CHAPTER ONE

INTRODUCTION

1.1 THE BACKGROUND

1.1.1 World trade has grown rapidly during the last two decades of the 20th century. It has grown from 73 per cent during 1980-1990 to 84 per cent during 1990-2000. The increasing trade is a consequence of a paradigm shift in economic policies of many countries. Increasing international trade and flow of foreign capital have infused efficiency in some economies and may have also adversely affected others. Krugman (1995) asks “Why has world trade grown, and what are the consequences of that growth?”, and observes that “these are surprisingly disputed issues.” Both developed and developing countries are affected by integrating market economy; but in varying degrees. The research interest in international trade shows a spurt subsequent to liberal policies introduced in many countries since 1980s. A number of countries introduced economic policy reforms from early 80’s, with the objectives of: (a) Removal of barriers in trade, flow of technology etc to promote rapid economic growth; and (b)Better utilization of resources as well as reduction of cost of production.

1.2 RECENT LITERATURE ON INTERNATIONAL TRADE

1.2.1 There is a large and growing body of literature on international trade and economic growth; it is convenient therefore to classify the literature on the basis of analytical framework and findings. This review includes publications both in the field of economic geography and economics.

1.2.2 Panayotou (2000) highlights, “Globalization has been the defining trend in the closing decade of the 20th century and the dawn of new millennium heralding a new era of interaction among nations, economies and people”.

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Fischer (2003) found that in the 1990s, the term globalization captured the debate relating to the direction of international economic relations. It is the most studied process by the social scientists (Caselli, 2006). It has been noted in an article (Anonymous, 2004) that in the globalizing world, export constraints are diluting through the removal of trade barriers; falling transport costs; spread of new information and communication technologies; international migration and free flow of capital and has created highly competitive global market. In this fiercer competition leaders are those who have a competitive edge over others. As per the study (Anonymous, 2004), being competitive rests on a country’s ability to produce competitive goods and services as well as to export them. In the same line of the thought, Porter (1990) had also argued that competitiveness has become linchpin of every nation’s government and industry and “The United States is an obvious example, with its growing public debate about the apparently greater economic success of other trading nations. But intense debate about competitiveness is also taking place today in such “success story” nations as Japan and Korea. Socialist countries such as the Soviet Union and others in Eastern Europe and Asia are also asking this question as they fundamentally reappraise their economic systems.” This simply refers to the fact that globalization of competition has intensified over the years.

1.2.3 Some believe that the term ‘competitive’ is a macroeconomic phenomenon, whereas others perceive it as a function of abundant and cheap labour. Others consider abundance of natural resources as a mainstay of competitiveness. Lately many viewed strong impact of government policies on competitiveness. None of the analysis succeeded in floating a convincing explanation of national competitiveness. Kay (2005) has also highlighted that national competitiveness is the one issue which has created more confusion than insight. Kay (1998) has also explored the adaptive capacity of the firm as a key to European competitiveness. Similar type of study was undertaken by Chaudhary and Saleem (2003), who analyzed Pakistan’s comparative advantage of exports, their complementarity, and instability and market
diversification. Sachs, *et al.*, (1999) have extended their work on the trade pattern and economic development when endogenous and exogenous comparative advantages coexist. According to Krugman (1995) nation’s emphasis on international competitiveness can be a risky venture, so the thrust should be in augmenting free trade. Panayotou (2000) finds, “Globalization in general, and freer trade in particular, result in a shift in industrial structure more in line with a country’s comparative advantage.”

1.2.4 The impact of trade on growth and income has been debated at length in economic history. Several studies have discussed that the possible benefits from increased trade since the early classical theorists like Adam Smith (absolute advantage, 1776) and David Ricardo (comparative cost advantage, 1817). Bidlingmaier (2007) has highlighted that according to Ricardo and Heckscher, gains stem from specialization in production through international trade. In consonance with this Harrison (1996) has also briefly reviewed growth models developed by Solow and others. According to them technological change was considered exogenous to the country’s openness. In stark contrast, new growth theories highlighted the impact of trade policy on the long run growth via technological breakthrough. Grossman and Helpman (1989) largely neglect the effect of trade on growth but have tried to explore the “reverse causation from growth and accumulation to trade patterns.” They have highlighted the key role played by endogenous technological improvements in growth. An attempt was also made for the first time to explore the nexus between trade intervention and long run growth.

