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India's Manufacturing Exports and Opportunities in Regional Value Chains (RVC's) with East Asia and Latin America

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Abstract

The economic expansion of the regions in comparison with the recent historical trends is steady. Whereas, the past experiences of weak external demand, rising trade protectionism and heightened uncertainty was there in the economies. Over the past decade, almost every region has enjoyed relatively high economic growth rates and made substantial progress in all social and economic indicators (education, poverty reduction, health, and trade). Nevertheless, firm productivity remains low across sectors (agriculture, service, and manufacturing). Some of the economies from East Asia and Pacific (EAP) and Latin American Countries (LAC) have substantially done well in every aspect. But, still, there are some challenges which these countries have faced during the last decade in which alleviating abject poverty, employment generation, reducing inequalities, raising health and educational standards and increasing the size of the economy via economic growth outcomes. There are multifaceted ways to address these challenges but one of the most important ways in which these could be addressed is by focusing on manufacturing, a sector which has rather diminished in importance.

The countries under these regions are quite small accompanied by some exceptions, in comparison with Europe and Central and North America. The regional cooperation plays a key role to boost the manufacturing tendencies of the countries and provide a way to achieving the growth and developmental goals. This is especially important in the background of new trends in industrial restructuring being organized in an inter-region or multi-country context, whereby different stages of manufacturing in a particular line of production are spread-out across the countries in a specific region. These trends in production fragmentation can also be known as Regional Value Chains (RVCs) and are also considered more efficient than a situation where each country specializes in each stage of production of a particular product. Against this framework, the paper presents the Indian perspective on evolving a coordinated policy mechanism for the development of the manufacturing sector in the EAP and LAC region by assessing the potential for doing so and also by identifying constraints.

Keyword: Manufacturing, Capital, Intensive, Comparative, Advantage, Labou, Absorption.

Introduction

This paper has been divided into four sections in which section I is covering the conceptual basis and outline of the regional cooperation in the quest toward building the manufacturing sector in the region. Section II highlighting the economies of Regional Value Chains (RVCs). The status of the manufacturing sector in India and its brief profile is analyzed in this section, followed by an analysis of trade in manufactured products and its trends in section III. Combining the results from the preceding sections and with the help of some empirical exercise, the paper further explores the possibilities of creating (RVCs) in the region. Thereafter, the paper summarizes the major findings and concludes with some policy recommendations.

Conceptual Framework or Methodology

The developmental objectives in developing countries can be achieved by cooperating among themselves in manufacturing by creating in Regional Value Chains (RVCs). The context of EAP, LAC

and India the concual support of RVCs could include: (a) Understanding the importance of manufacturing; (b) facilitating the creation of RVCs through adequate regional policies for trade and investment integration. (c) Adopting integrated approach towards trade goods and services and Foreign Direct Investments (FDI) (Das, 2014).

One of the major dearths in the recent academic research and policy-making process in the developing world is lack of contribution of manufacturing and local value addition and EAP and LAC are no exceptions. The manufacturing sector has regained its importance in near past. Some of the countries from LAC are more manufacturing sector centric similarly, India has become resilient in the export of manufacturing products. However, at the level of policy implementation, the performance is often lackluster, due to conceptual ambiguity.

The objective of the paper is to identify the importance of regional value chains in terms of India vis-à-vis East Asia and Latin America The paper employed UNcomtrade data from World Bank for the purpose of identifying the importance of regional value chains for India. Whereas,Annual Survey of Industries (ASI) data has been used to check the importance of Industries in terms of labour and capital intensity. The paper is covering period 2000-01 to 2014-15 for capital and labour intensity whereas, sectorial growth of the economy consisting a small time period of 2012-13 to 2016-17.The reasoning for using old dataset is non-availability of data.

Paper have used the Revealed Comparative Advantage (RCA) index to calculate competitiveness of the of the top products between the regions while for capital and labour inenstiy calculations based upon the simple statistics.

Review of Literature

Based on a review of the literature on GVC's/RVC's, this study finds that the two strings of research are commonly connected not only in technological and managerial information spillovers but also in absorptive capacity of domestic firms and backward linkages between foreign and domestic firms. In addition, this study demonstrates that there is significant scope for empirical research to make new contributions to the literature on the GVC's/RVC's on industrial development in these regions.

