

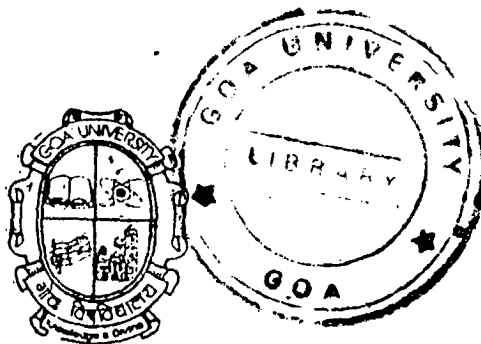
**ECONOMIC STRUCTURE, FOREIGN TRADE AND  
BALANCE OF PAYMENTS : A CASE STUDY OF INDIA,  
1970 - 71 TO 1990 - 91.**

**THESIS SUBMITTED TO THE  
GOA UNIVERSITY, GOA  
FOR THE AWARD OF DEGREE OF**

**DOCTOR OF PHILOSOPHY  
IN ECONOMICS**

**BY  
HALIMA SADIA RIZVI**

**UNDER THE GUIDANCE OF  
DR. M.A. SHAHI**



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**DEPARTMENT OF ECONOMICS  
GOA UNIVERSITY, GOA  
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## CERTIFICATE

This is to Certify that the Thesis entitled,  
" STRUCTURAL CHANGE, FOREIGN TRADE AND BALANCE OF  
PAYMENTS : A CASE STUDY OF INDIA. 1970-71 TO 1990-  
91." submitted by HALIMA SADIA RIZVI for the  
award of the degree of DOCTOR OF PHILOSOPHY in  
ECONOMICS represents her original work which was  
carried out by her at the DEPARTMENT OF ECONOMICS,  
GOA UNIVERSITY, GOA, under my guidance. The whole  
or any part of the thesis has not been previously  
submitted by her for any Degree or Diploma at any  
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## DECLARATION

I hereby declare that the thesis entitled " ECONOMIC STRUCTURE, FOREIGN TRADE AND BALANCE OF PAYMENTS : A CASE STUDY OF INDIA. 1970-71 TO 1990-91. " is the result of bonafide, independent research work carried out by me under the supervision and guidance of Dr. M.A. SHAHI, Professor and Head, Department of Economics, Goa University, Goa.

I also declare that the whole or any part of the thesis has not been previously submitted for any Degree or Diploma at any University.

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HALIMA SADIYA RIZVI.

26/11/97

*Dedicated*  
*to*  
*my parents*

### ACKNOWLEDGEMENTS

One of the best things in life is thanks giving as it enriches both the bestower and the bestowed.

Praise and thanks to the Lord Almighty who has chosen me to undertake a task and who helped me cherish a dream and turn it to reality.

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## CHAPTER ONE

### INTRODUCTION

#### 1.1. SIGNIFICANCE OF THE STUDY :

The study is concerned with the exploration of the relationship between foreign trade and structural change, and as such between the different components of foreign trade and as well as between the balance of payments and structural change with particular reference to the Indian economy during the period 1970-71 to 1990-91.

The role of foreign trade in economic growth and development has been the subject of several studies. Notable amongst these studies are those by Meier [8], Kindleberger [6], Nurkse [10], Singh [16], Chand [2], and others. These studies are of general nature. Other studies that concentrate on country analysis and on different aspects of foreign trade include those by Ali [1], Mohammed [9], Shinhohara [15], and Pack [11]. A few of these studies concentrate primarily on the role of exports. These have been carried out by Rao,

Alt and English [14, 4], Leela [7], and by Parekh [13]. With regard to the role of imports mention must be made of studies carried out by Kantawala [5], Chatterjee and Ray [3].

However, the changing structure of foreign trade in terms of the product mix of its contents during the period of economic transformation has hardly been the concern of most of these studies. The share of exports, imports etc, in national income does not reflect much about the structure of the economy concerned whereas the given product mix and changes in these project significant light on the structural transformation of the economy concerned.

Economic structure in the sense of the profile of an Economy is generally assessed in terms of the sectoral contribution to and composition of national income, within this grand aggregate concept of national income or product. The characteristics and distribution of other such aggregates are also studied to get a more detailed picture. These real aggregates are

consumption, investment etc and others that are of relevance include the employment patterns of the economy concerned. That is the occupational distribution of labor force. Nevertheless to pindown whether the economy has undergone significant structural changes, it is neither the broad growth of grand aggregates i.e. national income, nor the sub-aggregates that are of so much of relevance, but the 'product mix' of the economy. It is in this sense that the objective study is assumed significance on its own and also constitutes a departure from the studies in examining the relationship between structural change, foreign trade and balance of payments. This study tackles the issues of structural change with the help of empirical evidence with reference to the Indian Economy.

#### 1.2. METHODOLOGY AND SOURCE MATERIAL :

The study is of empirical nature and as such both descriptive and statistical approaches are used. Major efforts are concentrated in the analysis of the movements in different variables and magnitudes concerned within the framework of



statistical measures, appropriate for handling of such data. The source material insofar as data are concerned are secondary published sources of the Reserve Bank of India. These include Report on Currency and Finance, RBI Bulletin and Annual Reports. Other Sources include Government of India's Economic Survey, Statistical Abstracts of India, and various five year plan documents. Besides, the World Development Report published by the world bank has also been made use of. The theoretical background has been obtained mostly from journal literature.

### 1.3. OBJECTIVES OF THE STUDY :

The broad objectives of the study are :

1. To analyze the growth process and pattern of the economy in general with an emphasis on the measurement of the various aggregates involved in the economic growth, such as gross domestic product (GDP) and its major components such as gross domestic savings (GDS), gross domestic capital formation (GDFC), exports (X), imports(M) etc.

2. To examine and analyze the role of foreign trade in economic growth and development in general and with respect to Indian economy in particular.

3. To examine the changing structure of India's foreign trade particularly from the stand point of the composition of its exports and imports, i.e., the product mix of the contents of exports and imports.

4. To explore the relationship between structural change and foreign trade including the relationship between balance of payments and structural change within the context of the Indian economy.

#### 1.4. HYPOTHESES :

During the course of this study, the following hypotheses are specifically tested in terms of the empirical evidences.

1. That the Indian Economy has undergone structural change/ transformation over the years in terms of sectoral contribution to the Gross

Domestic Product.

2. That this structural change / transformation is reflected in foreign trade sector of the economy i.e., its composition of exports and imports.

3. That the structural change / transformation can be dated in the sense of the bench mark year from which it is evidenced to have taken place.

4. That the developments in the foreign trade sector can be used for such dating purposes as one of the several indicators.

#### 1.5. SCHEME OF CHAPTERISATION :

The study is spread over eight chapters. The first chapter is concerned with the introduction aspects. It deals briefly with the analysis of the work carried out, significance of the study, and the methodology and source materials. Further this chapter notes the objectives of the study, and also lists the hypotheses likely to emerge out of the evidence to be deduced in the subsequent chapters.

The second chapter is concerned with the review of the available theoretical as well as

empirical literature on the various aspects of the foreign trade including the balance of payments. (Refer Bibliography). The literature on the subject of foreign trade and its different aspects is fairly extensive. Nevertheless, the brief survey of available literature provides us with a helpful background to evaluate some of the hypotheses listed earlier with reference to the Indian economy.

The third chapter is concentrated on the survey of the Indian economy, since the inception of economic planning in the year 1950-51. It traces the developments in the magnitudes of different economic aggregates such as gross national product, exports, employment etc, and further notes the transformation of the Indian economy from a highly agrarian economy into one of industrialized economy. Further these developments in different aggregates have been used to find out whether the Indian economy has witnessed substantial structural change.

In tackling this question of structural change this chapter as well as subsequent chapters

emphasise in particular the developments in the foreign trade sector in the Indian economy.

The fourth chapter is concerned with the merchandise exports of the country. It examines the trends, composition and direction of exports over the 20 years period. On the basis of a fairly detailed study of the composition of exports this chapter tries to examine the issues connected with structural change in the Indian economy. It gives also a brief analysis of different policies concerning exports.

The fifth chapter is concerned with merchandise imports. As in the case of exports this chapter examines the developments regarding trends, composition and direction of imports over the 20 years period. This chapter also tries to make some inferences regarding structural change in Indian economy on the basis of empirical evidences particularly with regard to composition of imports; moreover it also examines briefly certain import policies.

The sixth chapter deals with the role of

services in India's foreign trade. In general along with an analysis of the development in invisible trade, this chapter also concerns itself with the examination of developments in the services sector proper. It must be mentioned that the study of the services sector within the context of international trade is not easy due to the complex and heterogeneous nature of the activities involved.

The seventh chapter deals with the examination of the developments in India's balance of payments. It notes the mode of financing the balance of payments deficit over the period under consideration. Further this chapter also studies the component accounts of the country's balance of payments over the years 1970-71 to 1990-91; wherever possible it touches upon issues regarding structural change.

The eighth chapter is devoted to the study of foreign investment within the context of the Indian economy. It examines in brief the different aspects of foreign investment and also in some detail the role of foreign investment

both direct and portfolio within the context of Indian economy. It must be mentioned however that the data on this aspect of the Indian economy is not easily accessible nor it is available consistently on a comparable basis. While examining the available evidence, the analysis also tries to touch upon the issues of structural change.

#### 1.6. CONCLUSION :

With the help of this analysis and material in the foregoing chapters, it is concluded that :

1. The economy has undergone substantial structural change in terms of the changing contribution of the different major sectoral components to the Gross Domestic Product.
2. The distribution of labor force in terms of Sectoral employment has also undergone substantial change.
3. Further there has been a significant change in commodity composition/product mix of India's exports as can be noted from export composition on the basis of SITC categories.

4. Along with the above a significant change in the commodity composition and product mix of India's imports can also be noted.

5. In spite of all these structural changes in the economy the prospects of the country's balance of Payments still remain uncertain, since they are governed by forces other than the economic.



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## CHAPTER TWO

### REVIEW OF LITERATURE

#### 2.1. INTRODUCTION :

In this chapter we briefly review the existing theoretical as well the empirical literature on various aspects of foreign trade. The objective of this review is to prepare the general background for what follows. Given that foreign trade sector is an important sector of an open economy, different writers have dealt with the varied aspect of foreign trade for the economy of a country. Foreign trade not only can affect the resources and output base of an economy, but also its technological capabilities.

#### 2.2. TRADE, GROWTH AND DEVELOPMENT :

Professor Dennis Robertson [85], while examining the role of foreign trade considers trade as an 'engine of economic growth', in the sense it promotes the growth potential of the

economy, and consequently leads to an improvement in the economic welfare of the trading nations.

To Ranis [82], trade is both an engine of economic growth as well as an additional device for achieving efficiency in production whereby imports and exports are transformed as inputs and outputs.

Mier [60], considers trade as an indispensable tool in the process of economic development. This view is shared by Singh [99], when he opines that trade has brought about economic growth in India by providing access to the Indian goods in foreign markets. Likewise Chand [19], holds the view that trade has been an important contributing factor to Indian economic development throughout its history.

Bhagwati and Srinivasan [12], further stress that the development potential of the Indian economy, in particular, could be harnessed by an open-door external trade policy within a liberalized environment.

The country studies undertaken by Kruger [47], further points out to the importance of the

foreign trade sector in overall economic development. That foreign trade, particularly, exports can increase the country's resource base has been noted by Agarwal [1]. The distributional aspect of trade especially international reserves has been emphasized by Liang [53]. Baldwin [10], on the other hand, emphasizes the role of trade in expanding the resource frontier and the beneficial aspects of production from export.

The active and dynamic role of trade in India's growth process has been noted by Ramachandra and Rao [77], which has been confirmed by Satya [72], when he opines that trade has assisted India's development process. The role of trade in achieving self-reliance by increasing efficiency in production and productivity has been noted amongst others by Chisti [22], and Marivals [56]. The active role of foreign trade in the case of such countries as Israel, has been noted by Pack [71]. According to Pack, in spite of the lack of adequate natural resources, Israel has been able to make

tremendous progress in adopting the technology based production process with a view to generating resources out of its exports. The economic structure of Israel has been transformed due to the dynamic role of its external sector. Similar reasoning has been put forward by Shinhora [89], when he deals with the role of trade in the Japanese economy. Of course, a number of these authors have stressed the need for export diversification along with export promotion for enlarging the resource base of the country. This is particularly so in the work of Ali [6], concerning the Pakistan economy and of Boltho's [17], work with regard to the economies of Socialist countries.

The international trade aspect such as the composition of exports and the effects of this composition on the economies of China and Taiwan within the context of industrialization have been studied by Lin [54]. The growth related aspects of the international trade have been thoroughly dealt with by Ram [55], in relation to the economies of South Asia. The role of different

economic sectors including the foreign trade in bringing about structural change with reference to the different factors responsible for such changes has been the work of Singer [95], whereas the question of 'geographic' vis-a-vis 'commodity' concentration of export with reference to 'tied-aid' policy has been examined by Stern [90]. The impact of political conflicts on trade and its growth within the context of India-Pakistan conflict of 1971 has been noted by Islam and Papanek [73].

Other studies that deal particularly with the structure of trade in the sense of composition of a country's exports / imports are there by Prasad [75], Balassa [8] et.al. Prasad for instance argues that though India a natural resource rich country, yet its exports basket does not reflect the factor and products of the country. Balassa, while examining the composition of exports and imports of several countries has stressed that manufactures play a significant role in particular in the structural



change of the concerned economies. While Hirschman [36] argues that exports have a higher degree of geographic concentration than imports, Halder and Richards [35] have examined the instability aspect of export in terms of geographic, commodity and primary product concentration particularly with reference to India.

Regarding trading relations themselves, Ghosh [33] has argued that these depend upon the socio-political environment, in the world economy.

For bringing about changes in the structure of trade, Sharma [91], emphasizes the presence of a cordial international environment, while Singh [96], argues that when the environment at the international level is uncertain, trading relationships become difficult.

According to International trade promotes employment particularly in developing countries, both when they use their abundant factor and resort to factor substitution. The Structural basis of India's foreign trade with the input-output is examined by Bharadwaj, who shows as gains in an area of sectoral dependence in foreign

trade. The relationship between trade and economic structure has been surveyed by Caves[18].

### 2.3. ROLE AND IMPORTANCE OF EXPORTS :

The specific relationship between exports and economic development has been examined by several authors. Export expansion is generally considered an integral part of the development process. The export sector can only be neglected at the peril of development. The role of exports in the development process has been examined by Rao [83]. Wolf [113] on the other hand deals with the nature, composition, trends and direction in the export sector of India while suggesting several measures to improve the export performance. The significance of exports has also been emphasized by Alt and English [28], who consider exports as an integral part of economic development. That export promotion schemes along with import substitution strategies should form an integral part of the development programme of India has been suggested by Patel [74], Tiwari [104], has carried out a study on the lines of Wolf

regarding the export sector. He has also developed a model to measure the rate of growth of exports and export share within the framework of constant market share analysis.

The export performance of the Indian economy has been examined by Feder [30], who also analyses the different promotional policies regarding exports at the same time suggesting some prospects for exports.

According to Singh [97], export earnings play a significant role in economic development, particularly within the context of a country's balance of payments. The slow growth of exports of developing countries and its concern are examined statistically by Agarwal [2] who argues that this is due to export composition and poor product quality of their export. Kaur and Singh [44], also attribute the slow growth of exports trade to the traditional type of exports that form a major portion of the export composition of the country.

Regarding the improved contribution of export revenues to GNP, Halder and Richard [35],

suggest that diversification of export is one of the solutions. In this context it is interesting to note that Leela [52], has identified some of the fast growing major exports of the country along with the factors that have contributed to this growth. According to Nanda [66], a comprehensive strategy and a dynamic export policy is essential to increase both the production and export of goods involved. The balance of trade argument is explained by Singh [98] when it comes to the role of exports.

That the product mix of export content and composition is of significance in the light of the experience of advanced industrial economies, has been emphasized by Balassa [9], who argues that of late high tech goods have become important. The need for diversification of exports both to increase export revenues and reduce export instability is stressed by Massel [58], who says that a high degree of commodity concentration with regard to primary products cause both fall in export revenue and export instability. The recent trend in the growth of engineering goods in the

world market has been noted by Singh [100]. The export market generally has received a boost according to Trechan [106], as a result of increased trade in manufactures and high technology oriented goods. The dynamic export promotion policies of varied countries have in addition added to the growth of export trade.

Another aspect that is of significance in the context of our study is the direction of exports. The direction of exports indicate both the international trading relationship and the competitive status of the exporting country in general. So far as India is concerned, it has had, and at present days have trading relations with almost all the industrialized countries, It must be mentioned that during the period of our study, Eastern European countries have been of significant importance in India's trading relations.

Amongst the studies concerning India's trade with the erstwhile Soviet Union, Sharma [93] argues that it is just the diversion from one

market to another. The prospects of export especially food products and other consumer items to the petro-dollar countries according to Mohammed [61] are quite good and India should try to explore these markets.

Syed [4], in his study examines the export competitiveness of Indian goods in the Canadian Market with a view to assessing the export potential.

