff Lines - Supply Chain Mobile Phones, plus Selected important Electronics Products	9.7%	3.2%	3.5%	5.0%	5.6%

Source: Tariff Schedules of Countries

Vietnam imports over 80% of electronics components on zero to 5% FTA tariffs. Therefore, the report compares FTA weighted average tariffs based on import shares of FTA and MFN imports. It shows that the FTA weighted average import tariffs of Vietnam are much lower than its MFN tariffs, as well as India's FTA weighted average tariffs (Table 8.3 below).

The report also compares India's tariffs with two other competing economies, Malaysia and the Philippines. The comparison shows that India's tariffs are much higher than all the competing economies.

Table 8.3. Simple Average of FTA Weighted Average Tariffs for Indian and Vietnam

Simple Average of Weighted Average Tariffs:	India	Vietnam
120 Tariff Lines - Supply Chain Mobile Phones, plus Selected important Electronics Products	7%	1.1%

Source: Tariff Schedules of Countries

Distribution of Tariffs shows higher tariffs for India compared to competing economies

India's tariffs are on the higher end of the spectrum, and the tariffs of the competing economies are imposed more towards the lower end, and in a manner that they make it easier to connect with the GVCs and export markets.

A majority of tariffs for the competing economies range between zero and 5%. A relatively small share of their tariffs is in the double-digit tariff range. The situation for India is the opposite, with a majority of its tariffs in the higher range, making the overall tariffs relatively much higher than its competing economies. Around 96% of Vietnam's tariff lines have an effective tariff between zero to 5% because of its high share of FTAs.

Comparison of Individual Tariff Lines

Tariffs on individual tariff lines are compared separately for the lines on which India has zero tariffs and others on which India has non-zero tariffs. The reason is that when India has a zero tariff for any line, the competing economy's tariff cannot be lower than the Indian tariff (because the lowest value for tariffs is 0%). At most it can be the same or higher than the Indian tariff. For non-zero tariffs, the tariffs of India are higher than other countries.

(a) Competing Economies Have Many More Zero Tariffs Than India

India has fewer tariff lines with zero tariffs compared to its competing economies. Three of them have zero tariffs on more than double the zero tariff lines of India (China, Mexico and Vietnam), and Thailand's zero tariff lines are also very significantly more than those of India. The larger number of zero tariff lines of the competing economies result in lower costs imposed due to tariffs, and make it easier to connect with GVCs.

(b) Comparison of Individual Tariff Lines on Which India Has Zero Tariffs

Of the 120 lines, India had zero tariffs for 31 lines in 2022, and 32 lines in 2023. Even for the situation of 2023, except for one of these lines, Mexico, Thailand and Vietnam also have zero tariff for the others. China also has zero tariffs on all these lines, except for three of them. However, in the comparison of zero tariffs it is significant that each of the competing economies has many more lines with zero tariffs than India. Thailand has 56 of the 120 lines with zero MFN tariff, Vietnam has 66 zero MFN tariffs, China has 71 and Mexico has 77 zero MFN tariffs.

(c) Comparison of Individual Tariff Lines on Which India Has Non-Zero Tariffs

India has non-zero tariffs for 89 tariff lines out of the 120 compared in 2022, and 88 such lines in 2023. In general, the Indian MFN tariffs on these lines are higher than the corresponding tariffs for the competing economy. India's tariffs are higher than those of the competing economy for 90% tariff lines for Thailand, 91% for Mexio, 93% for China, 71% for Vietnam in terms of MFN tariffs, and 97% for Vietnam in terms of FTA weighted average tariffs.

This includes the impact due to a tariff decrease in 2023 for one line from 2.75% to 0%. The change of tariff in 2023 does not significantly alter the results of the comparison of tariffs discussed above.

The Situation for Priority Products Identified by the Industry

The general results for 120 lines are valid for priority products as well, with some points that are noteworthy.

(a) Tariff Averages for Priority Products

- (i) India's average tariff for priority products is higher than that for 120 lines.
- (ii) For priority products, three competing economies (China, Thailand and Vietnam) have lower average tariffs than for their 120 lines; Mexico's average tariff for priority products is higher than its average tariff for 120 lines, but by a relatively small margin.
- (iii) The difference between India's average tariff and those of the competing economies is larger than the corresponding difference for 120 tariff lines.

(b) Tariff Averages for Inputs Among Priority Products

The priority products have been distinguished based on finished products, sub-assemblies and components. The categories of sub-assemblies and components are inputs in the production process and their tariffs impose costs in the process of production. **Among the five countries being compared, India is the only country with MFN tariffs above 15% on these inputs.** This implies a loss of competitiveness for India.

