Enhancing Economic Growth Through Export Diversification: A Case of Indian Economy

Shikha Sharma*

Exports play an important role in enhancing overall competitiveness of economies and contributing to the growth of the economies. As economies develop product composition for exports and export market destination change, this transformation is an essential ingredient for rapid economic development. What matters is not how much a country exports but to whom it exports and what it exports. While theories of International trade suggest export product selection based on comparative advantage, trade patterns and previous studies reflect that as countries develop they go for export diversification in long run and increase trade specialization in the products in which they have comparative advantage. Diversification involves significant changes in both the type and quality of goods produced and exported. Trade diversification enhances the growth of developing countries and minimizes risk due to international volatility, an inescapable component in globalized world. The paper explores the pattern of Indian exports in terms of product composition and also compares diversification indices of BRICS economies and suggests how transformation and policy support for export diversification enhances export performance leading to higher growth rate of Indian Economy.

Key Words: India, Indian Exports, Export Diversification trade.

Introduction

As developing countries grow, trade becomes an essential component of economic development. Trade theories suggest that countries should trade based on the advantages they draw from it. Adam smith (1986)in his work, The Wealth of Nations, stated the principle of absolute advantage and David Ricardo in the Principles of Economics (1951) propounded the theory of comparative advantage based on the principle of relative efficiency. Both laid emphasis on labour cost and free trade and stressed on trade specialization .Heckscher-Ohlin and later Samuelson based trade theories on the concept of resource endowment of nations and advancement from the concept of relative efficiency. New trade theories proposed innovation, competition, and economies of scale as key factors for trade participation by countries and further spilling the benefits to countries economies and other economies of the world in era of globalization. While trade theory suggested the reasons behind trade and numerous benefits associated with trade but ignored the problems countries face as they develop. Countries suffer from balance of payment

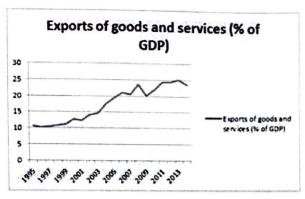
Countries export what they produce, thus reflecting their natural and acquired advantage in export composition.

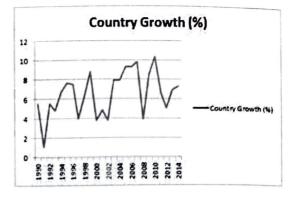
Products manufactured in domestic market change in composition and countries start producing advanced technical products as they develop and this gets reflected in exports product or services composition also. Resource rich country like Iran has natural advantage in oil production and thus exports oil and not advanced electrical equipment because of the absence of skills to manufacture. India is major exporter of IT and ITes services as it has acquired this advantage and has been continuously specializing in the same.

The change in product composition may also be due to strong policy support from government and shifts in overseas demand patterns.

deficit and subsequently this led to changes in trade composition. With globalization countries removed barriers to trade so as to enhance the movement of goods and services across the border. Therefore the countries were open to benefits of globalization from increased interdependence and also thrown open to any kind of volatility due to crises or effects of business cycles. While trade theories explained the reasons behind trade they failed to predict completely what should countries trade and where they should trade.

^{*} Professor, Amity Business School, Amity University Rajasthan, Jaipur, Email Id:ssharma2@jpr.amity.edu





Source- WDI, World Bank, 2016

As table reflects GDP and exports have shown consistent growth and the correlation value of GDP and exports is 0.98 showing strong correlation between GDP and Exports .Indian export of goods and services has grown strongly post reforms and as percentage of GDP, with service exports increasing rapidly in comparison to goods exports. The crises in 2008 impacted our trade performance very strongly; the crises had a spill over effect on growth of Indian economy and adversely influence the major macroeconomic variables.