The term "global value chains" (GVCs) has been used to describe the sequence of all functional activities required in the process of value creation involving more than one country (UNCTAD, 2013). According to UNCTAD (2013), "about 60 per cent of global trade, which today amounts to more than $20 trillion, consists of trade in intermediate goods and services that are incorporated at various stages in the production process of goods and services for final consumption. Value chain is simply defined as the "full range of activities that firms and workers do to bring a product from its conception to its end and beyond" (Gereffi and Fernandez-Stark, 2011). It consists of various activities such as design, marketing, distribution and support to the final consumer.

Global Value Chains are become increasingly influential in determining future trade and FDI patterns as well as growth opportunities. Literature shows that Asia-Pacific region benefits from participation in GVCs are multilayered, ranging from the company level where GVCs can bolster productivity of participating enterprises and provide opportunities for creation of high skilled and better paid jobs, to the macro level with enhanced economic growth and higher per capita income. An effective development strategy will now require policy approaches to effectively facilitate dynamic insertion of local companies into GVCs.

The main interests of seminal GVC works, such as Humphrey and Schmitz (2002), Gereffi, et al., (2005), and Pietrobelli and Rabellotti (2011), lie in the static categorization of GVC governance and upgrading, rather than the evolution of enterprises 12 from captive to relational type. Another important reason for the neglect of the evolutionary process of local industry is that GVC studies, especially the early works, such as Gereffi and Korzeniewicz (1994), consider lead firms as global buyers located in developed countries (e.g., large supermarkets), whose main role is to control or coordinate the GVC without directly engaging in production activities

The trends now a days show that most of the goods and services are produced by the different nations who are specialized in various functions are opposed to being produced by the single countries and creating the Regional Value Chain (RVC). Technological advancement along with trade and investment liberalization played an important role in emergence of RVCs and hence, economies are becoming more interconnected and specialize in different stages of production rather than specific products and industries. The trade investment and knowledge flows which are built in RVCs can provide mechanism for rapid learning, innovation and industrial upgrading (Humphery and Schmitz, 2002). Through participation in GVCs new opportunities, economies of scale along with competencies has been created for firms and they became more quality centric. The determinants of GVC and RVCs are quite similar to each other. They are production hubs connected with service links that are equipped with improvements in hard and soft connectivity; furthermore RVC is nothing but GVC in regional context.

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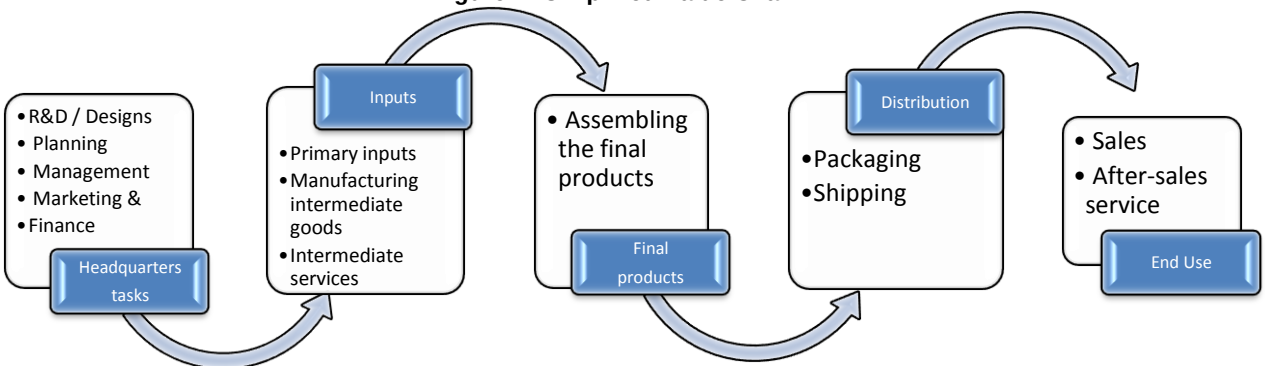
Figure -A simplified Value Chain



Source: ESCAP

Manufacturing As a Playing Field

The manufacturing sectors played a key role in the promoting economy of any country. Indian manufacturing exporters have played an important character in the sector's prowess to consumers across the world. Sectors such gems and jewellery, textiles and basic chemicals have been India's brand ambassadors in the global market since ancient times. The country has also made its presence felt in key industries such as engineering, electronic goods leather & leather manufacturing, carpets and handicrafts.