So far as trading relations in general are concerned, the importance of cordial political atmosphere between / amongst the partners for smooth flow of trade is explained by Chisti [22] and Desai [25]. Moreover trading relations are also governed by the individual country policy approach to its trading partner. That the changes in the structure of exports both regarding composition and competitiveness, and the export trend are governed by the individual country's policies has been studied by Nayyer [68] with reference to the policies adopted by India in the 1960's. The same has been studied by Verghese [109], for the subsequent decade, who suggests

that export promotion measures and also attempts at export diversification have had a favorable impact on the export trend of India. In this area, another study by Gonsalves [34], suggests that improved marketing and production techniques as well as awareness of the consumer preferences are essential for export promotion. The role of incentives as well as the need for such incentives in the promotion of exports during the course of economic development has been examined by Balassa [8]. There are a number of studies on the export performance of India. The studies by Biswas [15] and by Kapur [43] using the constant market share model suggest that the declining share of India in the world export market is a reflection of its cause of international competition in the area. Rampuria [79], further deals with the country's options during the long term for export-led growth, which in the views of Banerjee [11], is rather pessimistic and succeeded due to resistance from other competition in the international markets.

In this regard it is pertinent to note Wadhva and Kulkurni's [110] argument that large companies help the export prospects, albeit with certain limitations. Hew and Saxena [37] in their analysis of the performance and prospects of India's exports argue that the declining share of India in the world market is due to technological backwardness in the export policies sector as well as trade related barriers in the world markets.

In the development process, exports are required to obtain the necessary foreign exchange. This is to enable the imports of necessary technology and other essential raw materials and capital based goods needed to build up the productive capacity at home.

#### **2.4. ROLE AND IMPORTANCE OF IMPORTS :**

Amongst the different studies on imports, those concerning import substitution have been of quite significance. Bharat Ram and Panchmukhi [78] for instance, have studied the impact of import substitution both on economic development and on the rate of exchange. Naurihal [67], stresses that import substitution strategy with



emphasis on domestic technology leads to overall gains from international trade. The rising value of Indian imports vis-a-vis its exports, has been responsible for the trade imbalance according to Lajipathirai [49]. Such adverse impact can be checked, and the country may even gain if trade is carried out within the context of commodity agreements from time to time according to Kantawala [42].

The gains to India from trade with the Soviet Union have been immense according to Sabastian [86]. The imports and import-content of a number of goods in the sub-continent and India in particular have been influenced by the composition pattern of the nation particularly in the opinion of Verma [108], Chatterjee and Ray [20]

The demand function for imports with regard to food grains has been analyzed by Biswas and Ram [16] who have also calculated the elasticities of the goods involved-especially sugar whose demand was found elastic. Both Desai [26] and Saxena [88] have studied the country's import

requirements of capital and other equipment and Saxena argues that the country's import requirements are likely to increase with the opening up of the economy and hence the country's share in the world imports is likely to grow.

#### 2.5. BALANCE OF PAYMENTS :

Though a number of studies have been undertaken with regard to balance of payments in our survey, we confine our attention to just a few of them. In a fairly comprehensive study of the problem in general and with reference to India, in particular, Nayyer [70] , examines both the theoretical and empirical aspects of the balance of payments. In view of the persistent deficits, he suggests the use of both quantitative and qualitative measures to overcome the situation. Expressing his concern on the deficits, Sundaram [102] also suggests both fiscal and monetary measures and the need for a strong political will to implement these measures to overcome the problem.

The recent developments in the country's balance of payments have been studied by

Rangarajan [81]. Ahluwalia [3], on the other hand, while dealing with the problem of deficits over a number of years, finds that to some extent the problem has been alleviated by policies such as expenditure switching and expenditure reduction.

The balance of payments problems of the country have been attributed to the higher oil prices, and the increasing interest burden on foreign loans as well as low revenues from exports owing to depressed export prices according to Tandon [103].

The problem of balance of payments have also been studied within a broader context by Kennen, Dangen et. al [45] and with reference to the United States Economy. Marwali [57] on the other hand has analyzed the problem of disequilibrium within the context of a mathematical model. His analysis is of particular significance, since it deals with the developing economies in general with reference to the process of economic development. He traces

phenomenon has been the subject of several studies, prominent amongst them being those of Johnson and Frenkel [31]. The volume by Frenkel and Johnson, also contains a number of studies in different economies of Europe. For another developing country, particularly Sudan, the studies of Shahi [94] may be mentioned, where he has critically examined the empirical aspects of the monetary approach.

The appropriateness of the monetary approach has further been studied by Jayaraj [40] who also relates this to the Keynesian analysis. The applicability of the monetary approach is also examined by Raghavan and Saggar [76] within the Indian context. Another study in this sphere is by Bhatia [14] who examined the applicability of this approach within a regime of fixed exchange rates. Concerning the assessment of the degree of equilibrium, Alvis [7], opines that the problem in this regard are created by a non-uniform presentation of balance of payments statistics.

Besides the above, several other studies exist in the different aspects of balance of payments and to study literature to one's satisfaction is a formidable task. Hence we have restricted our survey to those which are of principal significance.

#### 2.6. OTHER ASPECTS :

In this section, we shall survey in brief some studies concerning the significance of the emerging services sector and those dealing with foreign investment. Though the literature on merchandise trade is quite extensive, that on invisibles inclusive of services, is rather scant. Services have assumed significance in international trade only recently. The barriers to trade created and sustained since World War II, are being relaxed only gradually over the past few years. This has been able to generate factor mobility labour and capital in particular. Capital itself has become mobile in the form of money and machine and labor in the form of skills (human capital). Services in general include those of banking, insurance, transportation,

tourism and other allied industries. As mentioned, the literature on services is rather limited, yet some studies deserve our attention. For instance, Spin and Lutz [98], in their analysis of the factors that determine the trade in services put forth the argument that factors of production especially labor migrate from developing to developed countries for better earnings as well as working environment, where both the productivity and performance can be improved. Moreover, these factors could be more efficiently utilized in the conducive environment of advanced industrial countries.

So far as India's potential in this sphere is concerned, Nayyer [69] is of the view, that India stands a great chance as a provider of services both professional and technical worldwide, and the problem is just to explore the markets for these. Regarding the utilization of services, Bhagwati [13] argues that most of these when imported go into the wrong type of domestic activity, and hence it is imperative that these

services be utilized in more productive sectors particularly economic and social infrastructure. The role of multinationals, in providing a useful base for innovative research and development effort is stressed by Rangarajan [80]. According to him, India can gain significantly by way of technical know-how as well as economic return by promoting joint ventures in the service sector. The importance of the service sector with regard to earnings and remittances from migrant labor has been studied by Nambiar [65]. He finds the contribution of this sector quite significant for generation of earnings and promotion of savings. The scope for consultancy service is assessed by Vardachari [107], who suggests that the country needs to develop more expertise in this area.

The role of investment in generation of income, output and employment is well established. The growth process itself requires huge investments and hence in the absence of adequate domestic resources, foreign investment by way of either equity, loans, etc. assumes considerable significance. It in fact becomes

indispensable. Though foreign investment may lead to its own complications, yet in modern times, it has played a significant role in the overall development of several economies. Of the several studies in this subject, that by Kidron [46] and Dunning [27] need mention. The former has studied the role of foreign investment within the Indian context and the latter developing countries in general. The impact in the context of liberalization measures in foreign investment especially by non-resident Indians has been studied by Ghoshal [33].

Other writers such as Mehta, Shenoy [58] et.al. have stressed the important role of foreign investment in the country's development especially with regard to laying the foundations of the development programmes.

The problems that arise regarding the degree of control of foreign enterprises have been studied by Kumar [48], with reference to the manufacturing sector. That customs unions can play a significant role in promotion of investment, has



been stressed in D'arge, Scrapperlander et.al [23]

The role of foreign aid and its limitations within the context of the Indian economy has been studied by Lakdawala Rao, et.al. [50,84].

Lall [51] has dealt with the theories of direct private foreign investment, synthesizing the recent theories he has tried to examine the role of private foreign investment in manufacturing sector and the growth of multinational corporations.

Examining the effects of multinational corporations on the host country Jayaraman [41] comments that this element was not given due weightage in Lall's analysis. Errunza [29] analyses the benefits of foreign portfolio investment in the Indian perspective in the wake of the liberalization process.

Sau [87] has dealt with the use of purchasing power parity, unequal exchange in the determination of foreign direct investment by international institutions such as IMF, IBRD and the UN.

Estimating the ownership and control of

joint ventures abroad by Indian parent companies, Morris [62] is of the view that Indians' control over joint ventures is quite large even though with much less financial commitment and less interferences from governments. Further Morris [63] has also noted the trends in foreign direct investment from India for the period 1950-81 which is quite sizeable.

These are some of the important and relevant studies which have been dealt in detail to form the background basis of the present study.

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## CHAPTER THREE

### STRUCTURE OF THE INDIAN ECONOMY

#### 3.1. INTRODUCTION :

Eversince the attainment of Independence in 1947, the major objective of the country's policy makers has been to put the economy on the development path. Serious efforts in this direction were made with the formulation and implementation of the nations development plans over the years, beginning with the first five Year Plan in 1950-51. Hence, whatever successes or failures that have been encountered in this regard are to be judged within the historical and socio economic context of the country. However, it must be noted that whereas several foreign rulers who came to this country imposed upon it their own socio economic and political values over the years, yet they looked upon India as their homeland once they were here and contributed their mite to its development. The exception however were the British, whose interests in this country were purely of exploitative nature - as a resource base to sustain their own power and promote the development of England in particular.

Nevertheless, the British did contribute to

the transformation of the country at all levels by the introduction of a uniform legal system, promotion and development of certain industries and infrastructure such as railways, ports, telegraphs. etc. They further strengthened the educational base of India by establishing several institutions of higher learning, thus contributing to the development of skilled manpower in India. Thus over the years, India underwent some sort of a structural transformation, yet the country remained heavily agriculture-based with endemic poverty and low rate of growth. It is within this background that we must look into the aspects of the Indian economy, particularly with regard to structural change, which is the concern of this chapter.

### 3.2. STRUCTURAL CHANGE : ASPECTS :

Generally by structural change we mean the transformation of the traditional heavily agriculture dependent economy to one with modern industrial base and with the dominance of the non-agriculture activities. At the social level, it

implies a transformation of the institutional structure. When, specially planned development is undertaken investment strategy that is geared towards industrialization and production of goods hitherto imported brings about changes in the factor proportions in the productive sectors of the economy. With regard to resources, such as labour, there could be a movement away from rural area into urban area in search of employment in the secondary and tertiary sectors. Hence the consequence is occupational redistribution. Structural transformation, particularly, in the present day high income economies has led to both increases in general productivity as a result of improved and advanced technology and to increase in employment in higher net-value production sectors of the economies.

Along with the changes in the relative importance of sectors, structural change within a sector may bring about changes in the output composition. For instance, in the case of industrial sector, there may be an alteration in the output mix of capital and consumer goods.



Consequently there will result changes in the pattern of investment and employment.

Structural change over the historical period may also bring about changes in the relative importance of the export oriented vis-a-vis domestic production oriented sectors of the economy. From traditional agriculture based produces, exports may take the shape of diversified manufactures. There will result a change in the composition of the country's inputs in favour of capital and intermediate goods in the early stages and a reduction of consumer goods imports over time.

The general objective of economic policy is both growth and economic development and the process of implementation of the policies to achieve this objective, structural changes in the economy also form an inherent and integral part. During this process, one finds on the demand side, the changes in income and living standards bring about a shift in the consumer preferences for the goods mostly produced by the manufacturing

sector as a result of changes in tastes and preferences. On the supply side, changes in technology, bring about diversification of the economic, and shifts in relative importance of consumer verses capital goods industries and also by making available new products and expanding industrial base and further by establishing inter industry linkages.

No doubt use of technology and technological change affect the economic structure and bring about structural change in that technology which affects not only the rate of economic growth, but also the pattern of investment and employment.

An important aspect of structural change is the changes in the distribution of labour force both at the inter-sector and intra -sectoral levels. This change in labour force distribution affects the proportion of labour force employed in different sectors and within sectors. Thus the work-force may shift from primary agricultural sector to non agricultural sector over time either by way of transfer or by way of new entry. This

movement of labour force or its distributional aspect, is likely to bring about changes in income and standard of living. In a way this can lead to the alleviation of poverty endemic in a agricultural economy of the developing countries. Besides income increases, there could be gains from productivity increases. Generally economic development itself is associated with changing sectoral distribution of the labour force.

The relationship between economic development and labour force distribution has been noted by Fisher[1] and Clark[2]. On the basis of statistical analysis, it is generalised that the proportion of labour force engaged in agriculture tends to decline relative to those in other sectors-especially services. Fisher is of the view that this relationship expresses itself by shifts in investment and employment from the primary to the secondary and to a greater extent to the tertiary sectors. Clark finds a substantial correlation between real income percapita and tertiary employment.

Inspite of the contrary views held by Baur and Yamey [3], the empirical analysis overwhelmingly has lent support to Clark's observation. Further, these observations have received strong endorsement by the empirical works of Kuznets [4] and also by the work of Lewis [5].

Whereas the growth performance of the economy is reflected in the growth rate of its national product, structural change is reflected in the changing proportion of the sectoral components contribution to national product percentage wise in general. This aspect is noted in a United Nations report [6] wherein it is observed that "An important aspect of the process of economic development is diversification of the economy which occurs. The relative contribution of various economic sectors to output changes, and structural shifts also take place within each sector. As a rule, the main shift in the overall structure of the economy is a relative decrease in the share of agriculture in the national output and a corresponding relative increase in aggregate share of other sectors with the increase

in industry tending to be in the earlier stages, particularly notable".

It is also possible to bring about structural change in the economy by deliberately altering the pattern of investment especially in a regime of economic planning. Thus, in the case of India this is evident by the policy geared towards industrialization and hence the investment strategy in favour of that sector under economic planning.

### 3.3. STRUCTURAL CHANGE IN THE INDIAN ECONOMY :

In order to assess the structural change within the Indian context, we have made use of figures of the various components of the national income on the expenditure side. These developments in such aggregates as GDP, GDS, etc., have been noted and examined at 5 year intervals. This interval is chosen to coincide with the plan years. Thus noting the figures on some of these aggregates, we find that GDP, that was Rs.17536 crores in 1950-51 in constant 1970-71 prices doubled over the 20 years period to reach

Rs.79345 crores. Thus over the 40 years period, GDP increased at a compound rate of 3.8 per cent per year.

However, a significant development in this sphere is the increase in the GDS per cent age from a low of 12.5 per cent to more than 20 percent on the average by 1990-91. Hence it is clear that this increase in savings capacity has been able to generate fund for investment activity to a considerable extent [TABLE-3.1].

However, this significant development does not tell us adequately about the structural change in the economy. This structural change in general is indicated by the developments in the component sectors of the GDP insofar as their percentage contribution to GDP is concerned. This we note from [TABLE-3.2].

TABLE - 3.1

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GDP, GDS AND GDCF 1950-51 TO 1990-91.  
(Rs. Crores in 1970-71 prices)  
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Year	GDP	GDS	GDCF	GDS/GDP	GDCF/GDP
1950-51	17536	2195	2379	12.52	15.57
1955-56	20870	3009	3323	14.42	15.97
1960-61	25534	4072	4523	15.95	17.71
1965-66	29023	5726	6170	19.73	21.26
1970-71	36736	6660	7177	18.13	19.54
1975-76	42890	7733	8463	18.03	19.73
1980-81	50623	11374	12227	22.47	24.15
1985-86	64988	13075	14477	20.12	22.28
1990-91	79345	16884	18709	21.28	23.58

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Note : Domestic Product (GDP), Savings (GDS), and Capital Formation (GDCF).

Source : CMIE's, Basic Statistics, 1994.

**TABLE - 3.2**

GDP by Industrial Origin 1950-51 to 1990-91.  
(Rs. Crores in 1970-71 prices)

Year	GDP	Primary	Secondary	Tertiary
1950-51	17536 (100)	10453 (59.6)	2538 (14.5)	4545 (25.9)
1955-56	20870 (100)	12123 (58.1)	3229 (15.5)	5518 (26.4)
1960-61	25534 (100)	14078 (55.1)	4413 (17.3)	7043 (27.6)
1965-66	29023 (100)	13559 (46.7)	6297 (21.7)	8928 (31.6)
1970-71	36736 (100)	17802 (48.5)	7594 (20.7)	11340 (30.9)
1975-75	42890 (100)	19934 (46.5)	8782 (20.5)	14174 (33.1)
1980-81	50623 (100)	21015 (41.5)	10937 (21.6)	20048 (36.9)
1985-86	64988 (100)	23644 (36.9)	14242 (21.9)	26748 (41.2)
1990-91	79345 (100)	27850 (35.1)	16821 (21.2)	34673 (43.7)

Note : At factor cost in 1970-71 prices.

Figures in the parenthesis are percentage to total.

Source : Government of India, Economic Survey, 1995.