Export Diversification

Export Diversification implies change in composition of county's export in terms of product or market. Export diversification is important for developing economies due their reliance on few commodities for exports, wider range of product portfolio for exports protects country in the event of international crises . The purpose of diversification is spread of production over multiple sectors and moving from traditional exports to non-traditional ones as developing countries grow. The purpose is to provide stability to exports, increase revenue, built new markets and enhance trade sophistication. The main objective being economic growth through trade diversification is integrating the economy with rest of the world yet remaining insulated to global spillovers. The Prebisch-Singer Hypothesis (1950) suggests that over the long run the price of primary goods such as coal, coffee cocoa declines in proportion to manufactured goods such as cars, washing machines and computers. If the PSH holds true then countries with a high export dependence on primary products (i.e. low diversification in their commodity pattern of trade) may lose out from a worsening of the terms of trade. They will have to import a greater quantity of products to pay for essential imports such as raw materials, consumer goods and capital goods. Based on the PSH, the advice for these countries is to use revenues from primary commodity exports to fund education, the development of skills and expand technological capacity. Developing manufacturing capacity and greater diversity of output is also important. Export diversification is a term contrary to the concept of comparative advantage wherin countries specialize but has narrow product portfolio which increases the risk .The case of Ukraine narrates the disadvantages of trade specilisation. countries, Ukraine was hit the hardest by the current global economic crisis due to its reliance on metal exports, a commodity that suffered a devastating collapse in trade volumes. As another example, Belarus' lack of geographical diversification of trade makes this country particularly vulnerable to trade disputes with Russia. The advantages of trade diversification in South Africa and its visible positive effects on economy with incorporation in the Foreign Trade Policy suggest that diversification is strategy best suited to Developing country. The policy implications from these findings suggest that an emphasis on diversifying exports in South Africa's trade and industrial policies-as is currently the case-can be justified. From the discussion in section 2 of this paper the implication is that a prerequisite for export diversification would be to diversify the production structure of the domestic economy. As was stressed, this does not require a return to the infant industry argument for protection: trade policy has been found not to be the first-best policy to address this. Better ways include financial sector development/credit market intervention coordination of investments between sectors and science and technology policy to raise the rate of creativity (innovation) and information spillovers in a country in order to find dynamic comparative advantages. Finger and Kreinin(1979)

used export similarity index to measure similarity of exports between two countries. The study by Wim and Riaan (2010) found that in Brazil, China and India, export specialization was found to be generally more beneficial and further suggested that the manner in which export diversification is obtained may be important: if it is obtained with less of a reduction in traditional exports, the impacts are better. The role of government is well depicted in the study by Alexander and Warwick (2007) There are also a number of arguments stemming from the unique role of government. Only government, for example, is in a position to perform certain functions such as setting the rules of the system (structures, laws, etc.) to enable international markets to function effectively. Government agencies can also have better access to their official counterparts abroad and so may be able to provide access to information that otherwise would not be available and to provide credibility to firms seeking partners in a transaction.

Changes in Trade Direction and Composition of Indian Exports

As per the details received from Ministry of Commerce, India's total merchandise trade increased from US\$ 467 billion in FY2010 to US\$ 757 billion in FY2015. Exports from India have increased at a CAGR of 11.6% from 179 billion in FY2010, to US\$ 310 billion in FY2015. India's Export to GDP ratio increased from 13.3% in FY2010 to 15.6% in FY2015.

Foreign Trade Policy 2015-2020 aims at increasing India's merchandise and services exports to US\$ 900 billion by FY 2020. Trade has shown diversion towards developing countries. Share of Asia, Africa and LAC regions increased sharply from 58% in 2004-05 to 66% in 2014-15; Of this, share of Asia region rose from 48% to 50% during this period.

It was in 2009 that the policy measures for insulating trade from economic crises were revised and were incorporated in the foreign trade policy 2010-15 of India. The concept of Export and market diversification are presently supported by in FTP 2015 to 2020, whereby Merchandise exports from India scheme and Service exports from India scheme have been introduced to further strengthen export diversification.

Research Methodology

In this study trade composition and concentration methods have been Tested . To observe the pattern of diversification the study analyzed the values of concentration and Diversification Index for a period of twenty years from 1995 to 2014 and for five emerging economies of the world namely Brazil, Russia, India, China and South Africa (BRICS). The rationale for choosing BRICS economies is that these are developing economies and are driving forces of global economic activity having high levels export and investment growth.