1.2.5. In this backdrop, Harrison points out that “Since theoretical literature does not provide a clear answer, empirical work is needed to help resolve the debate”. Hence many scholars; like Rodrigues and Rodrik (1999), Dollar and Kraay (2004), Sachs and Warner (1995), Harrison (1995) have analysed empirical data to measure the impact of trade on growth, using cross-country and panel data regression analysis. In these studies, indicators of openness
are regressed on income or growth of income controlling for other important growth variables. Sachs and Warner (1995) have divided countries into closed and open categories on the basis of export policy, black market exchange rate premia, import tariffs, etc. They have tried to sketch the process of global integration and its impact on economic growth. It has been pointed out that between 1970 and 1989, on an average per capita income in open economies grew over two percentage points more than the closed countries and therefore the proposition that economic reforms led to resurgence of economic growth.

1.2.6 Edwards (1998) has analyzed the relationship between openness and total factor productivity growth. He has pointed out that relatively more open economies have experienced rapid productivity growth, and “the results are forceful and persuasive.” Casacuberta, et. al., (2004) have analysed the Uruguayan manufacturing sector in terms of the impact of liberalized trade on productivity, labour and capital flows. Though openness has resulted in job creation and increase in productivity, this effect is offset by the unions. It has been suggested that the sectors, having higher tariff reductions and absence of unions, experience multiplying total factor productivity with the changing use of capital and labour. In line with this, Frankel and Romer (1999) have analyzed the correlation between trade and income but could not identify the direction of causation. They have suggested that trade has “quantitatively large and robust” positive impact on income. According to them, changes in trade as a result of policy may not influence income the way it does in case of difference resulting from “geography based differences”. Kali, et. al., (2005) have analyzed the relationship between the trade structure and rate of economic growth. They have pointed out that the structure of trade (in terms of number of trading partners of a country and the trade dispersion among the partners) has significant impact on the economic growth. It has been suggested in the study that there is a positive correlation between number of trading partners and growth, this effect is greater for ‘rich countries’. On the other hand, dispersion of trade has a
negative correlation with growth for the sample of ‘poor countries’. Besides, Shirazi and Manap (2005) have examined export-led hypothesis for five South Asian countries (Bangladesh, India, Nepal, Pakistan and Sri Lanka). They have shown long run relationship among real output, exports and imports for all the sample countries, except Sri Lanka. In stark contrast, Tang (2006) has tried to work out causality among increasing exports, imports and economic growth for China and concluded that there is no long-run relationship among the three variables. Bhat, et.al. (2007), have worked out patterns of import intensity in the Indian economy as well as the manufacturing sector during 1990s and beyond. According to them, relative to 1993-1994, in 1998-1999 import intensity has increased in all broad sectors and also in branches of manufacturing sector. The change in import intensity resulted in a significant impact on the growth of output, employment as well as export. Liberalization of import is a key factor in India’s development strategy. They further discuss how import is important to produce for export which is an essential feature of global integration and globalization of production process. However, in India, there are apprehensions about the desired results of the liberalized trade policies, i.e., whether these policies would result in an increase in demand for import with a corresponding increase in export. The growth of exports depends on several factors, for example, capacity of domestic production, global demand, world trade environment, policy regime, along with its competitiveness vis-à-vis other economies.