Thus the Indian economy was heavily agriculture based and between 1950-51 and 1960-61, more than 55 per cent of the GDP was contributed by the primary sector. The position changed considerably after 1961, when the contribution from the primary sector dropped from more than 50 per cent to below that figure, and by 1980-81 it had gradually dropped down to 41 per cent. By 1990-91, contribution from the primary sector had dropped down by a further 5 percentage points over the 1980-81 figures. The contribution of the secondary sector rose from 14.5 per cent in 1950-51 to 17.3 per cent in 1960-61. But the significant change occurred by 1965-66, when the secondary sectors contribution rose to almost 22 per cent and has continued to remain around that figure since then. The balancing role has been played by the tertiary sector which, of late has come to contribute more than 40 per cent to the GDP. In general the secondary and tertiary sectors have acted as dynamic sectors where the growth rates over the 40 year period have averaged around 5 per cent per annum. Hence, we

may safely say that the Indian economy has entered the phase of structural transformation from 1970-71 onwards as evidenced by the sectoral contribution to GDP. The developments in the various component sectors of the Indian economy in relation to GDP bear adequate testimony to the confirmation of the hypothesis regarding the movements in the sectoral contribution as noted by Kuznets, Clark Lewis and, of late by Shahi [7].

But of interest is that while the primary sectoral contribution to GDP has declined in absolute terms there is overall progress. Due to the Green Revolution and other policy measures the output of agriculture has increased. The country has achieved self sufficiency in food-grains where production has risen from 50.8 Million Tonnes in 1950-51 to 191.1 Million Tonnes by 1990-91. Other agricultural products such as condiments and spices, Tapioca, Sweet Potato, Cardamom etc, have also come upon the scene specially in the areas of horticulture. The production in agricultural front has become more

diversified, and several agro-industries have also come up during this period such as Poultry, Dairy and Piggery farming Bread Making, Bakery, Fruit Conservation units, flower cultivation Nurseries and farms etc.

In the secondary sector, particularly industrial sector, there have been tremendous changes both in output and employment. Several new industries have come up and traditional ones have come to be modernised. The progress has been noticeable specially with regard to heavy industries. Overall, there is progress in all types of industries : petroleum, mechanical engineering electrical engineering, chemical and fertilizer industries etc Table [3.3]. For instance in the metallurgical industries group amongst others, significant progress has been achieved in that the production has increased from 35 thousand tonnes in 1960-61 to 239 thousands tonnes by 1990-91 or almost by 7 times. Similarly in the case of mechanical engineering industries, the value of machine tools has risen from Rs. 3 Million in 1950-51 to Rs. 6500 Million by 1990-91,

TABLE-3.3

PRODUCTION OF SELECTED INDUSTRIES

<u>Industry</u>	<u>Unit</u>	<u>1950-51</u>	<u>1960-61</u>	<u>1970-71</u>	<u>1980-81</u>	<u>1990-91</u>
I. Metallurgical industries.						
	million					
1.1. Hot Metal	tonnes.	1.69	4.31	6.99	9.55	12.15
1.2. Steel casting.						
	thousand tonnes.	-	35	62	71	262
II. Mech. Engg industries						
	Rs. million					
2.1 Machine tools		3	8	430	1692	7731
2.2 Textile machinery						
	do	-	-	303	3027	9454
2.3 Cement machinery						
	do	-	6	42	336	2761
2.4 Motor cycle scooters etc						
	thousand	-	0.9	970	457.2	1842.8
2.5 Earth moving equipments						
	do	-	-	-	0.2	4.0
III. Electrical engg industries						
3.1 Power Transformers						
	M KVA	0.18	1.39	8.09	19.46	36.58
3.2 Electric motors						
	M hp	0.10	0.73	2.72	4.06	5.86
IV. Chemical industries						
4.1 Penicillin	MMU	-	-	190.4	336.8	525.0
4.2 Vitamin A	do	-	-	38.5	59.9	220.5
V. Index of industrial production.						
	Base (1980-81 = 100)	18.3	36.2	65.3	100.0	212.6

Source : Economic Survey, Government of India, 1995-96.

and the value of cotton textiles machinery, has increased from Rs.300 million in 1970-71 to Rs. 6400 million in 1990-91 or almost by more than 20 times. The same is the case with cement machinery where value of production has risen from a bare Rs.6 million to a high of Rs.3150 million over the period 1960-61 to 1990-91. In the same category whereas production of scooters, motorcycles has increased tremendously, new items such as agricultural tractors have also come to be produced. Other items of significant interest are power transformers and certain important chemicals and fertilizers, where there has been both expansion of production as well as introduction of new products. In short the structure of production in these industries has changed, and the contribution of goods-capital and consumer has changed over the period. The heavy industry, that was almost non-existent at Independence has come to occupy a pride of place in the Indian Industrial structure. Moreover, of late in the secondary sector, there is increasing emphasis on the so-called 'sunrise' industries such as

telecommunications, computers, micro electronics and biotechnology which India has been able to concentrate and develop upon in view of its existing strong industrial base. The industrial structure in the country is at present highly diversified and is capable of producing an entire range of consumer, intermediate and capital goods. This is clear evidence of the structural change in the economy.

The evidence of structural change in the Indian Economy can also be noticed in the developments on the employment fronts. In the first instance figures available on this variable since 1970-71 reveal that in absolute terms employment in all major sectors has increased as can be noted from Table [3.4].

TABLE - 3.4

Sectoral Distribution of Employment  
1970-71 to 1990-91.  
(in thousands)

Year	Agriculture	Manufacture	Others	Total
1970-71	1105 (6.2)	4802 (26.9)	11926 (66.9)	17833 (100.0)
1975-76	1170 (5.7)	5329 (26.1)	13904 (68.1)	20403 (100.0)
1980-81	1305 (5.6)	6227 (26.7)	15800 (67.7)	23332 (100.0)
1985-86	1403 (5.5)	6264 (24.7)	17647 (69.7)	25314 (100.0)
1990-91	1433 (5.4)	6333 (23.7)	18967 (70.9)	26733 (100.0)

Note : Figures in the paranthesis are percentage to total.

Source: RBI's Report on Currency and Finance, Vol II, Various issues.

Moreover, the sectoral distribution of employment particularly over the period 1970-71 to 1990-91 has undergone considerable change. Thus employment in agriculture as a percentage of total employment has declined from 6.2 per cent to 5.4 per cent over this period, though in absolute terms it has grown by 1.3 per cent per annum. In the industrial sector as well the same trend is noticed where the figure has gone down from 26.9 per cent to 23.7 per cent, though in absolute terms employment has grown in this sector by 14 per cent per annum, particularly with reference to manufacturing.

In the tertiary sector the changes both by way of percentage share of total and absolute increase in employment has been considerable. Thus where as the percentage share of this sector in total employment increased from 67 per cent to 71 per cent, in terms of growth, the rate was a significant 2.4 per cent per annum. Over all in terms of growth rates output/GDP in constant prices has grown at twice the rate of employment, which could be taken as an indicator of growth in



productivity and hence an evidence of transformation of economy from one of low growth and productivity to one of considerable growth and productivity. Expressing in terms of simple indices with base 1970-71=100, the index of productivity as a ratio of the above has increased by 44 percentage points over the 20 year period.

#### 3.4. CONCLUDING REMARKS :

Finally the evidence on structural change in the Indian Economy can also be obtained from both the country's requirements of imports and their composition as well as the composition of its employment where the former has grown from 6.5 per cent to 8.2 per cent of GDP to meet the increasing requirements of the growing economy of India, these imports especially after 1970-71, mainly consist of capital and intermediate goods. On the other hand exports have become more diversified over the period. These aspects of Structural change particularly with regards to foreign trade sector are taken up in the subsequent analysis.

In short this chapter has tried to discuss some issues and aspects concerning structural change in general and in particular with reference to the Indian economy. The discussion has been carried out with supporting emperical evidence wherever it was available. It must be noted that in a study of this type only the bear issues and aspects of structural change can be studied and this can be tackled within a limited framework.

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## CHAPTER FOUR

### FOREIGN TRADE : EXPORTS

#### 4.1: INTRODUCTION :

International trade is an essential ingredient of an open economic system. This provides the economies involved to reap the benefits of differences in international division of labor, productivity, and factor endowments to mutual advantage. From the point of view of an individual country, exports are quite important since they govern the ability of the country to pay for its imports. In the process of economic development, the significance of generating export-surplus hardly needs emphasis. Suffice it to say, that export surpluses and increased exports, are essential to acquire the necessary foreign exchange for the import of capital goods in particular, and other essential goods and services including technical know-how for the development effort. Exports also enable the

country by generating the necessary foreign exchange reserves to acquire imports connected with infrastructure development and modernization of the different sectors of the economy. The expansion of exports is possible by generating export surpluses along with the pursuit of proper market strategies and helpful government policies. Most of all, an international trading environment conducive to the establishment and pursuit of international trade to one's mutual advantage must exist.

The Tandon Committee has aptly emphasized the role of exports by stating that ["rapid export growth will undoubtedly help the overall rate of growth of the economy because of efficiency gains obtained from the pursuit of dynamic comparative advantage and the flexibility regarding foreign exchange stability"]. Further the emphasis on exports is viewed as "... a case for reallocating future investment of resources from import substitution to export promotion in a manner consistent with dynamic comparative advantage...( a notion useful)... for allocating

productive resources optimally between import substituting production and export oriented production".

In short exports, as an integral part of the development process are considered necessary to generate foreign exchange for financing of imports, since foreign debt is incurred to finance investment activities in general to sustain the development process itself.

#### 4.2. EXPORTS TRENDS :

The figures regarding the exports over the years are presented in Table 4.1 & 4.2. As may be seen from the former, exports increased from a low of Rs. 606 crores in 1950-51 to Rs.1535 crores by 1970-71 or roughly by 5 per cent per annum. This upward trend continued when in the terminal year of our study exports stood at Rs.32553 crores. Thus between 1970-71 and 1990-91, exports grew at the rate of 16.5 per cent per year, and over the forty years span 1950-51 to 1990-91, the growth of exports was a considerable 12 per cent per annum. The accelerated rate of

**TABLE-4.1**

**GDP AND EXPORTS 1950-51 TO 1990-91.**

Rs. Crores.

YEAR	GDP	EXPORTS	EXP/GDP
1950-51	9366	606	6.4
1955-56	10258	609	5.9
1960-61	16201	642	3.9
1965-66	26145	810	3.0
1970-71	43163	1535	3.6
1975-76	78761	4036	5.1
1980-81	136013	6711	4.8
1985-86	262243	10895	4.2
1990-91	529537	32553	6.1

Source : Economic Survey, Government of India, 1995.

TABLE-4.2

EXPORTS: INDICES OF TOTAL VALUE, QUANTUM AND UNIT VALUE  
(Base 1970-71=100)

YEAR	VALUE	QUANTUM	UNIT VALUE
1970-71	100	100	100
1971-72	104	100	102
1972-73	128	113	113
1973-74	164	118	137
1974-75	216	125	173
1975-76	262	138	186
1976-77	334	164	197
1977-78	352	157	222
1978-79	373	169	222
1979-80	418	179	233
1980-81	437	183	242
1981-82	508	186	275
1982-83	573	198	293
1983-84	636	191	335
1984-85	765	205	377
1985-86	709	188	380
1986-87	811	205	397
1987-88	1021	237	433
1988-89	1318	257	515
1989-90	1803	NA	NA
1990-91	2121	329	651



16.5 per cent during 1970-71 to 1990-91 bears adequate testimony to the country's increased capacity to generate export surplus as well as the success of the country's export promotion policies.

Nevertheless, on an average, over this period exports contributed just about 5 per cent of the Gross Domestic Product. In fact the percentage has varied between a low of 3 to a high of 6.5 per cent during this period. Expressing these export figures in terms of index numbers with base 1970-71=100, the merchandise exports have risen by more than 21 times over the period 1970-71 to 1990-91 [TABLE - 4.1 A]. This is in value terms at current prices. In terms of quantity, the increase works out to be slightly more than three times. Thus we note that the quantum index for exports with base 1970-71=100 has increased to 205 in 1980-81, and further to 329 by 1990-91, albeit the increase in the quantitative index was not a steady one during the 20 years period. On the other hand, the unit value index has shown a steady increase and by

1990-91, it stood at 651 or more than six and a half times the figures for 1970-71. These trends in value, quantum and unit values are likely to continue in the future, though there could be substantial variation in annual figures due to extraneous factors governing the country's exports. An interesting point to be noted is that the exports of manufactures in particular have shown considerable increase especially during the period 1960-61 to 1970-71 when these as percentage of total exports increased from 45 to 50 per cent. By the terminal year of our study, there was no looking back. These exports constituted almost 73 per cent of the total merchandise exports thus reflecting structural changes in the country's foreign trade sector and by implication the structural change in the production mix of the economy.

#### 4.3. EXPORTS COMPOSITION :

Though the trends in value, quantities and unit values are interesting by themselves in that the point of movements in these variables in the

particular directions are fluctuating around a particular trend in whatever direction is obtained, for analytical purposes it is the composition of the country's exports that is important. Whatever changes have taken place in the production structure or the product mix of the economy, if these changes are of any significance given that a country follows an open economic system are reflected in the composition of its exports.

In the first instance figures available on exports of principal commodities especially for the period 1970-71 to 1990-91 tell us that exports in general for all commodity groups have increased in value terms [TABLE - 4.3]. For instance taking SITC I (Food and Live Animals Chiefly for Food) we note that exports have increased from Rs 409 crores in 1970-71 to Rs 1705 crores by 1980-81 and to Rs3724 crores by 1990-91. Therefore, in absolute terms the value of exports by 1990-91 has increased by more than nine fold over the twenty year period. However as a percentage of the total exports of SITC-I have declined from 26.6 per cent

TABLE - 4.3

INDIA'S EXPORTS OF PRINCIPAL COMMODITIES.

Rs. Crores.

Commodity Group	1970-71	1975-76	1980-81	1985-86	1990-91
1. Food and live animal chiefly for food.	409 (26.6)	1253 (31.0)	1705 (25.4)	2509 (23.0)	3724 (11.4)
2. Beverages and Tobacco	33 (2.1)	99 (2.4)	141 (2.1)	171 (1.5)	296 (0.9)
3. Crude Material	252 (16.4)	544 (13.5)	814 (12.1)	1119 (10.2)	1497 (4.6)
4. Mineral Fuels	14 (0.9)	37 (0.8)	28 (0.4)	665 (6.0)	948 (3.0)
5. Animals & Vegetable oils, fats & waxes	7 (0.4)	37 (0.8)	19 (0.3)	49 (0.5)	88 (0.3)
6. Chemicals and related products	36 (2.3)	91 (2.4)	235 (3.5)	394 (3.7)	2345 (7.2)
7. Manufactured goods	616 (40.1)	1389 (34.4)	2320 (34.5)	3711 (34.0)	17391 (53.4)
8. Machinery and Transport equipment	76 (5.0)	260 (6.4)	526 (7.8)	704 (6.4)	2428 (7.4)
9. Miscellaneous Manufactures	76 (5.0)	317 (6.4)	871 (12.8)	1566 (14.3)	3693 (11.6)
10. Total Exports	1535 (100.0)	4036 (100.0)	6711 (100.0)	10895 (100.0)	32553 (100.0)

Note : 1) Commodity Group = Standard International Trade Classification (SITC I to IX).

2) Figures in the paranthesis are percentages to the total.

Source : RBI, Report on Currency and Finance, Various Issues.

to 11.4 per cent, over the period 1970-71 to 1985-86. For the penultimate five years 1985-86 to 1990-91 this decline was drastic in that from 23 per cent, the figures went down to 11.4 per cent or the figures declined almost by 12 percentage points. The same trend so far as SITC-II (Beverages and Tobacco) is noted during this period. Exports here declined from 2 per cent of the total to just below 1 per cent over the twenty years period, even though in absolute terms, they increased as much as nine times over the period 1970-71 to 1990-91.

The same developments as noted in the cases of SITC-I AND SITC-II are observable in the case of SITC-III (Crude materials) where there is a decline of 11.8 percentage points over the period 1970-71 to 1990-91 in that the exports in that category declined from 16.4 per cent to 4.6 per cent of the total exports, though in absolute terms they increased from Rs 252 crores to Rs 1497 crores. All these three categories fall into either agriculture based or extractive type of products and changes in their relative

contribution to total exports reflect the transformation of the economy from heavily agricultural based till about 1970-71 to one of manufactured based after that period and particularly from 1985-86 onwards.