 Trade Composition To examine shifts in trade composition of exports of goods and services, year wise time series data of share of country exports from UN comtrade was analyzed over a period of fourteen years from 2001 to 2014. The data on service exportis available on Intracen from 2005 onwards, thus the composition of service exports have been studied from 2005 to 2014.

2. Concentrationindex:Herfindahl-Hirschmann Index (Product HHI)

Concentration index, also named Herfindahl-Hirschmann Index (Product HHI), is a measure of the degree of product concentration. The following normalized HHI is used in order to obtain values between 0 and 1:

$$H_{j} = \frac{\sqrt{\sum_{i=1}^{n} \left(\frac{x_{ij}}{X_{j}}\right)^{2}} - \sqrt{1/n}}{1 - \sqrt{1/n}}$$

where

H_j =country or country group index

 x_{ij} = value of export for country j and product i

$$X_j = \sum_{i=1}^n x_{ij}$$

and

n = number of products (SITC Revision 3 at 3-digit group level).

If exports are extremely concentrated that all export receipts come from only one product, then HHI=1. If on the other hand export receipts are equally distributed among all products, where n is

the number of products exported. If a large number of products are exported, the value of HHI will tend to be small. Thus, an index value closer to 1 indicates a country's exports or imports are highly concentrated on a few products. On the contrary, values closer to 0 reflect exports or imports are more homogeneously distributed among a series of products.

The concentration index or HH index is calculated using three digit products in country's exports.

Results

Trade Composition – The study found that exports of traditional item have shown decline in share and skill based technical products have reflected upward trend and exports have risen from 2001 to 2015. The rise in exports of vehicle, electronic and electric goods reflect trade diversification pattern of Indian exports.

The share of mineral oil, distillation products rose from 4.9% in 2001 to 20% in 2014. Export of pearl showed a downward pattern, though marginal being 18% in 2001 to 13% in 2014. Share of vehicle exports doubled from 2% in 2001 to 4.6% in

2014. Pharmaexports share showed consistent rise and increased from 2.4% in 2001 to 4.6% in 2014. Textile and apparel exports have shown consistent fall. Apparel exports fell from 7.4% in 2001 to 2.6% in 2013 and 2.9% 2014. Electrical and electronic equipment showed steady rise till 2009 being at 5.4% from 3% but fell subsequently thereafter. Articles of copper have shown rise from 0.4% in 2001 to 2.5% in 2010 and fell to 1.1% in 2014. Footwear, manmade filaments, carpet, Raw hide , ores have shown decreased share in exports of India. In services exports the highest contribution is by manufacturing services followed by Telecommunication, computer and Information services, travel, transport, financial and insurance. Unlike products services have shown consistent export performance and that the services were less impacted by financial crises in comparison to the products.

aulal/libo,

HH Concentration index

The values of HH Product concentration of BRICS economies show consistent pattern for past twenty years. Russian economy reflects convergence pattern and it reflects marginal increase in values of HHI from 0.26 in the initial years and approaching to 0.38 from 2011 to 2015.

Table 1; HH Product concentration

Year	Brazil	Russia	India	China	South Africa	
1995	0.09	0.26	0.14	0.14	0.11	
1996	0.09	0.26	0.12	0.15	0.11	
1997	0.09	0.26	0.12	0.16	0.11	
1998	0.09	0.22	0.14	0.16	0.12	
1999	0.09	0.26	0.16	0.17	0.11	
2000	0.09	0.28	0.15	0.17	0.14	
2001	0.09	0.29	0.12	0.17	0.14	
2002	0.09	0.30	0.13	0.17	0.11	
2003	0.08	0.31	0.13	0.18	0.13	
2004	0.08	0.32	0.12	0.18	0.14	
2005	0.09	0.35	0.13	0.19	0.14	
2006	0.09	0.35	0.14	0.20	0.16	
2007	0.09	0.35	0.15	0.19	0.16	
2008	0.11	0.36	0.16	0.19	0.15	
2009	0.12	0.35	0.15	0.13	0.14	
2010	0.16	0.37	0.16	0.20	0.14	
2011	0.17	0.38	0.18	0.20	0.14	
2012	0.15	0.38	0.17		0.13	
2013	0.15	0.38	0.17	0.18	0.14	
2014	0.15	0.37	0.18	0.18	0.12	