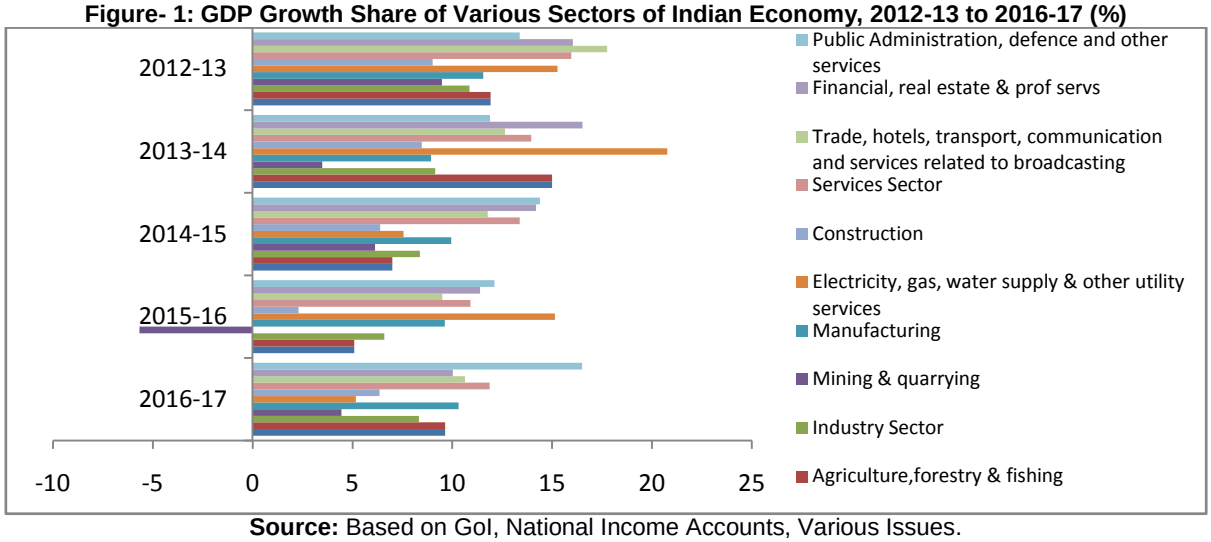
Table- 1: GDP Growth of Various Sectors of Indian Economy

	GDP Growth of Various Sectors of Indian Economy, 2012-13 to 2016-17 (%)					
	Sectors	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**
1	Agriculture Sector	11.92	14.99	7	5.08	9.64
1.1	Agriculture ,forestry & fishing	11.92	14.99	7	5.08	9.64
2	Industry Sector	10.86	9.14	8.37	6.6	8.32
2.1	Mining & quarrying	9.48	3.48	6.13	-5.67	4.44
2.2	Manufacturing	11.55	8.94	9.95	9.62	10.32
2.3	Electricity, gas, water supply & other utility services	15.27	20.76	7.55	15.14	5.17
2.4	Construction	9.02	8.47	6.39	2.3	6.36
3	Services Sector	15.96	13.95	13.38	10.9	11.87
3.1	Trade, hotels, transport, communication and services related to broadcasting	17.76	12.64	11.78	9.5	10.63
3.2	Financial, real estate & prof serves	16.03	16.52	14.2	11.39	10.02
3.3	Public Administration, defense and other services	13.37	11.89	14.38	12.11	16.5

Source: Based on GoI, National Income Accounts, Various Issues.

The manufacturing sector's performance in India has not been adequate with the understanding that this sector can serve as the engine of growth. Figure and table 1 shows the share of various sectors growth of the past five years. It is evident that share of each sector has been fluctuating on year-to-year basis. It shows that there is a continuous decrease in the growth of each sector since 2012-13 to 2016-17. Electricity, gas, water supply sector recorded the maximum fluctuations with the greater differences. On the other hand, we have manufacturing which has fluctuations with smaller differences on annual basis. In the year 2012-13 growth in manufacturing sector was around 11.55 % in comparison to the previous year. Similarly, in the very recent year of 2016-17, the changes in the growth of this sector are around 10 percent in comparison to the previous year. We have other dominating sectors of the Indian economy in which defense finance, real estate, mining & quarrying and service sectors also having the growth more than 5% year to year but mining and quarrying is the only sector had negative growth in the year 2015-16. Industrial sector growth is again considerably good in comparison with the other sectors. The manufacturing sector is way below than the combined sector of financial and real estate service sector (in terms of GDP). Over- financialization of an economy with limited real sector activities causes serious implications on a disconnection between the financial and real sectors of the economy and it is well documented in the literature. It has also severely impacted on the productive capacity and employment growth in the economy. (Peetz and Genreith,2011; Aizenman et al. 2013; Sen, 2013)

Figure- 1: GDP Growth Share of Various Sectors of Indian Economy, 2012-13 to 2016-17 (%)



Source: Based on GoI, National Income Accounts, Various Issues.

