development research institute, tilburg university

manufactures exports in india's development

policy options for the eighties

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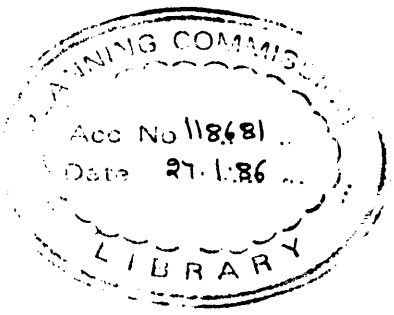

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FOREWORD

From the early seventies onwards, the research group IRIS (International Relations and Industrial Structures) of the Development Research Institute, Tilburg University, has been carrying out research in the field of industrialisation and international trade, in the framework of North-South relations.

Initially, this research mainly focussed on processes of industrial re-adjustment in the North, in the perspective of changing North-South trade and investment relations. Over the past few years, however, this research has been extended to investigate industrialisation and foreign trade strategies of developing countries in the face of this changing relationship.

The present study focusses on India. It is one of the results of a broader research project, designed for studying opportunities and constraints, advantages and disadvantages of a change in Indian industrialisation and trade policies towards a more "export-oriented" direction. Such a research was considered important and timely in view of the ongoing debate in India on these matters and in view of the changes in the international variables affecting industrialisation strategies of developing countries. Also, it was considered important to study the effects of a more outward-oriented industrialisation and trade strategy in developing countries with a considerable size of the domestic market and a relatively advanced industrial structure, as contrasted to small open economies.

The research project was designed to cover different aspects and to allow for different approaches and points of view. Broadly speaking, the project consisted of the following components:

a) an analysis of the role of foreign trade in general

and of industrial exports in particular, in the Indian development strategy;

b) an analysis of the policy aspects of an industrial export promotion strategy;

c) an analysis of the effects of increased exports at the micro-level, taking garments exports as the case in point;

d) an analysis of the probable changes in the international economic environment in the 1980's, as a parameter for Indian strategy. In this respect particular emphasis is being paid to Indo-EEC relations.

As indicated above, the main aim was not so much to arrive at a theoretical, analytical, and political coherent approach, but rather to emphasise differences in approach and assessment. Therefore, as much freedom as possible has been given to the authors to express their views and opinions, even at the cost of a certain overlap in the individual studies.

A research team was composed, consisting of both Indian and Dutch scholars. The first mentioned part of the research was the responsability of Prof. Dr. S. Chisthy (Indian Institute of Foreign Trade). The second part was carried-out by Dr. V. Kelkar (at the time Economic Advisor to the Minister of Commerce) in co-operation with Dr. K. Raipuria (director Indian Economic Service, Senior Fellow at the Research and Information System for the Non-Alligned and Other Developing Countries). The third part was carried out by Drs. F. Schuurs in cooperation with Drs. J. van de Meerendonk (Development Research Institute) and the final part by two researchers: Prof. Dr. K. Naqvi (Delhi School of Economics) and Drs. G. de Groot (Development Research Institute) respectively; the first one presenting a developing country's point of

view, the second one a developed country's point of view.

The sudden death of Prof. Dr. K. Naqvi made it impossible to finish his contribution. We remember Prof. Naqvi as a serious scholar, a good colleague and above all as a dear friend.

The overall direction of this project was in the hands of Drs. B. Evers (director Development Research Institute).

The present progress report concentrates on the policy aspects of a change in industrialisation and trade strategies of India. After presenting an overview of different theoretical approaches, it analyses Indian foreign trade strategy and policy aspects during the various plan periods. An important conclusion is that the terminology import-substitution versus export-orientation might give rise to a false delemma. These are not contradictory but complementary strategies. The report concludes that India should indeed more vigorously promote industrial exports, without neglecting import-substitution and finally presents the main elements for such a policy planning.

We are convinced that this report will contribute to the debate on these issues in India. Special thanks are owed to Dr. Kelkar and Dr. Raipuria for their valuable contribution to this project.

Acknowledgement is also due to the Indo-Dutch Programme on Alternatives in Development. This study was carried out within the framework of a broader research programme set-up by IMWOO (Institute for Social Science Research in Developing Countries) in The Hague, Netherlands, and the I.C.S.S.R. (Indian Council for Social Science Research) in New Delhi, India.

This programme on "Alternatives in Development" has as one of its starting points the complementarity of

development processes in rich and poor countries. The programme provided the bulk of the finances necessary to implement this project, was very helpful in creating the organisational framework for the project and provided an intellectural form for designing and implementing the research.

Though the number of persons to which we owe a debt is too large to mention them all. I want to make an exception for Prof. Dr. S. Chackravarty , Dr. K. Narula, Prof. Dr. S. Goyal, Dr. Barman Chandra and Drs. P. van Stuyvenberg.

Finally, a hardly visible but highly appreciated by-product of the project has been the direct contact between Dutch and Indian researchers. The importance of direct inter-action between the social science research communities of the developed and the developing countries can to my view, hardly be overemphasised.

Ben Evers
Director
Development Research Institute
Tilburg, Netherlands
May, 1985.

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We are indeed grateful to our respective Department/ Commission of the Government of India for permitting us to undertake this assignment. The views expressed are, however, personal of the authors and not necessarily reflect those of the organisations.

Debt is owed to various authors whose references are quoted in the study and to Dr. V.R. Panchamukhi for his comments on an earlier draft of the report.

References are given in the notes of each Section and in ANNEX 2. ANNEX 1 refers to references concerning Government of India documents.

We also like to express our thanks to Mr. M S. Anand of the Planning Commission Library, and Miss Batra of the Economic Administration Reforms Commission's Library for rendering library assistance, to Miss Sonika Jethwaney and Mr. A. Andiappoo for research assistance, and to Mr. S.C. Aggarwal for secretarial help.

Dr. V. Kelkar
Dr. K. Raipuria
New Delhi, India
September, 1984.

1. INTRODUCTION

The present report discusses the development alternatives and policy options regarding the role of manufacturing exports in the context of the growth pattern and relationships emerging in the Indian economy during the eighties[1].

The perspective of the external sector cannot be the same in the eighties as in the seventies and earlier decades, due to the changing domestic and world economic conditions and their likely impact on the external sector. It is therefore, necessary to consider the new role of foreign trade in general and industrial exports in particular in the country's development, and to examine the policy options, given the stated national objectives and major changing intitial conditions and parameters of the domestic and the world economy.

This is considered necessary because contrasting propositions have recently been put forward, for and against exports. These were sometimes based on a static analytical framework and/or depended on varying perceptions regarding the emerging world economy, the complementarity of domestic and external demand, and the cost and benefits of export promotion. Discussion has also centred on the benefits of a policy regime categorised as "outward orientation" (meaning export orientation and import liberalisation) replacing "inward orientation" (meaning orientation on importsubstitution) and also on the economic losses from a total "switch" in stategy or from policy changes which constitute a "quantum jump"[2].

This report critically examines these propositions. The endeavour of the report is to elaborate the rationale and the compelling reasons for faster growth in exports and greater participation in the international division of labour during the eighties, in

conjunction with import planning and management measures.

The following Section (2) discusses the role of exports in the development framework of a developing economy, reviewing the available analyses/models. This is followed in Section 3, by a review of planning and policy experience regarding the role of exports in the development of the Indian economy, covering the period from the First Plan to the present Sixth plan. In Section 4, market prospects are discussed particularly focussing on projected growth in exports of manufactures from developing countries during the eighties and beyond. The rationale, exigencies and policy options with respect to export expansion of manufactures as a development alternative are then discussed in Section 5. Lastly, we give a résumé along with some concluding observations (Section 6).

Footnotes chapter 1

1) Covering Groups/Divisions 5 to 8 (excluding 68 i.e. non-ferrous metals) of Standard International Trade Classification (SITC), and broadly Groups 5 to 8 of the Revised Indian Trade Classification (RITC). In the latter we have included 061 (sugar) and 334 (petroleum products), and taken out 68 (non-ferrous metals).

2) "Export orientation" or "outward looking development" as opposed to Export-led strategy (ELS), is in this report taken to mean an export promotion policy, including fiscal support, investment and output planning, for faster export growth than in the past. Empirically ELS (decomposed à la Chenery), is taken to mean an export sector contributing relatively more to the growth of the economy, vis-a-vis domestic demand and import substitution.

2. THE ROLE OF EXPORTS IN ECONOMIC DEVELOPMENT

It is possible to study exports in relation to the growth process of an economy both at the macro level and at the micro level. At the macro level the study of exports shows the particular significance of export earnings for the economy's growth. At the micro level effects of the export sector point to economic benefits like specialisation, market opportunities, high profits, investment stimulus, technical progress, larger employment and so forth.

Of course micro level growth effects will vary from case to case and productwise. Further, they are best studied empirically through their impact on the rest of the economy in terms of backward and forward linkages and consideration of structural ratios relating to value added of the linked industries thus identified[1]. In the following, we will discuss, keeping the above in view, the macro aspect of exports in the growth process.

The role of foreign trade in a country's development has been discussed ever since Adam Smith, who pointed out the contribution of division of labour, specialisation and economies of scale in production to increasing prosperity of a country and wealth of nations. In recent discussions, a reciprocal relationship between foreign trade, particularly export growth and the growth of labour productivity was highlighted[2]

Lamfallussy's analysis was based on the success of the six EEC economies in the fifties in overtaking the U.K. per capita production. Beckerman's study was based on the increasing gap between the slow growing U.K. and the fast growing six EEC countries.

An important approach explaining the role of foreign trade in economic development is found in the "two-gap" models which consider limited savings and foreign exchange and explore the relationship between exports

and economic growth, assuming that the amount of capital goods which can be imported for raising the growth rate is limited by the supply of foreign exchange[3]. It is shown that an increase in the rate of savings had no effect on the rate of growth beyond a certain point, given the fixed ceiling on expansion of foreign exchange earnings through increased exports. Thus, the growth rate of exports is shown to be positively related to the rate of income, assuming investments are comprised of a fixed proportion of domestic and imported capital goods, and imports of consumer goods are kept down to an irreducible minimum. The "two-gap" models have, however, been found highly unsatisfactory particularly in so far as they ignore interdependencies in segregating the savings and the trade gap and are thus mechanistic, especially due to the specification of import elasticities and exogenous parameters including export growth[4]. Such an approach has nevertheless often been employed in projections for a developing economy. The question, of the dominiancy of the two-gaps has been explored by Vanek[5]. There are various policy issues which arise when we are discussing exports in relation to the growth process, which are not touched upon by the "two-gap" approach. This should be seen more as an explanation of a tendency rather, than an exposition of the export-growth nexus.

The more recent discussion in economic literature has been quite rich in terms of different approaches, viz., "handmaiden of growth", "an engine of growth", "as an input to development" and discussed by some "as brake or offspring of growth"[6]. Discussing the issue, D. Alejandro observes thus: "Whether trade is the engine, the handmaiden, the brake, or the offspring of growth is an open question" and "ingenious and mischievous economic historians can come up with examples of each"[7].

Balassa has analysed the role of trade in terms of

changing patterns of comparative advantage in the process of economic development, but limiting the discussion to relative export performance, as imports are assumed to be greatly affected by the structure of protection[8]. Relating each country's exports to the capital (physical and human) intensity of product catagories, Balassa has shown that inter-country differences in the export structure are related to differences in physical and human capital endowments, thus supporting the "stages" approach in the discussion concerning comparative advantage.

Some attempts have been made to use regression analysis to relate exports to economic growth on the basis of the crosssection data with respect to various countries[9]. They correlate growth, as indicated by changes in national income, with changes in exports. Exports are, however, part of the national income. There exists, therefore, an autocorrelation which is in most of the cases significant. Michaely relates the rate of export expansion, represented by the export to GDP ratio, to the rate of growth, represented by the rate of per capita income, in order to overcome the problem of autocorrelation. He concludes that "growth is affected by export performance only once countries achieve some minimum level of development[10]. This because he finds a strong relationship in the case of Greece, Taiwan, Portugal, Spain, Israel, Yugoslavia and Korea (in that order) but no relationship at all among the least-developed.

2.1. Manufactures Exports and Growth

With advancing industrialisation in a developing economy, and given the well-known dynamic aspects of interaction between growth and industrialisation, foreign trade is likely to increase. In some cases, in order to balance excess consumption and investment

compared to supplies, and in others, to export excess supplies. A policy of development of excess supplies may also be used in order to maintain economies of scale or earn foreign exchange based on comparatively higher productivity.

According to Kaldor, industries which are brought into existence through import restiction of some kind are not competitive in the world markets, as "they are dependent on the maintenance of an internal price ratio between industrial and agricultural products which is higher than the prevailing world price ratio[11]. Once the scope for import substitution has been exhausted, their further expansion is limited by the growth of internal purchasing power, which is ultimately governed by the growth of production in the complementary sector of the economy". According to Kaldor, in most cases other than cotton textiles, such domestic industries do not raise export capacity. What happens is that import substitution reduces the proportion of imports to GDP, but, since it also raises the GDP, an increase in imports takes place which exceeds the growth of exports. A situation termed over-valuation of the currency. Through a system of combined taxes and subsidy, it is, however, possible to adjust relative prices in accordance with marginal social costs and promote exports of manufactures. In his view such a system, which can also be a dual exchange rate system, ensures that a developing country will avoid the dilemma of dependence on primary exports, an over-valued exchange rate and continuing balance of payments problems. Further, as the scale of industrial activity expands, productivity increases and manufacturing costs are brought down by economies of large-scale production and "learning by doing". In this way obstacles to exports are overcome. Thus, Kaldor argues for promotion of manufactures exports as a way out of the dilemma a

developing country faces in the intial stages of development, given the problems of discrepancies between private and social cost ratios, low productivity, low economies of scale, and low wages.

Empirically, Maizels' familiar contributions on the relationship of trade and growth, inspired by Chenery's formal descriptions, considering particularly manufactures and semi-manufactures (covering the long periode 1899-1959 and projections through the early 1970s, by regions and products), showed that the rates of growth of trade during the fifties were artificially high due to the changed ratio of imports to total absorption, after a period of restrictions during the depression of the thirties[12]. This accounted for as much as half of the increase in imports of manufactures by the industrial countries. He anticipated the possibilities of return to a more normal relationship of trade in manufactures to output growth. Thus, Maizels believed that during the coming decade the growth of trade would cease to be faster than the growth of production. In fact, it turned out that trade grew at a still faster rate compared to growth of production, in spite of the second oil price hike (1979) and the 1980-82 recession.

Industrialisation and trade, however, were not regarded as a necessary and sufficient condition for development as, barring a few small countries, they did not trigger the economic benefits of growth at mass level and involved high social costs. Proponents of domestic industrialisation with emphasis on capital goods have continued to maintain their thesis, reinforced by the "new protectionism" and increasing uncertainties in the world trading system. Their emphasis on inward-looking industrialisation has, in fact, gathered new momentum.

Batchelor et al. in analysing why Maizels' projection did not materialise and why a large number of

developing countries have remained on the "periphery", have identified as major reasons, plant sizes which are not competitive in the face of technological changes in developed countries, failure to adopt the new technology to local needs, and absence of competitive pressures (due to protection) to increase productivity[13]. Other reasons, in addition to historical factors, include inadequate participation by a large proportion of economic units due to highly skewed distributions of income and wealth, and policy biases against exports, which only perpetuated the above malaise. Dependent relationships, with developments in other parts of the world economy, also explain the malaise. In the view of Batchelor et al. these problems do not invalidate the search for patterns of trade and growth, nor the usefulness of such patterns in making medium-run growth projections.

With trade, particularly in manufactures, growing faster than output, the total supply volume of manufactures available (production plus imports) to the developed and developing countries has increased faster than their consumption. To what extent did this growth feedback into output growth? Experience varied among the countries. In general, according to Batchelor et al. for the advanced countries, exports appear to be equally as significant a factor as investment and a determinant of growth. However in the bigger semi-industrial countries, investment is indicated as a more important factor; while in the smaller ones exports, particularly manufactures, are found to be more important. In the case of the least developed countries, Battchelor et al. found that exports and investment are again equally important. Foreign exchange constraints mean exports enable them to import capital goods. On the other hand, in developed countries with no foreign exchange constraints exports enable higher income and growth of demand, investment

and output. In the bigger developing countries where foreign exchange constraints are prevelent, exports play the same role as in the developed countries but they also may raise income, demand and output. This depends on the composition of exports in general, and of manufactures in particular, resulting from the given comparative factor advantage.

2.2. Exports and Investment

The case against export promotion in the lines of the Harrod-Domar type open economy models is given by Findlay[14]. In his model, presuming full employment of labor and capital, an increase in the rate of growth of exports requires a rise in the rate of growth of capital in order to produce the output for the supply of exports. It implies than that the total capital stock will depend less upon a rise in the rate of growth of exports and hence less on output. While if the propensity to import "m" increases (with a fixed value of propensity to save, "s") the growth rate increases as imports replace consumption of domestic output, since investment has no imported component and the "re-investment ratio" is increased. In this model, increase in "m" has the same effect as increase in "s". Thus exports are shown to be a drain on the economy while imports support it. Growth depends on the choice between exports and investment.

Arguments recently made against exports in the line of Findlay's state that "exports are rather like investment in the short-run except that they generate claims on foreign resources rather than provide a future stream of domestic resources"[15]. In the context of India, Rangnekar and Bhaduri argued that "domestic consumption requirements have to rise much faster than domestic production potentialities, and it is not clear that an exportable surplus is easily generated without

basic changes in the overall development strategy. This is not to discount the possibilities of the development of export industries, but rather to emphasise the point that this development must have a direct linkage with the overall development strategy including the goal of self-reliance". We will discuss the question of overall development strategy, especially the objective of *self-reliance and the linkage of this strategy* to export growth. We hope to show that it is precisely for achievement of the goal of self-reliance that growth of exports would be an imperative, given minimum import requirements of the economy. Here, we take up the issue of whether there are trade-offs between exports and investment.

