CHAPTER 2

LITERATURE SURVEY

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2.1 INTRODUCTION

An issue of an absorbing interest for economists has been the role of International trade as a mechanism of economic growth and development, especially in identifying the belief with experiences of developing countries.

In principle three distinct relationships between foreign-trade and economic growth can be envisaged:

(i) a positive association, a view held by classical and new classical i.e. exports provide the dynamic stimulus to growth in the rest of the economy. An increase in exports induce new demand and for various inputs and brings about an increase on domestic capacity stimulates a change in technology which in turn calls the attention of entrepreneurs to new investment opportunities. Through stimulating investment and technical change, the expansion of exports can lead to economic growth.

(ii) a negative association, a view shared by the structuralists, i.e. exports as a lagging sector, if development concentrates on the domestic market and the demand for imports outstrips the capacity to import. Moreover if exports lead to a determination in terms of trade.

(iii) an eclectic one, i.e. economic development may give rise to an expansion in supplies of export goods which is sufficient to pay for the increase in imports which is required.

2.2 TRADE THEORY VS GROWTH THEORY

It has become fashionable to compare trade theory and growth theory and to assert that contradictory conclusions and advice for development policy can be derived from these two approaches. Infact the question addressed is what is the optimal allocation of given resources to promote growth?

The Classical Principle of Comparative Cost Advantage, according to which growth is promoted by specialisation. The defenders of this principle are Adam smith[1], David Ricardo[2], Alfred Marshall[3], J.S.Mill[4]. Whereas the growth theorists are Rosenstein-Rodan[5], Lewis[6], Nurkse[7], Myrdal[8], Rostow[9] and Hirschman[10] who emphasis on the sequence of expansion of production and factor use by sector than on the condition of general equilibrium. Growth theory either ignores comparative advantage and the possibilities of trade completely, or it considers mainly the dynamic aspects, such as the stimulus that an increase in exports provides to the development of related sectors or the function of imports as a carrier of new products and advanced technology. With this different point of view, growth theorists often suggest investment criteria that are point contradictory to those derived from considerations of comparative advantage.

2.2.1 Trade Theory

Trade was an "engine of growth" in the 19th century. Sir Dennis Robertson[11], from whom this phrase is borrowed, "observes in passing that it was not just a matter of optimum allocation of a given stock or resources. It was certainly that, but it was something more as well. As I see it, it was also a means whereby a vigorous process of economic growth came to be transmitted from the center to the outlying areas of the world." This aspect of 19th century experience was more or less neglected by the traditional trade theory, which focused its powerful spotlight on the beneficent specialisation of productive activities that results when two economies previously isolated enter into contact with each other. Trade was an engine of growth transmission as well as a means of improved allocation of existing resources. The classical trade

development, even though it paid little or no attention to an essential aspect of that experience, namely, the dynamic spread of economic growth through trade.

2.2.1.1 The Impact of Export Sector

The character of the export commodity's influence on regional growth is more complicated. A number of important consequences stem from the technological nature of the production function. If the export commodity is a plantation type that is relatively labour intensive, with significant increasing returns to scale and more equitable distribution of incomes, there is demand for a broad range of goods and services. part of this will be residentiary, thus inducing investment in other types of economic activities.

Levin[12], of the many yardsticks against which an export industry's effects upon the rest of the economy may be measured, is the level of generally distributed income. The achievement of a high level of general income must be based upon a high level of productivity, and this must depend upon the specialisation of labor and utilisation of increasing quantities of capital. Trading centers will tend to develop to provide these goods and services. A natural consequence of these divergent patterns will be the attitude towards investment in knowledge to improve the comparative position. Equally important is the investment induced by the export commodity or service. If the export requires substantial investment in transport, warehousing, port facilities and other types of social overhead investment, external economies are created which facilitate the development of other exports.

If the export industry encourages the growth of complementary and subsidiary industries, and if technology, transport costs and resource endowments permit these to be locally produced, further development will be induced. In both social overhead investment and investment in complementary and subsidiary industry, urbanization and increased specialization are promoted, and additional residentiary activity geared into the increasing local demand for consumption goods and services develops. Changes in technology and transport may completely alter the region's comparative advantage. Technological change may increase the potential rate of return from the production of

other goods and services and lead to exploitation of new resources and a shift away from the old export industry.

"The expanding international economy of the past two centuries has provided the avenue by which one economy after another has accelerated its rate of growth. An expanding external market has provided the means for an increase in the size of the domestic market, growth in money income, and the spread of specialisation and division of labour." [13]

The disposition of income earned from the export industry plays a decisive role in the growth of the region. Related to this argument is the region's propensity to import. To the extent that a region's income directly flows out in the purchase of goods and services rather than having a regional multiplier-accelerator effect, it is inducing growth elsewhere but reaping few of the benefits of increased income from the export sector itself. However in a successful economy the initial developments from the export industry lead to a widening of the export base and growth in the size of the domestic market.

"International division of labour and international trade, which enable every country to specialise and to export those things that it can produce cheaper in exchange for what others can provide at a lower cost, have been and still are one of the basic factors promoting economic well-being and increasing national income of every participating country."[14] Haberler, as far as the autonomous change is concerned, "I can see no difficulty resulting from them for the applicability of the classical theory of comparative cost." Such changes are the gradual improvement in skill, education and training of workers, farmers, engineers and entrepreneurs; improvements resulting from inventions and discoveries and from the accumulation of capital-changes which in the Western World stem for the most part from the initiative of individuals and private associations, but possibly also from conscious government policies.

These changes come gradually or in waves and result in gradually increasing output of commodities that had been produced before or in the setting up of the

has to be pictured as an outward movement of the production possibility curve (often called substitution or transformation curve)

2.2.1.2 Doubts Regarding the Comparative Advantage

"The classical theory has been often criticized on the ground that it is static, which presents only a timeless "cross-section" view of comparative costs and fails to take into account dynamic elements that is, the facts of organic growth and development. Opportunities for labour specialisation were limited, however, by the size of the market for the products."[15] As Adam Smith[16] perceived, "The division of labour is limited by the extent of the market." And it was an adequate domestic market, which in many export economies was lacking. The application of capital too was limited by the extent of the market. The incentive for the investment of private capital could be provided only by the existence of a market offering the prospect of attractive profits on future sales. In the comparative cost theory "specialisation", conceived as a reallocation of resources, is a completely reversible process. But in reality specialisation involves adapting and reshaping the productive structure of a country to meet export demand, and is therefore not easily reversible. Hence the country specialising for the export market is more vulnerable to changes in terms of trade. "Moreover the nineteenth century expansion of international trade was not due to a better division of labour and specialisation leading to innovations and cumulative improvements in skills and per man hour, but due to large scale movements of cheap labour. In times of boom output was expanded as quickly as possible on existing lines, and there is no time to introduce new techniques or reorganise production during slumps it was difficult to raise capital for such purposes. This shows that the nineteenth century phenomenon of international mobility of capital and labour has been largely neglected by the comparative-costs theory, which is based on the assumption of perfect mobility of factors within a country and their imperfect mobility between different countries."[17]

"The older comparative-costs theory that is usually formulated in terms of qualitative differences in the resources of the trading countries tends to stress the obvious geographical differences to the neglect of the more interesting quantitative differences in

and geography." [18] The comparative-costs theory assumes that the resources of a country are given and fully employed before it enters into international trade. With given techniques and full employment, export production can be increased only at the cost of reducing the domestic production. That is drawing labour away from domestic production. Now this result is possible only if a highly developed price mechanism is in operation, which is misleading fact in an isolated underdeveloped economy. The economy of the UDCs operates under conditions nearer to those of fixed technical coefficients than of variable technical coefficients."[19] "The market forces will not necessary lead to optimal investment decisions because present prices do not reflect the cost and demand conditions that will exist in the future." [20] "The existence of disguised unemployment implies an inefficient distribution of the labour force and means that market prices do not accurately reflect social cost. Further it is inferred that the import competing industries can be developed without any reduction in output in the export sector or elsewhere would be incorrect even if there really existed much disguised unemployment in agriculture. The reason is that an industry cannot be operated with unskilled labour alone-it also needs capital and skilled labour, which are always scarce in less-developed countries." [21]