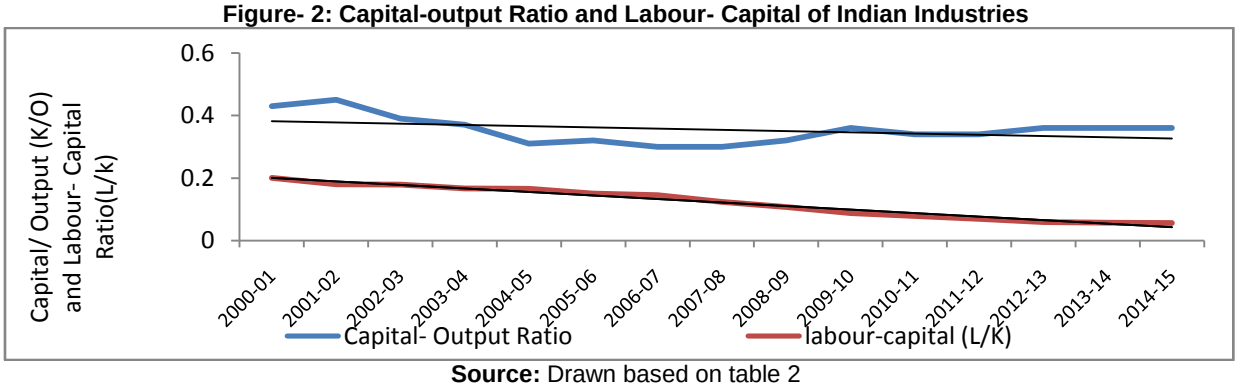
Table- 2:Capital and Labour Absorption in India's Manufacturing Sector

Year	No. of Factories	Labour (No. of Workers)	Capital (Rs. Lakh)	Gross Output (Rs. Lakh)	Capital-Output Ratio	Labour- Capital Ratio(L/K)
2000-01	131268	7987780	39960422	92690185	0.43	0.19
2001-02	128549	7750366	43196013	96245663	0.45	0.17
2002-03	127957	7935948	44475938	113056111	0.39	0.17
2003-04	129074	7870081	47333140	128740055	0.37	0.16
2004-05	136353	8453624	51234554	167256142	0.31	0.16
2005-06	140160	9111680	60694028	190835548	0.32	0.15
2006-07	144710	10328434	71513139	240854764	0.3	0.14
2007-08	146385	10452535	84513209	277570904	0.3	0.12
2008-09	155321	11327485	105596614	327279786	0.32	0.10
2009-10	158877	11792055	135218367	373303593	0.36	0.08
2010-11	211660	12694853	160700652	467621696	0.34	0.07
2011-12	217554	13430483	194955088	570366932	0.34	0.06
2012-13	222120	12950025	218026022	602594536	0.36	0.05
2013-14	224576	13538114	237371903	655525116	0.36	0.05
2014-15	230435	13881386	247445461	688633458	0.36	0.05

Source: Author's Calculation Based on GoI, Annual Survey of Industries, Various Issues.

It is evident from the table 2 that manufacturing activities have been increased (in terms of increase in the number of factories and gross output). So, the labour absorption and capital absorption have also increased. But the share which actually needed for the employment generation has not been increasing and hence, we can say that in the recent times manufacturing sector of Indian economy is more towards capital-efficiency. The table above has also explained the same results. Period 2001 show that capital-output ratio was around 0.43 and it has also increased in the subsequent year and reached to 0.45 and after that, it started declining till the year 2008-09. It shows that Indian govt. did not focus on spending more capital in economic activities. The Year 2004-05 to 2008-09 shows the less capital absorption year and the capital-output ratio was low as compared to the other years. But after 2008-09 there is a continuous increase in the ratio which shows that Indian economy is more interested to employ capital rather than labour.

