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India’s export diversification saga post Economic reforms

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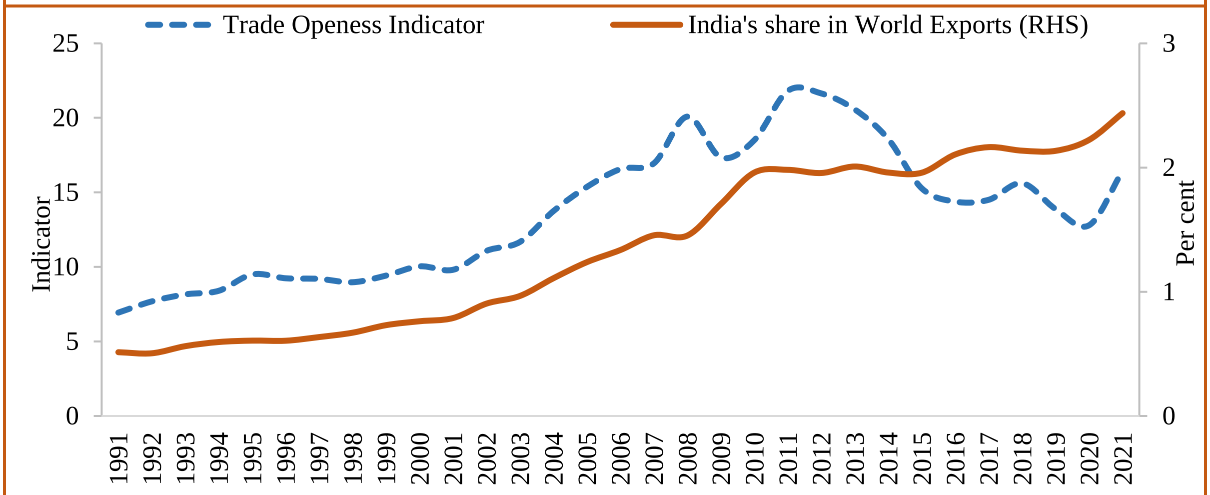
Introduction

1. India’s Merchandise exports have displayed remarkable performance post-1991 economic reforms. During the early phase of reforms, it took as many as 9 years (FY92-FY2000) to double the exports; however, within the next 10 years (FY2000-FY2009), as an easing of quantitative restrictions and reduction in tariff level across products started showing results, exports increased by nearly five times. Trade openness has contributed to higher economic growth, as reflected in the rising value of the Trade Openness Indicator (Ratio of Merchandise Trade to GDP)[2]. Higher trade openness, by facilitating efficient allocation of resources through comparative advantage, has been an important contributor to an increase in the GDP of the country.

Chart 1: Trade Openness Indicator and India’s Share in World Exports



Source: World Bank and Author’s Own Calculation

2. The figure below indicates that a strong correlation exists between India and World Merchandise exports. The correlation coefficient between India and World merchandise exports is positive and has moved northwards since the 1991 reforms signifying an increasing integration of the Indian economy into the global economy. India’s exports grew at a faster pace in comparison to the growth in World exports in the post-economic reform period. There was an exceptional acceleration in the export growth rate, particularly in the 2000s. During 2000–2008, India was one of the top exporting countries after China. The global financial crisis of 2008 led to a moderation in exports; however, supported by expansionary monetary and fiscal