In SITC-IV (Mineral fuels Lubricants and others) though the products are once again extractive based there is an element of processing as by-products and it is for this reason that the exports in this category have shot up tremendously both in terms of value as well as their percentage contribution. Exports in this category increased from a mere Rs. 14 crores in 1970-71 to Rs 665 crores by 1985-86 and further to Rs. 948 by 1990-91 thereby showing an increase of more than 67 times the initial figures. Likewise in percentage terms these exports increased from under 1 percent in 1970-71 to a peak of 6 percent by 1986-86 and by 1990-91 they had constituted about 3 per cent of the total exports. In the case of SITC VI (Chemicals and related products) the same upward trend in exports in value can be noticed. However

the increase in exports were fairly slow in the first 10 years. Nevertheless these exports have increased from Rs 36 crores in 1970-71 to Rs 394 crores by 1985-86. In the next five years we note that these exports have increased to Rs 2345 crores thereby showing an increase of six times over the 1985-86 figure and almost 65 times the figure for 1970-71. As a percentage to total exports their contribution tripled over the twenty year period. In category SITC-VIII ( Machinery and Transport Equipment) the percentage share has been fairly stable though in value terms these exports have increased from Rs 76 crores to Rs 2428 crores over the period. The most spectacular progress in so far as the increase in share of total exports is concerned is noticed in SITC-VII ( Manufactured Goods ) In this category though in value terms exports have not increased comparatively as much as say in the case of SITC-VIII ( Machinery and Transport Equipment) in percentage terms the share has increased from 40 per cent in 1970-71 to 53 per cent by 1990-91 or by significant 13 percentage points. On balance

where the elements of processing and more of technology are involved exports have shown considerable increases. This is evident from the movements in percentage shares of such major categories as SITC IV,VI,VII and VIII.

The structural transformation of the economy as evidenced by the above developments in the composition of exports is also evident when we compress the composition of exports into two major categories- manufactures and others [TABLE-4.4]. Taking the ratio of the former to the latter we find that the figure which was just 0.83 in 1960-61 has increased beyond unity by 1970-71. Not only the stability was maintained over the next decade but there was a tremendous jump in this ratio to 2.69 by 1990-91 which evidently is a strong indicator of the transformation of the economy so far as its product mix is concerned. In fact the composition of exports over the period is of considerable significance as an additional indicator in establishing structural change in the Indian Economy.



TABLE - 4.4

PRINCIPAL EXPORTS : MAJOR CATEGORIES 1960- 1990

Rs Crores

YEAR	Agriculture and allied Products	Ores & Minerals	Manufactured Goods	Minerals Fuels & Lubricants	Others	Total Export
1960-61	284 (44.2)	52 (8.1)	291 (45.3)	7 (1.1)	8 (1.2)	642 (100.0)
1970-71	487 (31.7)	164 (10.7)	772 (50.0)	13 (0.8)	100 (6.5)	1535 (100.0)
1975-76	1093 (27.1)	296 (7.3)	1751 (43.3)	35 (0.8)	459 (11.3)	4036 (100.0)
1980-81	2057 (30.7)	414 (6.2)	3747 (55.8)	28 (0.4)	466 (6.9)	6711 (100.0)
1985-86	3018 (27.7)	785 (7.2)	6374 (58.5)	655 (6.0)	63 (0.6)	10895 (100.0)
1990-91	4879 (15.0)	1497 (4.6)	23736 (72.9)	948 (2.9)	55 (0.1)	32553 (100.0)

Note : Figures in the parenthesis are percentages to the total.  
Source : Economic Survey, Government of India, 1995.

#### 4.4. DIRECTION OF EXPORTS :

In analyzing the direction of trade we are concerned with the flow of India's exports to different regional blocks and also with the assessment of the retention, stability and expansion of the country's export share relative to these blocks. For a long period India's exports trade has been governed by the historical and colonial relationships and this has continued even up to the 1960s. Apart from this historical and colonial links other factors that govern the direction of trade are political relationships amongst countries, geographical proximity, the structure of foreign markets and trading policies in general. These relationships could be quite complex and at times could significantly alter the market share of the country concerned.

In this section we just go into some aspects of export trade within these regional groupings. For analytical purposes these trading groups are taken as : Organization of Economic Cooperation and Development OECD. Organization of Petroleum Exporting Countries OPEC, Eastern

Europe, Other Less Developed Countries, OLDC's, and the Rest of the World, ROW. For instance it may be noted that in absolute terms India's exports to OECD increased from Rs 769 crores to Rs 17426 in 1990-91, of which exports to the sub region European Union (EU) increased from Rs 282 crores to Rs 8951 crores for the same period [TABLE-4.5]. In relative terms exports to EU increased by almost 32 times compared with exports to OECD itself which increased by 23 times. In terms of other sub regions such as North America and other OECD countries the European Union has remained a dominant trading block. In percentage terms as well the share of the OECD has increased from 50.1 per cent to 53.1per cent over the period 1970-71. So the same upward trend is noted in the case of percentage share with respect to EU where there has been about 10 percentage points increase from 18.4 per cent to 27.5per cent over the years. On the other hand in the case of North America the share has remained stable where as in the case of Japan which is another major trading partner of

TABLE-4.5

DIRECTION OF TRADE : EXPORTS

Rs Crores.

Country Groups	1970-71	1975-76	1980-81	1985-86	1990-9
I. OECD Countries	769 (50.1)	2023 (50.1)	3126 (46.6)	5532 (50.8)	17428 (53.5)
II. OPEC Countries	99 (6.4)	616 (15.3)	745 (11.1)	835 (7.7)	1831 (5.6)
III. Eastern Europe	323 (21.0)	659 (16.4)	1486 (22.1)	2416 (21.1)	5819 (17.9)
IV. Other LDC'S	305 (19.8)	708 (17.5)	1286 (19.2)	1462 (13.4)	5465 (16.8)
V. Rest of the World (ROW)	39 (3.7)	30 (0.7)	68 (1.0)	650 (7.0)	2010 (6.1)
VI. Total Exports	1535 (100.0)	4036 (100.0)	6711 (100.0)	10895 (100.0)	32553 (100.0)

Note : Figures in the parenthesis are percentages to the total.  
 Source : RBI's Report on Currency and Finance, various issues.

the country the share has been declined by 4 percentage points over the period. A significant development in relation to UK concerning exports of India with respect to India's trade with its traditional partner U.K. where India's share has declined considerably over the period from 11.1 to 6.5 per cent. Though this appears to be just about five percentage points decline, yet examining this development in the historical context we find that the importance of U.K. as a trading partner has become less over the period. This we cannot be certain whether even this reduced share can be sustained in the near future. This observation is reinforced by the fact that in 1960-61 exports to United Kingdom which constituted around 27per cent declined drastically by almost 16 percentage points over the decade. Nevertheless on balance the share of OECD has remained fairly stable around 50 pre cent and of late has shown some increases.

With respect to another trading block OPEC we note that India has increased export share during this period from 6.4 per cent to 9.6

per cent and in absolute terms the exports have gone up from Rs 69 crores to Rs 1831 crores over this period 1970-71 to 1990-91. The major trading partner in this block has been Saudi Arabia. The share with Eastern Europe in general being governed by bilateral agreements, has been stable as expected. Increases in the share of exports are noted in the case of its own Asian trading partners and the Rest of the World. In the latter case the exports have increased from Rs 40 crores to Rs 2010 crores or the share has risen from 2.6 to 6.2 per cent. These developments especially with regard to change in share reflect both the diversification of the market for country exports as well as its emerging trading relations in addition to the various politico-socio-economic factors that govern the evolution and maintenance of trading blocks and countries.

#### 4.5. SOME OBSERVATIONS ON EXPORTS PROMOTION :

Till the attainment of independence and for almost a decade thereafter, the country's exports trade was predominantly with the Sterling

Area as a consequence of India's historical linkage. Most of these exports were traditional items to the Sterling Area, or through it to other currency Areas. After embarking upon economic planning and industrialization programmes the country had not only to diversify its markets but also promote actively some of the non-traditional items of exports to other countries besides that of the Sterling Area. This was essential to obtain the required foreign exchange for developmental activity. Hence as early as 1962, a Committee was appointed under P.C. Alexander, to look into the question of export promotion. The Committee amongst other measures, recommended the granting of income-tax relief on export earnings, removal of disincentives and export promotion through import entailment. Besides, during this period, in 1966, the Indian Rupee was devalued with the hope that it will have a favorable impact on exports. In spite of all these measures, the exports performance remained far from satisfactory. Though, over the years India's export basket underwent some change in the sense

that engineering goods entered in its exports. But the recessionary trend resulting from the oil shocks of 1973 and 1978, came in the way of India's export performance thereby adversely affecting India's share in world exports.

Exports continued to be recognized as significant in the country's development programme. This persuaded the Government in 1979 to appoint the Tandon Committee. The committee recommended that a 10 per cent growth per annum of export was necessary to combat the situation. Thus foreign trade policy should be geared to the ends of export promotion so that India's share in the world trade should rise to one per cent by 1990-91. In this regard, the Committee suggested; amongst other things, active involvement of transnational corporations, export promotion in industrial undertakings, exemption of trading houses from the provisions of the Monopolies Restrictive Trade Practices where these were engaged in export activities, automatic licensing of additional capacity for small scale



sector, liberal import of latest technology under OGL by export industries, tax credit to export earnings, and greater involvement of the state.

As a sequel to the recommendations of the Tandon Committee, and to sustain the export promotion efforts several measures were introduced in subsequent years. These included measures such as : advance licensing and duty exemption schemes. Further free trade zones (FTZs) and export oriented units (EOUs) were set up to provide almost new trade environment for export promotion. Export related imports-raw materials, intermediate goods and capital goods were exempted from the provisions of MRTP and FERA.

Of late export promotion objectives is being pursued even more vigorously. In this regard several measures to encourage exports have been introduced. These measures include several types of incentives for export promotion such as fiscal concessions, income - tax exemptions, credit facilities and institutional activities such as setting up of export promotion councils (EPCs), product positioning by encouraging exports

to participate in trade fairs at home and abroad, market research, information and publicity etc. The consequence has been a significant growth in the country's exports and diversification of the markets for India's exports which we have already noted earlier.

## CHAPTER FIVE:

### FOREIGN TRADE : IMPORTS

#### 5.1: INTRODUCTION :

In the process of economic development of a country, imports of goods, services, and technology play an important role. Imports bridge the gap between essential demand requirements and availabilities. During the course of development a country requires plants and equipments, technology and expertise for its economic development activities. When industrialization is one of the objectives of development, a country such as India required these essential imports both to create the necessary base and to sustain the development activity.

Thus over the years India has imported both goods services and technology in the implementation of its development programme from the major industrial countries. In its programme of setting up heavy industries in particular, India has taken considerable material and

technological assistance by way of imports from the Soviet Union, United Kingdom and other European Countries. However, for the present we confine to the study of import trends, composition and direction during the period 1970-71 to 1990-91, which is the objective of this study.

#### 5.2. IMPORT TRENDS :

The figures in imports are presented in TABLE-5.1 and 5.2. As may be noted imports on an average have constituted about 7 per cent of the GDP over the last 40 years. The movements in imports have been more or less in tune with those in exports so far as their percentages to GDP are concerned. During the period 1950-51 to 1970-71 imports have grown at the rate of about 5 per cent. The rate of growth accelerated considerably during the period 1970-71 to 1990-91, when it reached about 18 per cent and overall during the 40 years period, the growth in imports has been a considerable 24 per cent. In absolute terms, imports have grown from Rs 608 crores in 1950-51 to Rs 43193 crores by 1990-91. There have been

TABLE-5.1

GDP AND IMPORTS 1950-51 TO 1990-91

YEAR	GDP	IMPORTS	IMP/GDP
1950-51	9366	608	6.5
1955-56	10258	774	7.5
1960-61	16201	1122	6.9
1965-66	26145	1409	5.4
1970-71	43163	1634	3.8
1975-76	78761	5265	6.7
1980-81	136013	12549	9.2
1985-86	262243	19658	7.5
1990-91	529537	43193	8.2

Source : Economic Survey, Government of India, 1995.

TABLE-5.2

IMPORTS : INDICES OF TOTAL VALUE, QUANTUM AND UNIT VALUE  
( Base 1970-71=100 )

YEAR	VALUE	QUANTUM	UNIT VALUE
1970-71	100	100	100
1971-72	111	121	94
1972-73	114	114	97
1973-74	181	129	140
1974-75	276	114	137
1975-76	322	113	282
1976-77	310	113	274
1977-78	368	149	251
1978-79	416	149	285
1979-80	560	173	325
1980-81	767	206	382
1981-82	832	225	380
1982-83	874	231	388
1983-84	968	276	454
1984-85	1048	232	462
1985-86	1203	271	462
1986-87	1231	316	397
1987-88	1361	305	457
1988-89	1727	334	531
1989-90	2169	NA	NA
1990-91	2643	355	765

Source: CMIE's Basic Statistics, 1994.

substantial annual variations, however, as may be noted from TABLE-5.1-A. In terms of index numbers with base 1970-71=100, the value of imports increased to 322 by 1975-76, and further to 1203 by 1985-86 and by the terminal year of our study, the value index for imports increased to 2643 i.e. by more than twice the figure for 1985-86. Similarly the quantum index went up to 206 by 1980-81 and by the end of the following decade to 355 or by more than three and a half times the figure with reference to 1970-71=100, we notice that unit value index has gradually and steadily risen to 765 or more than seven and a half times which by implication means that the import prices have gone up substantially. The Imports trend have been influenced among other factors, by the country's policies of import substitute industrialization and by the two oil shocks. This is true when it comes to the value indices- both total and unit values. Both the import substitution industrialization and export promotion policies have been based upon heavy import content for effective implementation and to

sustain the same. These imports have consisted of imports of merchandise as well as technology. Thus over the period, these imports have been responsible for changing the product mix of the Indian economy, and this is reflected very clearly in the changing composition of Imports.

### 5.3. IMPORT COMPOSITION :

The composition of imports depend on the size of the country, the availability of domestic resources, the pattern of income distribution, the size of population, the degree of elasticity of demand, the degree of industrialization, in short the extent of structural transformation. Indian imports generally were consisting of intermediate and capital goods up till 1955-56, but with the conscious efforts to industrialize the economy the government decided to import essential capital goods, technology etc. Absence of proper and definite Import Policy was responsible for maintaining more or less the same pattern of import composition. Some diversification was



witnessed with the commencement of the third five year plan. In the early sixties, since Indian planning mechanism had given impetus to industrialization in the second plan itself, the goods which found their place in the import list comprised of machinery, iron and steel, transport equipment, petroleum and petroleum products, non-ferrous metals, chemicals and chemical compounds and fertilizers. Depending on the priorities, domestic production of items like food grains, vegetable oils and raw materials had been given due significance, so that import of these items could be reduced; but the early sixties also witnessed successive shortfall in production of food grains (due to consecutive severe drought) and the withdrawal of aid from PL480 and their rising prices in the international market led to steep increase in their imports. So also was the rise in prices and increase in imports of vegetable oils, petroleum and petroleum products, fertilizers, non-ferrous metals, iron, steel and capital goods. The situation further aggravated after the eruption of the oil crisis in 1973.

Inspite of the decline in the volume of imports, the value experienced an upward trends on account of increase in the c.i. f. unit values. The second oil crisis in 1979 was another shock for the country which in the rate of inflationary and recessionary trends further strained the resources of the country. In the early eighties for instance, import of petroleum and allied products swallowed over 80 per cent of the country's total export earnings and a marginal increase in the volume of our intake resulted in a phenomenal rise in value terms.

The current import scene is characterized by predominantly essential items encompassing high technology equipment and machinery for affecting modernization and technological up-gradation in industrial sectors, petroleum and allied products as a sheer necessity, rough diamonds and gem stones as raw material for the importing and employment generation; Gem and Jewellery generating sector; and iron and steel, non ferrous metals and fertilizers as inputs for industry and

agriculture, food grains, cereals, pulses and preparations. Edible oils to meet the increasing demands on indigenous production is limited.

The developments in the composition of imports may be noted from the figures presented in TABLE-5.3. As in the case of exports, imports also increased substantially in value terms over the period. For example, in the case of SITC-I (Food and Live Animals Chiefly for Food) we note that imports have increased from Rs 272 crores in 1970-71 to Rs 380 crores by 1980-81 and to Rs978 crores by 1990-91. Therefore in absolute terms the value of exports by 1990-91 has increased by more than three fold over the twenty year period. However, as a percentage of the total imports of SITC-I have declined from 16.7 per cent to 2.2 per cent, over the period 1970-71 to 1990-91. The same trend so far as SITC-II (Beverages and Tobacco) is noted during this period. Imports here declined from 2 per cent of the total to 0.3 per cent over the twenty years period. Though in absolute terms they increased over four times over the period 1970-71 to 1990-91.

TABLE-5.3INDIA'S IMPORTS OF PRINCIPAL COMMODITIES.

Rs. Crores.

Commodity Group	1970-71	1975-76	1980-81	1985-86	1990-91
1. Food and live animal chiefly for food.	272 (16.7)	1429 (27.1)	370 (3.0)	878 (4.4)	978 (2.2)
2. Beverages and Tobacco	31 (1.9)	97 (1.8)	79 (0.6)	154 (0.8)	134 (0.3)
3. Crude Material	200 (12.2)	213 (4.0)	565 (4.5)	1502 (7.6)	3417 (7.9)
4. Mineral Fuels	136 (8.3)	1126 (21.3)	5293 (42.1)	5213 (26.5)	11605 (27.6)
5. Animals & Vegetable oils, fats & waxes	39 (2.3)	17 (0.3)	709 (5.6)	770 (4.0)	364 (0.8)
6. Chemicals and related products	192 (11.7)	760 (14.4)	1325 (10.5)	2873 (14.6)	5447 (13.1)
7. Manufactured goods	345 (21.1)	763 (14.4)	2242 (17.8)	3781 (19.2)	8600 (20.4)
8. Machinery and Transport equipment	395 (24.1)	670 (12.7)	1821 (14.5)	4084 (20.8)	7493 (17.3)
9. Miscellaneous Manufactures	33 (2.1)	46 (0.8)	212 (1.6)	561 (2.8)	4704 (1.8)
10. Total Imports	1634 (100.0)	5265 (100.0)	12548 (100.0)	19658 (100.0)	43193 (100.0)

Note. 1) Commodity Group = Standard International Trade Classification (SITC I to IX).