As Findlay's model shows,the above arguments also imply that exports are a drain on the economy while imports support it. Besides growth depends on the choice between export and investment. There are, however, serious problems with the interpretation of the model. The implicit assumption of full employment of capital and labour means that at a given level of employment there is substitutability between home and foreign demand. In fact, given under- and unemployment and the slower rate of growth which is also caused by inadequate demand in a developing economy considering the Keynesian framework, foreign demand for exports may supplement home demand[16]. It may be argued that capital does become a constraint in a developing economy, but if the production structure supporting foreign demand is labour-intensive, exports reduce this constraint. The model also does not consider the positive side of interdependence among growth, investment and exports. Exports in the above interpretation are not seen as a means of supporting imports but a competition for investment, which is financed by savings plus the difference between imports and

exports. In other words, investment plus exports is equal to savings plus imports. The model does not allow credit for imported capital goods as a part of exports and their contribution to capital accumulation, as implicitly it is assumed that investment has no import component.

In another model, which assumes that investment does have an import component Findlay found that capital stock, and hence income, grows asymptotically at a rate which is also the exogenously determined growth rate of exports. Exports are then no longer a drain on the economy. The rate of savings, which does not appear explicitly can be more or less than the "warranted" rate in the Harrod-Domar framework of growth[17]. If it is lower, savings become a constraint on growth. We then have the problem of a savings gap. If the rate of saving is higher than the required rate, the growth rate of exports should increase and/or "m" should decline. We then have a foreign exchange gap. It is through two gaps that we can explain the problems of the developing economies explicitly. But two gaps are not explicit in the model, as indicated in the relevant economic literature. Notably Chenery and Strout, who developed the theory further in an attempt to provide a rationale for foreign aid in terms of its role in filling the foreign exchange gap.

2.3. Exports, Balance of Payments and Growth

Arguments in the context of application of Keynesian employment theory are relevant here. One of the factors which prevent Keynesian policies from being implemented is that the balance of payments imposes a constraint on demand. As long as exports obviate this constraint, they may be considered significant in accelerating total demand and thus growth of income. This is amply

illustrated if certain essential items of consumption for a large part of a country's population need to be imported. This can be done through foreign exchange earnings by exports. According to Thirlwall, compared to the imbalance in gap between investment and full employment saving, the government's power to rectify the imbalance between export earnings and full employment imports is more limited[18]. He states that the ability to export in order to pay for full employment imports affects the level of employment and growth more pervasively. It is found by Thirlwall, as argued by Kaldor (1975), that the Harrod trade multiplier works in many countries and that differences in the export performance lead to differences in the growth rate[19]. The point to emphasise is that, in the long-run, efforts to increase exports to pay for planned imports are crucial to overcoming the foreign trade gap, which may be "much more difficult and stubborn".

Assuming balance of payment equilibrium must be maintained, Thirlwall aimed to test the hypothesis that a country's long-run growth rate will be determined by the ratio of its rate of growth in imports to its rate of growth in exports and to its income elasticity of demand for imports. Considering two sets of international data on the growth of output and exports, one for the period 1951 to 1976 and the other from a different source for the period 1951 to 1973 (and taking Houthakker and Magee's estimates of income elasticity of demand for imports for 1951-66, though these are known to be on the low side), he established from the growth experience of many countries that except when the balance of payments equilibrium growth rate exceeds the maximum feasible growth capacity, the rate of growth of a country will approximately equal the ratio of its rate of growth in imports to its income elasticity of demand for imports. The policy

conclusion simply followes from this: "If the balance of payments equilibrium growth rate can be raised by making exports more attractive and by reducing the income elasticity of demand for imports, demand can be expanded without producing balance of payments difficulties, and, within limits, demand can generate its own supply by encouraging investment, absorbing underemployment, raising productivity growth and so on".

The composition and characteristics of goods produced are most important to the extent they determine both the income and price elasticity of demand for the country's exports and the country's propensity to import. If the goods produced are relatively unattractive both at home and abroad, not only is the growth rate of exports likely to be slow but income elasticity of demand for imports may also be relatively high. While there may be many external reasons behind an overall slow growth in demand for world exports, the above findings are relevant in explaining why growth rates differ among developing economies.

In an expanding developing economy, ex-ante imports are likely to grow faster than exports. There are several reasons for this. First, technological advances are embodied in capital goods, new materials and processes, and for these the cheapest source, in the short run, is imports; and since in a growing economy investments are the fastest growth sector, demand for these imports will also increase at a more rapid pace. Second, there are various production lags in an economy which can create the problem of "disproportionality" in domestic production. This might create shortages in the economy which once again can be speedily met through imports. Third, in certain stages of development, when investment demand is greater than gross domestic savings, demand for foreign savings will also grow. (Admittedly, this also reflects the first two factors). Taken together this means that the income elasticity of

demand for imports will tend to be rather high, and the import financing capability will have an important bearing on the growth rate that an economy can sustain. In the short run, additional imports can be financed through external borrowing. However, given de nature of international capital markets, the supply of such foreign funds will depend on the growth rate of exports, especially in the case of funds obtained through foreign borrowing.

Dicussion so far assumes that in the given analytical framework of a developing economy, the role of export growth cannot be overemphasised. It removes the constraints of low domestic savings and foreign exchange, and enables imports of capital goods. All these factors facilitate accumulation. Besides, if properly planned in conjunction with import management, growing exports lead to growth effects via technological changes, greater utilisation of abundant resources and increasing efficiency. "Export orientation" also enables the earlier transformation of primary products into more highly processed items[20)]

2.4. Exports and Dependency

Another set of arguments opposing an export oriented growth strategy is found in the models based on certain assumptions, viz., inelastic world demand, low value added in production, high cost of promotion, and the inevitable capitalist organisation of the production system[21)]. What has been argued is that export oriented growth strategies are "self-defeating" and amount to an escape route. These strategies are said to result in a disproportionate increase in the growth rate of the export sector. This is bound to aggravate the problem of underutilised capacity, since the partial stagnation of the economy in the wage-goods sector fails to provide the impetus for a smooth process of growth in

the rest of the economy. These arguments may not necessarily be applicable to manufacturing exports (the subject of the present report) especially if suitable policy options are duly considered with respect to choice of technology and enterprises, and in regard to world market strategies - particularly given marginal shares in world manufactures trade -. Thus, investment and promotion of capacities in areas of comparative advantage may not only help overcome demand deficiency and bring in the foreign exchange necessary to import machinery and technology, but also may directly contribute to increased employment generation and overall growth. Furthermore they might be of help in developing competitive entrepreneurship and promote efficiency in the domestic economic system.

Yet another set of arguments used in making a case against exports has to do with the fact that a strategy of promoting exports for higher rate of growth may lead to dependency on the rest of the world. This may not be an appropriate strategy, given world demand conditions, which may get worse due to the observed structural shifts which disfavor developing countries. Thus Bhaduri has recently argued against enthusiasm regarding promotion of Indian exports[22]. His arguments were provoked by the recently prevalent opinion in India described as "favouring export promotion strategy virtually at any cost", accompanied by liberalisation of imports and foreign capital inflows which bring with them up-to-date technology and marketing skills. He believes that such a strategy "may ultimately result in a pattern of dependent growth".

Without going into the question of "at any cost" we take up Bhaduri's basic dependency argument. Originally, Wasow discussing the problems of dependent growth in a capital importing economy and taking the case of Puerto Rico, in an extended Harrod-Domar framework, has argued that in the long-run "either the savings

constraint will be binding and dependency will steadily diminish, or the rate of capital inflow will be binding and the dependency ratio will increase to a steady state level"[23]. He defined dependency of an economy in terms of the ratio of the net capital inflow to investment. The economy converges to a non-zero level of dependence when gf $s_1 v$, where gf represents growth in net inflow of foreign capital, S_1 propensity to save (domestic); and v the output-capital ratio.

Wasow makes inter alia the following restrictive assumptions·

I) constant capital-output ratio, implying static technological parameters and no possibility of change in relative productivity of labour/capital;

II) savings as an increasing function of income, but a decreasing function of net capital inflow, implying that foreign savings substitute for domestic savings.

Bhaduri also defines independent growth (or "self-reliance") in terms of the share of net foreign capital inflow in total domestic investment (x) within limits. He captures the nature of "export promotion strategy" by specifying export earnings as an increasing function of domestic production as well as of the level of foreign capital inflow.

Granting the assumption that inflow of foreign private capital brings in up-to-date technology and/or marketing skills which help to increase exports through more effective penetration of the international market, and granting the assumption that a successful export promotion means that "more is exported than imported out of every increment in domestic product", Bhaduri tries to prove through a formal model that the proportional growth rate of net foreign capital inflow, "gf" decreases to minus infinity as "x" tends to zero, while "gf" asymptotically approaches its maximum value

of i : (i+f) as "x" approaches (plus) infinity. (Here i stands for interest rate and f for $\delta H/\delta F$, where H is a functional operator in the export function and export earnings are an increasing function of domestic product as well as of the level of foreign capital inflow).

What Bhaduri attempts to prove is that liberalisation of imports will maintain a value of marginal propensity to import which is high enough for the difference between marginal propensity to export and import to be a rather small positive fraction, even in cases of successful export promotion. He argues that "in spite of successful export promotion, the economy may gradually settle down to a situation of constant dependence on net inflow of foreign capital to finance its investment. Given a relatively high initial level of dependence, the export promotion strategy may result in permanent dependence on foreign capital inflow".

There are several problems with the above formulation. First, foreign inflow through any form of borrowing can be sustained only if increases in export are sufficient to service as well as repay the debt. It is difficult to assume an unlimited supply of foreign savings, given the nature of the international capital market. Further, the inital level of foreign capital inflow in relation to domestic investment in a country may not be "reasonably high" (as Bhaduri puts it) like in India. Moreover, with the sustained growth in foreign borrowing the interest rate will not be constant. We find that proper assessment of initial conditions and parameters regarding capital markets is highly crucial, as, in practice, they determine the feasibility of the model.

2.5. Parametric Configuration

This configuration of parametric values Bhaduri considers, and on which his conclusions hinge, resemble

the present Indian economy. These include (1) an incremental capital-output ratio of 4 : 1; (2) an average rate of interest of 0,1; (3) a marginal propensity to export and import of, respectively 0,18 and 0,14 of GDP; (4) a marginal positive impact of foreign capital inflow on export (0,05); and (5) a marginal propensity to save (0,20).

To the extent this configuration is static and relevant only in the short-run, it is doubtful if Bhaduri's conclusions hold. Particularly if the capital output ratio and savings have, in fact, been changing. The assumption of linearity implied by the savings and imports ratios is highly questionable in a developing country. For example, the rate of savings in India rose from about 14 percent in 1955-56 to about 23-24 percent by the end of the seventies. Marginal propensity to export is noted to be higher for manufactures than for exports as a whole. Besides composition of imports is ignored. Given trade policy planning, imports can be so planned as to support national development objectives. The above configuration also totally ignores the possibility of import planning in conjunction with export promotion. Such a possibility has also been demonstrated by the so-called export-led growth economies of Taiwan and South Korea[24]. Thus the rate of growth of imports may not necessarily rise with increased output and exports.

Further, Bhaduri's analysis totally ignores the macro economic growth effects of increases in a sector's exports, which are reflected in backward and forward linkage effects; favourable (given the country's factor endowment) factor intensity, value added to production, wages to value added and other ratios for the linked industries; and final demand linkage effect via income generation.

Yet another set of arguments against the role of

of i : (i+f) as "x" approaches (plus) infinity. (Here i stands for interest rate and f for $\delta H/\delta F$, where H is a functional operator in the export function and export earnings are an increasing function of domestic product as well as of the level of foreign capital inflow).

What Bhaduri attempts to prove is that liberalisation of imports will maintain a value of marginal propensity to import which is high enough for the difference between marginal propensity to export and import to be a rather small positive fraction, even in cases of successful export promotion. He argues that "in spite of successful export promotion, the economy may gradually settle down to a situation of constant dependence on net inflow of foreign capital to finance its investment. Given a relatively high initial level of dependence, the export promotion strategy may result in permanent dependence on foreign capital inflow".

There are several problems with the above formulation. First, foreign inflow through any form of borrowing can be sustained only if increases in export are sufficient to service as well as repay the debt. It is difficult to assume an unlimited supply of foreign savings, given the nature of the international capital market. Further, the inital level of foreign capital inflow in relation to domestic investment in a country may not be "reasonably high" (as Bhaduri puts it) like in India. Moreover, with the sustained growth in foreign borrowing the interest rate will not be constant. We find that proper assessment of initial conditions and parameters regarding capital markets is highly crucial, as, in practice, they determine the feasibility of the model.

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Yet another set of arguments against the role of

exports in development stems from the point of view of inequalities and undesirable consumption shifts[25]. In fact, the question of equity and consumption shifts is related to overall production and import planning and also to the income accruel process. The ultimate effect has much to do with the stage of development and the prevailing socio-economic conditions, among which foreign trade, at least in a large economy, is marginal and thus may be used, if at all, only as a partial explanation for inequalities.

In this section, we have attempted to examine the major propositions put forward in the literature regarding the role of exports in a country's development. The case for growth in manufacturing exports stems not only from the balance of payments support provided by export earnings, but also from their macro-dynamic effects on a developing country, viz. increased total savings and capital formulation, technological growth, higher income growth and the possibility of sustaining a higher level of imports of capital goods for industrialisation. They also lead to greater utilisation of abundant factors and to higher efficiency, at least in export sectors. It has been argued that by mere export promotion a country is not led to the situation of dependency or inequality. Provided that favourable macro economic effects are maximised through appropriate policies. We will discuss these effects in relation to the Indian economy in section 5.

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3. PLANNING AND POLICY IN INDIA

This section discusses India's past planning and policy experience, to highlight the background of India's development model during the six Five Year Plans thus far formulated, in relation to foreign trade in general and exports in particular[1]. The contribution of manufactures exports to incremental output and value added of manufacturing sectors during the seventies and early eighties is analysed to highlight the emerging relationship between exports and changes in manufacturing output and GDP.

3.1. The Second Plan: Strategy and Exports

In the early plans, since production planning preceded trade planning in formulation of the development strategy, exports and imports were dealt with more as a balancing factor. The Second Plan (1956-61) assigned a crucial role to industrial expansion as a means of import substitution. Exports were not considered within the Plan as a desirable line of investment, because of the pressure of domestic demand for various industrial products, generally prevalent "elasticity pessimism" about the world demand for exports of traditional items, and the observed near stagnation in growth of exports in the pre-Plan period. The planners, of course, did not altogether ignore the sector.

The Second Plan noted that "in the case of certain industries where this country already has well-established export markets, e.g. cotton and jute textiles, some firm basis exists for formulating export targets over the next five years. But in other cases export targets can be little more than guesses or expressions of hope". The Second Plan further rightly anticipated that "it is only after industrialisation has proceeded some way that increased production will

be reflected in larger export earnings". Thus it was realised that, for future major export increases which could be anticipated in manufactures, a base had first to be created in the initial period. In particular, increased production of steel was to enable the competitiveness of manufactures exports, based on low labour costs. Thus, the future role of industrial exports was very much kept in view, and the Second Plan aimed to create the wherewithal for this.

It was noted in the Third Plan (1961-66) that "one of the main drawbacks in the past has been that the programme for exports has not been regarded as an integral part of the country's development efforts under the Five Year Plan". This had much to do with well-known and widely documented emphasis on import substitution rather than export promotion in the strategy of industrialisation clearly indicated by the Second Plan, which was based on the Mahalnobis model. A study of the Mahalanobis model has shown that there was, however greater scope for expansion as well as diversification of exports even in the given framework [2]. According to Chakravarty the assumption of stagnant export earnings in the Mahalanobis model and the Second Plan was not a matter of logic but, "to a large extent, a question of an assessment of empirical possibilities and also of the utility function that the planners may have regarded as relevant in the Indian context" (emphasis added)[3].

The level of total exports in 1960-61, the end-year of the Second Plan, was little over Rs 660 crore at current prices. This meant that, at 1955-56 prices, the increase was very little and well below the target level. The total earnings, thus stagnant, fell short of the increasing requirements for imports corresponding to industrial development, leading to the foreign exchange crisis of 1957-58. While the gap in the first two plans could be financed largely by a drawing down

of sterling balances accumulated in the pre-independence period, this crisis meant increased dependence on external aid.

A detailed study in 1962 on the export-development nexus pointed out clearly the need to analyse the problems of expansion of domestic demand for exportable goods and the "rebound effect" (i.e. diversion of home demand for imported goods)[4]. Datta et al. page 23, observed:

> "a deliberate export expansion programme - unless adopted through state trading of the variety which takes no account of costs and burdens - takes time to get started, takes time to get into effective operation and to produce results and is, above all, subject to uncertainties. It is not quite unnatural that a developing country like India would be somewhat vascillating with regard to the place of exports in its programme of action and with regard to the nature of its export policy". (emphasis added)

However, a strong case was made out by certain observers for recognition in planning of "investment in exports and its serious consideration as an investment alternative for discounting the pessimism regarding world demand and for a belief that India lost its share of world exports due to domestic policies[5]. The stagnancy in exports was explained by sluggish world demand as well and it was argued that the relative stagnation was due to supply factors and lack of competitiveness[6]. Bhagwati and Desai considered this a case of "pessimistic neglect"[7]. On balance, it may be nearer to the truth to say that the country's potential for export growth was not fully exploited during the fifties. Increasing imbalance of payments and dependence of imports on aid meant further intensifying import substitution and some recognition of the

financing role of exports. If certain policy measures had been taken in time, exports could have recorded some growth. However we agree with Chakravarty's observation in 1973: "it is difficult to sustain the argument that the extra growth of production secured in this way could have spared the economy from the necessity to embark on a programme of importsubstitution in the so-called core sectors of the economy"[3)]

3.2. The Third Plan: Export Targets and Measures

While the Third Plan (1961-66) reflected some preference given to industrial projects which contributed to exports, growth of exports was to come from "more intensive utilisation of plant facilities". The planners regarded realisation of the agricultural and industrial targets as the most important condition for fulfilling the export targets. The Plan aimed at achieving an export target of Rs 3700-3800 crore within the five year period of the Plan. It proposed to take the following measures, which indicate the general policy orientation at that time (Third Plan, 1961, p.141):

1) creating the necessary climate in the country for the export effort;
2) restraining domestic demand and enlarging the surpluses available for export;
3) diversification of exports and the development of new export markets, particularly in the developing countries;
4) increase in trade with the USSR and the countries of Eastern Europe; and
5) to support the role of promotion councils, state trading, and cooperative organizations and private export houses.