34

Russian economy is totally reliant on natural resources and energy for exports and they contribute significantly to the economy. The economy is government controlled and strategies for export diversification though have been framed from time to time but could not be implemented. Oil crises have further worsened the economic condition of Russian economy. The concentration index of Brazil, China, India and South Africa display similar pattern displaying that with an exception of Russia economies are moving away from their reliance on primary commodities and natural resources towards highly diversified export portfolio. The value of HH Product concentration index of India has shown more or less stable trend with maximum value being 0.18 and minimum 0.12, indicating that exports of India are more or less homogeneously distributed among a series of products.

Conclusion

Due to global volatility and uncertainty, countries may resort to tariff and non-tariff barrier thus need to diversify the exports. It should be complimented by participation in top export items of the world trade. This will leverage and influence manufacture of related items in domestic market. As mentioned above trade diversion to developing countries and reliance on EU and US has shown a downward trend. The objective should be to enhance economic growth through trade. This will enhance domestic production. Indian exporters and government need to identify products where India has potential but is untapped due to price disadvantages, Non-tariff measures and awareness for such products.

Trade diversification enhances economic growth of the economy and translates multifold benefits the economy as it reduces the risk associated with trade specialization and trade focus on few markets. The risk associated with trade has wider spread in case of trade diversification and

with policy support in FTP pace gets enhanced. India needs to export top 15 trading items of the world keeping it traditional export in pace. Due to current oil prices and its global spread the impact on Indian Economy can be minimized by retaining the existing products adding new export products and new markets. The policy support for skill up gradation in form of 'Make in India' can add wonders to boost the latent and identified export potential required for promotion of export diversification.

References

- Alexander C, Warwick K (2007) Governments, exports and growth: responding to the challenges and opportunities of globalisation. World Econ 30(1):177–194
- Acharyya, A. A. Export diversification, composition, and economic growth: Evidence from cross-country analysis. The Journal of International Trade & Economic Development, 22, 959-992.
- Prebisch, R., (1950). The Economic Development of Latin America and Its Principal Problems. Economic Bulletin for Latin America, 7, 1-12
- Finger, J. M. and M. E. Kreinin (1979), "A measure of 'export similarity' and its possible uses. Economic Journal, 89: 905-912.
- Ricardo (1817): Principles of Political Economy and Taxation" ed. R.M. Hartwell, Penguin, Hammondsport, 1971
- Rossouw, W. N. (2010). Export diversification and economic performance: evidence from Brazil, China, India and South Africa. Econ Change Restruct, 44.
- Shepotylo, O. (2012). Export diversification across countries and products: Do Eastern European (EE) and Commonwealth of Independent States (CIS) countries diversify enough? The Journal of International Trade & Economic Development; 605-638.
- Singer, H.W. (1950): "The distribution of Trade between Investing and Borrowing Countries" American Economic Review, Vol. 40, May 1950, pp.531-548
- Smith, A. 1986 [1776]. The Wealth of Nations. London: Penguin Books
- Naudé, W., & Rossouw, R. (2008). Export Diversification and Specialization in South Africa. UNU-WIDER Research Paper No. 2008/93.
- Vernon, R. (1966): "International Investment and International trade in the product cycle" Quarterly Journal of Economics, 80, pp. 190-207