Figure- 2: Capital-output Ratio and Labour- Capital of Indian Industries



Source: Drawn based on table 2

We have labour capital ratio in the figure is keep on decreasing from the beginning of 2000-01 to the latest available data. Meaning that economy has introduced advanced methods of production or more mechanical (machinery) ways of production has been employed by the economy. In the year 2000-01 the labour capital ratio was around 0.19 and reaches to 0.05 in 2014-15. It is very low in comparison to the capital output ratio of the country. The overall trend of the data for labour-capital ratio shows that country is becoming less labour intensive and more of capital intensive.

On the other hand, a more disaggregated analysis is required to identify the labor-intensity profiles of sub-sectors in Indian manufacturing. The documented literature shows that there is a jobless growth of the economy with high unemployment. Once we estimate than only we can analyze and identify the regional value chains for EAP and LAC regions and thereafter we can create opportunities for employment. The paper has taken top 15 manufacturing sub-sectors at NIC2008 3-digits in table 3.

Table- 3: Manufacturing Sub- Sectors with Higher labour Intensity (L/K) (2014-15)

NIC 08	Description	Total no. of Workers Engaged (L)	Gross Fixed Capital (Rs. Lakh) (K)	L/K
120	Manufacture of tobacco products	438519	634536	0.69
141	Manufacture of wearing apparel, except fur	713556	1279427	0.56
161	Saw milling and planing of wood	7562	17937	0.42
152	Manufacture of footwear	229376	574971	0.42
143	Manufacture of knitted and crocheted apparel	273907	695937	0.39
151	Tanning and dressing of leather: Manufacture of luggage, handbags, saddlery and harness, dressing and dyeing of fur	97766	272663	0.36
323	Manufacture of sports goods	13288	49601	0.27
102	Processing and preserving of fish, crustaceans and molluscs and products	53202	290738	0.18
139	Manufacture of other textiles	305518	1935561	0.16
310	Manufacture of furniture	57075	353684	0.16
274	Manufacture of electric lighting equipment	47990	325208	0.15
329	Other Manufacturing n.e.c.	65716	524109	0.13
108	Manufacture of prepared animal feeds	64636	634472	0.10
105	Manufacture of dairy products	143824	1819010	0.08
142	Manufacture of articles of fur	1188	51351	0.02
Source: Author's Calculation based on unit level data from GoI, ASI (Annual Survey of Industries).				

The traditional labor-intensive sectors with higher labour absorption potential are tobacco, apparel, footwear, sports goods, leather products, etc. for the year 2014-15. These are the sub-sectors which show that the labour absorption is very high in some sectors while little low in other manufacturing sectors. The calculated value for labour intensity is higher with the ratio of 0.69 in tobacco sector and apparel sector is also having the high labour intensity with the 0.56. On the other hand products like articles of fur and lighting equipment having the low capital-labor ratio 0.15 and 0.02 respectively. This has important implication for any exercise that may focus on coordinated in manufacturing in EAP region, of which the Indian manufacturing sector would be an important part. Because Indian market is very much associated with these regions particularly in manufacturing trade.

The study has to view the changes that have occurred in the past years between India, EAP and LAC in a holistic manner rather than focusing on the composition of products. The review of literature is showing that the relationship between these regions has undergone a progressive and healthy competitive phase. A number of obligations have been removed by these countries and a number of policy initiatives

have been taken to bridge the gap. They have taken steps like the promotion of trade by IBSA, BRICS, MERCOSUR, AFTA agreements and number of joint ventures has started by these countries. Leading jointly initiatives undertaken by these countries deal with some common topics like environmental protection, agricultural advancement, technology exchange programme etc. Apart from this, countries are becoming closer to removing their past tensions.

Competitiveness in Global and Bilateral Revealed Comparative Advantage

India East Asia Pacific and Latin America (LA) are the emerging economies. Latin America is well known for its high growth performance and inequalities in the region. And the Governments of Latin America have opened up their markets and reduced import tariffs in 2000-01. Since 2000 to 2009, Indo–LAC trade grew eightfold to approximately $20 billion from $2.41 bn. between 2003 and 2008; Latin America had its best economic performance in three decades, with an average annual growth rate of 5 percent, partly attributed to the boom in commodity prices. India was the third largest exports destination for Latin American exports in 2014. The region exported 29bn dollar goods to India, while its exports to japan and Spain was 21bn dollar, Germany 17bn, Italy and UK 11bn and France 8bn dollar. Beside the large reserves of oil, the region is endowed with mineral and agricultural potential, which can potentially be extremely useful in "Make in India" and food security. LA becomes more important for India in recent time. Like Mexico emerged as the top exports destination for India in 2016 and consisting 3.38 bn dollar exports, while neighboring partners like Indonesia, Japan, Thailand, Spain, Italy, South Africa and Australia having lesser shares in exports. LA is lately industrialized or still underway of industrialization. So, there is immense scope for future growth and expansion of this region. Therefore, resource abundance in LA creating new markets for India. (IT sector, pharmaceuticals, Automobile sectors etc.) On the other hand we have East Asia and pacific region which accounted more than 20 percent of the total trade of India. In which manufacturing trade is holds first position in the trade basket of India. Products like cotton, silk, clothing, machinery, vehicles, organic chemicals and engineering goods are the prominent products in the export basket of India.