However, in the sectors where export prospects were bright, export possiblilities were not allowed for in

planning additional capacity for the Third Plan period [8]. It is noteworthy to state that according to GATT statistics world trade (particularly manufactures) increased at the rate of over 10 per cent in the 1958-73 period.

3.2.1. The issue of comparative advantage

What were actually the export lines in which India had a potential comparative advantage? Lakdawala felt that this question needed to be answered, as any significant export expansion was linked to an increase in production and investment[9]. This was also recognised in the First Plan but not acted upon till 1964. Thus the question of efficiency in exports was raised by the observers, though no attempt was made to quantify the comparative advantage in efficiency in the sense of partial or general equilibrium. Some studies were made to specify labour and capital intensity of certain sectors and products.

It is remarkable that exports increased substantially, with value rising from Rs 660 crore to Rs 805 crore over the Third Plan period (i.e. by more than 20 percent) and quantity rising even faster by 24 percent.

3.2.2. 1966 Devaluation, Recession and Exports

The planning interregnum from 1966-67 to 1968-69, which followed the devaluation of the rupee in June 1966 and the drought during the year, changed the situation in the country so much that the Fourth Plan was postponed. The devaluation of the rupee was intended to rationalise the export incentive system and correct the exchange rate of the overvalued rupee. This in order to induce the growth of exports. The growth of exports (pre-devaluation and taken in terms of volume)

turned out to be negative during 1966-67. However it has been observed and recognised in the Fourth Plan, 1969-74, that the increase in exports after 1967, notably in non-traditional items such as enineering goods, was due, by and large, to the recession in the Indian economy[10].

3.3. The Fourth Plan: "Consistency" and Exports

The Fourth Plan (1969-74) aimed at significant export expansion, targeting an annual growth of export earnings of 7 percent over a period of ten to twelve years. Besides it postulated that nearly two-thirds of the long-range projected increase in commodity exports would be obtained by expansion of trade in minerals (particularly iron ore) and manufactures. Thus, the plan explicitly recognised the role of industrial exports in development of the sector. The export targets for specific commodities formed, through the export vector, a part of the final demand vector of the inter-industry model. Export possibilities were tc reflect fully in the input-output framework of the economy. However, "consistency", rather than "optimality" or "efficiency" remained the mainstay of foreign trade planning, with continuing strong emphasis on import substitution

An explicit attempt nonetheless was made to integrate export growth in the plan, especially for the industrial sector. The Fourth Plan stated that "there is a need to keep the requirements of exports constantly in view in licensing additional capacity and in permitting diversification of capacity". It noted that the institutional framework for export promotion was "sound" and that it had contributed to the development of exports. The Plan anticipated that exports from public sector enterprises would increase progressively in view of the fact that many "commanding heights" of

the economy had already been brought within the public sector and that an increasing role was being played by state trading agencies like the State Trading Corporation (STC) and the Minerals and Metals Trading Corporation (MMTC).

3.3.1. Export Policy Resolution 1970

The Export Policy Resolution passed by the Indian Parliament in 1970 underlined the "crucial" role of export expansion for financing the Plan. To achieve self-reliance, and to reduce dependence on external assistance, it stressed that export earnings needed to be expanded at a fast pace. It reiterated the need to achieve the Fourth Plan target of 7 percent growth per annum. Export oriented production, the Resolution stated, should be developed with the aim of: (1) promoting economic efficiency; (2) diversifying production; and (3) better utilisation of skilled and unskilled manpower. This Resolution emphasised, inter alia, the need for intensifying commercial and industrial cooperation with the Soviet Union and other socialist countries through negotiating medium-term agreements.

The Guidelines for Industries, issued occasionally by the Government ,reflected at this time the importance given to manufacturing exports by the Resolution. For example, Guidelines for Industries, 1973-74 pointed out:

> "Industrial capacity has to be consciously and specifically built up, particularly in respect to items where the economy has comparative advantage and when favourable trends are emerging in the international markets. Government will therefore, take into consideration the export objectives and the emerging international demands while deciding

> on the grant of industrial licences, and capacities may be built up so als to provide sufficient elasticity to facilitate the export efforts, not merely at the percent of the present export limits but taking into account the projected levels of exports also".

Export earnings, at current prices, at the end of the Fourth Plan aggregated to Rs 2523 crore, compared to Rs 1358 crore in the base year 1968-69. There was thus an annual compounded growth rate of 13,2 percent. The real growth worked out to be less than 5 percent, as the unit value index showed a rise of 48 percent over the Plan period. This meant that the plan performance fell short of the 7 percent export growth target. The shortfall can partly be explained by shortfalls in the output targets of the traded sectors. The planners recognised that the growth of exports after 1973, particularly during 1976 to 1980, was brought about by international inflation (the boom in agricultural raw materials and metals reflected in a rapid rise in their world wholesale prices) and by certain non-recurring factors, notably exports of food grains to Bangladesh in 1972-73. It may be added that the real growth of about 5 percent observed during the period of the plan was still better than in the past. The renewed emphasis and orientation to exports provided by the government was one of the factors contributing to this imporved performance. The Draft Plan (1974-79) called for a review of policy planning for exports: "The policy of export promotion has to be reviewed both from the angle of generating sufficient exportable surpluses as well as from the point of view of the competitiveness of our export products". (emphasis added)

3.4. The Fifth Plan: Increasing Emphasis on Manufactures Exports

The Draft Fifth Plan (1974) projected export earnings for major items up to 1985-86, assuming an annual compounded growth-rate of 7,6 percent up to 1983-84, and an annual compounded growth rate of 7,0 percent for 1983-84 to 1985-86. As much as threefourths of expansion in earnings, was expected from labour-intensive manufactures, viz. fish and fish products, cotton textiles, leather and leather manufactures, engineering goods, iron and steel, handicrafts, and chemicals and allied products. The percentage works out to more than 90 in the case of 1983-84 projections.

The Draft Fifth Plan was formulated in terms of the 1972-73 prices and in the context of the economic situation in the first half of the fiscal year 1973-74. It was later revised, because inflationary pressures gathered momentum; the balance of payments position worsened, owing to an increase in the price of petroleum, and other materials, besides the country had to resort to large imports of food grains and other essential wage goods. The final Fifth Plan, formulated at 1974-75 prices for 1974-75 and 1975-76 prices for the next three years, raised the target rate for export growth to 8,5 percent during the five year period as a whole, because of the higher growth rate already achieved during the first two years of the Plan.

3.4.1. "Leading Sectors" in the Fifth Plan

The strategy in the final Fifth Plan was to strengthen the "leading" sectors of growth, namely engineering goods, iron and steel, ready-made garments, leather and leather manufactures, and marine products. Here a rapid rise in world exports was assumed. Areas were identified as "leading" in the sense that an

increasing share of incremental exports was assumed to come from these products or product groups.

The emphasis of the Fifth Plan was on exploiting both supply and demand elasticities. It is, however, not clear that the anticipated increase in exports was accounted for in production capacities planned during the period. On a policy plan, it emphasised that "exports which are capable of competing without subsidy will have to be given preference and capacity for their production increased. The thrust of economic policy, according to the Plan, should be to generate additional net earnings of foreign exchange, a desideratum not always satisfied". (Draft Fifth Plan, 1974, p18).

It is, however, difficult to state that in the Fifth Plan emphasis shifted away from import substitution. The planners were faced with a highly favourable balance of payments and swelling foreign exchange reserves during 1974-75 to 1978-79, on account of the rapid growth in exports and smaller trade deficit up to 1977-78 (including a surplus during 1976-77), and a significantly rising level of net receipts from invisibles even beyond 1978-79. There was a surplus balance of payments during 1976-77 and 1977-78, as shown in table 1. But since then the situation has again changed.

Exports (DGCI&S) increased at the annual compounded rate of 17,8 percent by 1978-79 (using 1973-74 as a base year). Remarkably, in real terms, the annual compounded growth rate of exports during the period of the Fifth Plan, 1974-1975 to 1978-79, works out to be over 7 percent, as the volume index (1968-69 =100) of exports increased to 180 by 1978-79 from 125 in the base year of the Plan. This is despite the fact that the index declined by 3.4. percent during 1977-78.

Table 1.

The Indian balance of payment 1973-82

(Rs in crore at current prices)

Year	Exports-DGCI&S	Exports RBI	Trade Balance RBI-ES	Invisibles (net) RBI-ES	Balance of payments RBI-ES	Foreign Exchange Reserves*
1	2	3	4	5	6	7
Fifth Plan						
1973-74 (Base year)	2523.4	2350.7	(-) 378.6	(-)76.4	(-) 455.0	581.0
1974-75	3328.8	3179.7	(-) 977.2	217.0	(-) 760.6	610.5
1975-76	4042.8	4177.6	(-) 566.5	510.0	(-) 56.3	1491.7
1976-77	5142.3	5133.1	316.2	824.0	1145.5	2863.0
1977-78	5407.9	5433.5	(-) 107.5	1422.0	1319.9	4499.8
1978-79	5726.3	5554.9	(-)1842.6	1571.4	(-) 244.8	5219.9
Sixth Plan						
1979-80 (Base year)	6458.8	6201.4	(-)3374.3	2603.2	(-) 765.9	5163.7
1980-81	6710.7	6576.4	(-)5697.2	3748.6	(-)2218.6	4822.1
1981-82	7805.9	7765.5	(-)6121.0	3303.1	(-)2817.9	3354.5

* Excluding gold and SDRs, year end.

Source: ES = Economic Survey
RBI = Reserve Bank of India
DGCI&S = Directorate General of Commercial Intelligence & Statistics

3.5. Performance in the Seventies: Increasing "Openness"

Exports in the seventies increased in real terms at the annual compounded rate of more than 7 percent. The rate of growth was, however, somewhat slower during 1973-74 compared to 1980-81 (6,7 percent), and much slower (3,4 percent) during 1976-77 compared to 1980-81.

Table 2

India's Merchandise Exports & Imports - Share in Gross Domestic Product (GDP) of Tradeables Sectors (Primary and Manufacturing Sectors), 1970-71 to 1980-81

(Rs crore at 1970-71 prices)

Year	Merchandise Exports (E)	Merchandise Imports (M)	GDP(Y)	GDP from Tradeables Sectors (Y_T)	Percentage Share					
					E/Y	E/Y_T	M/Y	M/Y_T	$E+M/Y$	$E+M/Y_T$
1	2	3	4	5	6	7	8	9	10	11
1970-71	1535.2	1634.2	36736	23025	4.2	6.7	4.4	7.1	8.6	13.8
1971-72	1578.2	1961.8	37313	23091	4.2	6.8	5.3	8.5	9.5	15.3
1972-73	1741.0	1925.2	36910	22280	4.7	7.8	5.2	8.6	9.9	16.4
1973-74	1832.5	2141.6	38646	23756	4.7	7.7	5.6	9.0	10.3	16.7
1974-75	1928.6	1890.7	38979	23598	4.9	8.2	4.9	8.0	9.8	16.2
1975-76	2175.9	1880.4	42662	25957	5.1	8.4	4.4	7.2	9.5	15.6
1976-77	2595.8	1825.1	42986	25264	6.0	10.3	4.3	7.2	10.3	17.5
1977-78	2429.4	2417.8	46808	27891	5.2	8.7	5.2	8.7	10.4	17.4
1978-79	2593.4	2620.9	49426	29250	5.2	8.9	5.3	9.0	10.5	17.9
1979-80	2901.5	2539.6	46960	26472	6.2	11.0	5.4	9.6	11.6	20.6
1980-81	2800.8	3705.3	50682	28973	5.5	9.7	7.3	12.8	12.8	22.5
Trend (Annual Growth Rate*)(%)/average										
1970-71 to 1980-81	7.1	5.9	3.6	2.7	5.3	8.6	5.6	8.7	10.3	17.3
1973-74 to 1980-81	6.7	8.2	4.1	2.9	5.7	9.1	5.8	8.9	10.7	18.0
1976-77 to 1980-81	3.4	15.9	3.4	2.2	6.2	9.7	6.3	9.5	11.1	19.2

Table 2 (ctd)

* Antilog of the 'b' coefficient (untested) of regression (with respect to time) minus one.

Note :An appropriate denominator, of course, is value of output. National accounts which cover these statistics, however, give gross output data only for the registerd industries. There are also no firm data on value added/output for the various sectors/industries to enable estimates of output from unorganised industries using value added data given in the national accounts. To the extent intermediate inputs have to be deducted anyway from the value of output, in the ultimate analysis, value added (as denominator) and ratio's may be acceptable.

Source: Colums 2 to 4: Ministry of Commerce - DGCI&S.
Column 5 : Ministry of Planning, Central Statistical Organisation, National Accounts Statistics, (Various Volumes).

In the seventies (see Table 2), the Indian economy showed definite signs of "economic openness"[11]. This in terms of increase in the share of trade in merchandise (E) as a part of the gross domestic product total and that of the tradeable sectors (Y_T), i.e. primary and manufacturing sectors[12]. Values of both the variables are taken at constant prices to show "openness" in material terms. The percentage share rose from 13,8 percent in 1970-71 to as high as 17,0 percent in 1976-77 and 22,5 percent during 1980-81, considering GDP of the trade goods sectors.

Table 3 shows the overall shares during the period of the seventies and its sub-periods.

We find from the above that by the end of the seventies, as much as about one-fifth of the gross domestic product of trade goods sectors was, in fact, traded. If we consider the values at current prices, this share works out to about onethird. A much higher percentage share of GDP is actually exposed to the international economy today, considering non-commodity flows and movement of human populations.

Table 3.
The increasing "openness" of the Indian economy

Period	Trend Growth Rates (%)[1]			Share (%) (average) in Y_T		
	Merchandise		GDP/value added (Y) from primary & mfg. sectors (Y_T)	E	M	E + M
	Exports (E)	Imports (M)				
1	2	3	4	5	6	7
1970-71 to 1980-81	7.1	5.9	2.7 (3.6)	8.6 (5.3)	8.7 (5.6)	17.3 (10.3)
1973-74 to 1980-81	6.7	8.2	2.9 (4.1)	9.1 (5.7)	8.9 (5.8)	18.0 (10.7)
1976-77 to 1980-81	3.4	15.9	2.2 (3.4)	9.7 (6.2)	9.5 (6.3)	19.2 (11.1)

Notes: Parentheses show values with respect to total GDP

[1] Antilog of the "b" coefficient (untested) of regression (with respect to time) minus one.

Source: Own calculations

3.5.1. Contribution of Manufactures Exports in the Seventies

It is noteworthy that diversification both by sector and within an industry continued to be the major characteristic of India's exports in the review period, and the share of manufactures continued to rise[13)].

Table 4 shows that nearly three-fourths of the increase in total exports during the seventies was contributed by manufactures.

Table 4.

Share of manufactures exports in total exports

	Total Exports *	Manufactures Exports*	% share
1970-71	1535	705	45.9
1980-81	2801	1622	57.9
Increase	1266	917	72,4

Note * in Rs crore at 1970-71 prices

Source: Own calculations

3.5.2. Manufactures Exports and Value Added/Output

The role of manufactures exports (Em) in the development of the country can be examined on the basis of growth relative to rise in manufacturing GDP (value added, Ym) (both at constant prices)[A], increase in share of manufactures exports in manufacturing output[B], their incremental ratio[C], and also on the basis of growth of manufactures exports with respect to manufacturing output (Xm)[D] (both at constant prices). Note 14 presents the calculation formulas. Such a role along with other factors, notably slower public investment is generally not fully recognised in explaining growth and stagnation in certain recently investigated industrial sectors[15)].

It can be seen from table 5 that during 1971-72 to 1973-74, and during 1975-76 and 1976-77, apparent elasticity of growth in manufactures exports with respect to manufacturing GDP (both at constant prices) far exceeded unity.

Table 6

Growth of India's Manufactures Exports and Output

(Rs crore at 1970-71 prices)

Year	Manufactures Exports			Manufactures Output			Apparent elasticity Col. (3) Col. (6)	% Share Col. (2) Col. (5)	ΔEm/ΔXm in percentage Col. (4) Col. (7)
	Value (Em)	% variation	Increment (ΔEm)	Value (Xm)	% variation	Increment (ΔXm)			
1	2	3	4	5	6	7	8	9	10
1970-71	705	-	-	18854	-	-	-	3.74	-
1971-72	788	11.77	83	19135	1.49	281	7.90	4.11	29.5
1972-73	844	7.11	56	19235	0.52	100	13.67	4,39	56.0
1973-74	957	13.39	113	19334	0.83	159	16.13	4.95	71.1
1974-75	976	1.99	19	21280	9.72	1886	0.20	4.59	1.0
1975-76	1058	8.40	82	23521	10.53	2241	0.80	4.50	3.7
1976-77	1537	45.27	479	25647	9.04	2126	5.01	5.99	22.5
1977-78	1623	5.60	86	28731	12.06	3092	0.46	5.65	2.8
1978-79	1668	2.77	45	32213	12.09	3474	0.23	5.18	1.3
1979-80	1582	(-) 5.16	(-) 86	31457	(-) 2.35	(-) 756	2.20	5.03	(-)
1980-81	1622	2.53	40	30102	(-) 4.31	(-)1355	(-)	5.39	(+)
Trend Growth Rate * (%)	-	10.02	-	-	6.42	-	1.56	4.87	22.1

* Antilog of the 'b' coefficient (untested) of regression (with respect to time) minus one.

Table 5

India: Growth of Manufactures Exports and Manufacturing GDP, 1970-71 to 1980-81

(Rs crore at 1970-71 prices)

Year	Manufacturing Exports		Manufacturing GDP		Apparent Elasticity
	Value (Em)	Percent variation	Value (Ym)	Percent variation	col. (3)/ col. (5)
1	2	3	4	5	6
1970-71	705	-	5223	-	-
1971-72	788	11.77	5367	2.76	4.26
1972-73	844	7.11	5590	4.16	1.71
1973-74	957	13.39	5861	4.85	2.76
1974-75	976	1.99	5999	2.35	0.85
1975-76	1058	8.40	6128	2.15	3.91
1976-77	1537	45.27	6668	8.81	5.14
1977-78	1623	5.60	7108	6.60	0.85
1978-79	1668	2.77	7895	11.07	0.25
1979-80	1582	(-) 5.16	7753	(-) 1.80	-
1980-81	1622	2.53	7974	2.85	0.89
Trend Growth Rate* (%)	-	10.02	-	4.76	2.11

* Antilog of the 'b' coefficient (untested) of regression (with respect to time) minus one.