Annexure 1India - Share in value in country's cluster exports %

Product Lbels	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
All products	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mineral fuels, oils, distillation products, etc	4.89	4.65	6.1	8.07	10.46	14.86	16.19	18.07	13.5	17.2	18.7	18.7	20.6	19.63
Pearls, precious stones, metals, coins, etc	16	17.72	17.97	16.66	16.09	13.03	13.09	11.09	18.4	14.7	16.5	14.8	13.1	12.82
Vehicles other than railway, tramway	1.99	2.07	2.55	2.96	3.19	3.02	2.8	3.35	3.23	4.21	3.41	4.21	4.1	4.56
Machinery, nuclear reactors, boilers, etc	3.61	3.3	3.74	3.85	4.05	4.09	4.19	4.46	4.05	3.7	3.57	3.82	3.9	4.28
Organic chemicals	3.7	3.97	4.31	4.33	4.43	4.77	4.47	4.35	3.94	3.9	3.7	4.33	3.96	3.79
Pharmaceutical products	2.39	2.51	2.64	2.52	2.34	2.47	2.63	2.75	2.84	2.77	2.74	3.32	3.49	3.67
Cereals	2.05	3.11	2.35	2.41	1.91	1.31	1.9	2.15	1.69	1.33	1.78	3.01	3.44	3.17
Iron and steel	2.1	2.96	4.05	4.61	4.32	4.28	4.1	4.51	2.48	3.17	2.63	2.66	3.03	2.86
Articles of apparel, accessories, not knit or crochet	7.39	6.57	5.63	4.95	5.06	4.49	3.59	3.24	3.46	2.74	2.63	2.57	2.6	2.85
Electrical, electronic equipment	3.01	2.77	2.98	2.58	2.63	3.1	3.22	3.86	5.44	3.95	3.9	3.72	3.35	2.83
Cotton	4.85	4.29	3.66	3.27	2.6	2.9	3.02	2.5	1.81	3.13	2.59	2.96	3.36	2.8
Articles of iron or steel	2.37	2.16	2.4	2.67	2.74	2.66	3.05	3.4	2.43	2.89	2.16	2.65	2.18	2.37
Articles of apparel, accessories, knit or crochet	4.11	4.41	4.34	3.5	3.11	2.95	2.83	2.41	2.93	2.07	1.93	1.89	2.07	2.36
Aircraft, spacecraft, and parts thereof	0.17	0.19	0.13	0.07	0.06	0.05	0.26	0.82	0.62	0.7	0.76	0.61	1.23	2.12
Plastics and articles thereo	f 1.79	1.91	1.92	2.5	2.21	2.2	1.84	1.55	1.32	1.65	1.81	1.7	1.85	1.7
Fish, crustaceans, molluscs, aquatic invertebrates nes	2.82	2.7	2.15	1.51	1.46	1.22	1.07	0.73	0.8	0.98	1.07	1.13	1.5	1.69
Meat and edible meat offal	0.63	0.57	0.52	0.56	0.58	0.57	0.58	0.65	0.67	0.81	0.89	1.09	1.42	1.6
Other made textile articles, sets, worn clothing etc	2.49	2.4	2.54	2.42	2.37	1.93	1.6	1.33	1.31	1.32	1.28	1.37	1.4	1.45
Ships, boats and other floating structures	0.11	0.11	0.19	0.45	0.65	0.65	0.88	1.44	2.13	1.92	2.34	1.42	1.07	1.43
Copper and articles thereof	f 0.43	0.64	0.85	1.12	1.31	2.31	1.99	1.29	0.87	2.46	0.98	0.98	0.91	1.09
Miscellaneous chemical products	1	0.94	0.91	0.84	1.05	0.91	0.92	1.08	0.95	0.94	0.84	0.93	1.01	1
Footwear, gaiters and the like, parts thereof	1.46	1.26	1.16	1.12	1.04	0.98	0.97	0.87	0.84	0.75	0.69	0.68	0.78	0.94
Tanning, dyeing extracts, tannins, derivs,pigmentset	c 1.15	1.14	1.08	0.89	0.83	0.8	0.82	0.81	0.67	0.73	0.64	0.7	0.78	0.92
Coffee, tea, mate and spices	1.88	1.36	1.14	1.05	0.9	0.93	0.95	0.96	0.86	0.91	0.99	0.93	0.86	0.87
Rubber and articles thereo	of 0.85	0.99	1.06	0.94	0.97	0.98	0.84	0.92	0.7	0.76	0.86	0.95	0.88	0.87
Aluminium and articles thereof	0.72	0.85	0.61	0.54	0.65	0.64	0.71	0.69	0.55	0.6	0.47	0.55	0.62	0.81
Articles of leather, animal gut, harness, travel goods	2.07	1.63	1.5	1.44	1.19	1.01	0.91	0.89	0.8	0.66	0.67	0.7	0.75	0.8
Manmade filaments	1.2	1.29	1.39	1.26	0.95	0.82	0.85	0.87	1.01	0.99	0.88	0.78	0.8	0.79
Optical, photo, technical, medical, etc apparatus	0.69	0.69	0.74	0.73	0.68	0.65	0.6	0.6	0.71	0.65	0.6	0.7	0.68	0.74