The overall importance of RVC's can be seen by the sector-wise distribution of the imports and exports of India with these regions. In the year 2000 intermediate goods having the maximum share in trade of EAP and LAC followed by consumer goods whereas, in the year 2016 consumer goods are the top most sector of Latin America in recipient of Indian goods. Raw material and intermediate goods are major sectors of India's imports from LAC in the year 2016 which indicates the importance of RVC's in the region. Similarly, EAP region is also actively participating in exports of intermediate goods and imports of consumer goods from India in the year 2016.

Table- 4: Sector-wise comparison of Export-Import Percentage share of India with EAP and LAC

IND-LAC Year 2000			**IND-LAC Year 2016**		
Sector	**Export %**	**Import %**	**Sector**	**Export %**	**Import %**
Capital Goods	10.37	8.97	Capital Goods	10.37	8.97
Consumer Goods	35.26	35.13	Consumer Goods	50.9	5.07
Intermediate Goods	46.47	30.43	Intermediate Goods	37.4	37.3
Raw Material	6.35	25.12	Raw Material	1.32	54.66
IND-EAP Year 2000			**IND-EAP Year 2016**		
Sector	Export %	Import %	Sector	Export %	Import %
Capital Goods	5.59	32.07	Capital Goods	5.59	32.07
Consumer Goods	17.56	15.99	Consumer Goods	36.92	20.61
Intermediate Goods	58.83	29.72	Intermediate Goods	42.3	33.29
Raw Material	17.17	19.87	Raw Material	15.19	14.03

Table_ 5: India and Latin American Countries Exports Competitive Matrix (2016)

	(X2) (BRCA) Revealed Comparative Advantage (Value 1-5 or more)	(Y2)(BRCA) Revealed Comparative Disadvantage (Value 0-1)
(X1) (Trade Shares 1-5 % or more) (High)	9 13 32 52 53 54 55 57	97 19 33 34 36 39 40 56 58 59 64 68 70 71 73 78 79 82 96
(Y1) (Trade Shares (0-1 %) (Low)	24 29 30 38 42 43 50 51 61 62 63 67 69 72 76 87	1 2 3 4 5 6 8 10 11 12 14 15 16 17 18 20 21 22 23 25 26 27 28 31 35 37 41 44 45 46 47 48 49 60 65 66 74 75 80 81 83 84 85 86 88 89 90 91 92 93 94 95 97

Author's Calculations based on UNcomtrade Data.

X1∩X2 = 9 13 32 52 53 54 55 57
X2∩ Y1= 24 29 30 38 42 43 50 51 61 62 63 67 69 72 76 87
Y1∩Y2= 1 2 3 4 5 6 8 10 11 12 14 15 16 17 18 20 21 22 23 25 26 27 28 31 35 37 41 44 45 46 47 48 49 60 65 66 74 75 80 81 83 84 85 86 88 89 90 91 92 93 94 95 97

Y2∩X1 = 19 33 34 36 39 40 56 58 59 64 68 70 71 73 78 79 **82 96**

X1∩X2 (Dynamic Chapters); X2∩ Y1 (Emerging Chapters); Y1∩Y2 (Reconstruct Chapter); Y2∩X1 (improvidence Chapters) *Chapter in Bold Font are Manufacturing.