Source: Column 2: Based on data and unit value indices available from DGCI&S, Ministry of Commerce

Column 4: C.S.O., National Accounts Statistics

Table 6 (ctd)

* Antilog of the 'b' coefficient (untested) of regression (with respect to time) minus one.

Column 10 (+): Sign means negative value of denominator but positive value of numerator
(-): Sign means decline in exports as well as in value added.

Source: Column 2: Based on data and unit value indices available from Ministry of Commerce, DGCI&S.
Column 5: Estimates based on value added and output figures (disaggregated tables) given in National Accounts Statistics (CSO); output for unregistered sectors worked out using the value added/output ratios based on the data provided in the Report on Census of Small Scale Industrial Units, Vol. I & II of Government of India, Development Commissioner, Small Scale Industries, Ministry of Industry, January 1977, p.56.
Value of output deflated by wholesale price index number of manufactures.

Table 6 shows that the share of manufactures exports in manufactures output (both at 1970-71 prices) increased substantially over the period, from just 3,74 percent in 1970-71 to about 6 percent in 1976-77. Subsequently this share declined but remained above 5 percent. The incremental ratio of manufactures exports and output (as also indicated by apparent elasticity) shown in Table 6 reveals that exports contributed substantially to the growth of output during 1971-72 to 1973-74 and during 1976-77. Manufacturing output declined during 1980-81 (mainly in the unregistered sector) but exports continued to rise. Thus the role of manufactures exports in increasing output due to effective demand abroad is indicated.

3.5.3. Contribution by sector

In this paragraph we study the emerging association between the growth of manufacturing production and exports by sector in the period of the seventies. An attempt has been made to analyse at sectoral level the relative growth of exports and value added (both at 1970-71 prices) on the one hand, and incremental ratios of exports to output on the other.

Table 7 shows relative growth estimates. It is indicated that in certain sectors apparent elasticity (ratio of growth rates) of exports with respect to value added was substantially high for the period of the seventies as a whole. The elasticity was more than two in the case of wood, wood products and furniture; miscellaneous manufactures including gems and jewellery and certain handicrafts; food products; transport equipment and parts; metal products and parts; basic metal and alloy industries; non-electrical machinery and beverages.

Elasticity between one and two was observed for electrical machinery; rubber; plastic and petroleum products. For textiles, (including mill-made and handloom, cotton and other, fabrics and carpets, etc.), elasticity was less than one, working out to 0.87 percent for the review period. In sectors like leather and leather products and paper and paper products, performance shows that growth of exports lagged behind in comparison to value added. In the case of textiles and leather, primarily on account of the shrinking market abroad in the later period (i.e. 1979-80 and 1980-81), explained by recession in the industrialised countries and increased protectionism.

Table 7

Growth of Manufacturing Value Added and Exports by Sectors and Products (1970-71 Prices)

Product Groups	Annual Trend Growth Rate* (%) (1970-71 to 1980-81)		Apparent elasticity E_r/Y_r
	Value added from manufacturing (Y_r)	Exports of manufacturing products (E_r)	
1. Food products	4.35	27.71	6.37
2. Beverages, tobacco and tobacco products	5.34	11.88	2.22
3. Textiles[1]	5.98	5.18	0.87
4. Wood & Wood products, furniture and fixtures	1.00	10.29	10.29
5. Paper and paper products and printing, publishing and allied industries	4.10	(-)6.93	(-)
6. Leather and leather & fur products (except repair)	1.38	(-)1.09	(-)
7. Rubber, plastic, petroleum and coal products	4.38	7.13	1.63
8. Chemicals and chemical products (except petroleum and coal	6.56	13.32	2.03
9.Non-metallic mineral products	4.79	9.57	2.00
10. Basic metals and alloys industries	4.93	16.53	3.35
11. Engineering industries			
a. Metal products and parts	3.40	12.40	3.65
b. Machinery, machine tools & parts, except electrical machinery	6.47	16.29	2.52
c. Electrical machinery, apparatus and appliances	6.77	13.10	1.94
d. Transport equipment and parts	2.97	13.77	4.64
12. Miscellaneous manufactures[2]	2.36	22.06	9.35
13. Total	4.76	10.03	2.11

Table 7 (ctd)

* Antilog of the 'b' coefficient (untested) of regression (with respect to time) minus one.

[1] Including all fibre fabrics, readymade garments and other cotton manufactures.

[2] Includes professional, scientific measuring, and controlling instruments; photographic and optical goods; watches & clocks; jewellery & related articles; musical instruments; and other industries, n.e.c.

Source: Column 2: C.S.O., National Accounts Statistics.
Column 3: Export Statistics and unit value indices from DGCI&S, Ministry of Commerce.

Table 8

Incremental Manufactures Exports (ΔE) and Output (ΔX) of Selected Industries During the Seventies

(Rs crore at current prices)

Industry		1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
1		2	3	4	5	6	7	8	9	10	11
1. Food Products	ΔE	5	5	16	14	18	32	-	31	41	24
	ΔX	186	736	238	1182	809	293	-	225	783	428
2. Textiles[1]	ΔE	79	43	142	88	20	279	-	69	281	195
	ΔX	633	369	1189	1601	55	922	-	1589	1939	904
3. Leather, Leather & Fur Products	ΔE	16	85	-	-	57	71	-	82	166	-
	ΔX	43	117	-	-	65	186	-	222	379	-
4. Chemicals & Chemical Products	ΔE	1	5	15	43	-	25	6	31	50	28
	ΔX	230	233	413	1124	-	520	777	763	1219	1805
5. Basic Metal & Alloys Industries	ΔE	18	-	3	-	47	222	-	-	-	24
	ΔX	194	213	309	667	615	342	-	-	-	431
6. Engineering Industries	ΔE	-	19	61	155	57	1533	51	83	38	-
	ΔX	431	451	683	1422	756	1022	637	1364	2490	1873
7. Miscellaneous Industries[2]	ΔE	20	21	48	3	59	177	281	188	-	47
	ΔX	115	29	53	260	49	307	454	304	279	-
8. Total	ΔE	130	173	314	284	257	1024	188	408	330	173
	ΔX	2195	2417	3685	8813	4256	4662	6559	6542	9964	12580

[1] Including all fibre fabrics, readymade garments and other cotton manufactures.

[2] Includes professional, scientific measuring, and controlling instruments; photographic and optical goods; watches and clocks; jewellery and related articles; musical instruments; and other industries, n.e.c.

Source: Own calculations

Table 8 shows the extent to which incremental exports helped maintain the momentum of incremental manufacturing output in the country during the seventies. This is indicated by the notable performance (a ratio exceeding 10 percent) of manufactures, especially food products (during 1976-77 and 1979-80), textiles (1971-72 to 1973-74, 1976-77, 1979-80 and 1980-81), leather and leather products (1971-73, 1975-77, 1978-79 and 1979-80), engineering industries (1974-75 and 1976-77), and sophisticated industries including jewellery and various kinds of instruments, etc. (1971-72 to 1973-74, 1975-76 to 1978-79).

Table 9 gives the ratios in the seventies.

Table 9

Ratio of incremental export to incremental output

Products	Years	Ratio
Textiles	1976-77	30.0 %
	1980-81	21.6 %
Leather and leather products	1979-80	43.8 %
Metal and alloy products	1976-77	64.5 %
Engineering industries	1976-77	150.0 %
Miscellaneous industries (see note table 8)	1972-73	72.4 %
	1973-74	98.6 %
	1975-76	120.4 %
	1976-77	57.7 %
	1977-78	61.9 %
	1978-79	61.8 %

Source: Own calculations

It can be concluded from the above analysis that the higher output growth in the identified sectors was associated with higher export growth, at least in the periods specified above. The causation, however, is beset with a complex two-way effect. What may be noted is that in the growth structure of the Indian economy, the identified sectors are an important part of total manufacturing; thus this examination indicates the role of manufactures exports in Indian development. The high share of the small-scale sector in this output indicates the added significance of exports to industrial growth.

To state this is, however, far from saying that export production at this time began to lead the growth process of the Indian economy.

3.6. Exports in the Sixth Plan (1980-85)

In the eighties, the Sixth Plan (1980-85) has already reflected some change in perception and has indicated new requirements for higher export growth, plus broad guidelines for policy changes. The Sixth Plan deals with the export sector in support of the broad objectives of development planning in the country for the medium range, 1980-85, and the perspective plan period which extends through 1994-95. Compared to previous plans, the present five year plan assigns this sector a more active role in supporting resource mobilisation and attainment of self-reliance.

As the Technical Note of the Planning Commission in 1981 explains, the planning model used in preparing the development framework is "a hybrid of dynamic inter-temporal input-output models, with effective supply constraints"; foreign trade being one of the important constraints, and exports being exogenously projected. The objective of the development of the external sector in support of self-reliance is imposed via constraints

which, as Gupta explains elsewhere, means that the objective has "an infinite weight in the objective function until it is satisfied and a zero weight after it is satisfied"[16]. The given system, according to the Technical Note, is finally solved by giving alternative values to the key policy variables until the system is reduced to a state with only one degree of freedom.

Specifically, the aggregate trade constraint means that total imports must not exceed total foreign exchange availability (including withdrawal of reserves)[17].

Further, in the period of the perspective plan exports are treated as an important part of the demand side and, according to the Technical Note, demand is considered as the guiding indicator for resource allocation (as against a short-term view in which capacity sets the upper limit of growth and demand is made to adjust). In the discussion of alternatives for the postmedium-term two binding objectives, poverty reduction and constraints on production capacity, are maintained.

It may be noted that the objective of self-reliance is interpreted and measured cardinally (from the general ordinal guidelines, given by the National Development Council and the planning body in regard to the major long-term objectives of reduction in the level of poverty and achievement of a self-reliant society), i.e. stipulating a quantitative limit on foreign savings as a percentage of our export earnings and import requirements (through 1994-95) "regarded as a proxy for self-reliance". (Planning Commission, 1981). In this procedure, the implications are worked out for the model exercise, with import substitution and employment used as exogenous inputs.

3.7. Changing Perceptions on the Role of Exports

A question naturally arises on to whether the changed situation, though probably not accompanied by many socio-economic changes, led to a rethinking by India's planners and policy makers of the role of exports in the country's development model in the eighties.

Indeed, the changed perceptions are amply reflected. Not only in recent Indian economic reviews but also by the realisation in the Government of the possibility of achieving fast growth in export volume with an enlarged production base plus the balance of payments difficulties which have again emerged since 1979-80[18]. A committee was set up by the Government (1983) to cover the whole import-export policy and procedures. This has led to changed perceptions of the role of increasing exports, indicating, in fact a move towards export-oriented structural adjustment. This was clearly reflected in the Sixth Plan, 1980-85 which was finalised at the beginning of 1981. This Plan, unlike earlier ones, not only reiterated the need to increase exports, but also noted that the system of incentives and disincentives should be "neutral to the maximum extent possible concerning export promotion and import substitution" except in very special cases, and that any conflict among objectives be resolved in favour of exports. The Sixth Plan states "self reliance does not mean self sufficiency in all sectors of the economy. So long as the country is able to pay its way, it cannot be said to be dependent on others. The choice of the outputs to be produced domestically and those to be imported should then depend broadly on economic calculus and the long-term comparative advantage which the economy enjoys".

The Sixth Plan provides an example of strategy and policy formulation combining the objectives of import substitution and export promotion. These objectives

remained rather unnoticed in earlier plans. One of the socio-economic objectives of the Industrial Policy Statement (July 23, 1980) was faster promotion of export oriented and import substituting industries where "take-off" had been observed by the mid 70s.

The Sixth Plan, however, did not take into account the world recovery, long-run possibilities for market growth, and India's changed balance of payments parameters, which have led to new policy options regarding creation of new capacity in manufactures and various promotional efforts for export growth.

3.8. The sensitivity analysis of Exports and Development

What is in fact the macro level role of exports in relation to the growth rate of the Indian economy is shown by the innovative study of alternative scenarios and sensitivity analysis; attempted and reported explicitly for the first time in the Technical Note on the Sixth Plan (Planning Commission, 1981).

Varying growth in exports is considered as one of four exogenous variables. The others being: (1) expectations regarding weather; (2) change in population; and (3) change in terms of trade due to increases in the price of oil. Though it is conceded that the choice among alternatives is very much a socio-political decision, the generation of alternative scenarios helps to understand the impact of likely changes in certain variables on the macro economic dimensions of the economy. Besides it gives an insight into the properties of the model used. Recognising the difficulty of assessment of the international climate, such an attempt captures the effect on growth and development resulting for example from a shortfall in export targets.

Table 10

Components of Gross Domestic Expenditure in 1984-85 under Different Scenarios

(Rs million at 1979-80 prices)

Sl. No.	Scenario	Consumption	Investment (Total)	Exports	Imports (Excluding contingency of Rs 1000 crore	Gross Domestic Expenditure	Aggregate GDP	
							Growth Rate (%)	
							Sixth Plan	Perspective Plan
1	2	3	4	5	6	7	8	9
1.	Reference Case (Preferred Plan Scenario)	1112650	367970	113280	128500	1465400	5.2	5.5
2.	Lower Agricultural Production	1089042	369463	113280	130000	1441785	4.8	5.5
3.	Lower Export Performance	1100794	367871	88358	103578	1453545	5.0	5.5
4.	Higher Population	1122078	336341	113280	118154	1453545	5.0	5.0
5.	Higher oil price	1124907	326843	113280	117373	1447656	4.9	4.9

Source: Government of India, Planning Commission, A Technical Note on the Sixth Plan of India (1980-85), New Delhi 1981, p.229, Table 8.1.

The results presented in table 10 show that, assuming "a broad neutral policy", a decline in exports from 9 percent to 7 percent reduces the target growth rate from 5,2 percent to 5 percent. This is based on the assessment that the country is technologically in a comfortable position for undertaking marginal import substitution.

The Technical Note states:

> "As exports contibute to the economy by generating additional income, earning additional foreign exchange and helping to reduce the cost of exploiting the benefits of large-scale production, any decrease in exports will have adverse effects on all the three counts. Besides, the multiplier may be significantly large in those sectors of exports which have a large forward and backward linkage. The exact impact on the economy will depend on the details in which the export targets are unfulfilled. In general, the decline in the demand for import is likely to be less than the decline in export since the import component of exports is likely to be less than one. But leaving this direct impact, the economy may experience a lower growth because of the trade constraint, which in turn may reduce imports further. The resultant effect on the economy will very much depend on the policy packages used by the Government".

3.9. Toward an extended scenario analysis

In an extended version of the simulation exercise, i.e. given the projected 2-3 percent rise in the real price of oil, expecting that the world demands rise while more additions to reserves may proceed slowly compared to deptition over the perspective period, and the assumption of a harscher atmosphere surrounding aid and other financial flows, the nexus of lower export

growth and reduces growth in aggregate GDP can be put into a sharper focus than revealed in the Sixth Plan exercise. This is because the changed conditions, taken simultaneously, are likely to result in a sharper decline in GDP than worked out in the Sixth Plan exercise. This results from any decline in export growth, particularly if one also considers the higher population scenario indicated by the 1981 census.

As the Mid-Term Appraisal (Planning Commission, 1983) shows, the actual growth performance of exports has faltered (1,4 percent growth estimated for first three years) compared to the target rate of growth (9 percent annually compounded). Therefor it is all the more necessary to think seriously of development alternatives and policy options. The savings and investment levels and growth in GDP achieved during the first three years of the Plan, and also the very significant import substitution obtained in the oil sector under the "structural adjustment" programme, point to the stronger economic base created thus far, enabling the achievement of higher export growth for the remainder of the 80s and beyond. Several other factors, presented in terms of the changed parameters of the Indian economy (Table 11), favour this possibility. In fact, as we shall see in the following section, the changed parameters of the external sector (Table 12) mean that faster exportgrowth is necessary during the rest of the 80s. A brief discussion on development alternatives and policy options is undertaken in Section 5.

However primary consideration is given to empirical assessment of world market prospects during the 80s and beyond, indicating the changing external conditions which must be taken into account when discussing development alternatives and policy options.

Table 11

Economic Conditions and Parameters in the Eighties Compared to the Beginning of Planned Industrialisation in India

		1950-51 to 1978-79	1980-81	1981-82	1982-83
Growth rate (%)					
Gross Domestic Product (at factor costs)		3.5	7.8	5.3	1.8
	1955-56	1968-69	1980-81	1981-82	1982-83
Saving - Investment					
Savings (gross) rate (% of GDP)	13.9	14.1	22.9	23.0	22.3
Investment rate (% of GDP)	14.3	15.1	24.7	25.0	24.1
Composition of GDP - % share (1970-71 prices)					
- Mining, manufacturing and construction	15.9	21.2	21.3	21.4	21.6
- Electricity, water supply, transport communication	4.2	6.4	8.3	8.7	9.1
- Services	22.6	26.1	30.0	30.5	32.0
- Total of above	42.7	53.7	59.7	60.6	62.7
	1955-56	1970-71	1980-81	1981-82	1982-83
Industrial Stucture - % share in registered manufacturing sector					
- Engineering (metal products, machinery (elec and non-elec), and transport equipment)	8.3	24.9	28.2	27.8	...
- Chemicals, rubber, petroleum and coal products	11.7	17.3	17.4	18.4	...