Lac, gums, resins, vegetable saps and extracts nes	0.53	0.45	0.41	0.38	0.4	0.33	0.27	0.27	0.2	0.3	0.75	2.26	0.91	0.73
Manmade staple fibres	1.04	1.07	1.14	1.02	0.82	0.8	0.89	0.77	0.69	0.74	0.74	0.69	0.65	0.69
Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	0.72	0.48	0.55	0.62	0.41	0.4	0.52	0.54	0.39	0.49	0.61	0.62	0.56	0.68
Residues, wastes of food industry, animal fodder	1.03	0.82	0.77	1.21	0.8	1.04	1.11	1.53	0.97	0.94	0.91	0.91	1.1	0.64
Salt, sulphur, earth, stone, plaster, lime and cement	1.03	1	1	0.97	0.92	0.86	0.83	0.74	0.6	0.51	0.53	0.6	0.61	0.63
Carpets and other textile floor coverings	1.32	1.2	1.14	1.05	1.05	1.01	0.84	0.65	0.55	0.6	0.42	0.47	0.51	0.57
Edible fruit, nuts, peel of citrus fruit, melons	1.23	1.17	0.89	0.91	0.87	0.71	0.6	0.62	0.59	0.49	0.48	0.48	0.5	0.51
Essential oils, perfumes, cosmetics, toiletries	0.49	0.46	0.46	0.41	0.39	0.44	0.42	0.43	0.49	0.41	0.41	0.51	0.48	0.45
Inorganic chemicals, precious metal compound, isotopes	0.55	0.79	0.61	0.76	0.72	0.69	0.51	0.69	0.47	1.05	0.47	0.6	0.44	0.45
Stone, plaster, cement, asbestos, mica, etc articles	0.66	0.66	0.68	0.54	0.6	0.64	0.62	0.52	0.48	0.45	0.34	0.39	0.41	0.44
Raw hides and skins (other than furskins) and leather	1.04	1.02	0.88	0.79	0.64	0.6	0.55	0.47	0.32	0.36	0.34	0.37	0.4	0.43
Ores, slag and ash	1.17	1.82	1.69	3.27	4.83	3.8	4.02	3.58	3.28	3.13	1.63	1.11	0.71	0.43
Sugars and sugar confectionery	0.82	0.62	0.7	0.1	0.08	0.56	0.73	0.86	0.05	0.47	0.69	0.75	0.35	0.41
Furniture, lighting, signs, prefabricated buildings	0.12	0.14	0.22	0.3	0.29	0.32	0.36	0.3	0.3	0.32	0.3	0.35	0.35	0.38
Edible vegetables and certain roots and tubers	0.53	0.51	0.5	0.48	0.54	0.5	0.43	0.38	0.45	0.44	0.33	0.3	0.42	0.36
Paper and paperboard, articles of pulp, paper and board	0.42	0.49	0.44	0.4	0.42	0.36	0.31	0.32	0.3	0.36	0.3	0.32	0.34	0.35
Commodities not elsewhere specified	2.93	2.37	1.26	1.17	1.12	1.05	1.15	0.92	4.37	1.92	4.6	0.87	0.98	0.3
Tobacco and manufactured tobacco substitutes	0.4	0.42	0.38	0.35	0.3	0.3	0.31	0.37	0.51	0.4	0.26	0.32	0.32	0.3
Tools, implements, cutlery, etc of base metal	0.5	0.46	0.46	0.45	0.46	0.44	0.34	0.32	0.24	0.26	0.28	0.3	0.27	0.29
Animal, vegetable fats and oils, cleavage products, etc	0.44	0.3	0.3	0.41	0.32	0.26	0.29	0.32	0.3	0.32	0.35	0.33	0.29	0.28
Ceramic products	0.21	0.19	0.17	0.13	0.12	0.12	0.13	0.12	0.11	0.14	0.12	0.15	0.17	0.24
Nickel and articles thereof	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.11	0.15	0.23
Glass and glassware	0.32	0.35	0.34	0.28	0.23	0.24	0.24	0.24	0.19	0.17	0.19	0.19	0.2	0.22
Miscellaneous edible preparations	0.32	0.24	0.22	0.17	0.17	0.16	0.15	0.15	0.15	0.14	0.14	0.17	0.17	0.18
Soaps, lubricants, waxes, candles, modelling pastes	0.1	0.14	0.11	0.09	0.1	0.11	0.11	0.16	0.13	0.15	0.15	0.24	0.16	0.17
Miscellaneous articles of base metal	0.28	0.26	0.24	0.25	0.21	0.21	0.21	0.21	0.17	0.17	0.15	0.15	0.15	0.17
Miscellaneous manufactured articles	0.26	0.22	0.24	0.19	0.17	0.16	0.15	0.13	0.15	0.15	0.12	0.15	0.15	0.16
Vegetable, fruit, nut, etc food preparations	0.16	0.12	0.13	0.12	0.14	0.16	0.14	0.15	0.15	0.12	0.12	0.13	0.14	0.16
Cereal, flour, starch, milk preparations and products	0.1	0.11	0.11	0.11	0.12	0.11	0.1	0.13	0.12	0.11	0.12	0.14	0.15	0.15