2) Figures in the parenthesis are percentages to the total.

Source : Reserve Bank of India, Report on Currency and Finance, Vol II, Various Issues.

The same developments as noted in the cases of SITC-I AND SITC-II are observable in the case of SITC-III ( Crude Materials ) where there is a decline of 4.3 percentage points over the period 1970-71 to 1990-91, in that the imports in that category declined from 12.2 per cent to 7.9 per cent of the total imports. Though in absolute terms they increased from Rs 200 crores to Rs 3417 crores. All these three categories fall into either agriculture based or extractive type of products and changes in their relative contribution to total imports reflect the favorable developments that have taken place in the agriculture category and the extractive activity sectors so far as both production and productivity is concerned and these favorable developments have manifested themselves in our reduced dependence on these imports over the years.

In SITC-IV (Mineral fuels Lubricants and Others) it increased from Rs 136 crores in 1970-71 to Rs 5293 crores in 1980-81 and further to Rs

11605 crores in 1990-91. Likewise in percentage terms it increased from 8.3 per cent to a peak of 42.1 per cent in 1980-81 and then onwards have remained around 27 per cent in subsequent years.

In SITC-V (Animals and Vegetable oils, Fats and Waxes) the same decline in percentage terms as absolute in the case of exports is also observed in the case of imports. In fact in the case of imports there has been a fall in the value of absolute value as well from Rs 770 crores in 1985-86 to Rs 364 crores in 1990-91. The developments in this category can be attributed to both the growing needs of the country's population for this product, as well as the self sufficiency in this category of goods.

In category SITC-VI (Chemicals and Related products) the same upward trends as in imports can be noted in value terms in the case of imports. Thus imports in this category rose from Rs 192 crores in 1970-71 to Rs 1325 crores in 1980-81 and subsequently to Rs 5447 crores in 1990-91, thereby increasing more than four fold over the last decade, but in terms of percentages

imports in this category have ranged between 11 and 15 per cent of total imports.

In category SITC-VII (Manufactured goods) though in value terms there has been a substantial increase in imports, in terms of percentages there has been considerable variation, from an initial percentage of 21.1 in 1970-71 imports in this category drastically fell to by about 14.4 per cent in 1975-76 and increased slightly by 1980-81 and yet remained below 15 percent in that year. The impact of oil shocks in fact is quite evident in this area of imports. During 1970's India along with most of the developing countries was adversely affected by the increase in the oil prices and therefore had to resort to import compression and this in fact being the energy requirement for machinery and transport equipment, adversely affected the overall imports in this category.

Latest developments in the imports of SITC-VIII (Machinery and Transport equipments) category reflect the changing structure in the

world energy markets and as such imports have increased to 17 per cent of the total imports by 1990-91. The stability noted in imports of SITC-VII (Manufactured goods) is reflective of the considerable progress that the country has made in the production of domestic requirements of manufactures as well as the changing nature of its manufactures. Most of these manufactured goods are required to sustain the place of import substitution and diversification of the economy.

Overall where the element of processing technology and skills predominate, imports have shown considerable stability. This is clearly evident from the developments in the sector in categories such as VI, VII, and VIII.

Examining the composition of imports by categorizing them into three groups namely Capital goods, Intermediate goods (raw materials) and Other goods [TABLE-5.4], it can be noted that capital goods imports that formed around 35 percent of total imports between 1960-61 to 1965-66 have come down to around 25 per cent in subsequent years and have remained fairly stable



TABLE-5.4

PRINCIPAL IMPORTS : MAJOR CATEGORIES

Rs Crores

YEAR	Food & live animals.	Raw Materials.	Capital Goods	Others	Total Imports
1960-61	214 (19.0)	527 (46.9)	203 (18.1)	25 (2.2)	1122 (100.0)
1965-66	309 (21.9)	520 (37.0)	499 (35.4)	80 (5.6)	1408 (100.0)
1970-71	242 (15.0)	889 (54.4)	404 (24.7)	99 (6.0)	1634 (100.0)
1975-76	1395 (26.4)	2794 (53.0)	968 (18.3)	108 (2.0)	52651 (100.0)
1980-81	380 (3.0)	9760 (77.7)	1910 (15.2)	499 (4.2)	12549 (100.0)
1985-86	854 (4.3)	13966 (71.0)	4285 (22.0)	553 (2.8)	19658 (100.0)
1990-91	1412 (3.2)	30900 (72.0)	10466 (21.2)	1210 (3.1)	43988 (100.0)

Note : Figures in the parenthesis are percentages to the total.

Source: Economic Survey, Government of India, 1995.

at 24 percent. This fall in the imports of capital goods bears evidence to the economy's capacity to produce a number of items in this category. On the other hand the imports of intermediate goods including raw materials has increased from 47 per cent in 1960-61 to around 54 per cent in 1970-71. By 1980-81 the percentage of imports of this category peaks to 78 per cent and there after they have remained at a stable 70 per cent. The slow growth in the absorption of these goods over the period 1960-61 to 1970-71 and thereafter a jump in the imports of this category, with consequent stability reflects the growing capacity of the economy first at very low rates and later on significantly higher as evidenced by the index of industrial production which increased for instance by 29 percentage points over the decade 1960-61 to 1970-71. and accelerated thereafter. ( Refer Table Production of selected industries, Table-3.4, Chapter-3, Structural Change).

In the case of other goods consisting of

food and live animals and other unclassified goods as expected the share has drastically come down from 21 per cent in 1970-71 to around 6 per cent in 1990-91 for reasons mentioned earlier. In short especially the period 1980-81 to 1990-91, intermediate and capital goods taken together have constituted about 94 per cent of total imports, which confirms our view that the economy has undergone substantial change which is reflected in its imports composition.

#### 5.4. DIRECTION OF IMPORTS :

The same historical reasons that have governed the destination of exports have also governed the origin of imports though considerations such as political relationships, bilateral trade agreements, foreign aid inflows, besides the cost factor have assumed some significance in recent years. The origin of imports can be grouped into five different sources [TABLE-5.5]. We have already noted that imports have increased from Rs 1122 crores in 1960-61 to Rs 1634 crores by 1970-71 and further to an enormous figure of Rs 43193 crores by 1990-

TABLE-5.5

DIRECTION OF TRADE : IMPORTS

Rs Crores.

Country Groups	1970-71	1975-76	1980-81	1985-86	1990-91
I. OECD Countries	1042 (63.8)	3226 (61.3)	5740 (45.7)	10527 (53.6)	23310 (54.0)
II. OPEC Countries	126 (7.7)	1151 (21.9)	3480 (27.8)	3420 (17.4)	7041 (16.3)
III. Eastern Europe	220 (13.5)	566 (10.7)	1296 (10.3)	2169 (11.0)	3377 (7.8)
IV. Other LDCs	239 (14.6)	311 (5.9)	1966 (15.7)	3466 (17.6)	7965 (18.4)
V. Rest of the World (ROW)	7 (0.4)	11 (0.2)	67 (0.5)	76 (0.3)	1500 (3.4)
VI. Total Imports	1634 (100.0)	5265 (100.0)	12549 (100.0)	19658 (100.0)	43193 (100.0)

Note : Figures in the parenthesis are percentages to the total.  
Source: RBI's Report on Currency and Finance, various issues.

91. In the year 1960-61 78 per cent of the imports came from the OECD group of countries where as the OPEC group contributed 4.6 per cent to India's imports. About 12 per cent of the imports came from Other LDCs. By 1970-71 the share of imports from OECD declined by 14 percentage points, and this was compensated by almost a similar percentage point increase in imports from countries of Eastern Europe. Between the period 1970-71 to 1990-91, the share of imports from the OECD has declined by another 10 percentage points, though over the period 1985-86 to 1990-91 the share remained a stable 54 percentage points. An interesting development regarding the direction of trade in imports is that imports originating from European Union increased from around 20 per cent to almost 30 per cent over the twenty years period, whereas the share of North America declined considerably from 35 per cent to 14 per cent over the same period. Moreover, within the European Union, Belgium and France have become more important suppliers to

India. The imports from former in fact have grown from Rs 12 crores in 1970-71 to Rs 2718 crores in 1990-91, thereby the share of Belgium increased from just under one per cent in 1970-71 to a significant 6.3 per cent in 1990-91, and France over the same period more than doubled its share in the Indian market. Another major supplier from the European Union namely Germany has improved its position considerably in the Indian market. However, of late its share has been stable at 8 per cent. The traditional trading partner of India namely United Kingdom has lost out in the Indian market. In 1960-61 almost 20 per cent of India's imports were from the United Kingdom which drastically fell to 7.8 per cent by 1970-71 and by the next decade they had come down to just about 6 per cent. Although in subsequent years United Kingdom has improved its share in India's market marginally, nevertheless India's imports from United Kingdom at 6.7 per cent of the total in 1990-91 still remain below the 1970-71 level. Imports from other OECD countries particularly from Australia and Japan have grown over the

period fairly substantially. In terms of percentage share imports from Japan have risen from 5 per cent to almost 8 per cent over the twenty years period. Whereas in the case of Australia they have fluctuated between 2 to 4 per cent of the total imports over the period. The impact of bilateral agreements in particular can be seen with respect to imports from Eastern Europe. Here USSR has come to dominate the scene as a major supplier. The increase in India's imports from the OPEC group of countries is particularly significant for over the period these imports have risen from 8 per cent of the total to almost 28 percent and later on they have come down to about 16 per cent. In terms of value nevertheless they have increased from Rs 126 crores in 1970-71 to Rs 7041 crores in 1990-91. These being mostly oil imports have come from middle east particularly Iran, Iraq and Kuwait. The major supplier however, has been Saudi Arabia, whose share in 1970-71 just Rs 24 crores worth of imports which increased to almost Rs 300 crores by 1990-91. In terms of

the share of imports from Saudi Arabia has grown from 1.5 per cent to 7 per cent. In this matter Saudi Arabia stands on par with countries such as Germany, United Kingdom, Belgium and Japan as a trading partner regarding the country's imports.

So far as the Other LDCs are concerned in 1990-91 India imported about 18 per cent of its requirements from these countries. However, most of these imports came from the Asian Countries which supplied about 14 per cent of the requirements that year. Africa in particular has lost out as a supplier of India's requirements and though Latin America has improved its market position, still, over the past decade imports from this continent have fluctuated just around 2 per cent. On balance the OECD and the OPEC group of countries still remain the major trading groups in so far as India's imports are concerned. These could be due to the historical, political, economic and geographic reasons, though not always so.

#### 5.5. SOME OBSERVATIONS ON IMPORTS POLICIES :

Ever since the launching of the



Programmes of planned economic development, the achievements of self-sufficiency on all fronts has been one of the major objectives. The Indian economy over these years has remained an open economy, though regulatory measures especially in the foreign trade sector have been used whenever problems such as foreign exchange crisis arose due to one reason or another. Along with the objective of achieving self sufficiency in so far as food grains and other agricultural products are concerned, India from the very beginning did embark upon the policy of import substitution. Import substitution was particularly emphasized with respect to first basic consumer goods and then to intermediate and capital goods. From the II five year plan onwards the import policy was mainly geared toward imports of heavy machinery or to import what came to be known as "mother machines that produce other machines". This policy in particular was designed to lay emphasis not only for industrialization together with technological developments at the same time but

also to raise the productivity in the industrial sector by the use of improved and new capital equipments. Import substitution along with regulation of imports was also undertaken to save foreign exchange spent on imports in case where these imports could be substituted by local production of the goods concerned. In this effort many a time the comparative cost advantage was kept in mind with regard to consumer goods. The employment generation aspect was another factor that played an important role in the country's policy of import substitution. Import substitution was mostly undertaken under different phases, and in the early stages mostly capital goods were imported. However imports were not freely allowed in, but were subject to several regulations; yet there seems to have been no proper imports policy with a definite time frame, to achieve the objectives of import substitution. Broadly restrictive policies regarding imports were followed due to the constraints of foreign exchange and further those imports were to be let in that either directly or indirectly contributed

to generation of productive capacity in the economy. In this regard it is worth mentioning that as far back as 1962 Mudliar Committee was appointed to look into the country's import policy, and this committee recommended that certain imports pertaining to infrastructure industries such as power, and transport as well as certain other capital imports should be encouraged, whereas non-essential and low priority goods should be placed on the ban list. At a later stage the Abid Hussain Committee also recommended that only such imports which make the Indian industry efficient and competitive by increasing the productive capacity and cost savings should be encouraged for effective imports substitution and to avoid the problems associated with inefficiencies relating to import substituting industries. Subsequently in the early 1980's the V.P. Singh government embarked upon an import policy designed to facilitate the production of goods that would also strengthen the production base in the economy along with an up

gradation of technology. In subsequent years especially 1988 modifications to the import policy placed a number of items under the open general license (OGL). In the year 1990 a radical change occurred and the EXIM policy of 1988 was discontinued stating that the improvements in our balance of payments position can be achieved not so much as through import curtailment as through promotion of exports. By implication the policy of imports based exports was given further momentum and it is generally believed that a over liberalized import policy is both favorable to overall economic growth. Of late the import policy is predominantly geared towards the import of plant, equipment and technology which help modernization as well as technological up gradation of the different sectors of the economy. In short in spite of all the problems the import policies that have been followed had led to considerable diversification of the economy especially in the light of import substitution.

## CHAPTER SIX

### FOREIGN TRADE : SERVICES

#### 6.1. INTRODUCTION :

By nature a service is generally intangible, and invisible as against merchandise that is both visible and tangible [1]. Since a service is to be consumed as it is produced and that it cannot be stored, it is a flow rather than a stock. Further, by nature services are heterogeneous in character and cannot be put into definite categories. Broadly they can be classified into traded services and non traded services. The former include transportation of goods and passengers, banking and insurance etc, whereas the latter include mostly personal and social services. Trade in services is defined as international transaction in services between the residents of one country and the residents of another country, irrespective of where the transaction takes place. International trade in services so defined may be divided into four

categories: i) those in which the producer moves to the consumer, ii) those in which the consumer moves to the producer, iii) those in which either the producer or the consumer move to each other. iv) those in which neither the producer nor the consumer move to each other.

In general the physical proximity of producer and consumer is essential, though there could be exceptions when we consider trade in services. The measurement and analysis of different services entering international trade is a very complex task beset with statistical and conceptual problems. Nevertheless according to UNCTAD " trade in services may be defined as all the transactions on the current account in the balance of payments excluding merchandise trade and private transfer payments [2]. However, all transactions (including government transfers) by their very nature should be excluded from the definition of service".

Trade in services have generally been linked to the level of economic activity of a country vis-a-vis the rest of the world. Hence

historically mostly in European industrialized countries and Japan trade in services has played a significant role in total trade, and also has contributed considerably to their gross national products. At the most in the case of developing countries including India, this sector is just emerging and of late has assumed considerable significance.

Relying upon the evidence and experience of developed industrial countries, it is sometimes observed [3] that the services sector constitute a small proportion of the national product in developing countries in comparison to that of the developed industrialized countries. However, this observation though true to a great extent, may not be universally applicable. The empirical evidence on these is quite mixed. On the one side, there are developed countries where the services sector may not be so significant for their GDPs and there are developing countries on the other side where the services sector is quite predominant. For example as may be noted from the

peripheral analysis of the figures range between 4.5 to 7 per cent in the case of countries such as Germany, United States, and Japan which are quite high in the development scale, even during the 1990's whereas within the same group services contributed almost 12 per cent to GDP of Ireland. Likewise the services sector in United Kingdom is almost 18 per cent of the GDP though United Kingdom is far down the scale in the industrialized and developed countries group. On the other extreme in the case of very low income economies such as Nepal, Kenya, Honduras and Egypt receipts from services on the average constitute 16 per cent of their GDP, which is in contrast to the figure mentioned above in the case of countries such as Germany, United States and Japan.



TABLE - 6.1

SERVICES RECEIPTS AS PERCENTAGE OF GDP

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Range	Names of Countries
5-10 %	SriLanka, Morocco, Columbia, Poland, Thailand, Turkey, Uruguay, Greece, Portugal, Spain, Israil, Italy, Germany, etc.
10-20 %	Tanzania, Nepal, Nigeria, Honduras, Egypt, Phillipines, Saudi, Arabia, Ireland, United Kingdom, France, etc.
Above 20 %	Switzerland, Mauritius, Jordon, Jamaica, etc.

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Source : World Development Report, World Bank,  
1995.