8.5. Trend of Tariffs and Trade Performance between 2015 and 2021

- (a) Average Tariffs Between 2015 and 2021
- (a) India has the largest number of tariff lines for which tariffs increased;
- (b) India has the lowest number of lines for which average tariff in 2021 is lower than in 2015;
- (c) Except for China, India has relatively smaller number of tariff lines for which tariffs in 2021 were the same as in 2015;
- (d) For China, this was less than that for India because China's tariffs in 2021 were lower than in 2015 for a very large number of its tariff lines, i.e., 108 out of 210 lines.

(b) Trade Performance

- (b.i) Exports of Electronics: For each year during 2015 to 2021, all the competing economies had higher electronics exports than India. Despite the relative tariffs for the competing economies being lower over time, the gap between India and the competing economies exports has widened between 2015 and 2021. The competing country's electronics exports exceed India's exports in 2021 by a very significant amount compared to 2015 for China and Vietnam, and by a small amount for Mexico and Thailand.
- (b.ii) Trade Surplus or Deficit (Exports Minus Imports): Three economies (China, Thailand and Vietnam) have had a trade surplus for electronics each year during 2015 to 2021. In contrast, India and Mexico have registered a trade deficit each year. India's trade deficit for electronics has been higher than that of Mexico each year. During 2015 to 2021, India's trade deficit compared to Mexico has become relatively larger over time.
- (b.iii) A closer look at relative export performance of India and Vietnam: It is notable that even a small economy such as Vietnam has a trade surplus in electronics which is one and half times to more than double the total electronics exports of India.
- (b.iv) Tariffs in 2022 Compared to 2021: The results show that in 2022, compared to India there has been a general shift in tariffs of competing economies towards lower tariff ranges. This situation remains valid for 2023 as well.

8.6 Impact on Costs of Tariffs

This report shows that tariffs would increase costs and make mobile phones more expensive to produce in India versus other competing manufacturing nations. Costs would increase by about 4% which negates the cost disability support provided by the PLI Scheme. The domestic market is further affected also because the consumers have to pay an additional GST of 6% from 1 April 2020.

Domestic prices of major inputs increase, both because of tariffs and the rent seeking behavior of the few input producers. Even with export centric schemes (such as EOU, SEZ, MOOWR, Advance authorization etc) there is a pass-through of increase in input prices to exports. To the extent that export centric dispensation schemes such as Advance Authorisations etc. hope to reduce the cost of tariffs on imported inputs, its wider impact would require a much larger ratio of exports to domestic production than is currently the case for India for inputs to be manufactured at competitive prices to meet export demand. Such an increase in exports requires scale and cost-competitiveness. Therefore, imposition of tariffs works against both these objectives.

8.7. Investors Select Locations Based on Policies Impacting the Competitiveness of Their Operations

Exports have to be internationally competitive. Tariff policies result in differential operating costs, with high tariffs leading to higher costs and thus loss of competitiveness. If India implements the effective tariffs of Vietnam, then compared to its current tariffs, its costs of production for mobile phones would be 4% lower than at present. This implies that compared to Vietnam, India's tariffs make operations in India uncompetitive on average by about 4%. **Given this difference in competitiveness of producing in India vis-à-vis Vietnam, GVCs would be more likely to locate in Vietnam rather than India.**

Further with a depreciating currency tariff effects on costs are accentuated. Lower tariffs act as a shield against cost increases associated with currency depreciation.

Recommendations

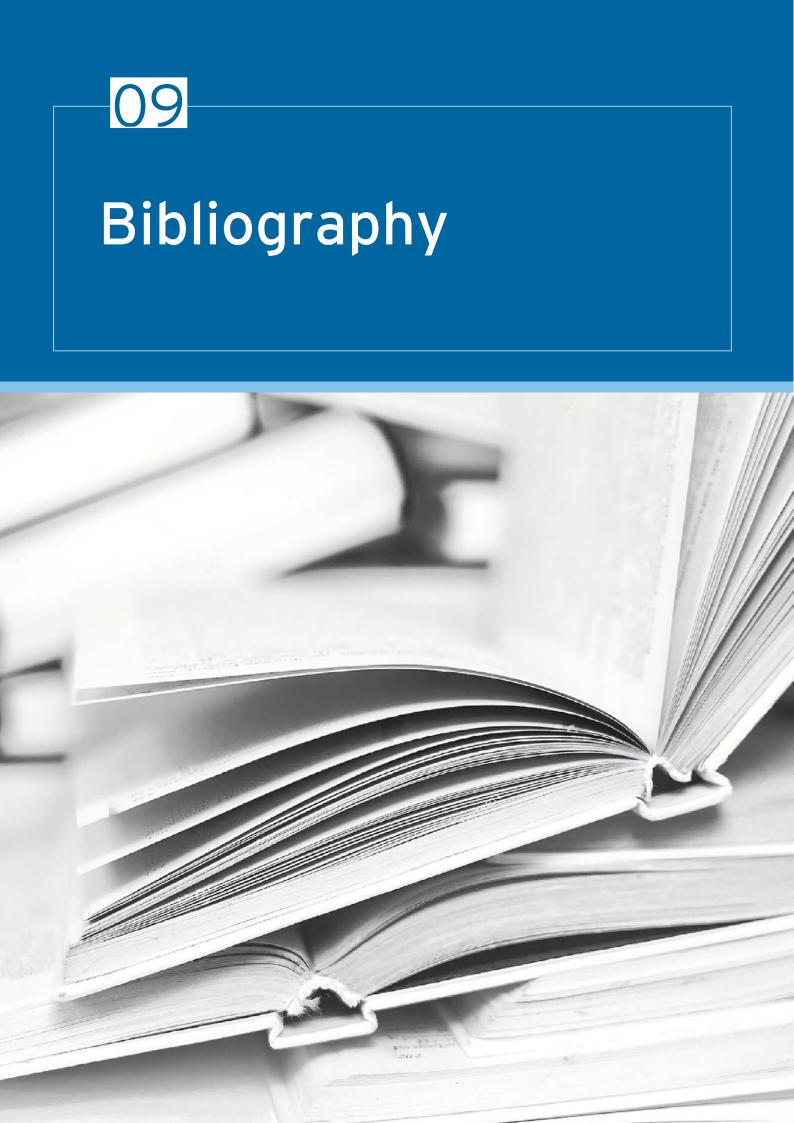
Overall, the importance of tariff rationalization increases with complex GVCs. The increase in scale and higher participation in GVCs takes time and will happen provided tariffs are rationalized. A relatively larger scale is possible if export oriented rather than domestic market-oriented operations are the focus. A tariff increase works against such a vision. Thus, it is recommended that;