1.2.7 Harrison (1995) has identified few of the limitations of the empirical studies. According to him, many studies make use of different openness measures and methods as well as sample countries which do result in varying conclusions. In addition, there are at times problems with interpretation of observed correlation between trade policies and growth. He has pointed out, policies except trade policy, for example macroeconomic policies, has led to a spurt in export as well as in growth. Last but not the least, most of the analysis makes use of “cross-sectional averages or starting values for time-
series data”. Harrison has cited the example of Barro (1996) who has analyzed the effect of price distortions in 1960 on post 1960 GDP growth. According to him, such an approach is inappropriate in case of developing countries, because it is not possible to control for unobserved country specific variations and it also ignores the changes undertaken over the time period for the specific country.

1.2.8 Despite of the voluminous empirical literature on the positive impact of trade on growth, debate seems far from resolved. According to Rodrik (1995), most of the work on trade and growth has measurement shortcomings. Harrison (1995) has highlighted that methodological problems make it inconvenient to link outcomes with that of the policies; causality tests as well as micro-level analyses led to mixed conclusions.

1.2.9 Another line of argument highlights that there are factors other than trade which accentuates growth. There is voluminous empirical literature on cross-country regressions to explore relationship between growth rates and institutional, political indicators as well as economic policies. Memis and Montes (2006) have pointed out “that the conclusion that increased trade is sufficient for development is controversial. The best that can be said is that there is no consensus on a direct correlation between external integration and development. Rather, development is associated with several different strategies and policies depending on the political, social and economic structure of the country or the region.”

1.2.10 In this backdrop, Neuhaus (2005) has observed that besides international trade, capital flow does have a significant effect on growth. Kneller (2002) has tried to analyze whether changes in the policy variables, for example fiscal policy, can nullify the effects of trade liberalization on GDP growth. According to the study conducted for a sample of developing economies brings to the fore, “Countries that liberalize their trade regimes do increase their spending on welfare, but once we control for fiscal policy, trade
liberalization still has no effect on the rate of growth.” Gemmell (2001) has made an attempt to assess the theoretical and empirical evidence of the influence of fiscal policy (taxes, budget deficits etc.) on the long run growth. An attempt was made to compare low-income countries with middle and high income (OECD) economies. He has also pointed out that though there is a large number of empirical evidence on the impact of fiscal policy on long run growth, majority of this suffered from weak methodology resulting in unreliable results. It has been noted that analysis conducted around late 1990s ignored the government budget constraints for testing effects of fiscal policy, rendering “non-comparable or non-robust results”. Evidence pertaining to impact of redistribution (fiscal policy is a part of it) on growth is quite vague. There is less evidence available for low income countries. Limited evidence available on the impact of fiscal policy on growth highlights that the impact varies in case of less developed countries vis-à-vis OECD countries. According to Gemmell (2001), though interpretations vary, “the robust evidence of a negative association between budget deficits and growth is beginning to emerge.”

1.2.11 One facet of research relates to trade and diffusion of technology. Mayer (2001) has suggested that technology transfer to developing countries from advanced economies has multiplied significantly over the years. The growth-accounting results reflect that machinery imports and human capital stocks have a positive impact on economic growth. Through endogenous growth model, Guerrieri and Padoan (2006) have tried to show that multiplying technology transfer and business services are closely tied with trade openness. Furthermore, Saggi (2002) points out that trade enhances growth, only when the knowledge spill over is international in scope. Though empirical evidence available is a bit ambiguous, there are evidences, at the aggregate level, hinting at the positive impact of foreign direct investment on the economic growth of the host country. Schneider (2005) has empirically examined the role played by technology intensive trade, intellectual property rights and foreign direct investment in country’s
economic growth and innovation. He concludes that in developed and developing countries, high technology imports helps in domestic innovation; and foreign technology has significant impact, vis-à-vis domestic technology, on per capita GDP growth; in developed countries impact of IPRs on rate of innovation is high; and last but not the least results pertaining to foreign direct investment are inconclusive. Perkins and Neumayer (2005) have examined two main factors causing diffusion of modern technology, viz. latecomer advantage of developing countries which allows rapid spread of technology in comparison to developed economies; and the openness factor. They have analysed three different technologies across a panel of developed and developing countries. Interestingly, it was found that trade openness has a positive impact on diffusion of all three technologies. There are several studies in line with such arguments, like Wheeler and Martin (1992); Gruber (1998) and Caselli and Coleman (2001) etc.