As in the case of merchandise exports and imports, the services component in India's foreign trade can also be analyzed in a similar manner. We have already mentioned that it is difficult to exactly delineate the exact components of the services sector. For this reason generally the services are considered as synonymous with "invisibles". The invisibles as such in the balance of payments account consist of seven items, travel, transportation, insurance, investment income, Government not included elsewhere, miscellaneous and transfers, (both official and private). However as has already been noted above transfers are to be excluded for reasons of lack of quid pro quo. Therefore it is proper to examine only the first six components though in the first instance the movements in invisibles be the receipts or payments could be of some use in assessing the significance of invisibles as such.

We begin our analysis of invisibles in the first instance by noting the developments on

the receipts side and later on we study the payments side.

6.2. SERVICES RECEIPTS :

The figures on total receipts from services are presented in TABLE-6.2 below.

It must be mentioned that we have identified services as total invisibles as shown in the balance of payments less transfers therein, though in the strict sense even this restrictive definition may not be correct except for transport and insurance which could be termed as services proper. Nevertheless the total receipts from services which were around Rs 293 crores in 1970-71 increased to almost Rs 3200 cores by the end of the next decade. In the subsequent decade they increased to Rs 9000 crores. Therefore it is clear that the growth in services receipts was faster during the previous decade compared to the latter years. In spite of this tremendous growth in absolute terms over twenty years 1970-71 to 1990-91, the receipts from services have fluctuated considerably over these years. The peak was reached in 1980-81 and these receipts

TABLE-6.2

**SERVICES RECEIPTS : SELECTED YEAR**  
Rs.Crores.

Year	Travel	Transport + Insurance	Investment Income	Others	Total
1970-71	28 (9.5)	118 (40.3)	49 (16.5)	99 (33.6)	293 (100.0)
1975-76	190 (21.3)	298 (33.5)	116 (13.0)	284 (32.0)	888 (100.0)
1980-81	1166 (36.6)	410 (12.8)	855 (26.8)	722 (22.6)	3183 (100.0)
1985-86	1189 (25.2)	683 (14.4)	669 (14.1)	2179 (46.1)	4720 (100.0)
1990-91	2613 (29.0)	1963 (21.8)	661 (7.3)	3764 (41.8)	9001 (100.0)

Source : Economic survey, Government of India, 1995.

constituted around 2.5 per cent of the GDP. However, by 1990-91 as a percentage of the GDP services had come down to 1.8 per cent, and this figure was less than 1985-86 figure which was 2.2 per cent. Therefore it may be observed that services receipts have not shown any steady trend.

In terms of different components for instance we note that receipts from Travel which were just around Rs 28 crores in 1970-71 increased to Rs 1166 crores by 1980-81 or almost by 17 times over the period. In the subsequent decade they increased to Rs 2613 crores, thereby increasing slightly more than two folds. As a percentage of total receipts, the receipts from Travel, reached a peak of almost 37 per cent in 1980-81 and from there onwards they have gradually come down to around 21 per cent by 1990-91. The growing receipts from Travel in absolute terms can be due to reasons that of late India has become quite attractive to tourists in terms of the cost factor and also in terms of the cultural value of tourism.

Generally Transportation and Insurance go together and most often they are joint products. So it is for this reason we have grouped them together as a second component of total receipts from services. Over the decade 1970-71 to 1980-81 the receipts from this components increased from Rs 118 crores to Rs 410 crores and by the subsequent five years to Rs 688 crores. By 1990-91 however the services receipts have increased to Rs 1963 crores. As a percentage of total invisible receipts from Transportation and Insurance drastically fell from 40 per cent to 13 per cent by 1980-81 and in the subsequent five years remained stable at that level. Over the last five years these receipts have grown and in 1990-91 they have come down to constitute around 22 per cent of total receipts from services (Transportation and Insurance). These developments in the Transportation and insurance receipts both regarding their absolute and percentage figures can be attributed to the developments in the merchandise exports, since they are invariably linked to such exports.

Moreover during this period both the bottlenecks in the shipping industry as well as growing competition in this area from other foreign operators have adversely affected the receipts from this component. Of late due to reorganization, modernization and better efficiency, receipts have picked up considerably and in fact over the last five years the growth has shown an upward trend.

Investment Income receipts which were around Rs 50 crores in 1975-76 doubled to Rs 116 crores by 1975-76 and by 1980-81 they had peaked to Rs 855 crores, both in absolute terms and as percentage of total receipts. Thereafter they have remained fairly stable around Rs 670 crores on the average. In percentage terms however they have drastically fallen to 7.3 per cent by 1990-91. Rising interest rates internationally as well as rising accumulation of foreign exchange reserves during the 1970's and early 80's have been responsible for the favorable developments in Investment Income receipts. The same reasons in

later years especially from 1986-87 onwards have been responsible for the gradual decline in Investment Income receipts, though another reason could be that whatever investment that India had made started bearing fruits in 1980's. Nevertheless their contribution to Investment Income receipts could not have been much because Indian investment activity abroad especially in the area of direct investment was at the most modest over the period.

Finally Other receipts being residual in character, though they have increased in absolute terms fairly considerably in the decade 1970-71 and thereafter at a modest rate over the last five years, have not shown any steady trend in percentage terms and have fluctuated between 23 to 42 per cent over the period.

### 6.3. SERVICES PAYMENTS :

The total payments in services have reflected the same direction as that of the total receipts in services [TABLE-6.3]. The total services payments increased from Rs 480 crores in 1970-71 to about 1600 crores by the end of 1980-



**TABLE-6.3**

**SERVICES PAYMENTS : SELECTED YEARS**  
Rs. Crores.

Year	Travel	Transport + Insurance	Investment Income	Others	Total
1970-71	18 (3.7)	91 (18.8)	274 (56.7)	101 (20.7)	483 (100.0)
1975-76	22 (3.0)	220 (30.1)	285 (38.9)	204 (27.9)	731 (100.0)
1980-81	90 (5.7)	389 (24.8)	371 (23.6)	717 (45.6)	1568 (100.0)
1985-86	412 (9.7)	899 (21.3)	1619 (38.3)	1288 (30.5)	4218 (100.0)
1990-91	703 (5.1)	2119 (15.4)	7393 (53.6)	3586 (26.0)	13801 (100.0)

Source : Economic Survey, Government of India, 1995.

81. By 1985-86 the payments further rose to Rs 4000 crores, thereby increasing more than two and a half times over the 1980-81 figure. By 1990-91 the services payments had increased to almost Rs 14000 crores thereby showing an increase of almost nine fold over the figure for the previous decade. As a percentage of GDP services payments have steadily increased during the decade 1980-81 to 1990-91 from 1.3 per cent to almost three per cent of the Gross Domestic Product.

With regard to the different components of services payments, in the case of Travel, for instance it has been observed that there has been steady increase in absolute values from a low of Rs 18 crores in 1970-71, payments in the case of Travel increased to Rs 90 crores by 1980-81. Over the subsequent five years they had reached to 412 crores. This infact was a peak figure for Travel Payments. As a percentage of total payments they constituted around Ten per cent. Though by the end of 1990-91 Travel payments further increased to Rs 700 crores yet they were just five per cent of the total

payments and almost comparable to the figure at the end of the previous decade. In general Travel Payments have been governed mostly by exchange control policies over the period, though of late there has been considerable liberalization and lessening of exchange control restrictions which account for the increase in the total amount of travel payments in recent years. Transportation and Insurance constitute the second component of the services payments. Up to the year 1985-86, Transportation and Insurance payments increased at a fairly steady rate and by doubling approximately over the previous five years from 1970-71 onwards. During the last five years, however the increase has been substantial for these payments have increased from Rs 899 crores to almost Rs 2120 crores by 1990-91. As a percentage of total payments, Transportation and Investment has steadily come down from 30.1 per cent in 1975-76 to 15.4 per cent in 1990-91. These developments are mainly due to the increase in freight rates in recent years so far as absolute payments are

concerned.

Coming to Investment Income payments we note that these increased from Rs 1970-71 to Rs 274 crores by 1980-81. Thereafter they jumped to Rs 1620 crores by 1985-86. Further by 1990-91 these payments increased by more than a quadruple when they stood at Rs 7400 crores. Except for the year 1980-81 over all these payments have ranged between 40 to 55 per cent of the total services payments over the period. The increase in these payments is mainly due to the increased remittances associated with the growing foreign investment in India where these remittances have taken the form of mostly dividends and due to the increased amount of amortization payments over the years.

The other services payments which are of residual nature mostly consisting Miscellaneous and Government Not Included Elsewhere have fluctuated wildly in percentage terms over the years. Though they peaked in 1980-81 to almost 46 per cent they had come down since then to 26 per cent by 1990-91. In absolute terms the rate of

growth has been considerably lower especially over the period 1985-86 to the period 1990-91. They have increased from Rs 1300 crores to Rs 3600 crores over the last five years. The increase in these payments of late has been due to the increased expenses associated with Indian embassies abroad and also increased contributions by India to international agencies such as United Nations and the World Bank etc.

#### 6.4. CONCLUDING REMARKS :

In conclusion, it is considerably easy to link up the question of structural change with merchandise trade since this can be evaluated in terms of the change in the product mix over the period and where certain trends can be easily observed. In the case of services it is not possible to say anything definite regarding the composition of trade in services and structural change. The components of services are governed by several complex factors involving both domestic and external elements. Most of the developing countries including India are very much dependent

upon foreign owned facilities in this sector for example transportation, shipping, insurance etc., in their international trade and to a considerable extent even domestic facilities connected with the services of foreign owned example hotels. Besides political and other socio-economic factors exert considerable influence in this sector and it is for this reason that no perceptible trend can be found in the different components of the services sector. Nevertheless, compared with the role in services sector before 1970 since then it can be said that the changing product mix of the Indian economy has also favourably affected this sector of late.

SELECTED REFERENCES :

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## CHAPTER SEVEN

### BALANCE OF PAYMENTS

#### 7.1. INTRODUCTION :

In an open economy where trading relationships with other countries are important for overall economic development and progress, the position of the economy vis-a-vis with the rest of the world is reflected in balance of payments. Balance of Payments is a record of an economy's transactions vis-a-vis rest of the world over a period generally one year where the transactions recorded on the principle of double entry book keeping. Balance of Payments accounts in accordance with the conventions set by International Monetary Fund (IMF) and adopted by Reserve Bank of India (RBI) are prepared to reflect from broad categories of transactions and adjustments. These are : 1. The Current Account, 2. The Capital Account, 3. Errors and Omissions, 4. Reserve Account.

And international transactions are recorded under these broad categories and their



sub categories. In this chapter we are not going to study in detail either the developments in these broad categories or their components in the balance of payments accounts, but we shall concern ourselves with the movements in the figures regarding these categories and where necessary in their components over the twenty year period 1970-71 to 1990-91 which is the period under consideration for our study.

In what follows we have analyzed the developments in India's Balance of Payments with respect to these broad categories in Net terms mainly the Current account and Capital account including Errors and Omissions and then note in a manner in which any overall surplus or deficit in balance of payments has been taken care of during this period.

## 7.2. BALANCE OF PAYMENTS AND FINANCING :

The figures on the developments in the categories noted above are presented in TABLE-7.1 for selected years.

TABLE-7.1

INDIA'S BALANCE OF PAYMENTS : 1970-71 TO 1990-91.

Rs. Crores

YEAR	Current account	Capital account	Total deficit or Surplus
1970-71	- 445	- 462	- 907
1975-76	- 294	- 706	-1000
1980-81	-1657	- 983	-2640
1985-86	-5956	+2769	-3187
1990-91	-17369	+5648	-11721

Source: Reserve Bank of India, Report on Currency and Finance, Vol II, Various Issues.

As can be seen the year 1970-71 started with a deficit of Rs 445 crores. And due to certain favourable developments and policies especially with regards to merchandise trade and some favourable developments in invisible account, the current account turned in to a surplus of Rs 294 crores by 1975-76. By 1980-81 the current account deficit had increased to Rs 1656 crores thereby showing increase of more than three and a half times over the figure of the previous decade. The developments in the international arena especially with regard to oil prices continued to have adverse impact on current accounts in general of not only of India but other countries as well and the continuing impact of this is shown in the current account of this country where in it may be noted that by 1990-91 the deficit on this account had increased to an enormous Rs 17400 crores which is almost 11 times the figure at the end of the previous decade.

On the other hand the capital account has not performed any better over the decade 1970-71 to 1980-81. The deficit on this account

including errors and omissions was almost comparable to that on current account in 1970-71 doubled to Rs 980 crores by 1980-81. Thereafter the capital account turned positive with a figure of Rs 2800 crores for 1985-86 which further doubled to a figure of Rs 5700 crores by 1990-91. Overall however the balance of payments itself inspite of the positive current account in 1975-76 and the positive capital account for the year 1985-86 and 1990-91 has remained in deficit over the twenty years period. Thus the overall deficit which hovered around Rs 1000 crores during the years 1970-71 to 1975-76 ( see Appendix Table 7.1), increased to Rs 3200 Crores by 1985-86. Thereafter within a period of just five years and by 1990-91 the deficit increased to almost Rs 12000 crores or by about four times the 1985-86 figures. Therefore on balance and in general the balance of payments of this country have been in deficit for the entire period under consideration and the deficit has been growing at a relatively higher rate in recent years both in absolute and

percentage terms.

Any record of transactions kept on the principle of double entry book keeping must always balance. So in this sense the proposition that balance of payments must always balance holds true and this balancing is brought about by certain policies which are reflected in the fourth category of the balance of payments account. The movements in the different components of this major category is also which we have indicated earlier in the reserve account, are undertaken and entered in such a way that the sum of these is just enough to cover overall deficit, and in the case of a surplus in the balance of payments these movements account for the management of the surplus. The reserve account which we also term the financing account, may be taken to consist of three major categories for our purpose. Thus in the year 1970-71 as can be noted from TABLE-7.2, a major portion of deficit was financed by external assistance in the form of loans and grants. Thus Rs 740 crores or almost 82 per cent of deficit was financed by this method. The rest of 20 per cent

TABLE-7.2

FINANCING OF BALANCE OF PAYMENTS DEFICIT : 1970-71 TO 1990-91.  
Rs. Crores

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YEAR	External assistance	IMF + SDRs	Reserves	Total deficit or Surplus
1970-71	+743	+ 75	+ 89	-970
1975-76	+1830	-	- 830	-1000
1980-81	+1729	+395	+ 516	-2640
1985-86	+2481	-	+ 707	-3197
1990-91	+6095	+3334	+2293	-11721

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Source: Reserve Bank of India, Report on Currency and Finance, Vol II, Various Issues.

was taken care of by approximately equal movements percentage wise in special drawing rights with the International Monetary Fund foreign exchange reserves. The overall deficit by 1975-76 as has already been noted remained around Rs 1000 crores and in that year the country was not only able to take care of the same as a result of favorable developments on the export front and on domestic front, but also due to favorable developments in the economy especially regarding production of food items brought about by benevolent monsoon. These factors in addition and substantial inflow of external assistance as well as due to the policy of import compression during this period allowed the country to accumulate Rs 830 crores worth of reserves apart from covering the deficit. By the end of subsequent five years 1980-81 however the tables were turned where overall deficit shot up to Rs 2640 crores and about 66 per cent of which was financed by external assistance. The balance of the amount was taken care of by accumulation of reserves worth Rs 516 crores and about Rs 400 crores were

aided from International Monetary Fund sources.

The situation since then worsened, but nevertheless in 1985-86 external assistance to the extent of Rs 2480 crores was utilized to finance around 78 percent of the over all deficit in that year, the rest of 22 per cent was bridged by the reduction of about Rs 710 crores in the country's external reserves. It is worth noting that during the 1970,s India and other countries of the world had to face the oil shocks of 1973 and 1978. Yet a prudent policy of oil imports management and an increase in domestic production of crude oil helped the country keep the overall deficit at a fairly manageable levels especially during the period 1980-81 to 1985-86. By 1990-91 the overall Balance of Payments situation worsened to such an extent that the country had to rush to International Monetary Fund for assistance. It had to accept implementation of the International Monetary Fund reform package.

In that year not only the country faced a huge amount of deficit of Rs 11700 crores but



its foreign exchange reserves were just enough to cover one month's merchandise imports and as a cover for current payments (merchandise + invisibles) these reserves were just sufficient for 0.8 month's or 24 days. The country rushed desperately to International Monetary Fund and other agency for assistance and was bailed out by the International Monetary Fund package which along with the reserve accumulation took care of 48 per cent of the deficit and the rest of Rs 6100 crores was financed by external assistance. Further India had to agree to implement the International Monetary Fund package geared towards stabilization as well as structural reforms. A little reflection shows that this unsustainable balance of payments position or what is termed the balance of payments 'collapse' was brought about by mismanagement of the economy over the years, the increase in burden of external debt service payments and a perverse policy of import substitution industrialization. In addition political conflicts with the country's neighbors, the two oil shocks as well as the Gulf crisis

played their due role leading towards this disastrous situation.

Having noted these developments in the Balance of Payments and financing we next proceed to look into their components in some detail. This may enable us to draw some conclusions regarding structural change. And also to trace out some of the possible factors as could be reflected in the various components of the balance of payments.

