

Chapter 7: Summary, Recommendation and Conclusion

7.1 Introduction:

In this chapter we will summarize what we did in this work and then we make some recommendations based on the findings of the study and finally we conclude. There are seven chapters in this study (including this chapter). Except for chapter 01 which is introduction and chapter 07 which is summary, recommendation, and conclusion, in each of the remaining chapters we have examined and analysed various aspects of India China trade relations. Now we will make a summary of these chapters.

7.2 Summaries of the chapters:

As first chapter is introductory one, and this one is the last chapter so we will summarize from chapter 02 to chapter 06.

a. Summary of Chapter 02:

In chapter 02 we analysed the performance of India's trade during the period between 1992-2018 using various measures and trade indices. Our study shows that the performance of both exports and imports and thus of total trade improved considerably during the period. As far as exports is concerned it grew at 11.3 percent at CAGR and import grew at 13.65 at CAGR. This means that India's imports grew faster than India's exports. In case of share in world trade, India's performance was dismal as it fluctuated around 2 percent throughout the period. Comparing the shares of exports and imports during this period shows that the share of imports was relatively higher than that of exports. Even though share of India's trade was stagnated during the period but both exports and imports grew tremendously during the said period. This is reflected in the export value index (EVI) and import value index (IVI) during the period. With the value of 1992 as base, we found that the EVI increased as much as 1556.12 in 2018 i.e., as compared to the value of base year India's export was more than fifteen time higher in 2018. On the other hand, India's imports were more than twenty-one times higher. So even though both exports and import grew tremendously but the growth in imports was higher than that in exports. To find out whether India's exports were adequate to cover its imports we calculated import Export- Import Coverage (EIC) index. It shows that India's exports during the period was never enough to cover its import bills. In fact, throughout the study period the value of EIC was less than one, which is the indication that India's exports never met its import obligations during the period. Another important measure was India's comparative advantage as measured by RCA. Our study found that India had RCA throughout

in all the selected years were Stone and Glass, Hides and Skin, Textiles and Clothing, Vegetable. and Footwear. Whereas in the sector of Fuels, Plastic or Rubber, Machinery and Electricals, Miscellaneous, Transportation and Wood, India has comparative disadvantage. In the sectors like Minerals and Animal India had comparative advantage in the early years but advantage was lost in the later years. On the contrary in the sectors like Metals and Chemicals India gained comparative advantages in the later years. During the study period India's trade was found to be diversified across many countries rather than concentrated in few countries. We come to this conclusion on the basis of the Hirshman Herfindahl Index. Not only India's trade had diversified during the period, but its exports was also seen to be diversified as shown by another index that we have used – Trade Entropy Index. The index that we used to find out the reliance of domestic producers in foreign markets was called Export Propensity Index (EPI). We found that there was increase in the value of this index during the study period which means that the reliance of domestic produces had increased over the years during the study period. On the basis of Import Penetration Index (IPI), we found that during the given period there was increase in reliance on imports for satisfying domestic demand. Increase in the value of this index is a cause of concern as it makes Indian economy vulnerable to external shocks.

As far as composition of India's exports and imports were concerned. The top export sectors of India during the first five years were in order of their share Textiles and Clothing, Stone and Glass, Vegetables, Chemicals and Metals. In the last five years it was Stone and Glass, Fuels, Chemicals, Textiles and Clothing, and Machinery and Electricals. So, some changes were observed in India's export composition over the years. The top export sectors constituted more than 60 percent of India's total exports throughout the period. On the other hand, the top import sectors of India during the first five years were Fuels, Machinery and Electricals, Chemicals. Stone and Glass and Metals. In the last five years the top imports were Fuels, Machinery and Electricals, Stone and Glass, Chemicals, and Metals. So, there was not much change found in composition of India's top imports. These top imports constituted more than 70 percent of India's imports throughout the period.

During the study period there was no significant change found in India's direction of both exports and imports Our study shows that during the first five years the regions of East Asia and Pacific, North America and Europe and Central Asia were the top three export destinations of India and in the last five years the top three destinations were East Asia and Pacific, Europe and Central Asia and Middle East and North Africa. So, over the years Middle East and North Africa become relatively more important export destination for India than North America. Continuous improvements were seen in the export's shares of South Asia, Latin

America and Caribbean, and Sub-Saharan Africa during the period. Similarly, India's top three imports destinations were the regions of Europe and Central Asia, East Asia and Pacific, and Middle East and North Africa during the first five years. During the last five years these destinations were East Asia and Pacific, Middle East and North Africa and Europe and Central Asia. So, there was no change in top three import destinations of India during the study period.