- a. Policy makers should be aware that different windows for exporters to import duty free inputs such as MOOWR, EOU, SEZ, Advance Authorisation and duty drawback, do not compensate exporters for increased tariffs on inputs. The imposition of tariffs orients a significant share of production towards the domestic market leading to higher prices for inputs as well as final products.
- b. Tariffs need to be rationalized for achieving both scale and export objectives. Shifting of GVCs is much more likely when tariffs are rationalized.
- c. The Government should engage in a detailed exercise on improving competitiveness vis a vis Vietnam and then accordingly make Indian tariffs more competitive with a view to reduce them.
- d. Tariffs should include a consideration of India's ambitions of self-sufficiency and transitioning to a global hub for manufacturing and exports. Furthermore, the government should also engage in industry wide consultation along with its nodal ministry before any tariffs are decided.

- e. Government should move to evidence-based tariff setting as the way forward, wherein comparisons must be made with competing manufacturing economies such as China, Mexico, Vietnam, Thailand etc., as India is trying to acquire higher global market shares.
- f. Duties which are styming the development of manufacturing as is the case in many areas like open cell assembly in colour TVs should be rationalized immediately.
 - A review of all duties imposed in the past 5 years, their current relevance or irrelevance should be evaluated.
 - As the Indian rupee has fallen against the dollar by nearly 11%, to retain competitiveness India must keep its tariff low.







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About the Authors



IKDHVAJ Advisers LLP is a boutique consultancy firm comprising a select group of experts dedicated to bridging the gap between systemic issues in trade policy and industrial/regulatory policy analysis. The experts at IKDHVAJ each have over 30 years of experience in industrial policy and trade, with deep insights into the overlap of trade policies with domestic policies. The research and advisory work of IKDHVAJ helps develop strategies for Indian policymakers and industries to improve effectiveness of policy measures, identify priority areas for strategic and policy focus, selection of appropriate policies for meeting major objectives, improve options for negotiations of trade-related agreements, and suggest ways to improve access to markets abroad. Our research and advisory work is also focused on helping Indian industries remove operational constraints and enhance capabilities of domestic industries, provide a supportive framework to improve the domestic regulatory environment, establish structured interaction with various stakeholders, and develop relevant institutions including those that enable industry to self-govern. The strategies we help create are both sustainable and holistic, and provide policy makers and industries with the flexibility to combat a constantly changing global trade landscape, as well as to enhance domestic competitiveness



ICEA with its motto - INSPIRE, ENABLE, and LEAD is the apex industry body for mobile and electronics industry comprising of manufacturers, brand owners, technology providers, VAS application & solution providers, distributors and retail chains of mobile handsets and electronics. ICEA is committed to carrying forward its vision of building strong "self - reliant and export focused" Indian electronics manufacturing and design ecosystem while consolidating the gains made in the mobile handset and components industry. ICEA is fully devoted towards improving the competitiveness and growth of the industry by closely working with the ministries of the Government for creating a robust, legal and ethical electronics industry, thereby creating an innovative market environment in the country.

NOTES

Note:

This report updates the previous tariff report released in November 2022. It take into the account the change in one tariff line for India announced as part of the Union Budget 2023-24. More recent information on electronics trade have also been used to update the report.

June 2023