"Moreover an industrialist trying to establish himself in an underdeveloped country finds his market too limited for specialise production, the variety of his output too wide to allow him to use the most advanced technique, and the investment necessary in order to train labour and provide ancillary services too large to make it possible to raise the capital on reasonable terms. These handicaps unless redressed by government action or by good luck (e.g. in war- time), may well become greater with the passage of time." [22] "Viner admits the necessity of interpreting comparative advantage in a dynamic setting in which the efficiency of production may change overtime, external economies may exist and the market prices of commodities and factors may differ from the opportunity costs." [23] "In real world there are always exist monopolies, oligopolies and other types of imperfections of competition, wage rigidity, price inflexibility, external economies and diseconomies. On a closer examination, the exchange economy with extremely crude and imperfect apparatus, can make only rough-and-ready responses to economic differentials, may require a considerable amount of state interference to move toward the comparative

2.2.1.3 In Defense of Classical doctrine

"International division of labour and international trade, which enable every country to specialize and to export those things that it can produce cheaper in exchange for what others can provide at a lower cost, have been and still are one of the basic factors promoting economic well-being and increasing national income." "Although comparative cost is static; it isn't debarred from saying anything useful about a changing and developing economic world. There is such a thing as "comparative statics", that is, a method for dealing with a changing situation by means of a stable theory. I content that the problems of international division of labour and long run development are such that the method of comparative statics can go a long way towards a satisfactory solution." [25] The direct static gains dwelt upon by the traditional theory of comparative cost; trade bestows very important indirect benefits, which can be described as dynamic benefits, upon the participating countries. "The older classical writers did stress these "indirect benefits" (Mill's own words). Analytically this "indirect," "dynamic" benefits from trade as an outward shift of the production possibility curve bought about by a trade-induced movement along the curve." [26]

This involves (a) creating modern manufacturing industries; (b) expanding their production and capacity; (c) improving their technology and organisation and efficiency; (d) raising the quality of their output; (e) widening their range and flexibility; (f) augmenting their capability for borrowing and adapting technology from abroad: (g) shifting the mix and "structure" (eventually if not immediately) in directions deemed desirable in the long run; (h) making locally owned industrial enterprises strong and competitive by the international standards.

An analogous transformation of supply capacities will take place in the economy as a whole, not only in manufacturing but also in agriculture, construction, mining, transport and communications, finance, distribution of goods to consumers, foreign and wholesale trade, education, health and medical services, power and water supply, engineering and research, other services and professional activities, and cultural facilities and recreation, along with the mix of activities.

"The latecomers and successors in the process of development and industrialization have always had the great advantage that they could learn from the experiences, from the successes as well as from the failures and mistakes, of the pioneers and forerunners. The autonomous changes in an economy that takes place independendent of international trade, stems from the initiatives of individuals and private associations, but possibly also from conscious government policies. However the autonomous changes are gradual and slow and usually cannot be foreseen either by private business or government planners in sufficient detail to make anticipatory action possible. There is no presumption that the allocation mechanism as classified in the theory of comparative cost will not automatically and efficiently bring about the changes and adjustments in the volume and structure of trade called for by autonomous development."[27]

"Myint believes that the pretrade situation was one of surplus productive capacity and not of full employment. He refuses to accept the "export bias" argument used against the nineteenth century trade-growth pattern. He contends that the real choice of the export economies was not between using resources for export and for home consumption but between using surplus resources for export production and leaving them idle."[28]

"The optimum pattern of production and trade for a country is determined from a comparison of the opportunity cost of producing a given commodity with the price at which the commodity can be imported or exported. Under the assumptions of full employment and perfect competition, the opportunity cost of a commodity, which is the value of the factors used to produce it in their best alternative employment, is equal to its market value. Market prices of factors and commodities can therefore be used to determine comparative advantage under competitive conditions. Long-term changes aren't ignored, but they are assumed to be reflected in current market prices."[29]

"The Heckscher-Ohlin version of the comparative cost doctrine has been widely recommended as a basis for development policy because it provides a measure of comparative advantage that does not depend on the existence of perfect competition and initial equilibrium. The labour theory of value underlying Ricardo's model has been

generalized for any number of commodities and countries. transportation cost was introduced and the law of increasing (or decreasing) cost has taken the place of constant labour cost. In the Hechscher-Ohlin version the theory of international trade is stated in terms of many factors of production: many different grades of labour. a great variety of land. climate and other natural resources. capital. entrepreneurship. etc. Dynamic factors, growth and development. changes in technology and in factor supply have been introduced. and with the help of the principles of modern welfare economics the precise meaning and limitations of the statement that with trade every country is, or atleast can be better off than without trade have been defined and clarified." [30]

The doctrine of comparative cost occupied a special place outside and apart from the general body of classical theory because of the inapplicability of the labour theory of value to international trade in view of the absence of mobility of labour as between countries. But today the doctrine is completely assimilated into the general body of economic theory. Classical trade theory does not exclude changes in the supply of factors and other data over time, but it does insist that under perfect competition the effects of such changes will be reflected in the market mechanism. If, on the other hand, we take comparative advantage as a principle of planning rather than as a result of market forces, we can include any foreseeable exogenous changes in technology, tastes, or other data without going beyond the framework of comparative statics. It is believed that the costs of labour and capital in an underdeveloped country do not reflect their opportunity costs with any accuracy because of market imperfections. Some types of labour may be overvalued while particular skills are undervalued. Factor costs may also change markedly over time as a result of economic development, so that an advantage based on cheap labour may prove quite limited in duration. As Lewis[31] and Hagen[32] show, the effects on comparative advantage of correcting for disequilibrium factor prices are often very substantial. The fluctuating nature and the low income and price elasticites of the demand for primary products are concerns expressed against the trade patterns decided by market forces. These factors can be admitted without seriously modifying the principle of comparative advantage. When export demand has a low elasticity, marginal revenue should be used in place of average revenue. Since it is quite likely that the market evaluation of the attractiveness of an investment in exports will differ from the social

not to do away with the specialisation in primary exports, since the corrected return on exports may be greater than that on alternative investments. The supply of foreign investment may also be greater for export production.

"The possibility of rising efficiency as labour and management acquire increasing experience in actual production has long been recognized and forms the basis for the infant industry argument."[33] Moreover there is often as much scope for technological improvement in agriculture as in manufacturing. The comparative advantage measures over a time can include the productivity change. Hence the question of improvements in the in factor supply not being reflected in the market mechanism and generate a bias against manufacturing is erroneous. The customary analysis of comparative advantage on a sector-by-sector basis requires the cost reduction from simultaneous development of inter-related sector to be allocated separately to each. However if a group of investment has to be profitable when they are undertaken together. Not only comparative cost advantage principle would fail to produce the best investment allocation in this situation, but any other structure of equilibrium prices may also be inadequate guide in the presence of economies of scale.