Dairy products, eggs, honey, edible animal			0.15	0.17	0.24	0.16	0.18	0.23	0.1	0.11	0.07	0.11	0.22	0.15
product nes	0.16	0.13	0.15	0.17	0.03	0.46	0.28	0.23	0.2	0.3	0.26	0.17	0.15	0.15
Zinc and articles thereof Special woven or tufted	0.01	0.02	0.03	0.15	0.14	0.14	0.13	0.13	0.11	0.11	0.08	0.09	0.12	0.13
fabric, lace, tapestry etc Impregnated, coated or	0.46				0.00	0.06	0.07	0.05	0.05	0.07	0.05	0.06	0.07	0.12
laminated textile fabric	0.1	0.09	0.09	0.1	0.08	0.00	0.07							0.12
Beverages, spirits and vinegar	0.07	0.05	0.04	0.04	0.05	0.05	0.05	0.06	0.07	0.08	0.09	0.12	0.13	0.12
Wood and articles of wood, wood charcoal	0.07	0.09	0.08	0.11	0.1	0.1	0.1	0.1	0.08	0.07	0.07	0.09	0.1	0.11
Vegetable textile fibresnes, paper yarn, woven fabric	0.34	0.22	0.21	0.22	0.17	0.13	0.12	0.11	0.1	0.16	0.13	0.11	0.1	0.11
Wadding, felt, nonwovens, yarns, twine, cordage, etc	0.1	0.1	0.1	0.07	0.08	0.08	0.08	0.08	0.09	0.11	0.1	0.11	0.1	0.11
Albuminoids, modified starches, glues, enzymes	0.13	0.12	0.12	0.11	0.14	0.1	0.15	0.13	0.1	0.11	0.07	0.09	0.1	0.11
Printed books, newspapers, pictures etc	0.13	0.13	0.14	0.14	0.14	0.13	0.16	0.12	0.12	0.1	0.11	0.12	0.1	0.1
Milling products, malt, starches, inulin, wheat gluten	0.11	0.14	0.16	0.09	0.03	0.03	0.04	0.03	0.03	0.03	0.05	0.08	0.09	0.1
Toys, games, sports requisites	0.15	0.14	0.14	0.13	0.12	0.11	0.08	0.08	0.07	0.07	0.07	0.07	0.08	0.09
Bird skin, feathers, artificial flowers, human hair	0.11	0.09	0.11	0.1	0.1	0.11	0.12	0.11	0.11	0.09	0.07	0.1	0.11	0.09
Knitted or crocheted fabric	0.07	0.06	0.08	0.06	0.04	0.06	0.05	0.06	0.06	0.07	0.09	0.07	0.08	0.08
Works of art, collectors pieces and antiques	0.01	0.01	0.62	0.53	0.44	0.36	0.35	0.18	0.12	0.1	0.09	0.08	0.08	0.07
Lead and articles thereof	0	0	0	0.01	0.02	0.01	0.03	0.02	0.04	0.06	0.06	0.04	0.06	0.06
Wool, animal hair, horsehair yarn and fabric thereof	0.11	0.11	0.09	0.09	0.08	0.07	0.07	0.07	0.06	0.06	0.07	0.06	0.05	0.06
Meat, fish and seafood food preparations nes	0.01	0.04	0.12	0.14	0.16	0.17	0.13	0.14	0.11	0.13	0.06	0.03	0.04	0.05
Silk	0.59	0.54	0.49	0.5	0.4	0.32	0.24	0.2	0.15	0.15	0.09	0.06	0.05	0.04
Railway, tramway locomotives, rolling stock, equipment	0.07	0.02	0.03	0.03	0.03	0.05	0.04	0.04	0.02	0.03	0.04	0.05	0.06	0.04
Cocoa and cocoa preparations	0.01	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.04