	1955-56	1968-69	1980-81	1981-82	1982-83
Import-Substitution					
(shares of net imports in total supplies/ consumption)					
- Food grains[1]	1.7	5.6	*	Neg.	1.4
- Iron & Steel	39.9	9.3	14.2	...	...
- Machinery[2]	41.0	24.6	10.0[3]	...	...
- Petoleum Crude	93.8[1]	66.2[1]	60.7[1]	48.0	38.0
- Nitrogenous fertilizers	39.8 (80.3 in 1965-66)	60.9	41.1	25.1	11.0

Exports			
Growth rate (annually compounded %) of exports (volume)	1.3 (1950-61)	3.6 (1960-70)	7.1 (1970-80)
% of manufactures in exports	45 (1960)	59 (1980)	60 (1982)

	Second Plan	Fifth Plan	Sixth Plan
	1956-61	1974-79	1980-85 (projected)
Net aid			
% of Plan expenditure/outlay	28.1	8.9	6.0
Technological Change in Agriculture			
- Fertilizer Consumption (kg./hec.)	0.9	29.5	N.A.
- Gross irrigated area as % of gross sown area	17.4	28.0	N.A.

Notes: * Net exports

(1) Calender Year basis

(2) Imports as percentage share of gross investment

(3) 1978-79

Source: Own calculations

Table 12

Changes in India of Parameters of the external sector during the Seventies

	1970-71	1980-81	1981-82	1982-83
- Net aid* as percentage of merchandise imports	20.9	10.8	7.5	9.1
- Invisibles (net) as percentage of all export earnings**	(-)12.4	35.8	29.8	25.2
- Export as percentage of imports	93.9	53.6	57.1	61.5
- Export earnings** as percentage of merchandise imports	83.6	83.5	81.3	...
- POL imports as percentage of export earnings**	10.1	50.3	51.2	...
- POL imports as percentage of total imports	8.3	42.0	38.0	39.0
- Export earnings** as percentage of GDP (1)	3.4	8.2	7.5	...
- Imports as percentage of GDP(1)	4.1	9.8	9.2	...
- Non-POL imports as percentage of GDP (1)	3.7	5.6	5.8	...
- Reserves (year-end)/imports (in months)	3.2	3.9 (4.7)	3.0 (3.4)	3.5 (3.0)
- Reserves (year-end) ± IMF drawings/imports (in months) (Parentheses refer to yearly averages)	3.2	3.8 (3.9)	2.4 (2.8)	...
- Debt Service (repayments + interest) as percentage of:				
. GDP	1.1	0.6	0.6	0.6
. Merchandise Exports	29.3	12.0	10.9	10.7
. Export earnings **	32.9	7.7	7.6	8.8
. Gross Export earnings **	26.1	8.8	8.4	...
- India's merchandise exports as percentage share of World Exports (GATT coverage, thus including Eastern European Bloc) (calender year values in US$)	0.65	0.41	0.37	0.44
- Net aid as percentage of Gross Domestic Capital Formation	4.8	4.3	2.8	3.3
- Net aid as percentage of GDP(1)	0.9	1.1	0.7	0.8
- Current account deficit as percentage of GDP (1)	(-)1.2	(-)1.7	(-)1.9	...

Table 12 (ctd)

Notes: * Repayments and interest payments
** Merchandise exports and net invisibles receipts.
*** Merchandise exports receipts plus gross receipts from non-factor services and investment income.
(1) At market prices.

Source: DGCI&S
RBI

Footnotes chapter 3

1) See for details:
Raipuria, K.M., Comparative Cost and Social Prices in Export Planning in India: A Case Study of Cotton Textiles, Unpublished Ph.D. thesis, Jawaharlal Nehru University, New Delhi, 1977.

2) Rangaswami, L. and N. Somasekhera, "The Export Dimension of the Mahalanobis Model", Arth Vijnana, 16/4, December, 1974.

3) Chakravarty, S., "Reflections on the Growth Process in the Indian Economy", Foundation Day Lectures of the Administrative Staff College of India, Hyderabad, December 6 and 7, 1973.

4) Datta, B., S. Chakravarty, M. Bhattacharya and G. Ghosh, Economic Development and Exports: A Study of the Impact of India's Economic Development on Exports (Calcutta, 1962, p.23).

5) See for example:
Singh, M., "Self-sustained Growth by 1971 ? Its Balance of Payments Implications", Economic Weekly, Special Number, Volume 14/28-30, July 1962.
Singh, M., India's Export Trends, Oxford, 1964.
Guha, A., "India's Foreign Economic Policy: A Theoretical Framework", International Studies, March 1961

6) Patel, S.J., "Export Prospects and Economic Growth: India", Economic Journal, September, 1959.
Cohen, B., "The Stagnation of India's Exports 1951-61", Quarterly Journal of Economics, November 1964.

7) Bhagwati, J. and P. Desai, India: Planning for Industrialisation (OECD, Paris, 1971).

8) Singh, M., see note 5, chapter 3.

9) Lakdawala, D.T., "Aspects of Trade Policy in India", Presidents Address to the 47th Annual Conference of the Indian Economic Association held at Baroda, December 1964, in D.T. Lakdawala, et.al., (eds.) Readings in the Theory of International Trade and Commercial Policy, Bombay 1973.

10) Frankena, M., "Devaluation, Recession, and Non-Traditional Manufacturing Exports from India", Economic Development and Cultural Change, Chicago, III. Vol.24/1, October, 1975.

11) See also for a theoretical discussion of the concept of "economic openness" and its measurement: Grassman, S., "Long-Term Trends in Openness of National Economies, Oxford Economic Papers, March, 1980.
And:
Beenstock, M., and P. Warburton, "Long-Term Trends in Economic Openness in U.K. an U.S.", Oxford Economic Papers, 35/1, March, 1983.

12) See note by Table 2.

13) Riedel, J., R. Grawe and C. Hall, "Determinants of India's Export Performance in the 1970s", World Bank, mimeo, January, 1983. Also in Review of World Economics 120/1, 1984.

14) A. (Em)r/(Ym)r, 'r' representing growth rate.
B. Em/Xm .100
C. ΔEm/ΔXm .100
D. (Em)r/(Xm)r .100

15) Ahluwalia, I. J., "Industrial Stagnation in India since the Mid-Sixties (1956-57 to 1979-80)", ICRIER Working Paper 12, New Dehli, December 1983.

16) Gupta, S.P., Planning Models in India with Projections to 1975, Praeger, New York, 1971.

17) $(\Sigma \alpha_T . X_{iT}) - A_T \leq E_{iT} + NIT_T$

and $A_T = \Sigma M_{iT} - \Sigma E_{iT} \quad NIT_T$

Where, X = Output, M = Imports, E = Exports, A = Net capital inflow form abroad, NIT = Factor Incomes and transfers from abroad, α = Import coefficients and T = Terminal Year (Planning Commission, 1981, p.12).

18) See contributions by:
Raj, K.N., "Facts and Fancies" A rejoinder to E.M.S. Namboodirpad, MAINSTREAM, September 3, 1983.
Jha, L.K., Economic Strategy for the 80s, New Delhi, 1980.
Jha, L.K., Convocation Address, Foreign Trade Review, April-June, 1980.
Chakravarty S., "Some Reflections on Indian Development Strategy", Inaugural Address to 8th Indian Social Science Congress, Hyderabad, July, 1983.
Singh, M., "Management of Industrial Change", T.T. Krishnamachari Memorial Lecture, RBI Bulletin, February, 1983.
Singh, M., "India's Quest for Self-Reliance", Sri Ram Memorial Lectures, New Delhi, 1983.

Raj (1983) observed thus: "While I am one of those sceptical about the feasibility and even the relevance of "export-led" development (of the kind associated with some East Asian Countries) in continental economies like those of China and India, I have no doubt that we too require increases in exports to the extent possible for relaxing some of the very serious constraints otherwise imposed on the development process". Increasing export volume by 9 percent during 1980-81 to 1984-85 and 7 percent during 1985-95, corresponding to the projected growth in GDP of 5.2 and 5.5 percent respectively, implying apparent elasticity of 1.75 and 1.27 percent. Manufactures exports total have been projected to grow at a rate slightly higher (9.5 percent) than the overall growth rate in exports of 1980-85, and may be compared with the projected rate of industrial production of 8 percent, which is assumed to "provide substantial exportable surpluses". Comparing manufactured output at the rate of 7.62 percent apparent elasticity, manufactures export growth works out to 1.25 percent, meaning a rise in the export production share of those products.

4. MANUFACTURES EXPORTS FROM DEVELOPING COUNTRIES IN THE EIGHTIES

4.1. Elements of Empirical Assessment

Empirical assessment of world market prospects, so essential in any discussion of the future role of exports, may include consideration of the existing share of the exporting country in question in the market, and its price-leading or price-taking role in the world market; price and income elasticities; "market penetration", and above all prospects for expansion of markets.

A marginal exporter, indeed, has certain advantages which may be observed in the case of a developing country, as for India's manufactures[1]. We shall have occasion to elaborate on this in the next section, indicating the marginality of India's share in major manufacture exports.

As for price and income elasticities in import demand, it has been argued that, on the basis of empirical exercise, "generally speaking, world demand for the products exported by developing countries has been much stronger than predicted"[2]. In fact, the export success stories of countries like Korea are quite powerful in routing both the demand and supply "elasticity pessimism", so much exaggerated in the foreign trade literature. This pessimism is applicable to the traditional agricultural items, but not particularly applicable to the case of various manufactures[3]. These are some of the sectors in which growth of the world exports has been very fast compared to primary items.

4.2. Protectionism and "Market Penetration"

While recent protectionist tendencies have been effective to some extent in curtailing the access of the developing countries' exports to the markets of the developed countries, and while recessionary trends during 1980-82 reduced demand for imports by the latter, "market penetration" has nevertheless increased [4]. Exports form developing countries form an increasing part of developed countries' imports.

This "market penetration" enabled some of the developing countries to develop the growth of exports of manufactures. It has been found that developing countries doubled their share of manufactured exports in industrial country markets between 1970 and 1980, though the share was initially only 3,4 percent[5]. Further "market penetration" increased at the rate of more than 8 percent between 1970-77 and 7,6 percent a year during 1977-80, despite protectionism especially aimed at textiles, clothing, and footwear. By markets, however, the pace differed during two review periods. It was faster (than the overall rate) in Australian an U.S. markets during 1970-77, and for Japan during 1977-80. By product the pace was faster (than average) for clothing, footwear, leather products, paper, non-metallic minerals and machinery during 1970-77 and 1977-80, with chemicals added during the latter period. The only negative cases were those of metals during 1970-77, and food during 1977-80. This was possible because of considerable product diversification. Besides Northeast Asian countries several Southeast Asian (including China) and Latin American countries also benefitted in the late 1970s.

Recently, fear has been expressed that wide-scale emulation of East Asian export-led growth strategy is

not advisable, and may lead to a resurgence of increased protectionism[6]. We think it too presumptuous to project any possibility of several developing countries trying to simultaneously penetrate the world market in a significant way (attributed to "export-led growth"), given the sticky parameters of supply and price-mechanisms in many of the developing countries, notably commodity concentration and limited marketing capabilities, and also considering apparent demand problems. For example, in the case of textiles, there is the fact that the quota limits of the East Asian countries have already been reached. Equally presumptuous is to argue that rising exports would in themselves increase the pressure, as has been argued in the case of Japan, for liberalising imports more and more. As is realised in Japan, what is more significant is resilience in economic structures to adopt the necessary changes in line with the emerging global economic trends.

4.3. Manufactures as "Leading Sectors" of Growth

Table 13 shows long-term projections for growth and trade in manufactures made in some of the latest available studies and models covering the period up to 1990-2000, and compared with actual figures for 1970-80.

The ratios of (1) growth in GDP of industrial countries to that of developing countries; (2) exports of developing countries to GDP of industrial countries ; and (3) imports of industrial countries to their GDP, are also shown. The selected projections include those of studies and models of UNCTAD, OECD (Interfutures), World Bank, UNIDO, Balassa and FUGI[7]

Table 13

Long-term projections for growth and trade in manufactures

(Percentage growth rates/ratio)

Source and Period	GDP (Y)	Exports (E) to		Imports (M) from		Apparent elasticity		
		World	Developing countries	World	Developing countries	Y_{DC}/Y_{IC}	E_{DC}/Y_{IC}	M_{IC}/Y_{IC}
1	2	3	4	5	6	7	8	9
ACTUAL 1970-80 (1)								
- Industrial countries (IC)	3.2	5.9	-	4.8	-	-	-	1.5
- Developing countries (DC)	5.6	9.9	-	10.8	-	1.75	3.09	-
PROJECTIONS								
UNCTAD, 1980-90 (1)								
- Industrial countries	2.4	5.2	-	3.5	-	-	-	1.5
- Developing countries	4.2	13.6	-	11.7	-	1.75	5.66	-
OECD-Interfutures (2) 1975-2000 ("Moderate Growth")								
- Industrial economies	3.4	6.0	6.0	6.4	8.2	-	-	1.9
- Developing economies	6.0	9.5	13.0	7.2	13.0	1.76	2.79	-
- South Asia	3.9	-	-	-	-	1.15	-	-
World Development Report, 1980-90 (3) (High case) (Parentheses show "Low case")								
- Industrial economies	3.6 (2.8)	-	-	-	-	-	-	-
- Developing economies	5.7 (4.5)	11.4 (4.7)	-	-	-	1.58 (1.61)	3.17 (1.68)	-
FUGI-GMEM, 1980-90 (Baseline simulation results) (4)								
- Industrial countries	2.8	6.5*	7.4*	-	-	-	-	-
- Developing countries	5.2	6.6* (8.7)	7.6* (9.7)	-	-	1.86	2.36* (3.11)	-

Table 13 (ctd)

1. UNCTAD, Trade and Development Report, 1981, Geneva, 1982.

2. OECD, Interfutures: Facing the Future, Paris, 1979.

3. World Bank, World Development Report, 1982, Washington, 1982.

4. Akira Onishi, "A Global Macro economic Modelling on Foreign Trade and International Economic Relationships", IXth International Conference of Applied Econometrics, VIth International Conference on the Econometric Modelling of the Socialist Economies, Budapest, Hungary, March-April, 1982 (mimeo).

(FUGI: Future of Global Interdependence;
GMEM: Global Macro Economic Model)

* Covering all commodity-groups, in current US dollars.

Note: Parentheses under FUGI-GMEM refer to non-oil exporters.

Source: K.M. Raipuria "Industrial Protectionism and Long-Term Export Growth: Some Issues", Foreign Trade Review, July-December 1982 (UNCTAD-VI Seminar Special Number).

The projections made within the various studies point to the varying perceptions and results regarding growth and trade in the period up to 1990 and 2000. They show in general that, despite the assumptions that current commercial policies of industrial countries will continue, their import elasticity could be considerably higher than one, and much higher in the case of imports of manufactures from the developing countries. Compared to the past (1970-80), these elasticities work out favourably. The projected growth of manufactures exports from developing countries is 13 percent in the OECD and UNIDO studies. These studies, however, have assumed some improvement in "adjustment problems" of "North" and "South", leading to increased imports by the developed countries from the developing countries.

Though world recovery is no longer uncertain, it

began in the latter part of 1983 (in Western Europe by 1984), growth of export volume, in the developing countries, including goods and non-factor services, is projected to be modest during the first half of the eighties, but is expected to pick up in the latter part, mainly on account of manufactures.

Thus, according to the World Bank's 1983 exercise, economic growth of the industrial countries (assuming no change in protectionism) will be slower (3,7 percent) in 1985-95 than in the 1960s. It was 5,1 percent during 1960-73, 2,5 percent during 1973-80, 0,4 percent during 1980-82, and 3,0 percent (projected) during 1982-85. The UNCTAD studies have recently projected growth of the developed marketeconomies at 2,4 to 2,9 percent for the remainder of the eighties, based on a different set of assumptions regarding feedback from the varying growth of developing countries[8].

The 1983 world trade projection (5,1 percent) of the World Bank for 1985-95 is about the same as observed during 1973-80 (4,9 percent), but greater than projected for 1980-85 (2,3 percent). Significantly, within this total, the industrialised countries are projected to increase their exports "more slowly than in 1973-80" on account of a more limited growth in trade, in relation to growth in GDP, than in the past. On the other hand, the share of the developing countries is expected to increase. Among them, the low-income (Asian) countries (including India) are projected to increase their exports at the rate of 7,2 percent during 1985-95 and 4,9 percent during 1980-85, compared to 7,3 percent during 1965-73 and 9,9 percent during 1973-80. China's initial export drive is assumed to slow down. These growth rates may be compared with the projected rate of all developing countries' export growth and to rates of 6,8 percent during 1985-95 and

4,3 percent during 1980-85, 8,2 percent during 1965-73 and 4,2 percent during 1973-80.

4.4. Improving Climate

According to a progress report on international debt, based on performance since 1970, and assuming realistic exchange rate policies and OECD growth of 3½ percent in 1984 and 3 percent per annum thereafter, the export growth projected for Asia (except the Philippines) in the medium term exceeds 10 percent per annum, and ranges up to 17 percent per annum for Korea and Taiwan [9]. Since the performance of the seventies may not be repeated in the eighties, which have been marked by increasing protectionist policies, these projections may appear to be unrealistic, particularly with respect to low-income countries of South Asia. However, the improving climate for growth is clearly indicated.

Among sectors and sub-sectors, since some of the existing protectionist measures, assumed to be constant in the World Bank's "central case", "will become a stronger brake on exports" the pace of "market penetration" is projected to be slow for the new competitors, due to competition with the established exporters. As a result, some of the manufactures exports of the new competitors may only grow slowly. Table 14 shows the projected relative growth of exports of developing countries ("central case").

Clearly, growth in manufactures exports will be much higher than for merchandise as a whole. These may be considered as "leading" items of growth, and their ratio share as a part of total merchandise is expected to increase from 1,6 during 1980-85 to 1,8 during 1985-95. The outlook for these exports, barring a few cases within textiles and clothing, is encouraging, although competition may increase due to growth among established exporters.

Table 14

World Bank projection of the growth of Third World exports
(annualy compounded percentage)

	1980-85	1985-95
All exports	4.3	6.8
Total merchandise	4.2	6.6
of which:		
Manufactures	6.6	12.0
Fuels	3.7	2.8
Primary products	2.6	2.6

Source: World Bank, World Development Report.

It may be noted that the World Bank scenarios do not take into account the possibility that faster growth in the long-term will result from technological and productivity changes, nor country-specific possibilities for increase in exports, given differences in the incidence of protectionism[10].