"The neglected elements in the Classical theory of International trade may be traced to Adam Smith, (i) International trade overcomes the narrowness of the home market and provides an outlet for the surplus product above domestic requirements. This develops into what may be called the vent for surplus theory of International trade (ii) By widening the extent of the market, International trade also improves the division of labour and raises the general level of productivity within the country. This develops into what may be called the productivity theory." [34]

In the comparative costs theory specialisation merely means a movement along the static production possibility curve constructed on the given resources and the given techniques of the trading country. In contrast the productivity doctrine looks upon International trade as a dynamic force, which by widening the extent of the market and the scope of the division of labour, raises the skill and dexterity of the workmen, encourages technical innovations, overcomes technical indivisibilities and generally

"J.S.Mill who regarded the gains in terms of comparative cost theory as direct gains and the gains in terms of Adam Smithian increase in productivity as "indirect effects, which must be counted as benefits of high order". Mill even went on to extend this doctrine to countries at "an early stage of industrial advancement," where international trade by introducing new wants "sometimes works a sort of industrial revolution."[35]

"Growth theory contains at least four basic assumptions about the U.D.C economies that differ strongly from those underlying the comparative cost doctrine; (1) factor prices don't reflect opportunity costs with any accuracy; (2) the quantity and quality of factors of production may change substantially over time, in part as a result of the production process itself; (3) economies of scale relative to the size of existing markets are important in a number of sectors of production; (4) complementarily among commodities is dominant in both producer and consumer demand."[36]

The first assumption is taken care by appropriate measures, involving heavy investment, methods of production can be improved and labour can be trained and made more efficient. This is very much within the infant industry qualification of the comparative cost advantage.

The second assumption is not a contradiction to the theory of comparative cost. Especially J.S.Mill[37] have stressed that trade itself, " the production process itself tends to change the quality of factors." Third the importance of scale relative to the size of market has been a standard argument for freer trade with trade theorists.

"What the theory of comparative cost assumes is perfect competition and flexibility of prices and wages- and the absence of external economies and diseconomies in the broad sense. But there always exist monopolies, oligopolies and other types of imperfections of competition, wage rigidity, price inflexibility and the external economies and diseconomies. But the mere reference to the large number and pervasiveness of these impurities does not invalidate the theory. The international trade is likely to diminish or reduce some of the imperfections. Moreover trade undermines the business monopolies and oligopolies."[38]

2.2.2 The Growth Theory

The neoclassical models are essentially "supply motored", assuming full-employment and full capacity utilization at all times. Growth in this model is explained by growth in the supply of the factors of production and their productivity, whether internal or through foreign trade. Modern Growth theory is concerned with the interactions over time among producers, consumers, and investors in interrelated sectors of the economy. In the writings of Rosenstein-Rodan,[39] Nurkse,[40] Hirschman,[41] there is much more emphasis on the sequence of expansion of production and factor use by sector than on the conditions of general equilibrium. Growth theory either ignores comparative advantage and the possibilities of trade completely, or it considers mainly the dynamic aspects, such as the stimulus that an increase in exports provides to the development of related sectors or the function of imports as a carrier of new products and advanced technology. With this different point of view, growth theorists often suggest investment criteria that are quite contradictory to those derived from considerations of comparative advantage.

The conflicts between these two approaches to resource allocation may be traced either to differences in assumptions or to the inclusion of factors in one theory to differences in assumptions or to the inclusion of factors in one theory that are omitted from the other. Growth theory contains at least four basic assumptions about underdeveloped economies that differ strongly from those underlying the comparative cost doctrine: (i) factor prices do not necessary reflect opportunity costs with any accuracy: (ii) the quantity and quality of factors of production may change substantially over time, in part as a result of the production process itself; (iii) economies of scale relative to the size of existing markets are important in a number of sectors of production; (iv) complementarity among commodities is dominant in both producer and consumer demand.

However the "balanced growth model" means simultaneous expansion of a number of sectors of production. Assuming an elastic supply of either capital or labour, these authors show that investment will be more profitable in related sectors because of

Market forces will not necessarily lead to optimal investment decisions because present prices don't reflect the cost and demand conditions that will exist in the future. This effect of investment in one sector on the profitability of investment in another sector, via increased demand or reduced costs, has been called by Scitovsky[42] a "dynamic external economy."

If we assume fixed investment resources instead of an elastic supply the same set of factors provide an argument for concentrated or unbalanced growth. In order to achieve economies of scale in one sector, it may be necessary to devote a large fraction of the available investment funds to that sector and to supply increased requirements in other sectors from imports (or to curtail them temporarily). The optimal pattern of investment will then be one, which concentrates first on one sector and then on another, with balance being approached only in the long run. Streeten[43] has developed further dynamic arguments for unbalanced growth from the fact that technological progress may be more rapid if increases in production are concentrated in a few sectors, while Hirschman[44] argues for imbalance to economise on entrepreneurial ability. The four assumptions mentioned above leads to following requirements for the analytical framework to be used in determining comparative advantage in a growing economy. (1) recognition of the possibility of structural disequilibrium in factor markets; (2) the inclusion of indirect (market and non market) effects of expanding a given type of production; (3) simultaneous determination of levels of consumption, imports, and production in interrelated sectors over time when decreasing costs result from the expansion of output; and (4) allowance for variation in the demand for exports and other data over time.

These changes destroy the simplicity of the classical system, in which allocation decisions can be used on a partial analysis because adjustments in the rest of the economy are reflected in equilibrium market prices. In dynamic analysis, it may not be possible to state that a country has a comparative advantage in producing steel without specifying also the levels of production of iron ore, coal and metal-working over time. In short, we are forced to compare alternative patterns of growth rather than separate sectors, and we cannot expect to find simple generalisations of the H-O type concerning the

Gottfried Haberler[45] "stresses upon an important source of disagreement between trade and growth theorists not noticed. Many or most classical or neo-classical theorists had an implicit faith in the efficiency of the competitive-market system and assumed that private entrepreneurs are aware of, and try to guess and anticipate, indirect effects and repercussions of their collective actions. No one assumes perfect foresight-losses, crises, depressions and the business cycle itself are strong reminders that foresight is imperfect and mistakes are well nigh unavoidable." Public policy can and should try to reduce ignorance by spreading information and making markets "transparent"; it should mitigate the consequences of miscalculations by counteracting deflationary shocks, by increasing the mobility of factors of production and by promoting the flexibility of the economy to adapt to new circumstances, especially by counteracting price and wage rigidity.

As far as to deal with uncertainty and flexibility, there is limited ability of policy-makers to foresee changes in demand and supply conditions puts a premium on flexibility in the choice of a development strategy. This factor not only argues against specialization in one or two export commodities but it also favour the development of a diversified economic structure which will enable the economy to shift to new types of exports or import substitutes when changing trade conditions may require them. Kindlegerger[46] "sees this factor as the main explanation for his finding that the terms of trade have favoured developed countries although they have not favoured countries exporting manufactured goods in general. The argument is similar to that of Stigler[47] "concerning the optimum choice of techniques in a manufacturing plant. The optimum design for a changing market is likely to differ from the optimum under static conditions because in the former case the proper criterion is lowest-cost production for varying operating levels and with changes in product design. Similarly optimum development policy should result in a pattern of resource allocation that allows for unforeseen changes in supply and demand conditions even at the cost of some loss of short-term efficiency."

2.3 THE NEXUS BETWEEN TRADE AND GROWTH

The Role of International trade contributes to growth and development in a developing country in a number of ways. It expands output and provides additions to incomes through demand for local natural resources, which, as the old phrase "vent for surplus" suggest, might other wise go practically unused. It also permits a developing economy to specialize, based on its relatively abundant resources, while importing goods and services that would be very expensive or impossible to produce locally. Thus, through trade, the country can potentially obtain more of each type of output than it could produce for itself. Benefits from trade are also based on economies of scale, i.e. advantages from large-scale production. The extent of the division of labour, and hence the output attainable per worker in any economy, are limited by the size of the market. Poor countries offer only tiny markets for most industrial products, so that a developing country will be impoverished by the high unit costs if it tries to produce a little of each product for its inadequate home market. Such a country stands to gain enormously by importing many or most of the goods that can be produced cheaply only on a large scale, and by building its manufacturing industries partly around exports, so that a larger scale of produce can be attained.