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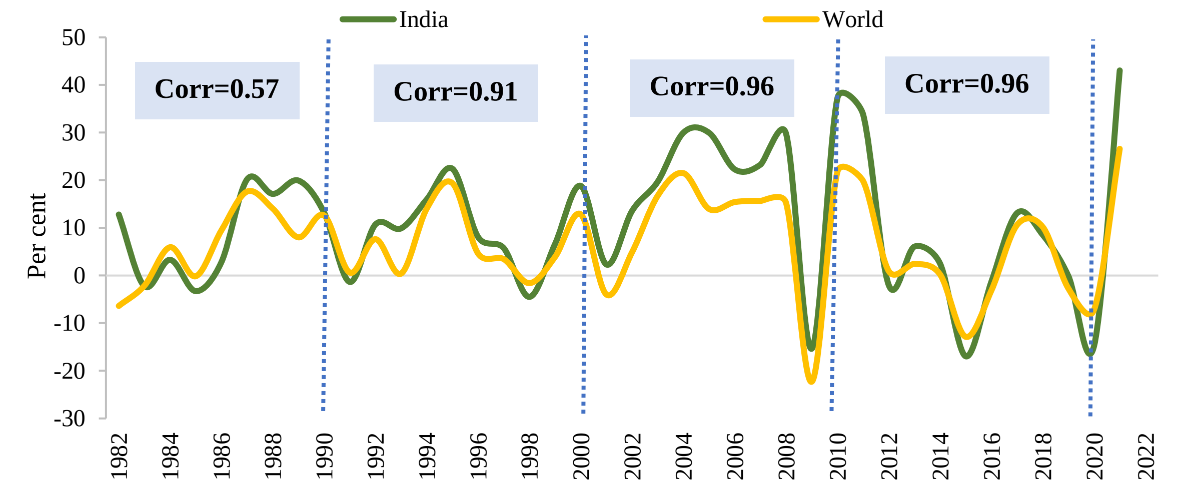
[2] Trade Openness Indicator is calculated by taking the ratio of the arithmetic mean of merchandise exports and imports to GDP

policies, exports picked up in 2010, accompanied with an increase in India's share in global exports.

Chart 2: Annual Growth Rate of India and the World's Merchandise Exports



Source: World Bank

3. The increase in the share of India's exports in World Exports was driven by measures undertaken by the Government, such as the launch of the Trade Infrastructure for Export Scheme and Rebate of State and Central Levies and Taxes (RoSCTL) Scheme to promote labour-oriented textile export, the launch of a Common Digital Platform for Certificate of Origin to facilitate trade, among others. As per WTO's latest World Trade Report, India's position among World's leading exporters in Merchandise Trade improved from 21st in 2020 to 18th in 2021.

4. To further enhance exports and to become internationally competitive, the Government has undertaken various measures in terms of export incentives, tariff reduction, procedural simplification, improved finance facilities etc. In recent years, especially after the global crisis, the Government has put greater emphasis on an export diversification strategy to achieve and sustain a high export growth rate in the long term. Export diversification refers to a change in the composition of a country's existing export product mix or export destination. Under the ambit of the export diversification strategy, two major schemes, i.e., Focus Product Scheme and Focus Market Scheme, were launched wherein exporters were incentivised to export notified products and to notified countries.

Box 1: Trade Reforms introduced in 1991

Starting with the July 1991 budget, there was a clear switch in favour of a move toward an outward-oriented, market-based economy. The trade liberalization program initiated in the 1991 budget was comprehensive, although the pace remained gradual, and there were occasional hiccups.

The July 1991 reforms did away with import licensing on all but a handful of intermediate inputs and capital goods. Consumer goods, accounting for approximately 30 per cent of tariff lines, remained under licensing. A decade later, these were also freed of import licensing. Under the Uruguay Round Agreement on Agriculture, all border measures on agricultural goods have been replaced by tariffs. Tariff rates in India had been raised substantially during the 1980s so as to turn quota rents for the industry into tariff revenue for the government. According to the Government of India (1993), tariff revenue as a proportion of imports rose from 20 per cent in 1980–81 to 44 per cent in 1989–90. According to WTO (2008), in 1990-91, the highest tariff rate stood at 355 per cent, the simple average of all tariff rates at 113 per cent, and the import-weighted average of tariff rates at 87 per cent. With the removal of licensing, these tariff rates became effective restrictions on imports. Therefore, a major task of the reforms in the 1990s and since has been to lower tariffs.

The reduction in tariffs has been accomplished through a gradual compression of the top tariff rates, with a simultaneous rationalization of the tariff structure through a reduction in the number of tariff bands. The top rate fell to 85 per cent in 1993–94 and to 50 per cent in 1995–96. Despite some reversals along the way in the form of special duties and through the unification of two successive bands at a higher rate, the general direction has been toward liberalization.

Traditionally, India has also restricted exports of several commodities. As part of its liberalization policy, the Government began to reduce the number of products subject to export controls in 1989–90. But until the July 1991 reforms, exports of 439 items were still subject to controls, including (in declining order of severity) prohibition (185 items), licensing (55 items), quantitative ceilings (38 items), canalization (49 items), and prespecified terms and conditions (112 items). The March 1992 Export-Import Policy reduced the number of items subject to controls to 296, with prohibited items reduced to 16.