b. Summary of Chapter 03:

Chapter- 03 was on the India- China trade relations. In this Chapter we examined India's complementary trade relationship with China during the given period. We conclude this chapter by making following observations. The share of China in India's total export was relatively higher than India's share in China's total exports. But the size of the share was not. Similarly, the share of China in India's total imports was found to be significantly higher than the share of India in China's total imports. India was importing relatively more from China as compared to China's imports from India. So, in both exports and imports the share of China in India was higher than India's share in China's exports and imports. Throughout the period the growth rate of India's exports to China was found to be lower than its growth rate of imports from China. The growth rate of India's exports to China was 19.54 percent at CAGR during the stud period but the growth rate of India's imports was 28.23 percent at CAGR during the same period. The comparison of export value index and import value index shows that India's exports to China grew as high as 110 times of the export value of 1992, on the other hand India's import value grew as high as 642 times of the import value of 1992. The study shows that India's imports rise much faster than India's exports during the period.

The export composition shows that India's exports to China was dominated by Intermediate goods and Raw materials throughout the period even though over the years the shares of Capital goods and Consumer goods improved at the costs of shares of Intermediate goods and Raw materials. In 2018 the share of Consumer goods was higher than that of Raw Materials. India's import from China during the given period was dominated by Intermediate goods and Raw Materials in the early years but at the latter years the shares of Capital goods and Consumer goods also increased at the expense of Raw materials and Intermediate goods. The share of Capital goods increased so much that after 2001 it had second highest share replacing Raw materials and from 2006 onwards it had the highest share in India's imports from China. So, there was notable change observed in India's imports from China during the period.

On the basis of Export Propensity index and Import Penetration index our study concludes that both Indian producers and Indian consumers were vulnerable to shocks in China's domestic market. The Import Export coverage index reveals that except for 1992 India's exports to China never matched its import from China. Rather over the years the value of this index declined signifying that India's balance of trade deficit with China had widened over the time. Situation was so worse during 2007- 2018 that during this period India's export to China failed to cover even 50 percent of its import from China. And in the last four-year India's exports to China was not able to cover even 20 percent of India's imports from China.

On the basis of the Trade Dependence index, we observe that India's dependence on China increased over time, but it was not very significant as compared to India's overall dependence. This again conforms that India's economy is relatively more vulnerable to shock in world economy than shock in economy of China. Another index that we employed was Trade Intensity Index to find whether the bilateral trade flow between India and China were as expected or not. This index also confirmed to other previous indices and concludes that bilateral trade flow between India and China was less than expected in majority of the years during the period. We compared the relative importance of India and China in each other's trade with the help of Trade Complementarity index. This index reveals that for India China is an important partner but for China, India is not an important partner.

We also analysed the diversification of India's exports to China using Herfindahl-Hirschman Product Concentration Index. It shows that even though India's exports to China was diversified throughout the period, but diversification was not smooth i.e., in some years diversification was relatively high and in some was relatively less diversified. To find the comparative advantage of India with respect to China we employ Revealed Comparative Advantage index. It revealed that throughout the period India had strong comparative disadvantages in Capital goods and Consumer goods. India had clear comparative advantage in Intermediate goods throughout the period (except for 1992) and it improved over time. India also had strong comparative advantages in Raw materials for majority of the years and it lost its comparative advantage from 2014 onwards. We also made a comparison of tariffs imposed by India and China to each other using MFN weighted average tariff. It shows that India's tariff was relatively much higher than China in the early years but over the years the gap was narrowed. This conclusion is true not only for aggregated tariff but is also true from individual good -wise tariff.

c. Summary of Chapter 04:

In chapter 04 we discussed various aspects of intra-industry trade between India and China for the given period of 1992-2018. First thing that we found in this discussion was that the share of Intra- industry trade was less than that of inter industry trade throughout the period. In other words, the share of this type of trade was less than 50 percent of the total trade during the given period. The share was between 20 percent to 35 percent in most of the years during this period. The intra industry trade between India and China was not very low rather it was moderate. Next, we discussed the intra- industry trade within a sector for the sixteen sectors. Here, we considered the average share for five-year period. The analysis showed that there was variation in the share of intra-industry trade among these sectors. Some sectors have high average share, and some had low average share. On the basis of their average value, we have divided these sectors into three groups. In first group we have following sectors: Minerals, Wood, Animal, Miscellaneous, and Machinery and Electricals. The average share of IIT in these sectors lie between 0 to 29 percent. Similarly, in second group we have Stone and Glass, Fuels, Chemicals and Plastic or Rubber. The average share of these sectors lies between 30 to 49 percent. Lastly, in third group we have Food and Products, Metals, Footwear. Textiles and Clothing, Vegetables, and Hides and Skins. The average share of IIT in these sectors lie between 50 to 75 percent. The first group of sectors are the sectors with low IIT, second group with moderate IIT and the third group are the sectors with high IIT.