For several developing countries, notably India, the tariff and non-tariff barriers are reported not to pose binding constraints at present, as shown by underutilised quotas for certain textiles and other products, including traditional leather, handicrafts, and to some extent certain engineering goods[11]. This is also corroborated by the inability of fully use facilities within the Generalised System of Preferences (GSP) although the time span has been short for maximising benefits of investments in supply lines. According to an OECD study (1984) on the influence of the GSP, India is classified among the ten largest beneficiaries of the GSP. However the total value of exports under the GSP in 1980 was far short of the limit, being less than half of the value of exports from South Korea, Taiwan and Hong Kong, and of about the same order as those of Singapore. The market, at least in the EEC, is considered quite consistent, and

it is claimed that no additional barriers have been introduced since 1982-83. India's market penetration ratios in manufactures exports to developed countries are indeed marginal, and are found to have declined, over the period of the study mainly due to a decline in competitiveness[12].

4.5. Favourable Factors

There are also favourable factors relevant to our consideration of market prospects which are naturally exogenous to the above projections. They include, apart form favourable trade conditions emerging from measures like the Global System of Trade Preferences, possibilities of "South-South cooperation", higher growth in exports of manufactures (UNCTAD, 1983), increased intra-industry trade by countries like India with a significantly diversified manufacturing base, and prospects of increased cooperation with the Eastern European countries.

In sum, these trends and projections reveal the changed external parameters of market conditions which need to be considered in projections for the eighties and beyond, and which are relevant in considering development alternatives and policy options.

Footnotes chapter 4

1) Horner, F.B., "Elasticity of Demand for the Exports of a Single Country", Review of Economics and Statistics, XXXIV, 1952.
Between the two extremes of world monopoly of the commodity supply (facing an inelastic demand curve) and suppling a negligible proportion of a free commodity market (facing a demand curve of (-00), price elasticity of export demand for a product is believed to exceed price elasticity of demand on the export market for the commodity by an amount dependent on the proportion of the market it supplies. This will, of course, also depend on the response of other supplying countries to a change in the export market price (Horner, 1952).
It is, however recognised that such a situation also means that in case of inflation and an increase in costs, even a small increase in price may result in considerable decline in exports. The initial cost of penetrating the markets may also be considerable.

2) Cohen, B. and D. Sisler, "Exports of Developing Countries in the 1960s", Review of Economics and Statistics, 1971.

3) Stern, R.M., F. Jonathan and B. Schumacher, Price Elasticities in International Trade: An Annotated Bibliography, London, 1977.

4) Kelkar, V.L., "Trends in Neo-Protectionism: Its Impact on India, Foreign Trade Review, July-September, 1978.
Kelkar, V.L., "Recent Trends in the World Trading System", Foreign Trade Review, January-March, 1983
Raipuria, K.M., "Industrial Protectionism and Long-Term Export Growth: Some Issues", Foreign Trade Review, July-Dec. 1982.

5) World Bank, World Development Report, 1982 and 1983, Washington, 1982 and 1983.

6) Cline, W.R., "Can the East Asian Model of Development be Generalised", World Development, 10/2, 1982.
Nayyar, D., "International Relocation of Production and Industrialisation in LDCs", EPW, XVIII/31, July 30, 1983, pp. PE1326.

7) See for a more detailed discussion of these issues for instance:
Raipuria, K.M., "Industrial Protectionism and Long-Term Export Growth: Some Issues", Foreign

Trade Review, July-Dec. 1982.

8) UNCTAD, Trade and Development Report, 1981, 1982 and 1983, Geneva 1981, 1982 and 1983.
Part 2, chapter 4 regarding sensitivity analysis.

9) Morgan Guaranty Trust Company, "International Debt: Progress Report and the Task Ahead", World Financial Markets, September 1983.

10) For a discussion, see:
Kelkar, V.L., "Long-Term Growth Possibilities in the OECD Economies: An Alternative View", Trade and Development: An UNCTAD Review, 4/Winter, 1982.

11) Particularly noting that the erstwhile fast growing manufactures exporting countries like South Korea, Taiwan and Hong-Kong have almost reached their EEC quota limits for textiles thus competition may be less than in the past.

12) Agarwal, M., "An Analysis of India's market Penetration", New Delhi (mimeo), 1983.

5. POLICY OPTIONS CONCERNING MANUFACTURES EXPORTS IN THE EIGHTIES

5.1. Rationale behind export growth

The main rationale favouring export growth during the 1980s, given changed parameters, rests on the need for expanding demand levels to accelerate domestic industrialization; exploiting dynamic comparative advantage; and maximising the Smithian benefits arising from increased foreign trade, viz. increased rate of capital accumulation, greater economies of scale, and improved technology leading to flexibility and efficiency in addition to specialisation. Given the nature of the world market, higher growth in manufactures exports also contributes to relative stability of export earning capacity.

In the context of the Indian development framework, the additional arguments stem from the "utility function" discussed by Chakravarty (1973) particularly the need to expand employment, and especially self-employment, using surplus labour; and to assist broad-based small-scale producers and entrepreneurs to both expand and develop industries in the backward areas of the country. This has been the basis for developing small-scale industries in India. At the same time the oil crisis and labour cost advantages have induced higher growth and increased productivity in this sector, thus making a virtuous circle. The share of the small-scale sector in manufactures exports and certain non-traditional items, as shown in Table 15, is significant and is expected to grow further.

Table 15

Share of the Small-Scale Sector in India's Exports of Selected Products/Product Groups

Sl. No.	Product Group	Percentage share of small scale sector* exports** in total		
		1979-80	1980-81	1981-82
1	2	3	4	5
A.	NON-TRADITIONAL PRODUCTS			
	1. Engineering Goods	29.99	29.98	30.00
	2. Basic Chemicals, Pharmaceuticals and Cosmetics, etc.	12.63	15.73	19.37
	3. Chemicals & Allied Products	7.32	10.19	9.78
	4. Plastic Products	57.86	53.13	44.50
	5. Finished Leather & Leather Products	66.67	89.72	80.00
	6. Marine Products	87.51	88.67	90.26
	7. Processed Foods	50.39	45.70	53.89
	8. Woollen Garments & Knitwears	100.00	100.00	100.00
	9. Sports Goods	100.00	100.00	100.00
	10. Readymade Garments	51.00	90.00	90.00
	11. Rayon & Synthetic Products	80.12	50.00	50.00
	12. Processed Tobacco Snuff and Bidi	100.00	100.00	100.00
	TOTAL: "A"	44.95	53.19	54.97
B.	TRADITIONAL PRODUCTS			
	1. E.I. Tanned Hides & Blue wet Chrome Tanned Hides and Skins	79.99	79.99	80 00
	2. Cashew Kernels and Cashew Nut Shell Liquid	70.68	69.02	66.01
	3. Lac	87.29	85.92	90.04
	4. a) Curry Powder & Paste b) Spice Oils and Opeoresins	62.68	62.21	70.89
	TOTAL: "B"	74.76	72.62	70.50
	GRAND TOTAL: "A" + "B"	47.71	54.71	56.12

Table 15 (ctd)

* Defined (Since May 1975) in terms of investment in plant and machinery (original value) of Rs 20 lakhs and less, irrespective of the number of persons employed (Rs 25 lakhs and less in the case of small-scale ancillary units).

** Figures are those provided by export promotion councils. Apart from direct exports, products of a large number of small-scale units are exported indirectly through merchant exporters, export houses and other channels. Small-scale units also supply parts and components which go into the assembly of finished products exported by large-scale industries. Thus, the above shares may be taken as under-estimates.

Source: Government of India, Ministry of Industry, Development Commissioner most recent Small Industry Export Bulletin (mimeo).

As a part of the logic for increased export growth, its potential for employment generation must be fully recognised. The option to specialise in labour-intensive industries with a view to promoting a fuller use of the abundant factor, thereby expanding employment, is foregone if the international division of labour is ignored. Therefore labour-intensive industries should be expanded faster than overall industrial growth. The chances of reversal of factor-intensities are limited given the institutional and social preference functions and factor-"stickyness" in fast adapting new technology on a wider scale.

Further, exports are expected to provide the large public sector, created during the past, avenues for demand and an increase in profitability through exploitation of market opportunities abroad on a competitive basis. The extent to which exports from the public sector contributed to total exports in the past is shown by the data in Table 16.

Table 16

India's Exports: Public Sector And Total, 1970-71 to 1981-82

(Rs Million)

Year	Production Under takings	Trading and Marketing Agencies	Total (2) + (3)	All Exports	Percentage of Col. (4) in Col. (5)
1	2	3	4	5	6
1970-71	963	1798	2761	15352	18.0
1971-72	655	1907	2462 (-299)	16082 (730)	15.03 (-)
1972-73	788	2869	3657 (1195)	19708 (3626)	18.5 (33.0)
1973-74	935	4337	5272 (1615)	25234 (5526)	20.9 (29.2)
1974-75	1442	7785	9227 (1955)	33306 (8072)	27.7 (24.2)
1975-76	2212	11102	13314 (6087)	40424 (7118)	32.9 (85.5)
1976-77	4216	14159	18375 (5061)	51423 (10999)	35.7 (46.0)
1977-78	4061	6575	10636 (-8240)	54079 (2656)	19.7 (-)
1978-79	4657	7231	11888 (1753)	57263 (3104)	20.7 (55.1)
1979-80	3853	7538	11391 (-497)	64184 (6921)	17.7 (-)
1980-81	7270	6607	13877 (2486)	67107 (2923)	20.7 (85.1)
1981-82	11024	6119	17143 (3266)	78030 (11123)	22.0 (29.4)

Figures in parentheses in Columns 4 & 5 show the increments. Figures in parentheses in Column 6 show the share of the former in the latter.

Minus sign in parentheses in Column 6 indicates a decline in total of Column 2 and/or 3, as shown in Column 4.

Source: Columns 2 & 3 : Government of India, Bureau of Public Enterprises, Annual Report on the Working of Industrial and Commercial Undertakings of the Central Government, New Delhi, Vol.1, various issues, and Ministry of Commerce, Annual Reports

Column 5: Ministry of Commerce, DGCI&S

It can be observed that together production and trading agencies contributed as much as 85 percent of incremental total exports during 1975-76 and 1980-81; the share was also significant in other years, except for 1971-72 and 1979-80, when public sector exports declined marginally, and during 1977-78 when there was a significant decline primarily because of reduced sugar exports by the Sugar Trading Company. The increased role of public sector trading agencies means that the public sector can increasingly market their products without the help of transnational corporations. Given the continuing efforts toward import substitution (see Table 11), higher export earnings also help India to increase its creditworthiness, in order to enable external financing for the balance of payments. Manmohan Singh (1983) thus observed "A vigorous export drive and a sustained reduction in our dependence on imported supplies of oil, fertilizers, steel, vegetable oils and cement would help to improve our credit rating"[1].

A new dimension also needs consideration. In an economy within a continent the size of India[2], high transport costs have been observed to contribute to the higher growth of certain regions and to a specialisation among States somewhat parallel to the arguments for trade among nations based on international division of labour.

Thus, foreign trade can enable economic management which prevents any region's economic loss arising out of a centralised trade regime. In the transport-intensive sectors such an argument is easily applicable, specifically for bulky items like coal, oil, and mineral ores.

5.2. Some Compulsions

At the outset, certain factors compel us to consider higher export growth in the eighties.

First, as is already realised, the Indian economy has reached the point of maturity and self-reliance in terms of savings and investment rates. Now this needs to be accompanied by more economic "openness", it is in the self-interest of industry to be exposed to competition in the world market, to spur flexibility and efficiency through both domestic and import liberalisation and technology imports. Notwithstanding some short-run increase in commitment of payments such an outlook may result in growth in output held by import compression. This may also help to defuse the Western protectionism which restricts world distribution of growth and the exports of developing countries. The Committee on Import Export Policies and Procedures (Ministry of Commerce, 1978) clearly recognised the role of technology in improving production efficiency and competitiveness of industry. Its report noted that:

> "While there is need for intensifying the research and development effort within the country, it is also necessary to adopt a more pragmatic and liberal approach to the import of technology in order, among other things, to avoid undue costs of rediscovering what has already been dicovered abroad and the time lag this involves. Further, if as a result of the liberalised import policy for goods the Indian industries are progressively exposed to international competition, they would be able to hold their own only by constantly updating their production techniques."

The Committee further noted that:

> "arrangements may initially involve somewhat higher costs by way of royalties or dividends on

equity, but could pay rich dividends in the medium term due to avoidance of technological obsolescence and enhanced competitiveness of Indian industry."

The vicious circle of "infancy" protection, inefficiency and protection which an economy gets into when "infant industry" logic is applied for too long cannot really be allowed to continue forever[3]. Recently measures went a long way in this direction, notably increased policy flexibility due to greater use of tariffs, liberalisation of the domestic economy (in terms of import licensing, automatic capacity expansion, etc.) and exposing industry to world competition. The success of these measures should not be judged on the basis of short-term performance. With reduced dependence on imports for strategic products like oil, economic resilience has certainly emerged. The compulsion of economic efficiency warrants that these measures should be intensified, keeping in view of course domestic economic development. Such a policy will enable bringing the pattern of trade sectors in line with India's comparative advantage, which must be the guiding factor for import substitution as well as for export promotion.

In years of domestic recession, as observed in the past (Section 3), increased exports are necessary to supplement demand at home, in order to see certain industries (with high export-output ratios) continuing at a normal level of economic activity and without "export constraints" as mentioned in the Annual Plan, 1983-84 (Planning Commission, 1983)

In addition to the above basic compulsions, there is the apparent balance of payments aspect, i.e. the need to finance the imports which in the light of the observed income elasticity of imports and the target growth rate, are projected as necessary. With the projected imbalance of payments, and assuming a

reasonable growth in new aid commitments, India will have to increase its exports beyond the present trend to keep the debt-service ratio within limits. Manmohan Singh observes of the whole situation:[4)]

> "As of now, there is some scope to rely on the resources of international capital markets, but a part of these resources may well be needed to service the IMF loan so that the flow of resources available for a net increase in investment from this source may be modest. One has also to reason with the uncertainty that inevitably surrounds the oil prices and developments in West Asia and also the crisis through with the international banking system is now passing because of debt-service difficulties of countries like Argentina, Brazil, Mexico, Poland, Romania and Yugoslavia. Therefore, as of now, it will be prudent not to count too much on the resources of the international capital markets for sustaining the tempo of investment."

The ratio of debt service to exports had declined to 8,8 percent in 1980-81 and 8,4 percent in 1981-82, compared to 26,1 percent in 1970-71 (Table 12), but the debt-service burden is likely to rise by 1984-85 and beyond, due to the IMF loan (of 5 billions SDRs) received by the Government during 1981-83, necessitating higher export growth[5)]. The recent surrender of part of the IMF loan eligibility (to the extent of 1,1 billion SDRs) will result in some decline in debt-service burden. However, this also means that the time the loan was to buy for adjustment is reduced, and that the case for export growth is all the stronger particularly when the difficulties of import substitution are realised. The debt service requirements are projected to go up to over Rs 1000 crore by 1984-85, compared to Rs 800 crore, 850 crore and 950 crore during 1980-81, 1981-82, and 1982-83, respectively. The debt-service ratio is projected to increase to around

20 percent in the nineties[6]. While the exactness of projections will obviously depend on various assumption regarding aid and loans; growth of GDP; industrial output, notably of imported steel, oil, oilseeds, and fertilizers; world trade environment; import elasticity; prices of oil and oilproducts; growth of services receipts; the compulsion is clearly indicated.

Most importantly, according to some projections, the level of demand (refinery throughput) for petroleum products may rise to over 90 million tonnes, compared to about 35 million tonnes at present, which would mean a considerable drain on the balance of payments even after maximum use of domestic sources.

It goes without saying that the Indian economy suffers from serious uncertainties of weather, which affect the economy adversely in bad years. Though risks have been somewhat reduced due to technological changes in the farm sector, such economic activities continue to face uncertainties affecting not only investment but also the supply of certain goods which are essential to the Indian population. The experience of the last few years shows that, in times of periodic shortages, deficiencies in supply can be reduced substantially through imports[7]. It may not be an exaggeration to say that the uncertainty referred to here is more serious than the uncertainty faced by an exporter in the world market, given our marginal share. Considering the objective of stabilising economic activity at home, and, as noted in the Annual Plan, 1983-84, supplementing supplies of essential goods by "timely imports" (Planning Commission, 1983) to keep supply of materials within manageable limits, the importance here of increased exports needs no further emphasis.

Certain unfavourable structural changes are taking place in the external sector of the economy (see Table 12). These are indicated on the one hand by (1)

significant decline in the percentage share of net aid in imports; and (2) a considerable rise in the level of invisibles and their share in export-earnings; and on the other hand, by (1) a decline in exports as a percent of imports; and (2) increase in the non-POL bill as a percentage of exports. Theoretically, there is no basis to argue against a growing share of invisibles; structurally a reasonable proportion of merchandise and invisibles may be necessary, in order to prevent the dependence of external financing on the relatively more uncertain service sector, which is beyond the control of the Government policy framework. This is another compulsion to the increase of merchandise exports, which may be considered a pre-condition for viable external financial relations during the eighties and beyond. To what extent this would be feasible is shown by the favourable features of the Indian economy.

5.3. Favourable Factors

The positive points are first the state of factor endownment in terms of an expanded base of farm production, human capital, diversified manufacturing production, and technological development.

Second, reserves of certain minerals, as mentioned in the Sixth Plan (Planning Commission, 1981), are large enough to enable surplusses for manufacturing and for exports, even after assuming the projected growth rate of consumption and normal exports through the perspective period (1994-95). These include coals (74 to 126 years), iron ore (111 years) and several other minerals (bauxite 245 years, limestone 519 years, and nonferrous metals like copper, zinc and lead at least 30 to 40 years).

Third, while management of infrastructure leaves much to be desired in terms of adequacy, over the period of

of the past Plan, in meeting the demand of society, a sound base has been created, especially in the case of energy, and priorities and preferences given to exports (e.g. on railways and as air cargo) would create a virtuous circle for the further development of the infrastructure.