The lifting of exchange controls and the elimination of overvaluation of the rupee, both of which had served as additional barriers in the traded goods sector, also accompanied the 1990s reforms. As part of the 1991 reform, the government devalued the rupee by 22 per cent, from ₹21.2/USD to ₹25.8/USD. In February 1992, a dual exchange rate system was introduced, which allowed exporters to sell 60 per cent of their foreign exchange receipts in the free market; the rest had to be sold to the government at the lower official price. Importers were authorized to purchase foreign exchange in the open market at a higher market price, effectively ending the exchange control regime. Within a year of establishing this market exchange rate, the official exchange rate was unified with it. Starting in February 1994, many current account transactions, including all current business transactions, education, medical expenses, and foreign travel, were also permitted at the market exchange rate.

Since 1991, India has also substantially liberalized trade in services. Traditionally, the services sector has been subject to heavy government intervention. The public sector presence has been conspicuous in the key sectors of insurance, banking, and telecommunications. Nevertheless, considerable progress has been made toward opening the door wider to participation by the private sector, including foreign investors.

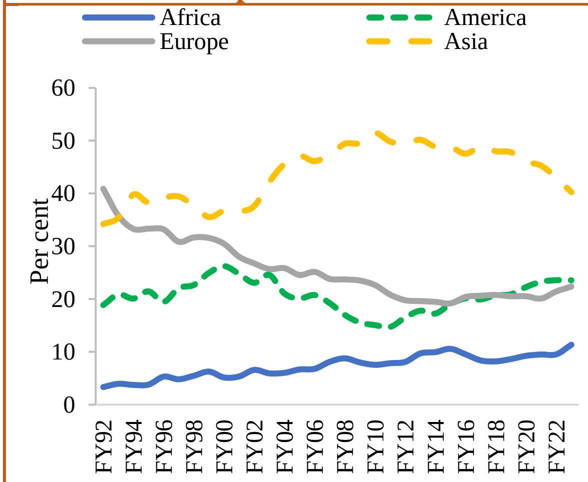
Analysis of export diversification based on Hershman Herfindahl Index

5. Export diversification has been measured by calculating Hershman Herfindahl Index.
Regional/Sectoral Herfindahl Index (RHI)=$\sum S_i^2$
Where S_i refers to the share of Country/Region i in India's export basket in case of regional diversification/the share of commodity i in India's export basket in case of Sectoral diversification.

Regional diversification

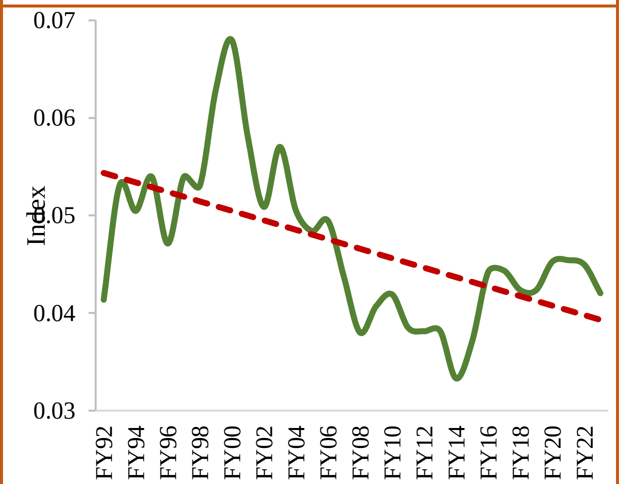
6. Owing to these measures, there has been a diversification of India's exports towards new export markets. Calculations based on DGCIS data on India's Exports reveal that the share of the top 10 countries in India's merchandise exports registered a declining trend, falling from a high of 56.6 per cent in FY2000 to 46.8 per cent in FY23, signalling regional diversification of exports. Further, the Regional Herfindahl Index (an estimate of the concentration of exports across countries) for the top 10 countries reduced from 0.068 in FY2000 to 0.042 in FY23.