"With respect to the relationship between economic and export growth, export growth has been the key variable in explaining the variations in economic growth among the advanced countries. The first is that export growth will stimulate industries with significant economies of scale; the second is that export growth, by insuring a strong balance of payments, will encourage investment." [48] "Kaldor in particular has stressed the first link, arguing for the importance of manufacturing in overall growth and the role of exports in the demand for manufacturing output."[49] The second argument has been strongly urged by Beckerman[50] as well as Kaldor.

For advanced countries in the post-war world, the effect of exports on growth cannot be interpreted simply in terms of demand. Given modern aggregate demand management, most economies will be at near or actual full employment. It is true that a

gains from trade and real income. However, this is likely to be an once-over effect and not the cause of a long-run increase in the growth rate. Proponents of the export-led view generally hold that the export-growth nexus should be explained on the supply side. It is argued that exports increase the underlying long-run growth of the economy, or the 'natural' rate of growth, given by the rates of increase of labour force and productivity. Moreover, with export-induced growth, the economy can void balance of payments difficulties, which force aggregate demand measures that show down the long-run rate of growth.

The exports increase the underlying growth rate. First, there is a postulated relationship, formalized as Verdoorn's Law between the rate of growth of output and the rate of growth of productivity. Thus an economy with a rapid increase in demand will also experience rapidly increasing productivity. If money wages do not also rise by enough to offset the productivity increase, costs will fall and the country's exports will, because of their competitiveness, also grow fast. This increase in exports in turn will stimulate demand and output growth, and the circle is virtuously closed through further productivity gains. Moreover, export growth ensures that balance of payments difficulties will not cause a slowing of the growth rate. And the high growth rate and comfortable balance of payments will give business the confidence to maintain high levels of investment; this leads to more modernized capital stock, and therefore higher productivity, which also increases the underlying growth rate, and maintains a strong balance of payments, closing the circle in a second way. Then, too, trade helps to create and demonstrates the existence of markets - initially for imports -- that can eventually be made the basis for import substitution and industrialization around the domestic market.

Kaldor[51] has also argued that when aggregate demand is maintained by exports rather than by a policy of stimulating consumption there are two growth-inducing effects. First, with consumption-led growth, the government finds itself in a dilemma-if it tries to shift resources from consumption to investment it will, by reducing consumption, weaken the inducement to invest. Export-led growth frees the government from this dilemma; consumption can be restrained while exports and therefore investment in export industries expand. Secondly, the pattern of consumer demand gives less scope to

Consumer demand is much less concentrated on manufacturing products than export demand; but increasing returns to scale are more important in manufacturing than other industry. Thus the underlying growth rate is greater with export-led growth for two reasons-the capital formation proportion is higher and the share of manufacturing in the growth of output is higher.

Moreover, trade is a source of stimulus and pressures from international competition, which can be major source of motivation for actually mastering the techniques and meeting the standards of foreign competitors. Competition from imports, too, can potentially motivate improved performance, especially since, in a developing country, many industries consist of only one or two or a very few enterprises, as a reflection of the small size of the local market. Unless subjected to foreign competition, theses firms are more likely to collude than compete, and will tend to raise prices, neglect quality, and perform poorly in terms of technology and efficiency. Import competition helps to weed out hopelessly inefficient local firms while driving others to greater efforts and higher performance standards.

"Even though trade is valuable for all these reasons, this does not mean that more trade is desirable in all situations. Trade policy must not only pursue these advantages but also balance them against the gains from learning to produce goods and services that could be imported. Trade policy is used to further the expansion of manufacturing industries."[52] This in turn can be viewed as part of a wider process of economic growth and development having two sides: one is economic growth, raising earnings and income levels; while the others is economic development, transforming and expanding supply capabilities. Industrial development is part of this second process involving a transformation of supply capabilities in manufacturing industries. Economic growth has a huge impact on industrial (and overall) development, since effective demand on an adequate scale is required before an industry (or other economic activity) can be launched and mastered. Successful growth leads to a rising demand for consumer goods and indirectly for producer and investment goods. Systematic development efforts alongside this growth help to widen demand to include a broad range of producer goods that would not necessarily be needed in a narrowly-based process of economic growth. A part of this

development programs) and incentives. In industry as in many areas, the objective of growth and development sometimes conflict. Any development program that doesn't contribute to growth, or detracts seriously from growth, becomes self-defeating.

"In principal three distinct relationships can be envisaged between the export sector and the whole economy in the process of economic development: exports can be leading sector, i.e. they can provide the dynamic stimulus to growth in the rest of the economy; or they can be lagging sector as for e.g., if development concentrates on the domestic market and the demand for imports outstrips the capacity to import: or, finally, economic development may give arise to an expansion in supplies of export goods which is sufficient to pay for the increase in imports which is required." [53]

2.3.1 Trade Between Developed and Developing Countries : A Debate

An insight into relationship between trade and welfare (including growth) can also be understood by examining the direction of trade, in general, and trade among developing countries. An important reference used as predictive theory of trade to deal with the direction of trade in a multi-country world is, of course, Heckscher-Ohlin. "The relative endowments of capital and labour are on a continuum." Krueger[54] and Baldwin[55] extended the theory to predict that a country will trade in both directions, selling more labour-intensive goods to countries more generously endowed with capital and vice-versa. As the paper illustrates that a country in the middle range of factor endowments will produce for domestic consumption goods requiring factor ratios close to its overall endowment and will export more labor-intensive goods to countries with higher overall capital endowments and more capital-intensive goods to countries with lower overall capital endowments (and vice –versa for imports).

"A dynamic version of this theory is " Stages of Comparative Advantage." that a country changes its relative factor endowment over time. Thus a country experiencing rapid growth will develop advantages in more skill and capital intensive activities whereas a gradual surrender of advantage to a slower growing countries in labour-intensive manufactures. Over time rapidly growing developing countries will increase

the capital and skill intensity of their exports in both directions while maintaining the separation between the characteristics of goods traded in each direction."[56]

It was observed that developing countries' manufactured exports to developed countries are, on balance, more labor-intensive than those to other developing countries.[57] With reference to further concerns about the differences in natural resources endowments across countries, labelled "Ricardian" goods, which included minerals, food and non-food raw materials such as cotton, rubber, or timber. Since in the global contexts differences among developing countries in natural resources endowments are likely to be large in relation to differences in capital availability, and these differences can be quite as large with one another as with developed countries, one might expect "Ricardian goods" to be an important part of trade among developing countries.[58]

The product-cycle theory, which is focused on manufactures, stresses country-specific knowledge, with that knowledge being slowly diffused over the world provides rationale for trade among developing countries. For a given product advanced developing countries first pick up production from developed countries and export in both directions. Later the product shifts to less advance developing countries. In the meantime the advanced developing countries have picked up a new product.

Nurkse[59] noted that the "relationship between trade and economic growth that was observed during the nineteenth century, when the expansion of international trade at a rate much exceeding that of domestic production importantly contributed to economic growth in the industrial countries." He further claimed, however, that "the world's industrial centers in the mid-twentieth century are not 'exporting' their own rate of growth to the primary-producing countries through a corresponding expansion of demand for primary products" and that the developing countries face difficulties in exporting manufactured goods to the industrial countries. "Industrialisation for export markets may encounter difficulties on the supply side. Equally serious are the obstacles which industrialisation for export is liable to encounter in the side of external demand due to protection in the industrial countries." These pessimistic views, subsequently given increased emphasis by writers such as Gunnar Myrdal[60] and Raul Prebisch[61], were not borne out by the facts.