1.2.12 On the other hand, Andersson and Ejermo (2006) has traced the relationship between technology and export specialization. According to the study, there is a strong correlation between these two variables across regions. It has been highlighted that comparative advantage can be enhanced via knowledge-building capabilities. In line with this, size and structure of trade flows are largely affected by the technology specialization in origin and destination countries.

1.2.13 Recent theories on the relationship between trade and growth have shown varying effects of trade (from none to beneficial and non-beneficial). Bidlingmaier’s (2007) study found not so positive impact of trade on growth. He cited that the of cost advantage, where the ‘first mover’ can offset the gains for the new entrants due to increasing economies of scale; and also disadvantages attached to the multiplying specialization, especially for developing countries. In the latter case, if the country specializes in sectors with low productivity growth or has lower income elasticity of
demand, then they will experience low productivity growth vis-à-vis developed economies. As per Redding (1997) it is referred as “specialization trap.” According to him, specialization of developing countries in accordance with the existing comparative advantage (in low technology intensive commodities) results in the reduction of welfare, whereas protectionist policies do increase it.

1.2.14 The literature on increasing income inequality, unemployment and wage differential is quite vast. Egger, et. al., (2005) have studied Central and eastern European countries, and figured out the effects of trade openness on regional disparities. Those countries which have embarked on export openness in the period of 1991-98 have experienced accentuation in regional disparities. As per the analysis, trade in intermediate goods is the major cause. They have estimated 23 per cent rise in the average economy’s variance of real wages because of the rise in the intermediate goods export openness. Silva and Leichenko (2004) has worked out the impact of international trade on interregional and intraregional income disparity prevalent in the U.S.A. It has been suggested that income inequality has accentuated from 1992 to 1994. Interestingly, the analysis points out that the regional income inequality cannot be regulated through trade policy. Though trade restrictions do result in higher import prices as well as regional inequality, there are evidences which have shown that free trade through cheaper exports has also led to higher inequality. The study also reveals that social policy is required to mitigate “the inequality enhancing effects of trade.”

1.2.15 In a related work, Sjoberg and Sjoholm (2004) have analysed the spatial concentration of Indonesia’s manufacturing industry over a period. They figured out that, even after trade liberalization the spatial concentration has not declined, for instance industries indulged in international trade has experienced relative concentration. Other possible factors affecting the concentration of Indonesian manufacturing industries has also been
discussed. Theron, et. al. (2007) have made an attempt to evaluate the effect of trade liberalization on employment and wages in South Africa. They found that unemployment, poverty and inequality has accentuated after trade liberalization. It has also been noted that appraisal of the impact of trade liberalization on employment is quite complex, because there are other factors influencing the given sector.

1.2.16 Similarly, according to Arbache (2001), effects of trade liberalization on labour markets is quite inexplicable. Openness in Asian countries has resulted in reduced wage inequality, whereas Latin American and other economies have experienced an increase. There has been several attempts undertaken to elucidate this phenomenon, but none of them can be considered as a general theory. The study also highlights, “trade liberalization is a necessary, but not a sufficient condition to explain technological modernization and the increase in the stock of capital per capita, which are supposed to shift labour demand in favour of skilled workers thus causing wage inequality.” For example, in several developing economies except openness, there are also other factors like ‘institutional framework’, human resource and political stability etc, which play an important role in adopting new technologies and attracting foreign capital. Similarly, Bowen Jr. (2006) has also pointed at the alarming rate of job loss due to trade induced deindustrialization.