Another thing that we analysed in this chapter was the share of HIIT and VIIT. Here we found that the percentage of sectors exhibiting VIIT was much higher than the sectors exhibiting HIIT throughout the period. This means that intra- industry trade between India and China was VIIT dominated rather than HIIT. After we have found that intra- industry trade between India and China was VIIT dominated, we again analysed the shares of VIITH and VIITL, which are the two types of VIIT. Here, the analysis showed that VIITL dominated the sectors exhibiting VIIT from 1996- 2005 and from 2006-2018 VIITH was dominant. As the sixteen sectors that we had considered for this analysis exhibited both HIIT and VIIT (VIITH or VIITL) at different years of the given period, for our final analysis we discussed what type of IIT was exhibited by each of these sectors. For this analysis we had divided the entire period between 1997-2001 into four sub periods of five year each and one period of three years. Here we found that among the sixteen sectors, there was not a single sector which exhibited HIIT for entire period of five years in any of the periods. On the other hand, many sectors exhibited VIIT for entire years of the period. This includes the exhibition of both VIITH and VIITL in all the five years of particular period. Along with this we also found that some

sectors exhibited both VIIT and HIIT in different years of a particular period. Not only that but some sectors also exhibited VIITH and VIITL in different years of a particular period. In conclusion, we can say that India had moderate intra-industry trade with China and the nature of IIT between these two countries was dominated by VIIT rather than HIIT. This result confirms the conclusions of studies by Veeramani (1999) where VIIT was found to be the dominant type of India's IIT. As far as the types of VIIT is concerned, even though in the former years of the period VIITL was dominant but in the latter years, VIITH was dominant.

d. Summary of Chapter 05:

In chapter 05 we analysed the long-run equilibrium relationship between India's import and export with China for the period of 1996-2018 with quarterly data. The method that we used for this analysis was Engel- Granger (1988) Cointegration test. The Augmented Dickey- Fuller (1980) test was used to find out the stationarity of the variables. We found that both the variables were non – stationary at level but stationary at first difference. This means that both variables were integrated of order I i.e. I (1) at level and integrated of 0 i.e., I (0) at first difference. The cointegration test revealed that there exists cointegration between the two variables during the given period. As cointegration relationship was established between the given variables, we further go for error correction model to see whether the disturbances between long- run and short- run is corrected. It was found that 25 percent of the disturbances between long- run and short run were corrected within the quarter of the period during the study period.

e. Summary of Chapter 06:

In chapter 06 we compared the trade performances of India and China during the period between 1992-2018 with a focus on export performances of the two countries. Various trade related indices and other measures were used for this purpose. As far as the comparison of shares of these two countries in the world trade is concerned, our study shows that the share of China in the world trade was relatively much higher than that of India during the study period. The pattern shows that while on the one hand India's share stagnated or fluctuate around same low value on the other hand China's share in the world trade increased rapidly, particularly after its accession to WTO in 2001. It was seen that even the highest share of India (2.34 percent) was lower than lowest share of China (2.88 percent). Same pattern was seen in export performances of the two countries. Here also India's highest share was found to be less than China's lowest share. On the one hand China's lowest share was five times higher than India's lowest share and China's highest share was six times higher than India's highest

share. Even China's lowest share was almost double than that of India's highest share. So, it is clear that India had no competition with China in the world export market.

Even though India's share in the world exports was not significant but its growth rate was as comparable to growth rate of China. We found that the growth rate of India's exports during the study period was slightly lower than China. India's growth rate was 11.13 percent at CAGR as compared to 13.88 percent of China at CAGR. Growth in the exports can also be seen from the comparison of Export Value Index of India and China. The comparison shows that India's exports increased as high as sixteen times more than its value in 1992. On the other hand, China's exports increased as high as twenty-nine times more than its value in 1992. This confirms the dominance of China in export performance over India.

If the composition of exports of two countries are similar, then there are chances of increased competition. So, to find out extent of India's competition with China in export market we compared the export composition of these two countries. Our study shows that at stage of processing level, India's export item in order of importance were Consumer goods, Intermediate goods, Raw Materials and Capital goods whereas China's most important export items in order of their importance were Consumer goods, Capital goods, Intermediate goods, and Raw Materials. Since consumer sector was common most important export sector for both the nations, India faces fierce competition from China in this sector.