"The failure of industrial countries to expand their imports of primary products in proportion to their economic growth, or to their consumption of manufactures, must have been due, in part at least, to the price factor. He argued, that the acute pressure on supplies of primary produce in a fully employed economy-a pressure that continued because of the low elasticity of supply of this produce. He further argues that this low elasticity was "aggravated by the concentration of effort in many under-developed countries on industrialization rather than agricultural development." [62]

"There is a widely held view that international trade served as an engine of growth for the periphery countries in the nineteenth century but that it cannot be counted upon to serve a similar function for the developing countries of the twentieth century. Even in the nineteenth Century, however, the pattern did not work for all periphery areas. The countries that benefited especially the countries like United States, Canada, Argentina and Australia owed the pattern and speed of its development mainly to internal factors, while trade expanded just as rapidly for some countries, such as India and Ceylon, that did not experience fast growth." [63]

It is to deny that the presence of strong external demand is a necessary or sufficient condition for growth or even for trade to play a helpful role in growth. It is to say that trade is one among many factors affecting growth, and it is helpful role in growth. The term "engine of growth" is not generally descriptive and involves expectations, which cannot be fulfilled by trade alone; the term "handmaiden of growth" better conveys the notion of the role that trade can play. One of the most important parts of this handmaiden role for to-day's developing countries may be to serve as a check on the appropriateness of new industries by keeping the price and cost structures in touch with external prices and costs. The post war export performance (twentieth century) of the L.D.C.s shows that external demand, by almost any measure, has been larger relative to the economic size of to-day's L.D.C.s than in the former period. When the export performance of Developed countries is compared with that of L.D.C.s suggests that the L.D.C.s have not on the whole taken full advantage of world trade opportunities, often incorrectly attributing their difficulties to unfavourable external conditions when the more important problems have been at home. A similar view was held by Balassa[64], "the export performance of a number of developing countries was adversely affected by their

own policies: the bias against exports in countries pursuing import substitution policies led to a loss in their world shares in primary exports."

"In discussing relationships between trade and growth, external demand factors and internal supply factors must be regarded as interdependent and their roles in the growth of trade or the development process are not readily separable. A notable way in which external demand may affect internal supply conditions is via its role in raising the import constraint; this again suggests that export demand is to be considered in the context both of changes in the terms of trade and its influence on capital movements." [65]

"Certainly in any discussion of nineteenth-century expansion of exports it is not easy to distinguish between "supply factors" in the periphery and "demand factors" in centre. The point is that in their internal transformations the countries of the periphery frequently relied heavily on imports of input goods, inflows of labour and funds from abroad. The countries represented as a successful case were trade served as more than the engine of growth was largely attributed to the internal factors, but the development of internal factors cannot be exclusively indigenous it has to depend on imported inputs, inflows of labour and capital."

(i) The basic point can be made simply enough-where export demand "promotes the transition" successfully we would also expect rise in exports but we would also expect rises in national income via both multiplier effects and induced investment occurring throughout the economy. A priori it may well be that, in many cases, rises in the share of exports in national income will be indicative of failure where these secondary effects do not occur.

(ii) Export demand may be expected to affect sectoral investment decisions through increases in national income and availability of imported inputs. Less direct but frequently very significant effects may be forthcoming through the results of the impact of export demand conditions on the terms of trade, immigration or the inflow of foreign capital.

"The theory of trade as an engine of growth is founded on the premise that there exists a stable, mechanical relationship between economic growth in developed countries

and export growth in developing countries. A crucial assumption of the trade engine theory is that of complete specialisation, which implies limited substitutability between the goods LDCs supply and those produced domestically in developed countries."[66]

"The principal relationship between MDCs and LDCs is that the former control the growth rate of the latter is trade. As MDCs grow faster, the rate of growth of their imports accelerates and LDCs export more. It shows dependence of L.D.C. export growth on income growth in developed countries implies very limited substitutability between the products LDC produce and export and those produce in developed countries."[67] Lewis rules out price competition explicitly, arguing, "the main linkage between MDC [More developed countries] and LDC economies has been MDC demand for LDC primary commodities. The two-thirds increase in the rate of growth of exports of primary products from LDCs was no more or less than could be predicted from the increased rate of growth of MDC production. The question asked by Arthur Lewis that could LDCs maintain fast growth even in face of a decline of MDC growth? L.D.C.s in a group can be self-sufficient rather than as individuals. Although given the resources and flexibility, of L.D.C.s it can always sell more to MDCs. However, it thereby displaces some other LDCs trade. However for the LDCs the best way is to accelerate sharply their trade with each other. The LDC exports of engineering products are also growing rapidly, and contrary to popular belief, already exceed LDC exports of textiles and clothing in value. There is no reason why LDCs as a group should not become nearly self-sufficient in standard types of equipment. One of the emerging beliefs is that the developing countries to sustain the trade must not depend entirely on the developed countries.

"The level of trade among developing countries should be high. The argument, which is restricted to manufactures, considers international trade to be like domestic exchange. Trade flows will radiate outwards towards proximate and similar markets. The greater the similarities between the patterns of domestic demand, the higher the trade between two countries."[68]

Since developing countries are more similar to one another than to industrialised countries. and the latter are similar to one another, the implication is a large trade, all

things being equal, among developed countries and a large trade among developing, with relatively little trade between developed and developing countries.

"The trade among developing countries is better than trade with industrialised countries because of opportunities for learning by doing, the advantages of the appropriate technology supposedly embodied in capital goods produced by developing countries." [69]

"The benefits of trade among developing countries in similar goods will result into greater competition and learning by doing and to exploit economies of scale."[70] "However a different inference was drawn in favour of trade between developed and developing countries since, being more labour intensive, it leads to more employment per unit of exports."[71] "To reach an understanding of the "real world" relevance of Lewis' thesis - that trade depends on prosperity in the industrial countries. In a study of structural changes for the sample of 52 LDC's over the period 1955-1978, found manufactures are rapidly claiming an ever-larger share of exports in most developing countries."[72] The solution for LDC's is not shifting markets but improving their competitive positions within the MDC markets. The elasticity assumptions on which the trade engine theory is based apply best to traditional LDC exports of broadly non-competing, tropical commodities. Such products, however, have been shown to constitute a relatively small and declining share of exports in most developing countries. Given the present small share of the market claimed by LDC's, one can reasonably assume that demand elasticites are extremely high for most LDC manufactures. The thesis that prosperity in developed countries fuels exports of developing countries clearly cannot be applied to manufactures. Since manufactures share in MDC consumption is declining secularly, and further, since the mid-1970's witnessed a rise of protectionism against developing countries exports, if anything the opposite would seem to be the case. Nor can it be argued that the growth of exports in the 1970's was maintained by finding markets outside the developed countries. The evidence, therefore, suggests that supply rather than demand factors have principally determined LDC exports performance in manufactures.

The pattern of exports maintained through the decade of the 1970's is especially striking since the developed countries in general have relatively high trade barriers

against labour intensive imports and developing countries have relatively high trade barriers against capital intensive imports. Still the findings reflects that "exports are labour intensive "upstream" to more developed countries, and capital and skill intensive "downstream" to less developed countries. [73] In another study of 33 developing countries, for the period 1963 to 1977, shows that the share of manufactured exports from developing countries to developed countries increased, meanwhile among the developing countries it declined sharply. However the share of non-fuel primary commodities the share of developing country markets in developing countries exports grew rapidly during the same period. [74]

Agricultural-demand–led industrialisation was recommended as an alternative to export-led growth mechanisms, as a solution for the developing countries who are not anticipating a sufficiently rapidly expanding growth in world demand for their non-traditional exports. The ADLI strategy would stress the increasing of agricultural productivity especially that of medium-scale farmers expand internal demand for intermediate and consumer goods produced by domestic industry. Thereby achieving the important linkage effects between agriculture and manufacturing. Such a strategy will allow time for implementing the structural changes that must be introduced before embarking on export-led growth. [75]

"In the nineteen-thirties, protectionist measures have been invoked on the grounds that imports are responsible for the loss of jobs. This argument is obviously incorrect as far as trade among the developed countries is concerned, as the expansion of this trade does not lead, on balance, to a decrease in employment opportunities in the developed world." [76] Nor is the argument valid as far as trade with the developing countries is concerned. Between 1973 and 1976, the exports of manufactured goods from the developed nations to the developing countries increased substantially more than their imports of manufactured goods from these countries. It would appear, then, that manufactured trade with the developing countries is likely to have been favourable, rather than unfavorable, for employment in the developed nations. Also, available evidence indicates that in import-competing industries the loss of jobs due to increased imports has been relatively small compared to the effects of technological change. The high rate of unemployment in the developed nations then cannot be attributed to international trade.