1.2.17 Additionally, there is a related branch of the literature that has explored for evidence regarding the differential impact of trade and economic growth on developing and developed countries. Khor (2000) has pointed out that globalization is an uneven process. Almost all countries are greatly affected, though it impacts different categories of countries differently. Even a country having a meagre share in global trade experiences significant effect. The benefits of trade liberalization accruing to developing countries are highly controversial debate. On the one hand it is perceived by developing countries as a key to growth. On the other, it resulted in eroding their
economies and has “marginalized them”. Khor has observed, “The notion that all are gainers and there are no losers in trade liberalization has proven to be overly simplistic”. Some countries have gained more in comparison to others whereas there are many especially developing countries that have not gained at all “but have suffered severe loss to their economic standing”.

1.2.18 In line with the above arguments, Shafaeddin (2005) has also analysed the economic performance of a sample of developing countries that have embarked on the structural reforms and trade liberalization policies. Mostly East Asian countries have experienced rapid export growth along with the expansion and upgradation of industrial supply capacity. In contrast, growth in mostly African and Latin American countries was far from satisfactory. Wright and Rayment (2004) have argued that new policy orientation and rapid opening of the developing countries to foreign trade and capital flows, has failed to create an economic environment which supports robust economic growth. Kotilainen and Kaitila (2002) have also analysed globalization in its various facets, with a major thrust on the economic effect on developing countries. They concluded that maximum gains can only be accrued by solving various development bottlenecks and further liberalizing imports in the developed economies. Nataraj (2007) has put forth that the regional trading agreements (RTAs) have emerged as a linchpin of the world trade. He has analysed issues in the Doha round with reference to RTAs and emphasized on the rules governing RTAs in the WTO regime “as the key to growth for developing economies like India”.

1.2.19 It is pertinent to point out that trade can be considered as means to an end, rather an end itself. Despite explicit trends towards increasing trade openness over the last few decades, there are mixed evidences of positive and negative effects of trade and prevalence of methodological limitations to gauge it.
1.3 Geographic Perspectives on Globalization

1.3.1 Geographical literature is limited on international trade. By and large, research by geographers has confined to the case studies. For instance: Silva and Leichenko (2004) worked on United States, Sjoberg and Sjoholm (2004) on Indonesia’s manufacturing industry, Hughes (2001) focused on Kenyan cut flower industry, Sparke, et.al., (2004) on Indonesia-Malaysia-Singapore growth triangle, Bowen Jr. (2006) worked on New England, and Breau (2007) on Canadian provinces. Commenting on this Angel (2002) observes that, “Geographers have, for the most part, failed to synthesize the results of multiple case studies in ways that provide a broader assessment of global economic change and of the potential for positive engagement in these processes of change. Even when multiple studies are brought together in a single volume, differences in methodology and precise focus mean that the value of the work lies primarily in the individual case studies.” He further points out that one of the factors which has ‘marginalized’ geographers from policy analysis “is their failure to bring together case-study research as broader synthetic statements on global economic change.” This claim raises a series of questions about theory and empirical research.” On the other hand, approach of economists is also limited in scope, missing out the spatial factor. Hence, an attempt will be made through this study to work out a spatial pattern and typology of the countries on the basis of trade pattern and growth.

1.4. OBJECTIVES

1.4.1 In the backdrop of the above discussion major objectives of the study are as follows:

- To bring out the changing spatial pattern of the volume of trade over time with particular focus from 1990. The year 1990 is chosen with Indian focus,

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1 He has acknowledged the contribution extended by Storper and Salais (1997) in this regard. They have “synthesized a broad body of case-study research on the territoriality of economic change through the identification of a set of ideal-type ‘regional worlds’ of production.”
since this was the time that India initiated the new economic policies. Several other countries had also initiated reforms during 1980’s

- To note the change in the commodity composition of exports and imports in the international trade
- To compare volume of trade and commodity composition of exports and imports within trade bloc and across trade bloc
- To measure the degree of relationship between trade and other economic attributes