Table- 6: India and East Asia and Pacific Countries Exports Competitive Matrix (2016)

	(X2) (BRCA) Revealed Comparative Advantage (Value 1-5 or more)	**(Y2)(BRCA) Revealed Comparative Disadvantage (Value 0-1)**
(X1) (Trade Shares 1-5 % or more) (High)	2 3 9 13 14 25 41 50 52 53 57 67 71 78 79 89	6 8 10 18 20 21 26 27 28 33 34 35 40 42 51 56 58 59 61 64 69 73 75 80 82 83 87 96
(Y1) (Trade Shares (0-1 %) (Low)	5 7 11 12 15 17 23 24 29 30 32 36 38 54 55 62 63 68 72 74 76 86	1 4 16 19 22 31 37 39 43 44 45 46 47 49 60 65 66 70 81 84 85 88 90 91 92 93 94 95

Author's Calculations based on UNcomtrade Data.

X1∩X2 = 2 3 9 13 14 25 41 50 52 53 57 67 71 78 79 89

X2∩ Y1= 5 7 11 12 15 17 23 24 29 30 32 36 38 54 55 62 63 68 72 74 76 86

Y1∩Y = 1 4 16 19 22 31 37 39 43 44 45 46 47 49 60 65 66 70 81 84 85 88 90 91 92 93 94 95

Y2∩X1 = 6 8 10 18 20 21 26 27 28 33 34 35 40 42 51 56 58 59 61 64 69 73 75 80 82 83 87 96

X1∩X2 (Dynamic Chapters); X2∩ Y1 (Emerging Chapters); Y1∩Y2 (Reconstruct Chapter); Y2∩X1 (improvidence Chapters)*Chapter in Bold Font are Manufacturing.

The above table 5 and 6 shows the competitive matrix of exports of India to above-mentioned regions. These tables are divided into four sections quadrant 1 XI∩X2 showing the products whose RCA values are greater than 5 or more and considered as the dynamic chapters (Products). Quadrant 2 X1∩Y1 shows the comparative advantageous products whose values are greater than 1 and less than 5 and taken as the emerging Chapters (products) in the year 2016. Quadrant 3 Y1∩Y2 shows the chapters which have the comparative disadvantage in India's exports basket and they need the restructuring. Quadrant 4 X1∩Y2 again shows the comparative disadvantageous group of chapters but it is little different from the quadrant 3. In this quadrant, most of the chapters are near to one or more than .50 RCA value which needed small reconsideration to become comparative advantageous in Indian export basket and hence called improvidence chapters. On the other hand we have shares in terms of percentage of total exports. We have high shares with high BRCA values in the first quadrant and then we have low export percentage share and low BRCA values are placed in quadrant 4 and shows the least importance in the exports basket and called as reconstruct chapters.

The table above shows the Bilateral Revealed Comparative Advantage (BRCA) for India with LAC and EAP and we found that most of the products are from the manufacturing chapters like cotton, man-made filaments, articles of apparel and clothing, iron and steel articles and thereof, vehicles other than railways and aluminum articles etc. We have further divided the broadest category and estimated BRCA at HS 4 digit for these comparative advantageous chapters for these two regions and we found that some of the products at this level became comparative disadvantageous because of lower share in the trade. Estimates for BRCA with Latin America shows that there are more than 30 percent exports products in which India is enjoying the comparative advantage with high values. And around 27 percent products in the export basket Y2∩X1 (improvidence Chapters) which are comparative disadvantageous but they need little push to be comparative advantageous. All other remaining chapters are considered as the comparative disadvantageous chapters for India. On the other hand BRCA for EAP in table 5 explaining that there are more than 40 percent products in which India have a comparative advantage. Out of remaining chapters, there is more than 45 percent chapter have the comparative disadvantage for India but the values of most of them are close to zero and hence, they are considered as the Y2∩X1 (improvidence Chapters) for India. Remaining chapters have comparative disadvantages with less than .50 RCA values in the estimates.

Creating Regional Value Chains in LAC and EAP: Potential Sectors

Table- 7: Composite Matrix Estimates of Manufacturing Products BRCA India with EAP and LAC HS 4 Digit (year 2016)