Rather, unemployment has been the result of the policies applied by these countries, which have unfavourably affected domestic production and investment in particular in Western Europe and Japan.

Nor can one expect that protection would reduce unemployment; it will only shift unemployment from lower skilled labor used in import-competing industries to higher-skilled labor used in export industries. Apart from unemployment considerations, the desire on the part of the individual countries to improve their balance-of-payments position has created pressures for the application of protectionist actions taken by any one country can improve its position only temporary as the OPEC surplus must be matched by the collective deficit of the non-oil countries.

2.3.2 Barriers to Trade and the Implications for Its Direction

The cost of transport, communication, financial institutional networks and currency clearing arrangements is said to be particularly high for South-South trade. However the geographical and cultural proximity of most of the developing countries than to the developed countries can be a natural offsetting tendency towards trade with one another. One of the important barriers in selling the product to other developing countries is that of marketing channels. There is absence of large retailers, specialised importers, and wholesalers. Such institutions grow only as per capita income rises and even then only if governments let them. The most important barrier is apparently the commercial policies of both the developed and developing countries and the relationship between the two. "The principal constraint to more South-South trade lies in the developing countries is high level of protection"[77] Further more, protection is concentrated on items that a developing country is in a position to produce, which are also suitable to export. This may be a part of the explanation why; "Ricardo goods" are concentrated in the trade among the developing countries. Turning to the barriers imposed between developed countries and developing countries.

Although the tariff have fallen for manufactured items but the reductions may be offset by the bias against developing countries in tariff reductions in the form of non-tariff barriers to trade (NTBs). "Moreover it has been argued that the tariff reductions

negotiated among developed countries are largely irrelevant to the developing, since they do not apply to developing country goods."[78] "In the first place, developing countries have not only been able to take advantage of tariff cuts but have also diversified and upgraded their exports to exploit the opportunities created in products not previously thought of as of export interest to them."[79] "As with tariffs, prior to 1973 the trend in developed countries were towards greater liberalisation, whereas in developing countries it was, if anything, the reverse. These different trends certainly helped to pull developing countries exports, at least in manufactures, towards developed country markets. Agriculture was much more thoroughly protected in developed countries, especially in the European Economic Community. Even the system of protection in textiles and clothing had no major effect on developing countries' exports prior to the latter 1970s."[80]

2.3.3 Market Size and Growth as Determinants of the Direction of Trade

Given the underlying determinants of and barriers to trade, differences in market size and growth are bound to play a decisive role in determining the direction of trade. In the 1960s and early 1970s developed countries were particularly dynamic markets. In the middle 1970's oil-exporting developing countries enjoyed a rapid rise in purchasing power, and after 1973 developing countries grew faster in relation to the developed than they had before. From the point of view of exporters it is not merely the growth in aggregate market size but its commodity composition that matters. It is only if the pattern of demand matches the actual or potential comparative advantage of the exporter that the aggregate growth creates important opportunities. Indeed, the export pessimism of the 1950's depended as much on the presumed inability of developing countries to diversify away from primary commodities with poor growth prospects, even in a rapidly growing world, as on doubt about the aggregate growth potential of developed countries.

2.4 EMPIRICAL WORK ON EXPORTS AND GROWTH

Emery[81,82]-Syron[83]-Walsh,[84] There is, statistically, a belief that the export is the key factor in promoting economic development. It is generally the increase in export that

stimulates an increase in aggregate economic growth rather than vice versa. This conclusion is arrived by R.F. Emery based on regression analysis for 50 countries for the period 1953-63. Emery regressed the growth rates of per capita GNP on the growth rate of exports, expressed on constant prices. The results infers that the countries achieving 2.5% increase in the rate of export, would obtain one percent expansion of real G.N.P per capita. Emery concluded that, "these data indicate that countries relying heavily on agricultural exports can do better than average, at best in term of aggregate G.N.P and export growth." R.F.Syron and B.W. Walsh extended the analysis of Emery. By splitting the sample of Emery into developed and less developed countries, they found that association between export growth and GNP growth rates was higher for developed countries (R^2= 0.86) than for less developed countries (R^2=0.62). The hypothesis was that the stimulation provided by export to domestic economy may be expected to be higher in DCs than LDCs, due to weakness of institutional framework leading to lack of inducement of growth. Further the LDCs, when divided into three groups in accordance with significance of food-stuff exports, it was found that R^2=0.00 for countries in which food stuff comprised 66% and more, R^2=0.66 for those where food-stuff was between 66% and 33% and R^2=0.72 where food-stuff was 33% and below. The inference is that the countries depending on less of foodstuffs in the export basket, derives greater benefit in the growth of GNP from exports growth.

As a critic of Emery's statistical findings, Severns supports his proposition that in economic development, the line of causation is from export to growth in the LDCs. The main causation is likely to be from exports to GNP for two reasons. First, import control prevents an exogenous increase in GNP from raising imports. Even if it does, the small importance of one developing country in total world trade means that the causation from lagged GNP to current exports via the income mechanism abroad is small. Second the price elasticity of demand for primary products typically exported by developing countries means that larger production is unlikely to raise export earnings. Thus Emery's equation, estimated for developing countries, should appear less satisfactory than for advanced countries. But its economic meaning may be greater, due to the relative absence of bias resulting from common causation mutual trends, and foreign income effects. Further Emery's use of rates of change and his functional form is wrong because his units are incomparable, due to differences in openness.

Severn's modified equation is: the rate of growth of GNP is function of rate of growth of exports and the relative size of a country's export to its GNP (openness of the economy) A re-examination of emery's conclusion gives unstabilising results. That is 7.7% rise in exports is required to affect 1% increase in GNP. The results are less significant than Emery's since they reflect a complex set of income effect, institutional change over time and other economic phenomena.

Michaely,[85] He in his paper tried to test the relation between GNP and Export; the novel feature is the exclusion of exports from GNP. This was done since there is significant correlation between GNP growth and export growth. Further the rate of growth of export is represented by the rate of change of proportion of exports in the national product, whereas the growth rate is the rate of change of per capita product. The data of 41 LDCs for the period (1950-73) provides a coefficient of the Spearman rank correlation of the two is equal to 0.380 and it is significant at one percent.

It was to be noted that the correlation is strong among the countries with the most successful growth experience. When the sample was divided into more developed and less developed countries of the third world (using 1972 per capita income of $300 as the cutoff point), it was discovered that a correlation of 0.523 existed in the case of relatively rich countries compared with a rank correlation of (-0.04) in the case of the poor countries. This prompted Michaely to suggest that it seems likely that growth is affected by export performance only once, when a country achieves some minimum level of development. Michaely also tried to test the alternative version of the relation of growth to exports namely, higher the export ratio in a country (rather than change in the export ratio), the more rapid economic growth. Spearman's rank correlation coefficient of these two series is (-0.326). This is significant at 2.5% level.

Anne O. Krueger,[86] In the context of a study of the impact of foreign trade regimes on economic development. She assessed the effect of exports on GNP of 10 countries for the period 1954-71. a fairly simple log-linear regression specification was estimated for each country from time-series data, and the general coefficient for the export variable was obtained. The estimates indicated "an increase in the rate of growth of exports of 1 percent will increase the rate of growth of GNP by just over .1 percent."