1.5 HYPOTHESES

1.5.1 In the process of realizing the above objectives the study intends to test the following hypotheses:

- Countries have opened up by undertaking reforms in export and import policy in order to increase their trade, however, such expected increase is confined to few countries
- South-south trade has significantly improved
- Commodity composition, particularly, of the developing countries have also changed from low value raw material to high value manufactured goods
- Competitiveness leads to specialization in production. Consequently one expects an increase in the concentration in commodity composition of exports
- The process of commodity concentration of exports would lead to diversification of imports
- Distance still matters

1.6 Data Base and Analytical Framework

1.6.1 Data Base: Given the nature of objectives stated above, the analysis would be based on secondary data. There are differences in definitions and other
kinds of discrepancies between different sources of data, each with their own advantages and limitations. The data provided by different sources often do not tally with each other. There are data that are missing for specific time period (Yadav, 2012).

1.6.2 Each country brings out trade related data. For example in India, Reserve Bank of India brings out an annual data series relating exports and imports and other economic indicators (Hand Book of Statistics of the Indian Economy). Data provided by RBI basically emanates from Directorate General of Commercial Intelligence and Statistics (DGCI & S), Ministry of Commerce and Industry, Government of India. U.S. Census Bureau (Foreign Trade Division, Data Dissemination Branch) is another such country specific source which provides trade related data. There are also multilateral sources, like World Bank, World Trade Organisation, UNCTAD, which disseminate data pertaining to trade and other economic indicators. The multilateral sources render the data more comparable than country specific data bases.

1.6.3 To maintain the consistency, much of the data will be extracted from UNCTAD. It provides statistics relevant for analyzing, international trade, foreign direct investment, indicators of development and more explicitly for comprehending the economic trends of developing countries over the past decades, particularly in the globalization context (UNCTAD Handbook of statistics, 2005). The statistics are based on existing national and international data sources. Analysis of time series data spans periods as long as available data permit. The export and import structure of individual countries by main regions of origin and destination are presented in percentages. Data are presented for as many individual countries as possible while trade partners are grouped in 13 major clusters according to the UNCTAD secretariat’s judgment as to their relevance for their analysis of the direction of international trade. The commodity groups are defined according to Revision 2 of the Standard International Trade Classification (SITC) of three digit standard. For structure and description of economic
base of various countries, we make use of data pertaining to gross domestic product given in World Development Report published by World Bank.

1.6.4 **Methodology:** The first step required is to build data matrices reflecting structure of international trade across countries for which data can be collated for different time period. Thus, for four points of time (1990, 1995, 2000 and 2005) four data matrices have been created. This would include trade related variables, such as value of exports and imports by region, structure of imports by origin and exports by destination, structure of international trade by product, export concentration and import diversification indices; and growth related variables like gross domestic product. Since we are dealing with time series data there are problems of comparability of countries (with changes in national boundaries) the analyses would be limited to countries for which time wise data is available. Methods of analysis are discussed separately in detail in respective chapters for the convenience of readers.

1.6.5 In selected cases three digit commodity classification is used particularly when dealing with concentration and diversification of commodity composition. Among other methods of measuring inequality location quotient has been used.

1.6.6 Data reduction techniques such as factor analysis and regression models for relating the economic structures and trade pattern have been employed. These models are used for both aggregate and disaggregated data. Data analysis is undertaken for different groups of countries over the time period of 1990 to 2005.

1.7 **PRESENTATION OF THE DISSERTATION**

1.7.1 The study is organized in six chapters. This introductory chapter includes the background, a brief review of literature, objectives, hypothesis, data base
and methodology. In the second chapter an attempt is made to analyze volume and growth of trade in merchandise and services. Based on inter regional flow of merchandise export and import, a typology of countries is developed in the third chapter. The changing composition of merchandise export and import is examined in fourth chapter. In the fifth chapter relationship between economy (output) and trade patterns (merchandise trade) has been worked out. The sixth chapter deals with intra-regional trade, with reference to a trade block - MERCOSUR. Finally in the backdrop of the study, the summary and major conclusions have been sketched in seventh chapter.