HS	Description	HS	Description
5007	Woven fabrics of silk or of silk waste	7202	Ferro-alloys
5003	Silk waste, incl. cocoons unsuitable for reeling, yarn waste and garnetted stock	7208	Flat-rolled products of iron or non-alloy steel, of a width >= 600 mm, hot-rolled,
		7219	Flat-rolled products of stainless steel, of a width of >= 600 mm, hot-rolled or cold-rolled
5205	Cotton yarn other than sewing thread,	7210	Flat-rolled products of iron or non-alloy steel, of a width >= 600 mm, hot-rolled or cold-rolled
5201	Cotton, neither carded nor combed		
5208	Woven fabrics of cotton,	7308	Structures and parts of structures "e.g., bridges and bridge-sections, lock-gates, towers
5209	Woven fabrics of cotton, containing >= 85%	7326	Articles of iron or steel, n.e.s. (excluding cast

	cotton by weight and weighing > 200 g/m²		articles)
		7325	Articles of iron or steel, cast, n.e.s.
5515	Woven fabrics containing predominantly	7323	able, kitchen or other household articles, and parts thereof, of iron or steel; iron or steel
5509	Yarn of synthetic staple fibres		
5503	Synthetic staple fibres, not carded, combed or otherwise processed for spinning	7601	Unwrought aluminium
5514	Woven fabrics containing predominantly, but < 85% synthetic staple fibres by weight, mixed	7616	Articles of aluminium, n.e.s.
		7614	Stranded wire, cables, plaited bands and the like, of aluminium
6109	T-shirts, singlets and other vests, knitted or crocheted	7606	Plates, sheets and strip, of aluminium, of a thickness of > 0,2 mm
6114	pecial garments for professional, sporting or other purposes, n.e.s., knitted or crocheted		
6105	Men's or boys' shirts, knitted or crocheted (excluding nightshirts, T-shirts,	8703	Motor cars and other motor vehicles principally designed for the transport of persons
6111	Babies' garments and clothing accessories, knitted or crocheted	8708	Parts and accessories for tractors, motor vehicles for the transport of ten or more persons
6403	Footwear with outer soles of rubber, plastic leather or composition leather	8701	Motorcycles, incl. mopeds, and cycles fitted with an auxiliary motor, with or without side-cars
6204	Women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers	8711	Tractors (other than tractors of heading 8709)
6206	Women's or girls' blouses, shirts and shirt-blouses		
6211	Tracksuits, ski suits, swimwear and other garments, n.e.s		
6205	Men's or boys' shirts (excluding knitted or crocheted, nightshirts, singlets and other vests)		

Author's Calculations based on UNcomtrade Data.

The results for the above table shows that these commodities are having the higher share (in terms of percentages) in India's exports basket as well as high BRCA values. The results are explaining that all these products are manufacturing products. Our results of the capital-output ratio are also explaining the same outcomes that India is producing capital efficient goods. The estimates for the EAP and LAC region on the basis of RCA values showing the same outcomes. The products in table 3 NIC 08 classification are more related to labour intensive products rather than capital intensive. In comparative analysis of NIC classification and HS nomenclature for year 2014-15 and 2016 the paper found that both are showing the same results. In table 3 most of the labour intensive products related to apparels and clothing are present with the high labour- capital ratio similarly in HS classification most of the products in terms of percentages and RCA values are located in the same category of clothing and apparels.

So, it clearly explains that these regions are manufacturing hub and India is taking advantage by exporting semi furnished or articles of it and hence, India playing an important role in the creation of regional value chains for these countries by the exports of essential raw material and semi furnished goods.

Conclusion

The conceptual contour presented in the paper suggested that there is a compelling economic logic to boost growth and employment through adequate emphasis on manufacturing sector. This became possible with India's pro- active role in creating regional value chain in aforesaid regions. However, it may not be possible for an individual country to achieve a certain level of growth without involvement in creation of regional value chains and it would not happen until there will be constrains and barriers in trade. Thus, regional economic integration with these regions through integrated approach focusing on RVC in various in various identified sectors which had identified in the study, especially due to their relatively higher labour absorption potential, which could well provide the avenue for harnessing the advantages of a growing manufacturing sector, including in terms of employment generation. The other important findings of the paper is that both of the regions are similar in terms of product composition in exports basket of India and effectively exporting labour intensive goods to these regions and contributing in employment generation.

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Analytical Framework

Revealed Comparative Advantage

The GRCA index denotes the ratio of a country's export of a specific commodity in its overall exports to the share of commodity in total world exports at a given point in time. A nation's comparative advantage in a certain product is said to be revealed if it has an RCA >1. It is said to have a comparative disadvantage if it has an RCA <1. Despite reservation, these indices are extensively used in applied research as indicators of relative advantage or relative performance.

$RCAij= Xi^k /Xi / Xw^k /Xw$

RCAij= Revealed Comparative Advantage of country i of commodity j.

Xi^k= Export of commodity k of country i.

Xi = Total export of country.

Xw^k = Export of world's commodity k.

Xw = Total export of the world.