Chart 3: Regional Share in India's Export Basket



Source: DGCIS, Ministry of Commerce

Chart 4: Regional Herfindahl Index



Source: Author's Calculation

7. Post-FY2000, Asian, African and Middle East Nations, such as the UAE, Singapore, Hong Kong, and China, have replaced India's traditional export partners, such as the UK, Germany, Belgium etc. The share of Europe, which was around 40.9 per cent in India's merchandise exports in FY92, fell to 19.2 per cent in FY15. The combined share of the developing regions viz. Asia and Africa in India's total exports rose from around 37.5 per cent in FY92 to 51.4 per cent in FY23.

Sectoral Diversification

8. In terms of sectoral diversification, the share of Petroleum and Crude products in overall exports has increased considerably since FY2000, registering a Compound Annual Growth Rate (CAGR) of 7.3 per cent. Due to the availability of Russian cargo at a discounted price, India's imports of Petroleum Crude and products from Russia increased from 6.8 million tonnes in FY22 to 57.1 million tonnes in FY23, which is higher than the quantity of imports from Iraq. As per the data from DGCIS, Russia's share in India's import basket of Petroleum Crude and products rose from 2.2 per cent in FY22 to 16.4 per cent in FY23, higher than the share of Iraq (16.3 per cent). This contributed to an increase in exports of refined petroleum products, including high-speed diesel, motor spirit, aviation turbine fuel, and naphtha. India's exports of Petroleum and Crude products rose from USD 67.6 billion in FY22 to USD 97.3 billion in FY23, with the share in total exports increasing from 16 per cent in FY20 to 21.6 per cent in FY23.

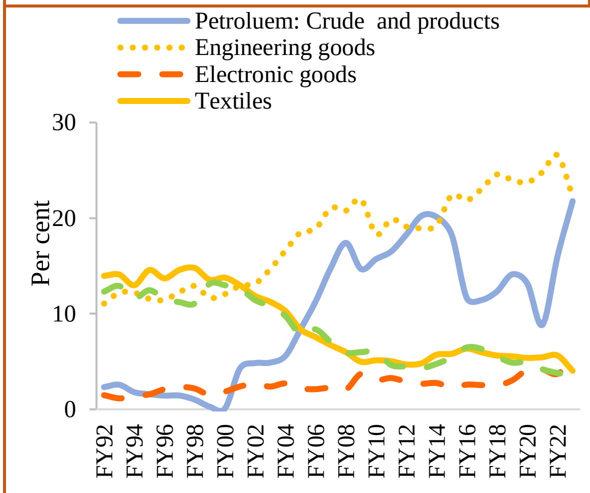
9. A rise in domestic demand and government initiatives such as the launch of the Phased Manufacturing Programme for Mobile handsets and related sub-components manufacturing, the National Policy on Manufacturing, imposition of countervailing duties, among others, have contributed to an increase in the share of electronic goods in overall exports. India has an advantage of strong manufacturing technology and R&D capabilities in the semiconductor industry focused on chip design and end-to-end supply chain improvement. Owing to this, exports of electronic goods registered YoY growth of 49.4 per cent in FY23, supported by the Production Linked Incentive Scheme (PLI), which led to an increase in shipments of smartphones. As per the data from Indian Cellular and Electronics Association (ICEA), the total export value of India's smartphone shipments during FY23 exceeded USD 10 billion, approximately twice that of the corresponding period last year. The top five global destinations India currently exports mobile phones to are the UAE, the US, the Netherlands, the UK and Italy.

10. There has been impressive growth in Engineering Goods exports in recent years, mainly due to the implementation of the Zero Duty Export Promotion Capital Goods (EPCG) scheme. However, driven by a sharp fall in exports of iron and steel and an economic slowdown in key markets, including the EU and China, the share of engineering goods exports declined in FY23. Initiatives to support and enhance the competitiveness of the domestic engineering goods

manufacturing firms, such as the PLI scheme for Automobile & Auto Components and the National Programme on Advanced Chemistry Cell (ACC), FAME INDIA II, among others, are expected to promote engineering goods exports.