Bela Balassa.[87] He examined the effects of exports on economic growth in a group of eleven developing countries (period 1960-73), which have established an industrial base and test the hypothesis that export-oriented policies lead to better growth performance than policies favouring import substitution. The two sub periods were considered 1960-66 and 1966-73, since in the sample the policy changes occurred in the mid-sixties. The empirical results shows that the statistical significance of the estimated Spearman rank correlation coefficient improves between the first and the second sub periods. This was because of low level of manufactured exports in several countries at the beginning of the period. Not surprisingly, a weaker relationship is obtained for the correlation between the export growth and the growth of output net of exports for the sub periods as well as the total period considered. Moreover the observed correlations in regard to the total effects of exports are higher for GNP than for manufactured output. The same is noted in case of the correlation coefficients estimated between incremental export-output ratios and the growth of output, increments in export-output ratios and the growth of output. This reflects the indirect effects of exports. However the coefficient for the correlation between incremental export output ratios and the growth of output net of exports, the average ratio of exports to output and the growth of output is higher for the manufactured output compared to GNP. Further he pooled data of ten countries for the 1960-66 and 1966-73, and conducted the regression, in a production function-type relationship, making GNP a function of the average difference between gross fixed capital formation and current account balance as a proportion of initial year GNP, average current account balance as a proportion of initial year GNP, labour expressed as the ratio of the absolute change between the initial and the terminal year divided by initial year values, same procedure for exports expressed in current dollar values and purchasing power of exports (derived by deflating dollar values by the index of unit values of manufactured exports of developed countries), and incremental export-GNP ratio. The results shows that for the period 1960-66, only if GNP is made a function of the first two variables mentioned above and later when export in current dollar terms is added, the coefficient of determination raises from 0.53 to 0.71. Similarly for the period 1966-73, the coefficient of determination improves from 0.58 to 0.77. The results are not substantially affected if the current dollar value of exports is replaced by the purchasing power of exports or incremental export-GNP ratio. In the former 1% increase in exports will lead to 0.05 of 1 percent increase in GNP and in the latter case 1% rise will lead to

0.006 of 1 percent increase in GNP. When the intercountry differences in exports and economic growth was obtained by incorporating actual export growth rates along with the first two variables included in the above function for each of the country. The results point to the fact that trade orientation has been an important factor contributing to intercountry differences in the growth of incomes. It is further apparent that income increments have been achieved at a substantially lower cost in terms of investment in countries that have followed a consistent policy of export orientation.

Demetrios Moschos,[88] The paper attempts to estimate the effect of export expansion on the economic growth examined through an intercountry aggregate analysis of the sources of growth. The paper uses cross-section data of 71 developing economies for the period 1970-1980. The assessment of the effect of export performance on economic growth is carried out in a production function framework. Assuming a production function with two factors – labour and capital – disembodied technical progress and constant elasticities of output with respect to inputs, expressing the relationship in growth rates and making the additional assumption that the rate of technical change is a linear function of export growth. The growth rate in real terms of GDP is function of exports, labour force and capital respectively. The hypothesis of the existence of a critical level of development, which causes a break in the relationship between export expansion and economic growth, can be tested within the framework of the above function.

Two variants of the basic hypothesis can be formulated; first. the hypothesis of the existence of a threshold level of development below and above which the effect of export expansion on economic growth differs, the effects of the other sources of growth remaining unchanged; second, the more general hypothesis of the existence of a threshold level of development below and above which the responses of output to all sources of growth differ. Then he hypothesized that the two regimes were characterized by different output growth response to real growth rate of exports, but that the effects of growth rate of labour and growth rate of exports remained unchanged across regimes. An additional variable of multiplicative dummy variable for the growth rate of exports is incorporated and takes the value of zero for all observations in which the level of development is at or below its hypothesized threshold level. The one, which yields the maximum t-statistic on

the dummy variable incorporated growth rate of exports term, provides the critical level of development, which is the breaking point at which the likelihood function obtains its maximum value. The evidence suggests that the existence of a critical or threshold level of development below and above which the effects of export expansion, as well as of labour and capital growth, on the output growth of developing economies vary substantially. Output growth in less advanced developing countries appears to be unaffected by labour growth (Characterized by abundant labour and low productive base), whereas in more advanced developing economies the growth of labour seems to have a significant positive effect on output growth. The coefficient of the capital variable is positive and significant in both the groups, but larger in advanced countries. Finally the coefficient of export variable seems to be positive and significant but stronger for less developing countries compared to more advanced developing countries. The results shows that the effect of export expansion on economic growth tends to diminish as the stage of development passes the critical level.

Gershon Feder,[89] In his paper he analysed the sources of growth in the period 1964-1973 for a group of 31 broadly and 19 strictly defined semi-industrialised less developed countries. He adopted a supply side description of changes in aggregate output focusing on the potential non-optimality of resource allocation between export and non-export sectors. Although the output of export sector is function of stock of capital in export sector and labour forces in export sector, whereas in the output of non-export sectors volume of exports was made an additional variable in the production function. The formulation represents the beneficial effects of exports on other sectors, such as the development of efficient and internationally competitive management, the introduction of imported production techniques, training of higher quality labour, steadier flow of imported inputs etc. These effects are referred to as externalities, since they are not reflected in market prices. He found the marginal factor productivities in the non-export sector to be lower. Finally since the GDP is the total of output produced in the export and non-export sector. The cross-country regression related to the rate of growth of GDP (in constant prices) to the share of investment in GDP, growth of population (proxy for labour force) and to the growth of exports (in constant prices) multiplied by exports share in GDP. The above equation makes allowance for the gains brought about by shifting factors from a low productivity sector (non-exports) to a high real productivity sector

(exports). The results lend strong support to the hypothesis that marginal factor productivities in the export sector are higher than the in the non-export sector. as the coefficient of the growth of exports (in constant prices) multiplied by exports share in GDP is positive and significantly different from zero. Therefore the conclusion is to reallocate the resources from less efficient non-export sector to the higher productivity export sector.

Panos C. Afxentiou and Apostolos Serletis,[90] The objective of the paper was to test the causality between exports and GNP, and the reverse causality in the 16 industrialized countries for the period 1950-1985. The method they used to determine the causality is the method of Integration and Cointegration. The causality evidenced that out of industrialised countries only the United States supported a statistically significant bi-directional causality with an optimal lag of one period. In no other industrial country causality from exports to GNP supported statistically. But incase of casuality from GNP growth to export growth apart from U.S.A, Norway also with one period optimal lag and in Canada and Japan with ten period optimal lags. Therefore neither the export promotion policies nor GNP growth policies are necessarily effective in fostering export growth.

Rati Ram,[91] The purpose of his paper is to find the linkages between exports and economic growth by employing larger data sets, i.e 73 developing countries for the periods 1960-70 and 1970-77. The frame work is a straight forward production function model, aggregate real output is a function of annual growth rate of labour force, annual growth rate of exports and Gross domestic investment as a percentage of GDP. The results shows that the impact of export performance on growth does seem small in the low-income LDCs (although large in the middle-income group) over the period 1960-70. the impact differential almost disappears in 1970-77, during which period the positive impact of exports on growth seems quite large and of almost equal magnitude for the two groups.

Peter C.Y.Chow,[92] The paper investigates the causality between the growth of exports of manufactured goods and development of manufacturing industries in eight developing countries (NIC's) in the decade 1960's and 1970's.The causal pattern between export growth and industrial development in the NICs has important

implications for development strategies. If there is a definite unidirectional causality from export expansion to the development of manufacturing industries, then it will lend credence to the export led growth strategy; exports will not only promote the growth of national income, but also lead to structural transformation in the developing economies. If the causative process were of the opposite direction, then it would imply that the development of manufacturing industries might be prerequisite for developing countries to expand their exports. If causative are bi-directional then growth of export and the development of manufacturing industries having a reciprocal relationship. If there is no bi-directional causality then alternative strategies is required to structurally transform the developing countries. To study the above hypothesis, the Sims technique [Sims (1972)] was used. Among the thirty-two regression equations that were estimated, most of them have relatively high R^2. The F-statistics for the estimated equations are significant, except for equations for Argentina. The results support the hypothesis of reciprocal causality i.e. it establishes the causal relationship between export growth and industrial development.