Forth, a number of institutions have been set up, and a large institutional structure exists in support of the export sector on various fronts - consultancy and advice (Advisory Board and Parliamentary Consultative Committee), marketing services (Trade Development Authority, Export Promotion Councils and Commodity Boards), research (IIFT), credit (EOGC), state trading and marketing (STC, MMTC, etc.), bonded houses and export processing zones (Kandla and Santacruz), and so forth. Recently, in order to enable special treatment and service to export producers, Export Oriented Units (EOUs) have been promoted, with the aims of reducing investment costs and generating export surplusses on a sustained basis during the years to come in spite of intial problems[8]. The recently created EXIM Bank will go a long way toward helping with the very necessary credit aspect of exports, especially in the area of engineering goods destined for the developing countries of Asia and Africa. There are further plans to establish export processing zones, and the number of EOUs is increasing, indicating their potential. Expansion of exports at a faster rate would lead to fuller utilisation of these institutions.

The export commodity structure is widely diversified, which is remarkable given the per capita income and export level of the country, and allows flexibility in promotion of the various export items, depending on demand and supply conditions and taking full advantage of market situations, with minimum cost to the domestic economy[9]. The diversified export structure of manufac-

tures leads to many economic benefits which are amply discussed in the economic literature.

The estimates of net foreign exchange earnings based on exports and imports (at disaggretaed level of 89 sectors), according to an input-output table in the Technical Note of Planning Commission (1981), show low import-export ratios for most of the sectors, indicating the net foreign exchange earnings nature of the sectors. It has also been found that not only is the ratio of imported input to output low in most of the export sectors, but their consumption ratio of non-renewable resources like oil is also low, indicating the low social cost of exports[10].

One of the most significant plus points is that India's share of manufactures exports in world trade (as also in production) is very marginal as shown in table 17. It is as high as 0,1 to 0,6 percent for engineering goods, 1,5 percent for clothing, 0,2 percent for chemicals and allied products, 5 percent for fish products, 7,7 percent for leather manufactures, and 3 percent for pearls and precious and semi precious stones (worked and unworked).

As discussed earlier, several benefits stem from the flexibility in penetration of world markets due to marginality, considering proportionate promotional effort. It has been observed that with product adaption and quality control, marginal penetration would be considerable, given price elasticity, even in cases of highly protected comodities like textiles and clothing.

The benefits of exports to the economy are broader when the backward linkage effects of export production are greater. Riedel has estimated on the basis of production characteristics, that the backward linkage index of export items in general is very high though it declined during a recent period: from 2,96 during 1968-73 to 2,37 during 1974-78[11]. The backward linkage index is somewhat higher for exports to centrally

Table 17

India's Share in World Exports (I/W) and Export-Production (E/X) Ratios of Major Products/Product Groups. 1975 and 1980

Product / Product Groups	1975		1980	
	I/W	E/X	I/W	E/X
1	2	3	4	5
A. Traditional and Primary Product with a Marginal Share				
Meat: fresh, chilled, frozen	0.1	Neg.	0.4	Neg.
Rice (mainly Basmati)	0.6	0.1	1.8	1.2
Vegetables, etc.	0.5	Neg.	0.2	Neg.
Oilseeds, nuts, kernels	1.0	1.7[1]	0.3	Neg.[1]
Sugar	5.0	28.2	0.2	1.9
Coffee	1.6	65.0	2.2	62.4
Animal feed stuffs	2.7	23.2	1.6	N.A.
Tobacco (Unmanufactured)	5.2	22.6	4.4	20.0
B. Traditional/Primary or Mineral Products with a Significant Share (5%)				
Tea	31.1	43.9[2]	39.3	39.4[2]
Spices	13.2	N.A.	11.6	N.A.
Leather	12.3	N.A.	11.0	N.A.
Iron Ore	5.3	54.5	8.0	61.5
Cotton Fabrics, Woven	5.1	7.6	5.5	8.9
Jute manufactures	44.0 (1972-74) average	40.1	32.0 (1978-82) average	31.6
C. Non-traditional/Manufactured Products with Growth Potential but Marginal Share				
Fish, fried and simply preserved	3.3	3.0	5.0	4.3
Fish, tanned and preparations	0.1	-	-	-
Leather manufactures	1.0	N.A.	7.7	22.4
Clothing	1.5	N.A.	1.5	N.A.
Engineering Goods of which:	0.1-0.6	4.2	0.1-0.6	5.2
Metal manufactures	0.6		0.6	
Machinery other than electric	0.1		0.2	
Electrical Machinery, apparatus	0.2		0.1	
Transport Equipment	0.1		0.2	
Pearls, precious and semi-precious stones, worked and unworked	2.2	N.A.[3]	3.0	N.A.[3]
Iron and Steel	0.3	7.9	Neg.	0.8
Chemicals and related products	0.2	N.A.	0.2	2.3

Table 17 (ctd)

1. For cashew nuts, the share of exports in production is more than three-fourth.

2. For pepper, the exported share is about 95 percent.

3. Products primarily export-oriented.

Source: Columns 2 & 4: Government of India, Ministry of Finance, Economic Survey, 1982-83.
Columns 3 & 5: Derived/estimated on the basis of data from various publications of exports.

planned and less developed economies, compared to the exports destined for the industrialised economies.

One of the main arguments against acceleration of export growth accompanied by technological updating is that there would be an undesirable enty of transnational corporations and the drain on resources could be considerable, negating the benefits of income generation from exports[12]. However, recent studies show that the share of transnational corporations in the production and exports of India's manufactures is 13 percent and under 10 percent, respectively[13]. The former ratio is as high as 49 for Brazil, 30 for Singapore, 31 for Argentina and 28 for Mexico. For exports, percentage shares are reported to be as high as nearly 79 for Singapore, over 40 for Brazil, 30 in the of Argentina, Colombo and Mexico, and 28 for Korea The ratio observed for India cannot therefore be considered, by any standard high. Besides this statistical aspect, it has been argued that, taking into account macro aggregates, the role of transnational corporations is by no means in the Indian economy dominant[14]. This is because of India's highly diversified and self-reliant industry and trade structure;

ability to sustain autonomous capital accumulation; a strong human capital base; a highly developed array of domestic institutions relating to credit, finance, trade, transport, insurance; and the host of instruments in the government's policy kit. It is widely recognised that the entire political strategy of India towards the economy has been creating independent national economic structures.

The progress of technology-linked exports (viz., electronic, turn-key projects, consultancy, engineering contract services, construction contracts, software, etc.), in addition to joint ventures abroad, shows that India is significantly participating in sophisticated areas of the international division of labour. This can provide backward and forward linkages for many other exports, notably engineering items and other industrial products. Table 18 shows that projects and capital goods exports increased from almost negligible during the mid-sixties to more than Rs 100 crore in the mid-seventies, and are reported as Rs 371 crore in 1980-81. The expected level is Rs 1000 crore in the near future. Exports of electronics rose from scarcely Rs 10 crore in 1973-74 to more than Rs 40 crore by 1980-81. Earnings from exports of consultancy services rose from about Rs 1 crore in 1970-71 to Rs 25 crore by 1980-81 and have great potential. Reports confirm further increases in these exports.

In this context, the progress of Indian joint ventures abroad (235 in total) is noteworthy. By the end of 1983 as many as 154 ventures had been implemented and 81 were in production, clustered in the sectors of engineering, textiles and chemicals, plus construction and shipping. These export links augur well not only for the considerable potential which lies ahead for manufactures exports, but also in the context of South-South cooperation.

Table 18

India's Technology-Linked Exports, 1973-74 to 1980-81

(Rs crore)

Year	Capital goods and project Exports	Electronics (incl. those of SEEPZ)	Consultancy Services
1	2	3	4
(1956-57)	(0.62)	(nil)	(nil)
1973-74	63.9 (201.7)	9.3	1.3
1974-75	111.6 (356.6)	11.6	1.5
1975-76	155.2 (413.0)	16.2	3.9
1976-77	177.3 (566.3)	22.0	7.5
1977-78	202.5 (617.4)	36.9*	9.5
1978-79	260.0 (700.7)	39.6*	14.0
1979-80	300.0 (739.0)	46.6*	22.0
1980-81	371.0 (727.0)	41.8*	25.0

* Calender Year.

Figures in parentheses in column 2 show total exports of engineering goods.

Source: Engineering Export Promotion Council, and Department of Electronics (Annual Reports).

Yet another plus point may be indicated. The growth in real wages and productivity (indicated by gross value added) per worker shows that competitiveness increased considerably over the period 1960 to 1977 in several manufacturing categories (factory sector), excluding non-ferrous basic metals, electric light and power, petroleum, and to some extent for cement, railroad equipment, rubber products and steel (see Table 19).

Table 19

India: Growth of Real Wages (W) and Productivity (Pr) in the Factory Sector, 1977-1960

Industry	Annually compounded Growth Rate 1977-1960		Growth Rates ratio (apparent elasticity)
	W	Pr	W/Pr
1	2	3	4
Basic Industries			
1. Chemicals and chemical products	1.43	2.90	0.49
2. Cement	1.57	0.45	3.49
3. Iron and Steel	1.80	0.64	2.81
4. Non-ferrous basic metals	1.85	(-)2.80	(-)
5. Electric light & Power	0.66	(-)0.14	(-)
Capital Goods Industries			
6. Machinery except electric	1.85	4.66	0.40
7. Electric machinery, apparatus, appliances, and supplies	2.05	4.50	0.46
8. Shipbuilding and repairing	2.28	3.93	0.58
9. Railroad equipment	1.90	0.56	3.39
10. Motor vehicles	2.18	2.19	1.00
11. Repair of motor vehicles	1.83	3.14	0.58
12. Metal products except mech. equipment	0.90	1.23	0.73
Intermediate Goods Industries			
13. Rubber products	1.39	0.39	3.56
14. Petroleum	1.64	0.62	2.65
15. Structural clay products	(-)0.32	0.29	(-)
Consumer Goods Industries			
16. Spinning, weaving & finishing of textiles	0.83	2.19	0.38
17. Manufacture of pulp paper & paper products	0.77	4.82	0.16
18. Miscellaneous food products	(-)1.92	(-)3.67	(-)0.52
19. Tobacco products	(-)1.49	(-)1.15	(-)1.30
20. Sugar	(-)4.19	(-)5.70	(-)0.74

Source: C.S.O., Wages & Productivity in Selected Industries in Organised Manufacturing Sector - 1960-1977, (October, 1981, mimeo).

While there are limits in the extent to which the growth of real or "efficiency wages" can be restrained in line with productivity[15] and technological updating, there are possibilities for improving competitiveness through faster increases in productivity relative to wages. In fact, this provides the basic rationale for increasing exports of manufactures, in so far as it increases one's comparative advantage in trade[16].

5.4. Development Alternative and Policy Planning Options

Taking export expansion in conjunction with import planning as one of the development alternatives aimed at higher growth of the economy and balanced external payments, policy planning options can be set out. It has been noted that application of an export-led growth strategy has inherent limitations in an economy of India's size and domestic resource endowment. It is also recognised that the success stories of Japan and certain East Asian economies contribute several lessons of importance regarding export expansion[17]. However the results achieved by them in terms of the export-growth nexus, under the given conditions (discussed earlier), would have limited potential in an economy like India's. Not only because of the large population, but also on account of different economic structures and basic differences in socio-economic pre-conditions and stated objectives[18]. The possibilities of increased imports must be explored as a means of achievement of development goals of higher growth and self-reliance, considering the compulsions and positive factors discussed above.

Regarding the balance of payments, it has rightly been observed that "our problem is more structural than cyclical. Even a modest recovery in the world economy

is unlikely to help our exports much' (Economic Advisory Council, 1983 [illegible] problem is an empirical phenomenon affected not only by world market recovery but by several internal factors, especially the policy options with which we are mainly concerned in this section.

It has also been noted that in the eighties the Indian economy faces certain external obligations and should look for means of exploiting export opportunities, as well as increasing growth and efficiency[19] Export capability should in fact be the touchstone of national efforts for independence in the various industrial sectors, to ensure minimum cost

At the outset, it is emphasised that by policy planning options we do not mean total change. As noted earlier, a policy in which export promotion co-exists with import planning must be the guiding factor for future policy planning, and the transition is likely to be gradual as well as difficult in regard to policy planning.

The significance to the succesful implementation of a strategy, of policy planning and designing specific measures to ease this transition needs no emphasis; particularly considering the structural characteristics, imperfections and weak "feedback parameters" (tax pattern, wage system, utility pricing, capital costs, etc.) of a developing economy like that of India. While there is no question of emulating a particular country or group of countries in such planning - as conditions may not be similar - the importance of more coordination in the efforts of government and industry, and also of planning, cannot be overemphasised[20].

The options to be exercised definitely have dynamics of their own, as they depend on emerging internal and external conditions. However, given the initial conditions of the Indian economy for the eighties, and

considering the country's need to increase the pace and pattern of growth and "structural adjustment" some main elements of policy planning may be discussed briefly[21)]

5.5 Main Elements of Policy Planning

5.5.1. Change in Policy Thrust

We state the necessary change in overall policy emphasis at the outset. The Indian economy is more integrated and complex, than at the time planning began, when a number of industrial and foreign trade controls and regulations were adopted towards the stated national objectives. In many ways, fundamental changes have taken place in the economy over the past planning period (see also Table 11). For example, the savings rate has increased considerably which is a sharp pointer to the changes noted in the country's accumulation process; the GDP structure has changed in favour of industry and services; the shares of engineering goods, chemical and rubber products, and coal and petroleum products in the industrial sector have increased significantly; there have been technological changes in the vast agricultural sector; and these changes have occured notwithstanding major achievements in the area of self-reliance. Several qualitative changes are also observed in the economy, in terms of the changed nature and breath of industrial activity, a build-up of human capital and industrial and institutional infrastructure, notably power, transport, and so forth.

Therefore, the nature of the policy instruments, including controls, must be different in the eighties and beyond than in the past, in the sense that they should be of a more strategic (meaning economy-wide and not "case by case") nature, aimed at statements of

overall policy rather than direct and detailed interference in terms of licensing regulations and rules. Among the many possible changes are first those, wherever feasible, of the licensing and other specific controls. These may give way to fiscal incentives and disincentives. Tariff changes may be preferred to licences and quotas. This must be accompanied by a package of measures which rationalise fiscal policy. Further, in the coming years, not only will the complexity and integration of the economy increase, but also the new "sunrise" industries (e.g. electronics, telematics, airport equipment and spare parts, and new materials and substitutes for use in agriculture) must be encouraged. This will require the latest technology and a kind of policy-mix which is user-friendly, i.e. which reduces the cost to the consumer of the input or the product, and thus stimulates an increase in the level and diversification of markets and production. This would surely call for use of incentives-based policies which would lead to needed liberalisation of enterprise and trade, accompanied by an atmosphere of rapid acquisition, absorption and diffusion of technological innovations.

In such a framework, it is difficult to discriminate between domestic and foreign markets. Production and foreign trade must be seen in an integrated way[22]. The policies of import substitution and export promotion would have to be considered as simply two sides of the same coin, i.e. in light of the objective that the production and trade structure will become increasingly competitive within the domestic economy as well as with respect to the world economy, and stay competitive.

Of course, in India's case, elimination of obsolete controls and regulations will have to be done over a period of say a decade, during which the correct signals must be given.

In what follows, we briefly discuss the lines of

industrial (manufacturing) development requiring such policy changes, mention the elements of destination-wise policies, and proceed to outline trade-specific policy changes, including changes in fiscal and exchange rate policy, procedures, and plan programmes.

5.5.2. Diversification Towards Intra-Industry Trade in Manufactures

We have noted that one of the main aspects of the strategy for manufactures export expansion during the eighties in a developing country like India is growth. This can be obtained from increasing diversification, particularly within a sector e.g. from trade in intra-industry products with "South" as well as with "North" [23]. This would call for a higher degree of processing and for participation in the vertical specialisation of manufacturing trade, and must receive due attention in policy planning.

Even in the lower income case of India, not only has the export basket been significantly diversified in favouring manufactures, but also its vector meshes with the import vector with the following characteristics, indicating increased scope for intra-industry trade:

1) India exports as well as imports capital goods and chemical products in considerable amounts.
2) Raw materials like iron ore, some amount of fibres, and packaging inputs (jute manufactures) continue to be important exports, while raw materials and intermediate manufactures (pulp, fibres, fertilizers, and chemical products) are being imported to increase manufacturing production, especially of exports (notably gems, jewellery, and cashews, and to some extent rubber)
3) Food grains are imported occasionally, and exports of certain kinds of rice are on the

increase while traditional items like tea, coffee, animal feedstuffs, and spices are exported, but as a declining proportion of the total.

These characteristics need further enquiry in the context of the future, and only disaggregated analysis can really illuminate the implications. However, it is clear that given the above characteristics, the future lies with expansion of intra industry trade. Policy options for such expansion call for a high degree of adaptation of the latest technology not only in industries whose products are for export but also in products meant for import substitution.

An important criterion in such expansion of trade is maximisation of net foreign exchange earnings, with resource cost constraint. The experience of the past shows that barring sectors like oil, fertilizers, and those of essential consumption items like vegetable oils, most sectors are at least net foreign exchange earners (See Planning Commission, 1981).

The option of promoting intra-industry trade following a liberal industrial policy would be in line with the classical logic of promoting the foreign trade which allows greater participation in the emerging international division of labour, though in a somewhat vertical sense. Such trade is expected to result in increased specialisation, in economic efficiency including "X-efficiency" as well as in technological advancement[24]. To what extent growth benefits will "trickle down" depends upon the linkage effects (backward and forward) and the factor intensities of value added. Specific choices should be guided by the objectives of spreading more and more backward linkage effects and specialisation based on labour intensity or a higher wages to value added ratio in the linked

industries within the foreign trade sector.

5.5.3. Export Markets

The policy options in regard to the role of exports during the eighties cannot be worked out in a generalised sense. Considering the emerging pattern of trade and macro trends in the world economy, it is necessary to consider market-wise policies. Specifics would be a function of detailed exercises involving both imports and exports. Broad guidelines, however, can be set out tentatively, based on assessment of past experience and recent emerging trends.

Thus, for example, the future expansion of exports to ESCAP countries should be focussed on intra-industry manufactures, since India competes with the low-income countries in certain traditional exports and with the middle-income countries in manufactures.