Another index that we had employ to analyse the competitiveness of exports of these two countries was RCA (Revealed Comparative Advantage). Our study shows that both India and China had RCAs in the same types of sectors in the world over the years. This may be one important reason that India faces competition from China. Our study found that during the early years of the period Europe and Central Asia, East Asia and Pacific, and North America were the three major destinations for India's exports but on the other hand China's exports was concentrated in East Asia and Pacific but slowly it diversified its exports to other regions importantly to Europe and Central Asia and North America. Over the years India also diversified its exports to Middle East and North Africa which become third major destination of India's exports in the later years replacing North America. This can also mean that India's exports are diversified in more regions than that of China's exports. In the three regions of Latin America and Caribbean, South Asia, and Sub-Saharan African the export shares of both nations were relatively lower.

Another comparison was made on the basis of export import coverage. In this index China outperformed India. Our analysis shows that except for the year of 1993, China's exports comfortably covered its import bills throughout the period. In other words,

China maintained trade surplus throughout the period (except for 1993 as said earlier). On the other hand, India's export struggled to cover its import bills throughout the period. In other words, India had trade – deficit throughout the period.

We had also used other indices to capture and compare the export performances of these two countries. One index was Export Market Penetration Index and other was Export Propensity Index. Analysis of these indices revealed two things. First, the values of both indices increased for both the nations over the years and second, China's outperformed India in both the indices. These results indicates that the domestic producers of China were relatively more dependent on foreign markets than India making them relatively more vulnerable to external shocks (i.e., any shocks or disturbance in export destinations of the country). The Herfindahl- Hirschman Index was used to compare the geographical concentration of exports. Our analysis shows that over the years the value of this index declined for both nations but the value of this index for India was relatively less than that of China during the study period, so we conclude that India's exports was relatively more diversified than that of China. Same result was confirmed by Trade Entropy Index.

For the comparison of openness, we employed Trade Dependence index. Our analysis reveals that there was increase in openness of both the countries, but China was relatively more open than India during the study period.

At last, we conclude that in the world market India performance was dismal as compared to China as our study found that China outperformed India in most of the indices that we used in this analysis.

7.3 Suggestions and Recommendations:

On the basis of our study, we can make following suggestions and recommendations:

- a. The government should focus on increasing India's exports share in the world trade by facilitating exporters and providing them with various incentives.
- b. Measures should be taken to reduce India's dependence on China and must explore other partners for its import needs.
- c. India should take measures to reduce rising balance of trade deficits with China either by promoting more exports to China or discouraging imports from China.
- d. India should identify all the exportable where it has comparative advantage and provide incentives and subsidies to the producers of such products to encourage exports.
- e. The government should take adequate initiatives to create a favourable environment to facilitate and encourage exporters. This can help the exporters to produce goods which can compete with the exporters like China in the world market.

7.4 Conclusion:

In our study we have attempted to address two broad aspects of India-China trade relations. These are complementary aspects and competitive aspects. As we have already said that our focus is mostly on the complementary aspect of the relation as compared to competitive aspects. This is why we have dedicated three chapters on analysing and examining this aspect and one chapter is dedicated to competitive aspect.

As far as the complementary relation is concerned our study revealed that China is at a dominant position and India's dependence on China for its import needs was relatively much higher than that of China's dependence on India. In terms of exports also China was found to be in much better position than India as it was found that China maintained a consistent export surplus with India during the study period. Thus, our study finds China to be more important trade partner for India be same is not true for India as a trade partner of China. One positive aspect of complementary trade relation between the two was rising share of intra-industry trade between the two countries that also in vertical intra-industry trade where the two countries were trading with each other in same sector but at different stages of processing. In other words, the two countries provided each other with necessary inputs to each other in same sector which enhances the production and production capacity of these countries. This is one important complementary relationship that has been emerged between the two nations during the study period. As far as the relationship between India's exports to and import from China is concerned, the two countries were found to have stable but weak long run relationship. These were the complementary aspects of India- China trade relations. The discussion of competitive aspect of India- China trade relation revealed that India's performance in world trade was far behind that of China in almost all the indicators. India's performance was found to be very weak relative to the performance of China in the world trade. This means that China's performances, both as a partner and as a competitor was superior to that of India during the study period. Even though our study reveals China to be an important partner of India and India vastly depends on China for both its exports and imports but too much dependence on single country makes India vulnerable to any kind of shocks in Chinese economy. India must therefore slowly diversify its exports and imports from China to avoid over dependence and vulnerability. We must learn from Chinese trade policies as well as device our own idiosyncratic policies to improve the performance of India's external sectors and to increase the share and influence in the world trade.