Products of animal origin, nes	0.09	0.09	0.06	0.05	0.04	0.03	0.03	0.02	0.03	0.03	0.06	0.04	0.04	0.04
Clocks and watches and parts thereof	0.12	0.1	0.11	0.09	0.06	0.04	0.03	0.03	0.02	0.02	0.02	0.03	0.03	0.03
Explosives, pyrotechnics, matches, pyrophorics, etc	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.02	0.03	0.03	0.03
Fertilizers	0.04	0	0.01	0.01	0.01	0.01	0.01	0.02	0.08	0.02	0.03	0.03	0.02	0.02
Live trees, plants, bulbs, roots, cut flowers etc	0.07	0.07	0.07	0.07	0.07	0.07	0.1	0.04	0.04	0.03	0.02	0.03	0.02	0.02
Arms and ammunition, parts and accessories thereof	0.01	0	0.01	0	0	0	0	0.01	0.01	0	0.01	0.01	0.02	0.02
Other base metals, cermets, articles thereof	0.01	0.01	0.01	0.02	0.02	0.03	0.02	0.02	0.01	0.02	0.01	0.03	0.02	0.02
Vegetable plaiting materials, vegetable products nes	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Headgear and parts thereof	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Tin and articles thereof	0.02	0.02	0.02	0.01	0.01	0.03	0.01	0.02	0.01	0	0	0	0.03	0.01
Photographic or cinematographic goods	0.07	0.05	0.04	0.04	0.03	0.02	0.02	0.02	0.01	0.02	0.01	0.01	0.01	0.01
Musical instruments, parts and accessories	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Live animals	0.01	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0	0	0	0
Pulp of wood, fibrous cellulosic material, waste etc	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manufactures of plaiting material, basketwork, etc.	0	0.01	0	0	0	0	0.01	. 0	0	0	0	0	0	0
Furskins and artificial fur, manufactures thereof	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Umbrellas, walking-sticks, seat-sticks, whips, etc	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cork and articles of cork	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Annexure 2
India-Exports and GDP (in US\$Thousand)

Year	GDP	Goods Exports
2001	43878489000	4,38,78,489
2002	50097958000	5,00,97,958
2003	59360659000	5,93,60,659
2004	75904200000	7,59,04,200
2005	100352637000	10,03,52,637
2006	121200606000	12,12,00,606
2007	145898053000	14,58,98,053
2008	181860898000	18,18,60,898
2009	176765036000	17,67,65,036
2010	220408496000	22,04,08,496
2011	301483250000	30,14,83,250
2012	289564769000	28,95,64,769
2013	336611389000	33,66,11,389
2014	317544642000	31,75,44,642
2017		

Source :Intracen and World Bank