With regard to the Gulf countries, considering the complementary elements in their economies, and that of India there is great potential for attracting direct investment, provided export possibilities can be developed on a long-term basis.

Trade with the EEC could expand through greater inflow of technology and industrial cooperation, keeping in view the changing production and demographic-occupational structures of the EEC. This means that many specialised manufactures may be transferred to countries like India following plans of industrial cooperation with the EEC at competitive prices.

Trade with East European countries is already being reassessed. Several studies have shown many possibilities for long-term economic integration[25]. There are signs of change in composition, possibly towards third-country exports and production cooperation for

mutual benefit in meeting the countries' need for materials.

The USA and Canada together remain a competitive and big market for consumer items. Considerations for expansion of exports would be proper delivery, better quality, demand adaptation, generic promotion, and marketing links. In fact, better quality, cost reduction and an aggressive marketing strategy are the kingpins of any export promotion strategy.

5.5.4. Policy Instruments

The compulsions of domestic resource mobilisation and increase in the tax ratio, particularly for indirect taxes, will necessarily lead to a higher cost structure for traded goods due to their 'cascading effects" (Jha Committee, 1978). With the effort to increase exports, and to compensate for the high cost structure, therefore, the cost of promotion towards compensating for high input costs, and of supplies of intermediate raw materials will naturally increase[26]. The economy will have to bear these costs. They are difficult to reduce, particularly when faced with deteriorating terms of trade resulting in an already lower profitability of exports explained inter alia by the pull of the domestic market. The possibilities of rationalisation of various incentives, taking into account current market and resource conditions must, however, be continuously explored, though minimum continuity must be ensured to facilitate investment decisions regarding exports[27].

It had been argued that "there is a limit of what we can do to stimulate exports through fiscal devices such as subsidies or monetary policy such as offering low interest rates on exports. What monetary policy can more effectively do for exports is to help maintain a relatively non-inflationary macro environment" (Economic Advisory Committee, 1983). This is no doubt

significant, particularly in respect to maintaining an appropriate exchange rate. For this an outright substantial devaluation to promote "structural adjustment" is generally ruled out in the Indian case, as that might not also enable raising sales abroad. What is suggested is that the exchange rate policy can be activated to help achieve export profitability. It has been observed that costs of "adjustment" are less and transition to a dynamic state is easier in a developing economy when the exchange rate is under-valued. In a world of floating exchange rates there is a compulsion to make frequent changes in the nominal rate of exchange to maintain the real exchange rate at a desirable level[28]. Further, in so far as exchange rate changes are ex-ante, it should be possible to maximise their beneficial effects in the context of both promotion of exports and import planning, as obtained earlier in countries like Japan[29]. An active exchange rate policy particularly helps when an economy is faced with a relatively large deficit, as is India. It should not be considered an inferior solution on the ground (as has been argued) that "it accepts the inevitability of domestic cost increases and has the further disadvantage of adding to the rupee prices of our imports"[30]. In fact, slightly erring on the side of an undervalued exchange rate would help in planning for import substitution without resorting to an import control regime. Imports of luxury goods must, of course, be directly banned. However, with increased "openness" and an increasing share of invisibles trade in the economy, non-tariff barriers have to decrease and instruments like the exchange rate should gain importance. Considering that import liberalisation policies have recently reduced the hidden subsidies in REP licences, an under-valued exchange rate may be desirable to compensate for this element of policy.

It may be added that for the Indian economy there is a further consideration, in that changes in the nominal rate of exchange should not only adjust for relative price changes (to maintain real exchange rate at a desirable level) but should also correct for declining competitiveness in terms of productivity relative to export competitors, particularly the decline due to the relative rise in the energy input to manufacturing value added ratio[31].

It is therefore contended that in a growing economy like India's, the balance of payments constraint will be considerably eased by an undervalued exchange rate, which will not only make transition to a liberal economy easy but will also make it easy to attain a higher rate of growth and the desired "adjustment".

5.5.5. Procedures and Priorities

The long-term focus must be on removing the various handicaps, including those of time-consuming procedures involved in the various policies, which also justify some of the present subsidies and incentives. The need to develop and manage the infrastructure means continuously higher growth in non-traded goods compared to the traded goods, due to the stage of development of the economy. Policy options should give priority to exports in use of the available infrastructure as well as in planning its future development.

5.5.6. Plan Programmes

In planning, investment in exports may be considered as a worthy alternative from the viewpoint of wider economic benefits to the country, and thus complementary to the inward oriented growth strategy.

Investment in furtherance of artisans' and craftmen's

training, build up of necessary institutional machinery, adaption of technology, processes, and products; harmonising standards; and R&D would not only help human capital formation and professionalisation but would also improve productivity and quality standards, especially in the case of small and medium-scale industries. This would contribute significantly to employment generation and may be considered complementary to the basic thrusts of development planning i.e. the development of the core sectors and poverty reduction[32].

To this end, the Plan programmes for export promotion, production and export linked infrastructure need to be reviewed and strengthened. Shortfalls in public sector expenditure on such programmes and schemes, shown in the Mid-Term Appraisal of the Sixth Plan, should be taken seriously rather than considered as "savings" (Planning Commission, 1983).

Footnotes chapter 5

1) Singh, M., "Management of Industrial Change", T.T. Krishnamachari Memorial Lecture, RBI Bulletin, February, 1983.

2) Considering composite index of relative size of population area and GDP. See for a discussion on size of the economies and their implications, a report of a Commonwealth study in Jalan (1982). Jalan, B. (ed.), Problems and Policies in Small Economies, Commonwealth Secretariat, London, 1982. It remains small if we consider the domestic actions affecting the rest of the world.

3) Chakravarty, S., "Trade and Development: Some Basic Issues", International Social Science Journal: The World Economy: Theory and Reality, 97, 1983. Chakravarty has recognised such a vicious circle accompanying an inward-looking orientation, and has pointed to the dilemma in simultaneously pursuing a dynamic technology policy.

4) Singh, M., "Management of Industrial Change", T.T. Krishnamachari Memorial Lecture, RBI Bulletin, February 1983.

5) Merchandise exports plus gross receipts from non-factor services and investment income.

6) Gupta, S.P., "Planning - 1990s: Strategies and Progress", MAINSTREAM, April 2, 1983.
World Bank, Economic Situation of India and Resource Mobilisation Issues, Washington D.C. (Unpublished), 1983.

7) Patel, I.G. "Inflation - Should It Be Cured Or Endured", Kale Memorial Lecture, May 21, 1983, Business Standard, July 4, 1983. Patel concedes that "the only solution when it comes to controlling the inflationary pressures which arise from periodic shortages of basic commodities is to eliminate these shortages - either by producing more, on average, or by importing more while the former is being attempted. It is no use saying that we cannot afford such imports because afford we must in the short run". This is not to suggest that in the long run, efforts should not be made to increase domestic supplies. Nor may such arrangement be applied to all items of mass consumption. Thus we in fact agree with Patel when he says:
"I do not believe that important as export promotion is, it can be an answer in our circumstances to the problem of obtaining adequate

supplies of essential mass consumption goods".

8) Gupta, M., 100 Percent Export-Oriented Units: Problems and Prospects, E&SRF, New Delhi, 1983.

9) Riedel, J., R. Grawe and C. Hall, "Determinants of India's Export Performance in the 1970s", World Bank, mimeo, January, 1983. Also in Review of World Economics, 120/1, 1984.

10) Riedel, J., R. Grawe and C. Hall, "Determinants of India's Export Performance in the 1970s", World Bank, mimeo, January, 1983. Also in Review of World Economics, 120/1, 1984.

11) Riedel, J., R. Grawe and C. Hall, "Determinants of India's Export Performance in the 1970s", World Bank, mimeo, January, 1983. Also in Review of World Economics, 120/1, 1984.

12) Rangnekar, D.K. and A. Bhaduri, "Note of Dissent" in the Report of the Committee on Export Strategy: 1980s Final Report, Ministry of Commerce, December 1980.

13) UNCTAD, Trade and Development Report, 1982, Geneva, 1982.

14) Kelkar, V.L., "India and the World Economy: Search for Self-Reliance", EPW, Annual Number, February, 1980.

15) Chakravarty, S., "Some Reflections on Indian Development Strategy", Inaugural Address to 8th Indian Social Science Congress, Hyderabad, July, 1983.
Chakravarty, S., "Aspects of India's Development Strategy for 1980s", EPW, XIX/20-21, May 19-26, 1984.

16) Borpujari, J.G., "Consumption and Productivity Patterns and Their Implications from the Production Structure", Paper presented at the Seventh World Congress of the International Economic Association, Madrid, 1983 (mimeo).

17) It has been demonstrated recently that even Korean export expansion was founded an industrial base built through severe import controls before export production was promoted, and even now the import of many items is restricted or prohibited (Datta-Chaudhury, 1981).

18) Sen, A.K., "Public Action and Quality of Life", Oxford Bulletin of Economics and Statistics, 43/4,

November, 1981.
Notably, educational background of the population, degree of urbanisation, success of land reforms, extent of energy use in industrial production, port facilities, and nature of government (Sen, 1981).
Lee, E. (ed.), Export-Led Industrialisation and Development, Asian Employment Programme ILO, 1981. On the basis of case studies of Japan, South Korea, Philippines, Singapore and Hong Kong, Lee discusses certain conditions of export-led industrialisation concerning the nature of industrialisation, policy requirements and necessary changes in the socio economic system.

19) Particularly "X-efficiency" see:
Bergsman, J., "Commercial Policy, Allocative Efficiency, and 'X-efficiency'", Quarterly Journal of Economics, 1974.

20) Sen, A., "The Profit Motive", Lloyds Bank Review, January, 1983, 147 Fred Hirsch Lecture.
As Sen observes: "The types of planning used have varied, say between China, Sri Lanka, South Korea and Yugoslavia, but their respective successes are directly linked to deliberation and design, rather than being just the results of uncoordinated profit seeking or automative pursuit of selfinterest", and quotes Datta-Chaudhury, K., "Industrialisation and Foreign Trade: An Analysis Based on the Development Experience of the Republic of Korea and Philippines", ILO Working Paper (114), Asian Employment Programme, ARTREP, ILO, Bangkok, 1979, who observed on the basis of analysis of Korea that "no state outside the socialist block ever came anywhere near the measure of control over the economy's investible resources".
Streeten, P., "Trade as the Engine, Handmaiden, Brake of Offspring of Growth", The World Economy, 5/4, December, 1982. Streeten goes to the extent of saying that it is wrong to attribute the high growth rate of countries like South Korea to exports as an engine of growth, and it is wrong to attribute the success of exports to the invisible hand. Thus it is recognised that a strong visible arm of intervention has guided the South Korean policies of import substitution and export promotion.

21) "Structural adjustment", in contrast to mere debt accumulation, is identified here as a set of measures taken by a country to meet the problem of serious imbalance of payments (which primarily resulted from two steep oil price hikes) without affecting the growth of the economy. In case the adverse balance of payments is allowed to affect

the growth process, "disruption" is assumed to take place.
The process of adjustment is differentiated as "financial" (inflationary and by "maturation" in external financing), or "structural" (policy/ strategy switch), later resulting in changing investment and output priorities, ultimately reflected in export penetration/import substitution in line with the country's comparative cost advantage, growth structure and priorities.

22) The idea of "deemed" exports is one example of integration of the national with the world economy. Certain products have been identified by the government, and a number of major products are being added (in respect to development of the oil sector), which will be considered as "deemed" exports by the government.

23) Balassa, B., "Intra-Industry Trade and the Integration of Developing Countries in the World Economy" in H. Giersch (ed.), On the Economics of Intra-Industry Trade: Symposium 1978, Tubingen, 1979, World Bank Reprint Series, no.113.
Amsden, A.H., "The Industry Characteristics of Intra-Third World Trade in Manufactures", Economic Development and Cultural Change, 29/1, October, 1980.
The recent research in this area has shown the extent to which a country's exports of a given product group mesh with imports of the same product group, and the increasing importance of intra-industry trade in proportion to total foreign trade in the product group, regardless of degree of disaggregation of products. It has been observed that "export vectors mesh better with import vectors when the importing country is a richer nation" (Hufbauer, 1979).
Hufbauer, G.C. in R. Vernon (ed.), The Technology Factor in International Trade, NBER, 1970, also in UN/ECE, The European Economy From the 1950s to the 1970s, Economic Survey of Europe in 1971, Part I, 1972. Thus, among Western industrial countries, the proportion of such trade in manufactures is very large, estimated (based on the three-digit SITC level) to be more than two-thirds of total trade in manufactures of the OECD countries (Raymont, in Frowen, forthcoming). Even among the developing countries, the exporters of manufactures have recently shown signs of increase in such trade. These countries include: Argentina, Brazil, Hong Kong, Republic of Korea, Singapore and Taiwan province of China (vide UNCTAD classification).

24) Leibenstein, H., "Allocative Efficiency vs.

'X-efficiency'", American Economic Review, LVI, June 1966.
Bergsman, J., "Commercial Policy, Allocative Efficiency, and 'X-efficiency'", Quarterly Journal of Economics, 1974.

25) Alagh, Y.K., "Intra-Industrial Specialisation and Its Impact on Trade and Economic Co-operation between India and Socialist Countries of Eastern Europe", UNCTAD TSC/25/GE/76-61025, 30 December, 1976. Reprinted under Series of Sardar Patel Institute of Economic and Social Research, Ahmedabad (India), no.6.

26) Kelkar, V.L., "Export Subsidy: Theory and Practice", EPW, June 7, 1980.

27) A programming study in the context of export targets may be in order, to minimise fiscal cost, giving broad trends in projected changes in the medium term.

28) Bird, G., "Should Developing Countries Use Currency Depreciation as a Tool of B/P Adjustment? A Review of the Theory and Evidence and a Guide for the Policy Maker", Journal of Development Studies, July, 1983.

29) Watanabe, T., "An Analysis of Economic Interdependence Among the Asian NICs, The ASEAN Nations, and Japan", The Developing Economies, 1980.
Malmgren, H., "International Order for Public Subsidies", Thames Essays No.11, London, 1977, pp.18-25.
Sinshihara, M., "Real Exchange Rate and Patterns of Industrialisation", The Developing Economies, December 1983.
Watanabe observes that maintaining a cheap yen "apparently worked to orient not only industries with comparative advantage but also those with comparative disadvantage toward the export market. It also served as an important factor in making the Japanese industrial structure self-supporting by penalizing imports".

30) Narasimham, M., "Unfulfilled Promises of the Economy", Commerce, December 31, 1983.

31) Stausser, T., "Where have all the barrels gone", Middle East Economic Survey, July 1984.
It has been found that productivity, as indicated by reduced energy input/value added ratio, improved at the rate of 1.5 - 1.7 annually in the non-socialist economies over the past decade.

32) The craftsmen's highly trained skills and techniques were the basis of the rapid adaptation of many small and medium-scale enterprises during the initial growth phase of Meiji in Japan.

6. CONCLUDING OBSERVATIONS

This paper has attempted to discuss the role of manufacturing exports in India's development pattern as it will be emerging in the eighties, also considering changing prospects in world markets.

In this regard, the contrasting theoretical propositions put forward, both for and against exports, have been briefly examined. The analytical weakness of the major propositions have been brought out and the relevant parameters examined in order to provide a framework for the role of exports, particularly pointing out the dynamic considerations. For example, changing rates of savings and investments, capital-output ratio, the conditions of the world economy, and also the policy alternatives available to the Government. The role of growth in manufactures exports has been discussed not only from the viewpoint of the balance of payments support provided by export earnings, but also from the viewpoint of their macro-dynamic effects of facilitating capital accumulation, technological growth and increasing efficiency.

The background of the six Five Year Plans formulated in the country so far and the role of exports has been discussed in some detail, to emphasise changing perspectives on trade in the light of overall economic perspectives. Specifically, the role of manufactures exports in maintaining and raising value added and production levels has been studied, covering the seventies and early eighties. It has been found that exports aided growth in certain manufacturing sectors in the sense that the higher growth of value added and production in these sectors was associated with higher export growth, albeit causation being a complex two-way effect. Considering, however, the role played by exports in these sectors, which make up a significant part of the small-scale sector, it is argued that

exports may be considered an important alternative strategy for development. It has been shown that the "openness" of the economy has considerably increased, and the perception of the reviewers of the Indian economy has also changed in favour of export oriented "structural adjustment", which is different form arguing for "export-led growth".

The report considers long-term growth prospects taking into account the projections provided in important studies. It is recognised that though the world recovery is no longer elusive, growth in projected export volume is going to be modest. However, it may be faster in the latter part of the eighties on account of manufactures which are likely to lead the growth, and can provide, for a marginal exporter like India, increased avenues for exploring market opportunities. It may be added, that the possibilities of "South-South Cooperation" and increased trade with East European countries brighten these prospects.

In the latter part of the report the logic and compulsions for encouraging higher export growth in India during the eighties have been discussed in some detail. The rationale stems not only from the employment angle, but also from the role exports play in the development of small-scale and traditional household industries, and in increasing both credit-worthiness and avenues for participation in the international division of labour. The compulsions arise due to balance of payments requirements, a need to expose the Indian economy to world market conditions after long innings with import substitution-based industrial development, and the structural changes taking place in the Indian economy. The favourable factors discussed in the report include an adequate resource base, growing infrastructure, institutional build-up, acceptable value added (even in exports based on imports), possibilities of large backward linkages of export

industries, and an atmosphere for South-South Cooperation.

The elements of policy planning for the development alternative of export growth in manufactures have also been discussed, keeping in view the difficulties experienced during the recent "structural adjustment" and those which accompany radical change. Promoting of intra-industry trade in manufactures is a significant policy alternative, having already obtained a diversified pattern of trade favouring manufactures. This has been highlighted as a way of increasing India's participation in the emerging international division of labour. The market-wise elements which must be taken into account in formulating policies have also been specified. The report argues for more active use of policy instruments already available to the Government, particularly fiscal and monetary measures (notably the exchange rate), to the extent they help to maintain a favourable macro environment and export competitiveness. The report has particularly emphasised the need for investment in exports, for which greater integration of export promotion programmes and projects into the overall resource allocation plan would be necessary in the next plan. Export production programmes and projects must be taken as seriously as those of the core sectors and those for reduction of poverty, which may be complementary.

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