At the first instance we examine the different components of the current account in net terms and later on we will look into the various components of the Capital Account.

### 7.3. THE CURRENT ACCOUNT COMPONENTS (NET) :

Since we have already examined the major components of the current account from both the receipts and payments side, when we dealt with merchandise exports, imports and also services in earlier chapters, our objectives for the present as stated immediately above, we confine to the examination of the net figures (TABLE-7.3) so far

TABLE-7.3

INDIA'S BALANCE OF PAYMENTS  
1970-71 to 1990-91. Rs. Crores  
CURRENT ACCOUNT (NET)

YEAR	MERCHANDISE	INVISIBLE	TOTAL CURRENT ACCOUNT
1970 - 71	-305* (0.7)	-14 (0.03)	-332 (0.7)
1975 - 76	-566 (0.7)	+861 (1.0)	+295 (0.3)
1980 - 81	-5967 (4.3)	+4311 (3.1)	-1656 (1.2)
1985 - 86	-9557* (3.6)	+3630 (1.3)	-5927 (2.2)
1990 - 91	-16934 (3.1)	-435 (0.08)	-17369 (3.2)

Note : 1. Merchandise includes Non Monetary Gold for 1970-71 and 1980-81.  
2. Figures in the parenthesis are percentages of GDP

Source : Reserve Bank of India, Report on Currency and Finance, Vol II, Various Issues.

as the current account is concerned. The figures in this table reveal that in 1970-71 as a consequence of merchandise imports being greater than merchandise exports, the net merchandise balance was on the negative side. Adjusting for some positive figure in the case of non monetary gold the net merchandise balance was in deficit to the tune of Rs 305 crores in that year. By 1975-76 the deficit on this account increased to Rs 566 crores. By the end of 1980-81 the deficit in net merchandise balance / trade balance had shot up to almost Rs 6000 crores i.e by more than ten times the figure for 1975-76. The trend in this deficit accelerated further when at the end of the next five years it rose to Rs 9500 crores. By 1990-91, the deficit had reached an enormous sum of Rs 1700 crores. However the situation was moderated to a considerable extent during the decade 1975-76 to 1985-86. The considerable net inflows on invisibles kept the current account deficit at fairly manageable levels during this period, particularly in 1975-76 the net

invisibles being greater than merchandise net, the current account net showed a positive amount of about Rs 3000 Crores. Likewise considerable positive inflows on invisibles in 1980-81 took care of almost 72 percent of deficit on merchandise account which helped keep the current account deficit around Rs 16000 crores. By 1985-86 however invisibles on the positive side could only take care of about 40 per cent of the merchandise deficit, which was considerably lower than the percentage figures five years earlier. The crisis point reached by about 1990-91 when not only the deficit on the merchandise account was enormous but also there was an average outflow of Rs 435 crores on the invisible account, thereby increasing a deficit on current account to almost Rs 17400 Crores.

It is of some interest to examine in a little more detail the component items of the current account net with reference to (Appendix TABLE-7.3 A). The figures presented in this table make it quite clear that the trade balance though it remained in deficit for almost all the fifteen

years between 1970-71 to 1984-85 still remained at fairly manageable levels. The almost counter-balancing figures as a result of the positive developments in the invisible account over this period had not put much strain on the economy. The country during this period had been able to withstand the two oil shocks principally as a result of the favourable developments on the invisible account. From 1985-86 onwards the situation regarding trade balance has not been very satisfactory; yet during the three years period 1985-86 to 1987-88, the positive inflows in the invisible account on an average have taken care of almost 40 per cent of deficit on merchandise account and therefore the deficit on the current account doubled during this period to an average figure of Rs 6000 crores compared to the previous five year average, yet the economy was able to sustain itself.

It is the developments in the current account especially during the last three years of our period of study that brought the economy to

its crisis point by 1990-91. Apart from the unfavourable trade balance the outflows on the invisible accounts particularly those on accounts of investment income payments and to some extent transportation (TABLE-7.4. A) put together that reinforced the crisis in spite of the positive developments in net transfer payments. Therefore this aspect of the current account considered to have some relevance to the question of structural change/transformation of the economy within the context of the 'stages theory of Balance of Payments' regarding the debtor creditor status.

#### 7.4. CAPITAL ACCOUNT COMPONENTS (NET) :

The capital account as a total comprises of Private, Banking and Official flows. The movements on capital account are mostly of induced nature especially with regard to long term capital flows. In 1970-71 the net capital inflows were just around Rs 400 crores (TABLE-7.4). In the subsequent decade they rose more or less in line with the current account deficit and to a considerable extent they were of a balancing

TABLE-7.4

INDIA'S BALANCE OF PAYMENTS  
1970-71 to 1990-91.  
CAPITAL ACCOUNT (NET)  
Rs Crores.

YEAR	PRIVATE	BANKING	OFFICIAL	TOTAL CAPITAL ACCOUNT
1970 - 71	-29	-8	+656	+400
1975 - 76	-54	+27	+1326	+570
1980 - 81	+77	+13	+1665	+916
1985 - 86	+2092	+186	+3683	+4894
1990 - 91	+1875	-632	+5813	+7056

Source : Reserve Bank of India, Report on Currency and Finance  
Vol II, Various Issues.



nature. Though in 1980-81 they fell short by about Rs 500 crores. In the subsequent years capital inflows increased considerably and by 1985-86 they were of the order of Rs 5000 crores, and formed about two per cent of the GDP. By 1990-91 the total inflow of Rs 7000 crores amounted to 1.3 per cent of GDP. On an average over these last five years inflows have ranged between 1.2 per cent and to 1.8 per cent of the GDP.

So far as individual components are concerned during the decade 1970-71 in general there were net outflows of private capital both long and short term since then long term net inflows have gradually picked up and by 1985-86 there was a long term; inflow of Rs 2000 crores. Subsequently long term capital inflows reached a peak figure of Rs 3000 crores in 1989-90.

The inherent fundamental weakness in the economy as a result of uncertain and ambiguous policies regarding the role of foreign capital and the Crisis of Confidence in the Indian economy

affected adversely these capital flows and by 1990-91 they had come down to Rs 1800 crores.

Long term flows on private account are connected in general with both direct and portfolio investment, and as such, the flows are primarily determined by the investment atmosphere, regulatory framework and economic considerations relating to these forms of capital.

Sort term capital flows generally consist of commercial borrowing of short term nature and are privately governed by interest rate differentials and credit worthiness of transactors involved. Such capital flows have shown very wide fluctuations over the period and for fourteen out of twenty years, there have been net outflows. The year 1982 in particular was an year of outflow of Rs 17 crores and a second instance of such outflows is the year 1989-90 when almost Rs 9 crores worth of capital moved out of the country.

But in general net outflows of short term capital have not been significant either as percentage of capital account or as percentage of GDP. The major reasons for this could be a highly

regulated nature of the Indian Economy particularly on the foreign exchange front all these years..

Similar considerations must have prevailed in relation to inflows of Banking capital, inspite of the fact that this item relates principally to the banking sector's routine transactions.

In short both private and banking capital flows have not formed any significant percentage consistently either on the positive or on the negative front.

It is the Official transactions that predominate the capital account transactions over the years (Appendix TABLE-7.4). Official loans which were just Rs 656 Crores in 1970-71 gradually increased to Rs 1550 Crores in 1974-75. Thereafter they showed a declining trend for subsequent five years. In 1980-81 once again reached a figure of Rs 1660 crores. Since then the trend has been upwards until 1989-90 when in that year under reference they reached Rs. 8400

Crores. By 1990-91 Rs 5800 Crores worth of Official loans were incurred by various government and official agencies. The significant fact in this item is that through out the period the trend has been fairly positive and as a percentage of GDP official loans have ranged between 1.1 per cent to 1.6 per cent during these years. Still in percentage terms there is no persistent trend. In the official transactions, Amortization payments have increased at a fairly steady rate over the period 1970-71 to 1984-85. For instance these payments rose from Rs 190 crores in 1970-71 to Rs 610 Crores in 1980-81 and in subsequent years the increase was gradual and by 1984-85 amortization figure was of the order of Rs 730 Crores. By the end of the very next year amortization payments crossed Rs 1000 crores and finally they peaked to Rs 5700 Crores by 1990-91. This trend is generally to be expected since most of the loans which have been incurred in the earlier decade of long term nature have reached the maturity periods and the sudden increase in 1985-86 onwards could be the result of bunching or many of these loans

fall in due for repayments.

Finally the miscellaneous items on Official capital account which is made up mostly of diplomatic expenditures and contributions towards international institutions being a residual item has fluctuated very widely, and significantly in 1990-91 there has been a considerable outflow.

In short in the case of capital account the private transactions have assumed importance only in recent years over the last decade and especially in the last five years due to the liberal policy attitude which has been touched upon elsewhere and all through it is official flows which have been of importance.

## CHAPTER EIGHT

### FOREIGN INVESTMENT

#### 8.1. NATURE AND SIGNIFICANCE OF FOREIGN INVESTMENT:

International capital flows play a highly significant role in the early stages of development of the present day industrialised economies, and these capital inflows still continue to play their due role in the development of natural resources in particular and industrial activity in general by providing the financial resources and technology. Thus by the first they bridge the gap between domestic savings and investment and by the second they help improve both production as well as facilitate the production of new goods and services. In short these capital inflows along with inflow of technology touch the production possibility frontier of the countries concerned.

Foreign capital flows originate broadly from two sources : Private and Public. The former consists of individuals, companies (corporations) and other non governmental sources. The latter consists of governments, quasi government

organisations and international financial institutions. Coming to the types of these capital flows we may classify them once again into two broad categories: a) foreign assistance and b) foreign investment. Foreign assistance can be categorised into loans (FL) and grants (FG), similarly foreign investment can once again be broken into 1) direct investment (FDI) and 2) portfolio investment (FPI).

Foreign direct investment implies a controlling interest by the investor in the host country's economic entity or venture motivated by the differential rates of return on invested capital. Such capital is considered to be having greater productivity in the host country compared to that of the country of the investor and as such is likely to yield higher dividends.

Portfolio investment on the other hand does not imply such control. It is investment in financial assets. It is sometimes known as rentier investment. The motive behind this investment is the advantage that accrues to the

investor by the differential rates of return by way of interest where these rates are greater in the host countries.

In this chapter we are concerned with foreign investment be that direct or portfolio investment and we are not going to touch upon the other types of capital flows namely external assistance which is governed by many complex factors. Foreign investment, whatever form it takes - either direct or portfolio has both benefits and costs. The benefits include increases in productivity, income, employment, output, technical skills and knowhow and other organisational benefits. The costs include increase in long term liability to foreigners and costs of locational concessions such as differential tax treatments and other concessions. These benefits and costs in terms of the 'opportunity costs' have been conveniently summarised by Klas Markensten in his study on foreign investment in India.



✓  
MARKENSTEN CHART

POSITIVE EFFECTS

NEGATIVE EFFECTS

Inflow of capital	O	Repatriation of capital
	P	
Net profits	P	Dividend remittances
	O	
Wage benefit	R	
	T	
Employment	U	
	N	
Consumer benefit	I	
	T	
External economies 'in a narrow sense'	Y	External diseconomies 'in a narrow sense'
	C	
External economies 'in a wider sense'	O	External diseconomies 'in a wider sense'
	S	
	T	
Other indirect benefits	S	Other indirect costs

Source : Markensten, K. : Foreign Investment and Development: Swedish Companies in India, Curzon Press, London, 1972.

As may be noted that numerically the positive effects or benefits of foreign investment far outweigh negative effects or costs of foreign investment. Therefore, it is in this context foreign investment becomes significant in the study. Given these background and introductory remarks about the nature and significance of foreign investment we devote the following sections to an examination of the different aspects of foreign investment in India.

#### 8.2. FOREIGN INVESTMENT IN INDIA :

It must be mentioned at the outset that though foreign investment has played a very important role in India over the years and quite a bit of infrastructure and other industries and other economic activity have been set up / developed with the help of capital flows reliable and consistent data are neither easily accessible nor are they available for a serious study of this highly important aspect of the Indian economy. Therefore, our analysis at best has to rely upon very scanty material. Nevertheless even with these material we hope to be able to draw certain

conclusions regarding the role of foreign investment. Thus we note from TABLE-8.1 that total foreign investment in 1987 stood at Rs 2200 crores and over the four year period it increased to about Rs 4000 crores. Thus doubling over this period. Out of this direct investment increased from Rs 1740 crores to Rs 2700 crores. Yet the increase in the absolute figure of a Rs 100 crores worked out in percentage term does not give us an optimistic picture. Infact FDI declined over the period from 79 per cent to 68 per cent. On the other hand portfolio investment (FPI) showed substantial increases both in absolute and percentage terms. Thus FPI increased from Rs 460 crores in 1987 to Rs 1260 crores by 1990 and thus has shown a steadily increasing trend in percentage terms from 20.8 per cent to 31.7 per cent over the period. However, the increase in FPI of late has not been as fast as it was in the early years. This can be noted from the fact that FPI between 1987-88 increased by 5 percentage point and between 1987-89 by another 5 percentage

TABLE-8.1

TOTAL FOREIGN INVESTMENT 1987-1990  
Rs. Crores.

YEAR	FPI	FDI	TOTAL
1987	459 (20.8)	1742 (79.2)	2201 (100.0)
1988	719 (26.0)	2045 (74.0)	2764 (100.0)
1989	979 (29.8)	2302 (70.2)	3282 (100.0)
1990	1258 (31.7)	2705 (68.3)	3963 (100.0)

Sources : CMIE's Basic Statistics, 1994.

points but in the penultimate year the increase was by 2 percentage points.

So far as the sectoral distribution is concerned from TABLE-8.2 we note that manufacturing sector has consistently attracted on an average 86 per cent of total investment. Thus in absolute terms investment in manufacturing increased from Rs 1896 crores in 1987 to Rs 3376 crores by 1990. The plantation and services sector on the average have attracted 6 to 7 per cent of such investment where as investment in mining and petroleum sector has not been very significant. Therefore, it may safely be argued that the flow of investment in manufacturing is indicative of the low risk and high return nature of that sector vis a vis other sectors.

It may be of some interest to note from TABLE-8.3 the distribution of investment so far as the manufacturing sector is concerned. As stated above investment in manufacturing increased from Rs 1896 crores to Rs 3376 crores over the period 1987 to 1990. Out of this on an average 30 per

**TABLE-8.2**

**FOREIGN INVESTMENT BY INDUSTRY**  
Rs. Crores

YEAR	PLANTATION	MINERALS PETROLIUM	MANUFACTURES	SERVICES	TOTAL
1987	158 (7.1)	18 (0.8)	1896 (86.1)	128 (5.8)	2201 (100.0)
1988	180 (6.5)	24 (0.8)	2368 (85.6)	192 (6.9)	2764 (100.0)
1989	208 (6.3)	22 (0.6)	2864 (87.3)	187 (5.7)	3281 (100.0)
1990	266 (6.7)	47 (1.1)	3376 (85.1)	274 (6.9)	3963 (100.0)

Source : CMIE's Basic Statistics, 1994.

**TABLE-8.3**

**FOREIGN INVESTMENT BY INDUSTRY (IN MANUFACTURING)**  
Rs. Crores.

ITEMS	1987	1988	1989	1990
a) Food and Beverages	121 (6.3)	131 (5.5)	162 (5.6)	195 (5.7)
b) Textile Products	279 (14.7)	371 (15.6)	366 (12.7)	406 (12.2)
c) Transport Equipment	210 (11.0)	270 (11.4)	336 (11.7)	398 (11.7)
d) Machinery and tools	239 (12.6)	291 (12.2)	365 (12.7)	434 (12.8)
e) Metals and Products	100 (5.2)	144 (6.0)	189 (6.5)	252 (7.4)
f) Electrical machinery	229 (6.4)	270 (11.4)	366 (11.7)	380 (11.2)
g) Chemical Products	584 (31.0)	704 (29.7)	807 (28.1)	965 (28.5)
h) Others	134 (7.0)	184 (7.7)	274 (9.5)	346 (10.2)
Total	1896 (100.0)	2368 (100.0)	2868 (100.0)	3376 (100.0)

Note : Figures in the parenthesis are percentages to the Total.

Source : CMIE's Basic Statistics, 1994.

cent of total investment has gone into chemicals and allied products. Thus in 1990 investment in the subsector was Rs 965 crores. Investment in manufacturing and machine tools has remained stable around 13 per cent over the period 1987 to 1990. Likewise investment in transport equipment has also been fairly stable around 12 percent. In the case of electrical goods the share has been doubled over the three years. In the case of textile products the share of investment has gone down from about 15 per cent in 1987 to about 12 per cent by 1990. On the other hand the shares of metals and metal products and the residual group (others) have shown an increasing trend percentage-wise and in these cases on the average the shares have increased by about 3 percentage points in each case. Finally investment in food and beverages has fluctuated over 6 percent. On balance an analysis of the figures regarding relative shares in the manufacturing sector indicates considerable stability though in absolute terms the amount in these sectors have increased all over. Interestingly in the



manufacturing sector the traditional sub sector such as food, beverages and textiles etc has not been that attractive relatively compared to other sector in the rates of return, and more over it is possible that the increase in investment and also the higher share in these non-traditional sectors could be the result of prevalent policy regarding channelling of investment in these activities.