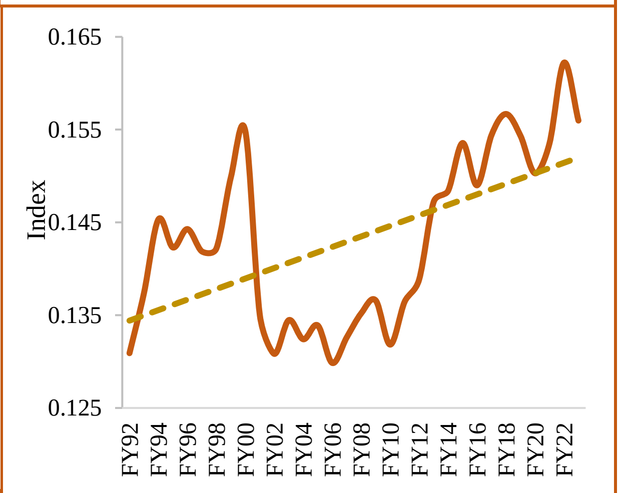
11. The share of textiles and readymade garments in overall merchandise exports has shown a declining trend due to rising input costs, weak demand in both domestic and foreign markets and an improvement in the competitiveness of peer countries such as Vietnam and Bangladesh. Going forward, the exports of textiles and readymade garments are expected to rise, driven by the presence of the complete value chain, from raw materials to finished goods, the competitive cost of manufacturing and preferential market access. The PLI scheme for man-made fibres (MMF) and technical textiles and the Integrated Textile Parks scheme is expected to improve the potential of MMF-based Ready Made Garments exports and enhance its export share in the time ahead.

Chart 5: Sectoral Share in India's Export Basket



Source: DGCIS, Ministry of Commerce

Chart 6: Sectoral Herfindahl Index



Source: Author's Calculation

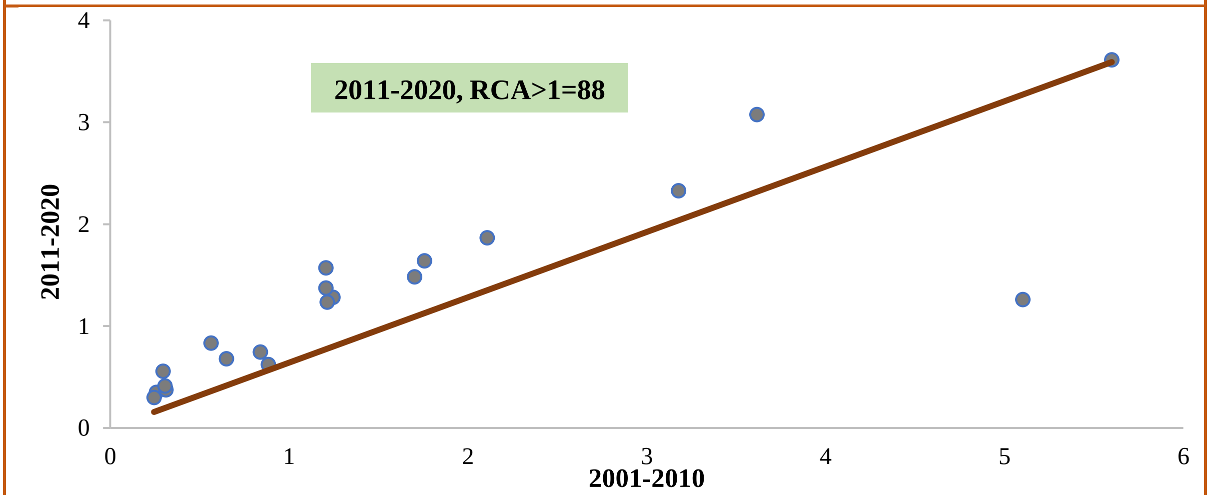
12. The above analysis indicates that there has been a significant change in the composition of India's export products. Until FY2004, labour-intensive commodities (leather and leather manufactures, textiles and readymade garments) constituted nearly 40 per cent of the total manufactured exports. But their share has fallen consistently, and they accounted for roughly 20 per cent of the manufactured exports during FY05-FY23. In contrast, the share of capital-intensive commodities (electronic goods, engineering goods and chemical & related products) has gone up from around 31 per cent to 52 per cent during the same period. This reflects that India's exports have become more technology-intensive over time and also improved in technological content, quality, sophistication, and complexity. The sectoral Herfindahl Index, including all the commodities, an estimation of the concentration of commodities in India's

export basket, has increased from a low of 0.130 in FY06 to 0.156 in FY23, reflecting a rise in the concentration of commodities in the export basket.