William G. Tyler,[93] His work analyses the empirical relationship between economic growth and export expansion in 55 middle-income developing countries for the 1960-1977. He used Pearson and Spearman rank correlation between GDP growth rates and various other economic variables like growth rate of manufacturing output (b) growth rate of gross domestic investment (c) growth rate of exports (d) growth rate of manufactured export earnings (e) growth rate of direct foreign private investment (f) change in net barter terms of trade. The results show positive association between GDP growth rate and all other variables considered except net barter terms of trade.

Further, GNP is made function of Capital stock services, labour force inputs and country exports. The results show that although the capital formation and labour force growth contributes to GDP growth but by adding the export growth rate the R^2 improves. Moreover, 69% of the variance in the intercountry GDP growth rates can be explained by the rates of growth of capital formation, the labour force and total exports. The conclusion is that the countries that neglect their export sectors through discriminatory economic policies are likely to have to settle for lower rates of economic growth.

Dalia Marin.[94] He tried to analyse whether export performance also leads to the productivity performance and vice-versa with respect to four developed market economies (United States. Japan, United Kingdom. and Germany) for the period 1960-61 to 1987-88. based on the cointegration and casuality approach. The findings of the econometric analyses shows that exports. productivity and the terms of trade (with and without the inclusion of world output) share a common trends. i.e. they move together in the long run in all countries except the United Kingdom. Furthermore the causality F-tests suggest that exports Granger cause productivity in all four countries. An outward looking regime seems to favour productivity performance of developed countries and not only in case of developing countries.

Mohsen Bahmani-Oskooee, Hamid Mohtadi and Ghiath Shabsigh,[95] In his paper he examines the causality between export growth and economic (output) growth for 20 LDCs, the period of analysis varying among countries, ranging from 24 to 37 years. The procedure followed is to check for stationarity and Final Prediction Error criterion. The results show that the countries pursuing export promotion policies exhibit positive causality from export growth to economic growth whereas the countries pursuing import substitution policies exhibit negative causality or no causality between export growth and economic growth

Sharif Mohammad,[96] He applied a closed input-output model to the Indian data tried to estimate the interrelationship between trade, growth and income distribution. It has been found that employment opportunities could be raised substantially through redistribution as well as through export promotion in developing countries such as India, if capital and foreign exchange constraints are not binding.

Smriti MukherjI,[97] Her paper examines the relationship between exports and economic growth in India over the period of 1950-51 to 1980-81. It is evident that in whatever way is chosen to represent export growth and income growth variables, the outcome happens to be the same; that is, in the case of the Indian economy a higher growth rate in exports has led to a fall in the growth rate of income over the period observed.

Woo S Jung and Peyton J. Marsall.[98] He performs a Granger test of causality tests between exports and growth for 37 developing countries (including India) for the period 1951 to 1981. The time series results for 37 countries provide evidence in favour of export promotion in only four instances, Indonesia, Egypt, Costa Rica and Ecuador. This strongly suggests that the evidence in favour of export promotion is weaker than previous statistical studies have indicated. In case of India, in spite of high correlation between exports and domestic output, these tests could not establish the direction of causality between export and domestic output in India.

Sukumar Nandi,[99] In his paper an attempt to examine two-way causation between export and economic growth in Indian context. The method used to find the causation was Sims Test of Causality. The econometric result shows that in Indian context, causality runs in one way, i.e. export growth causes growth of national income.

Sakiya Khan,[100] tried to examine the connection between exports and economic growth in case of India for the time period 1981-82 to 1992-93. The real output (GDP) is made a function of growth rate of labour force and investment output ratio, growth rate of exports, growth rate of agriculture and manufacturing output. The results show that export coefficient is not statistically significant, domestic investment and labour variables had highly negative impact on the real GDP, the growth of manufactured output and growth of agricultural output had positive impact but the former proved to exercise a lesser impact on real GDP.

Sangeeta Prasad,[101] She has attempted to test that the export-led growth hypothesis holds particularly for countries that have reached a certain minimum level of development as only then changes in productivity and efficiency from increasing exports translate into externalities and spread effects. Her sample included 46 middle-income countries and 36 low-income countries (including India) for the period 1970 to 1990. The results substantiate the hypothesis that the impact of exports as a source of growth is different for countries at different stages of development. For low income countries, inclusion of the export variable in the sources of growth equation does not improve the goodness of fit, whereas for middle income countries the results obtained were just opposite. Further dividing the entire sample into sub periods for both the groups found

that the relationship between exports and economic growth depended upon the favourability of world trade environment.

Sushanta Kumar Mallick.[102] Investigates a question whether India's exports lead to the country's economic growth using the data for the period 1950-51 to 1991-92. In order to answer this. he has made use of causality as statistical technique employing Granger. Sims and modified Sims (or Geweke-Meese-Dent) tests, to examine one-way or two-way causality in the Auto-regression where the lag lengths of the variables included are chosen by the Akaike's FPE criterion. The conclusion is Modified Sims test, of which the Granger and Sims tests are special cases, by and large supported the bi-directional causation between income growth and exports growth. But Granger and Sims tests don't provide consistent evidence regarding the causal linkage between exports and income growth.

V.N.Attri,[103] He in his paper examines the possibility of rapid and efficient industrialisation in India by fully utilising foreign trade. His study proves that economies of scale mechanism operate through manufactured export during the period 1970-80. The total exports are positively correlated with growth, and exports causes growth through ensuring economies of scale as the coefficient of Manufactured Exports took the positive value and it is statistically significant. Further by regressing industrial production on the log of share prices, log of wholesale prices, log of export prices, log of import prices, concluded that although domestic demand in India occupies the drivers seat, but export demand plays a very important role.

V.N.Attri,[104] He in his paper examines the relationship between exports and economic growth in twelve developing countries for the period 1960-80, with an emphasis on the testing of export-led growth mechanisms. He have extracted the two mechanisms i.e. economies of scale and the balance of payments effect on investment. In case of India the export are although positively associated with the GNP but is statistically significant only when the manufactured exports are included. The coefficients of stability are subject to change due to structural changes. However when the investment variable is included the strong positive relationship of exports to growth certainly doesn't operate through the effect on investment, because investment has an

independent significant effect. The investment variable emerges to the powerful explanatory variable, suggesting that initiative for economic growth stem from internal factor, i.e. domestic investment. It shows that balance of payment effect on investment, has not been proved.

Sham K. Bhat,[105] His paper examines the causal nexus between export and economic growth in India for the year 1950-51 to 1993-94. Co-Integration technique has been employed to pursue the objective. The empirical results revealed that the existence of a bi-directional causal relation between export and economic growth in India.

2.5. CONCLUSION

The viewpoints on the relationship between International Trade and Growth are extremely diverse. Even at theoretical level despite the developments in the trade theory and its accommodation of changing realities, its validity and relevance is questioned. Moreover the aspects of Growth theory are recommended as a practical solution to achieve faster economic growth by the underdeveloped countries. Even the empirical studies undertaken by various authors provide diverse inference with regard to the type of causation between trade and economic growth that may prevail for a developed country and an underdeveloped country or between them. Henceforth it can be seen that there are conflicting and at times competing empirical findings which either is compatible with the advocates of the trade theory or disregards the theoretical judgments.

Henceforth, we have reviewed India's trade performance empirically for the period 1960-61 to 1995-96 with special attention to the nexus between exports, imports, productivity and growth.

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