Analysis based on Revealed Comparative Advantage (RCA)

13. The fact that India's exports have become more technology-intensive is also confirmed by the analysis based on Revealed Comparative Advantage (RCA). The export Index of RCA shows that while the RCA has shifted across sectors between two decades (i.e., 2001-2010 and 2011-2020), the number of sectors with RCA greater than one has moderated from an average of 93 in 2001-2010 to 88 during 2011-2020. An inter-temporal comparison reveals that out of 88 sectors which currently enjoy comparative advantage (i.e., RCA index greater than one), the index improved for 45 sectors but deteriorated for 43 sectors during 2010-20. Out of the remaining 171 sectors with an RCA of less than one, 57.3 per cent gained market share by moving closer to the RCA value of 1.

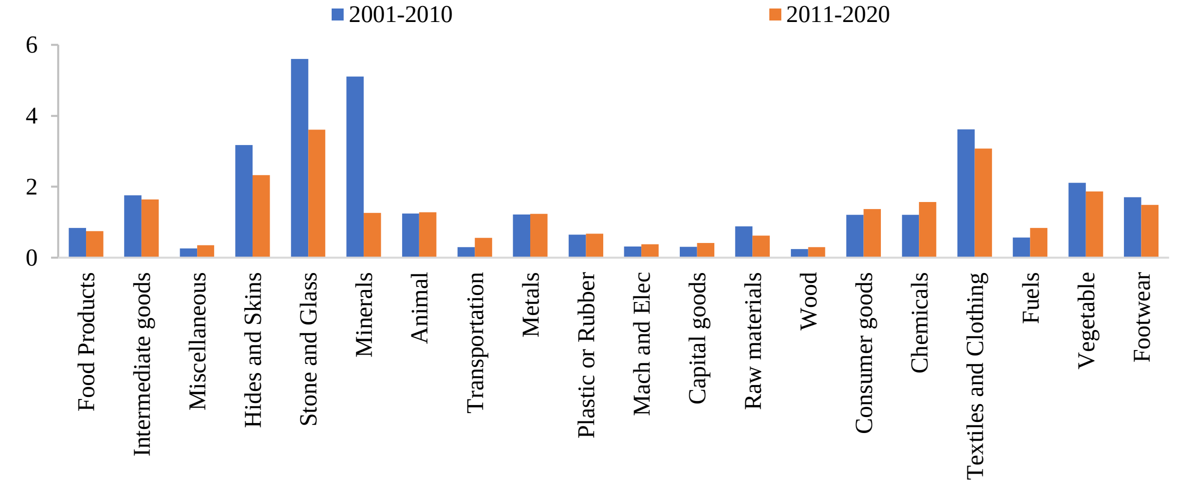
Chart 7: Sectoral Shift in Revealed Comparative Advantage



Source: UNCTAD and Author's own calculation

14. The RCA index of exports of consumer goods and capital goods gained share and improved during 2010-20. By contrast, the RCA for intermediate goods and raw materials was eroded, reflecting a lower scale of participation in Global Value Chains (GVCs). An item-wise comparison shows that RCA improved for exports of fuels, chemicals, transportation, machinery and electrical, wood, plastic and metals during 2010-20, whereas it declined for food products, footwear, textiles and clothing, hides and skins, stones and glass and minerals. The analysis reflects that the change in the sectoral composition of the export basket towards capital-intensive products is in line with an improvement in RCA Index for Capital and consumer goods. This clears the fact that there is an increase in the share of those commodities in its export basket for whose production India has a comparative advantage.

Chart 8: Revealed Comparative Advantage Index for Merchandise Exports



Source: World Integrated Trade Solution (WITS) Database

Conclusion

15. Going forward, the author is of the view that, positive developments in the manufacturing sector, driven by production capacity expansion, government policy support, heightened M&A activity, and PE/VC-led investment, are expected to create a robust pipeline to sustain economic growth in the years to come. These factors will continue to play out during the course of this decade, which will accelerate India's manufacturing-led exports. Key free-trade agreements (FTAs), including India-UAE Comprehensive Partnership Agreement (CEPA) and India-Australia Economic Cooperation and Trade Agreement, are also expected to create an environment for boosting export growth. India can achieve greater market and product diversification by entering into more Free Trade Agreements (FTAs) with its trade partners and reviewing existing agreements in accordance with emerging international trade trends.