The picture obtained from the analysis of total foreign investment sector-wise as well as in manufacturing and its component sectors does not change very much when these total figures are broken down into the two broad categories namely direct investment and portfolio investment and when the sectoral distribution is analysed. Both the predominance in relative shares of manufacturing as well as stability of shares percentage-wise in rest of the sector which have been noted earlier are more or less maintained (Refer Appendix Table).

### 8.3. INVESTMENT APPROVALS : COUNTRY-WISE :

Though the figures on actual investment are

very scanty as has been noted earlier when it comes to figures on approval, fairly consistent and continuous data are available since 1977. Approvals to some extent indicate in general the mutual cooperation between India and other countries as well as their interest in developing economic relationships. They also indicate the interest of the investing countries to explore their fortunes in India. Further they indicate their growing interest in India as such for considerations that could be other than economic. Thus from figures in TABLE-8.4 we note that the total investment approvals which were just of the order of Rs 4 crores in 1977 increased to Rs 10.9 crores by 1981. However by the end of the subsequent five year period investment approvals were almost ten times the 1981 figures. In the year 1980 approvals amounted to Rs 107 crores. Thereafter upto 1989 there was a consistent increase in approvals and in that year they stood at Rs 307 crores. By 1991 approvals once again increased by more than one and a half times the 1989 figures when they amounted to Rs 534 crores.

TABLE-8.4

FOREIGN INVESTMENT APPROVED BY COUNTRY  
Rs. Crores

COUNTRY	1977	1981	1986	1991
U.S.A	1.8	2.2	29.3	185.8
Switzerland	0.4	0.1	3.2	35.5
Japan	-	0.6	5.6	35.5
U.K.	0.6	0.7	7.7	32.1
Germany	0.7	5.4	20.1	41.8
Netherlands	0.1	0.0	0.4	55.9
Others	0.2	1.7	33.5	130.2
Total	4.0	10.8	106.9	534.1

Sources : CMIE's Basic Statistics, 1994.

These figures for selected years indicate only the increases in absolute average regarding approvals. However, there is no consistent trend so far as approvals are concerned. There are considerable variations between various Years. Appendix TABLE-8.2 A. So far as the country wise distribution is concerned, the United States has been the predominant country in this regard. Thus in 1977 its share of approvals was almost 46 per cent of the total. However, by 1987 the share came down to 27 per cent; still in absolute terms approvals in the case of U.S.A. increased from Rs. 1.8 crores in 1977 and doubled almost to Rs. 2.9 crores by 1987. In 1991 as well the share of the United States approvals was 35 per cent and investment worth Rs 186 crores had been approved. In the case of the United Kingdom the erstwhile colonial power the approvals came down from 16.8 percent to just 6 percent over the period 1977 to 1991. For instance in 1991 United Kingdom had approvals worth Rs 32 crores. The same situations regarding approvals from Germany where in we find out approvals came down from 19 per cent to 8

per cent in 1991. The opposite trend is found in the cases of Japan and Netherlands. In the case of Japan for instance approvals which were just one per cent of the total increased to 10 per cent over the period 1987 to 1991. Likewise Netherlands share of approvals came to be around 10.4 per cent in 1991.

#### 8.4. COLLABORATIONS : COUNTRYWISE :

The data on the approvals numbers of foreign collaborations is consistently available for the entire period of study. In the first instance the approvals regarding collaborations can be broken down into financial and technical collaborations (TABLE-8.5). Thus we note that in 1971, 243 collaboration agreements were approved. Of these 187 or more than 80 per cent were technical collaborations. Upto 1983 most of the approvals were in this area only and on an average they remained more than 80 per cent. In subsequent years the percentage of approvals involving technical collaborations have gradually come down and especially during the period 1984 to 1990. On

TABLE-8.5

FOREIGN COLLABORATION APPROVED BY NUMBER AND PERCENTAGE

YEAR	FINANCIAL	TECHNICAL	TOTAL
1971	46 (18.9)	197 (81.1)	243 (100)
1976	39 (14.1)	237 (85.9)	276 (100)
1981	57 (14.7)	332 (85.3)	389 (100)
1986	240 (25.1)	717 (74.9)	957 (100)
1991	692 (45.5)	828 (54.5)	1520 (100)

Sources : CMIE's Basic Statistics, 1994.

an average these approvals have been 70 per cent of the total. In 1991 15920 collaboration agreements were entered into, of which technical collaborations constituted 55 per cent. Therefore inspite of this reduction, in percentage terms technical collaborations agreements still predominate the total collaboration agreements. For instance, in absolute terms in 1991, 828 such approvals were given, and in that year the financial collaborations agreements also became quiet significant for the 692 such agreements constituted 45 per cent of the total approvals of that year. On balance approvals regarding technical collaborations have been predominated as compared with financial collaboration approvals ( Refer Appendix TABLE-8.5.1 A and TABLE-8.5.2. A).

So far as the country wide distribution of collaboration of approvals is concerned we note from TABLE-8.6 that the United States and Germany have continued to dominate the scene. On an average agreements by these countries have fluctuated around 20 per cent amongst the total

TABLE-8.6

FOREIGN COLLABORATION APPROVED : COUNTRY WISE

YEAR	USA	SWITZ.	JAPAN	UK	GERM.	NEITH.	OTHERS	TOTAL
1971	43	14	35	55	47	4	49	243
1972	62	15	27	38	52	4	56	257
1973	48	10	36	53	64	2	47	260
1974	79	34	28	59	70	3	80	353
1975	55	27	23	54	65	5	49	271
1976	69	22	10	54	65	5	51	276
1977	54	23	20	59	58	4	47	265
1978	58	18	28	61	66	10	67	308
1979	48	14	12	63	61	6	63	267
1980	125	38	34	110	104	8	103	526
1981	85	26	27	79	78	9	85	389
1982	100	41	51	106	112	14	166	590
1983	135	47	58	119	139	13	162	673
1984	146	30	78	127	146	14	215	752
1985	197	42	108	147	192	16	322	1024
1986	189	42	111	130	189	26	280	957
1987	196	31	71	122	152	23	258	853
1988	191	41	96	134	183	15	266	926
1989	127	22	62	66	115	12	201	666
1990	120	35	47	101	133	12	218	950
1991	177	52	72	134	157	50	308	1520

Sources : CMIE's Basic Statistics, 1994.



number in each case. On balance the number of agreements with the U.S.A. are almost on line with Germany for over twenty year period, for ten years approvals with the U.S.A were more than those with Germany and for another 10 years it was the other way round, though not consequently. In the case of the United Kingdom for the first ten years approvals of collaborations on an average fluctuated around 20 per cent of the total. In subsequent decade they have gradually come down in percentage terms. Thus in 1991, 134 approvals were given to U.K. which constituted around 14 per cent of the total. The other major countries so far as collaborations approvals are concerned are Switzerland, Japan, Netherlands, and Others. In the case of the former approvals range between 4 to 15 per cent over the years. But in general they remained above 5 per cent whereas approvals in the case of Netherlands do not show any particular trend. Appendix TABLE-8.6.A and TABLE-8.6.B.

Thus in absolute terms in 1991 approvals of Rs 53 crores and of Rs 56 crores was given in the case of Japan, Netherlands respectively. So far as investment is concerned, it must be mentioned that no perceptible trend in approvals either total or countrywise can be noted and neither it is expected since approvals express only the willingness to invest by the foreign country and also the willingness to accommodate by the domestic country. So the real stake of foreigners in India can be judged only when figures on actual investment are made available.

Regarding approvals it may be mentioned that they are governed primarily by the various policies concerning the targetted objectives as laid down in different five year plans. Here the various industrial policy resolutions over the years are indicative of the prevalent atmosphere and signals to foreign investor in India, so far as the scope of this investment in this country is concerned. In short what matters is not the total number of approvals as such but the amounts involved and how much of actual capital inflow

takes place in the economy, and also how effectively these agreements are executed.

8.5. SOME OBSERVATIONS ON INVESTMENT POLICIES :

With the realisation that foreign investment could play a useful role in India's economic progress, as early as 1948, Prime Minister, Nehru stressed the constructive and cooperative role of such investment in the Indian economy when he announced the Industrial Policy Resoultion in 1948. The Prime Minister at the same time ensured a fair and reasonable treatement for foreign investors such as non discrimination, reasonable remittance faciliites for profits and capital repatriation and equitable compensation in case of nationalization. Subsequently the Industrial Policy Resolution of 1956 placed a number of industries under the scope of the public sector, thereby giving a reduced role to the private sector, domestic as well as foreign. However, the foreign exchange crisis that followed immediately compelled the government to take a liberal attitude and in 1961 foreign investment was

welcomed to cover the foreign exchange cost of plant and machinery in the approved project and to bridge the gap between capacity utilization and planned targets particularly in basic and heavy industries. But the adverse consequences of this attitude specifically outflow of foreign exchange as remittances of dividends, profits etc as well as the then foreign exchange crisis in the late 1960's resulted in some restrictive steps. In 1968 the government set up the foreign investment board (FIB) to handle the cases of FDI and FPI collaborations within certain limits. Further a technical evaluation committee (TEC) was formed in 1976. to assist the (FIB) in screening collaborations proposals and at the same time emphasis was laid that in general FDI accompanied with technology should be favoured.

In the meantime the foreign exchange regulation act (FERA) came into effect in 1973 and defined the scope of regulatory framework particularly in the case of direct investment. In general FERA put a 40 per cent ceiling on foreign equity participation and further clarifications

in this regard are issued in industrial policy resolution IPR of 1973.

These restrictive policies politically within the scope of FERA and other administrative measures such as licensing etc, rendered the economy inefficient, non competitive at the international levels. Therefore, it was felt necessary to embark upon modernization of the industries by allowing the required imports of capital goods and technology, and also by reducing the trade barriers. A useful role of transnational corporations was also recognised. As a consequence of this need, the industrial policy statements of 1980 and 1982 relaxed many of the regulations and restrictions regarding equity holding, licensing and import duties etc, and a more liberal policy towards direct investment and collaborations was introduced. This liberal attitude and policy approach helped make the foreign investment climate more favourable and as such the FDI inflows started to register a favourable trend especially during 1980's.

With the introduction of new industrial policy (NIP) in 1991, this favourable trend is likely to be reinforced. In passing we must mention that the percentage of foreign investment in India has improved considerably in recent years and yet it continues to be below one percent of GDP in 1990. We must bear in mind that foreign investment is governed by several complex factors amongst them the significant being political strategic considerations.

These in fact are likely to influence the course of foreign investment in the Indian economy in the near future.

So far as the nature of foreign investment is concerned it is evident that over the years it has undergone substantial change. With the changing product mix of the Indian economy foreign investment as well as technical collaborations are being emphasised and undertaken in the basic infrastructure and also sophisticated industries where technological considerations are more relevant in the present international economic environment. This is further evidence of the

structural transformation of the Indian economy from an inward oriented one to an economy with global orientation.

## CHAPTER NINE

### CONCLUSION

On the basis of the material discussed and examined in the previous chapters, we proceed to draw some conclusions particularly with respect to structural change in the Indian economy and more so regarding the dating of this change. The study as has been mentioned in the introductory chapter is primarily of empirical nature. It is confined to the analysis of the data relevant variables and then magnitudes in so far as they are of direct concern in handling the question of structural change. Therefore the survey of relevant literature has been quite brief.

As mentioned in the introductory chapter the study is specifically devoted to empirically testing of the hypothesis posed in introduction regarding structural change. It was our contention that the Indian economy has undergone considerable structural changes. This can be assessed empirically not only on the basis of sectoral composition of GDP over the year but also the composition of the country's merchandise



exports and imports and to some extent from the movements in the components of the Balance of Payments accounts. More than that the controversial issue of dating of structural change in the economy can be more conclusively established by the developments regarding the compositions of exports, imports etc. or in general the developments in the country's external sector.

The empirical evidence examined here in the foregoing chapters keeping in view the broad hypothesis leads to conclude the following:

1. The Indian economy has undergone structural change as can be evidenced from movements in the relative shares of different sectors so far as their contributions to GDP is concerned over the years.

2. The structural change is further evidenced by the growing importance of capital goods vis-a-vis consumer goods in the economy. Inshort the increasing importance of goods and services involving relatively increasing technological

sophistication.

3. The sectoral distribution of employment and the stability in its share so far as manufacturing is concerned and its growth in residual sector vis-a-vis that in agriculture also reinforces the conclusions regarding structural change.

4. The evidence obtained from the composition of the exports in terms of SITC group wherein it is noted that non traditional exports have to occupy a relatively more important position when compared with traditional items, is also indicative of the structural change in the Indian economy. But more significantly in our views can be taken as important not only in confining the structural change in Indian economy but also for establishing a bench mark date for the beginning of such change.

5. Similarly, the empirical evidence from the analysis of composition of imports on the basis of SITC groups, wherein a substantial change in the nature of imports from raw material inputs to intermediate and capital goods may be noted, also strengthens the conclusion regarding structural

change in the economy over the years and further taken together this with the developments in the exports sector, it helps in establishing more firmly the question of dating the structural change. In short the study is of the view that in the light of the bench mark year in which the Indian economy entered the era of economic progress more or less as an industrial economy.

6. The predominance of the services sector in the first instance as a component of GDP and secondly as a component of the invisibles is considered as an indicator of the development status of an economy. However the empirical evidence adduced by the study shows that this is far from true. The study found no conclusive relationships between the developments of the services sector and the developments of the economy and moreover services sector is not of much help in establishing a structural change in the economy.

7. The evidence from the Balance of Payments especially from the components of the capital account over this period establish that from a

purely debtor status the country has entered into a phase of high debtor and low credit status, which once again reinforces our conclusions regarding the dating of structural change.

8. Empirical evidence on investment flows though considerably limited more or less confirms the conclusions regarding dating of structural change as well as the structural transformation of the Indian economy from a purely agraraian one to one of then emerging and presently well-established industrial economy with 1970-71 as the bench mark year.

Through out our study the data on the relevent variables of our interest have not been available at a more disaggregated level. This would have enabled us to test our conclusions about the bench mark year more rigorously with reference to some of the 'stages theories of economic growth and of Balance of Payments'.

This may be an area of interest to the future research in International Economics.

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**TABLE 4.1.A**  
**GDP, EXPORTS, ANNUAL VARIATIONS**

YEAR	GDP	EXPORTS	EXP/GDP	ANNUAL VARIATION
1970-71	43163	1535	3.6	8.6
1971-72	46257	1608	3.5	4.8
1972-73	51005	1971	3.9	22.6
1973-74	62007	2523	4.1	28.0
1974-75	72325	3329	4.5	31.9
1975-76	78761	4036	5.1	21.2
1976-77	84894	5142	6.1	27.4
1977-78	96067	5408	5.6	5.2
1978-79	104190	5726	5.5	5.9
1979-80	114356	6418	5.6	12.1
1980-81	136013	6711	4.8	4.6
1981-82	159760	7806	4.9	16.3
1982-83	178132	8803	4.9	12.8
1983-84	207589	9771	4.7	11.0
1984-85	231343	11744	5.1	20.2
1985-86	262243	10895	4.2	-7.2
1986-87	292949	12452	4.3	14.3
1987-88	333115	15674	4.7	25.9
1988-89	394376	20232	5.1	29.1
1989-90	450601	27681	6.1	36.8
1990-91	529537	32553	6.1	17.6

Note : Data Computed by the Author for GDP/exp, Annual Variation.

Source : CMIE, Basic Statistics, 1994.

TABLE-4.2.A

DIRECTION OF TRADE : EXPORTS

Percentages

Country Groups	1970-71	1975-76	1980-81	1985-86	1990-9
I. OECD Countries	50.1	50.1	46.6	50.8	53.
II. OPEC Countries	6.4	15.3	11.1	7.7	5.
III. Eastern Europe	21.0	16.4	22.1	21.1	17.
IV. Other LDC'S	19.8	17.5	19.2	13.4	16.
V. Rest of the World (ROW)	3.7	0.7	1.0	7.0	6.
VI. Total Exports	100.0 (1535)	100.0 (4036)	100.0 (6711)	100.0 (10895)	100. (3255)

Note : Figures in the parenthesis are total value in Rs. Crores.  
 Source: RBI's Report on Currency and Finance, various issues.

TABLE-5.1.AGDP, IMPORTS AND ANNUAL VARIATIONS

YEAR	GDP	IMPORTS	IMP/GDP	ANNUAL VARIATION
1970-71	43163	1634	3.8	3.3
1971-72	46257	1825	3.9	11.7
1972-73	51005	1867	3.7	2.3
1973-74	62007	2599	4.8	58.3
1974-75	72325	4519	6.2	52.9
1975-76	78761	5265	6.7	16.5
1976-77	84894	5074	6.0	-3.6
1977-78	96067	6020	6.3	18.6
1978-79	104190	6811	6.5	13.1
1979-80	114356	9143	8.0	34.2
1980-81	136013	12549	9.2	37.3
1981-82	159760	13608	8.5	8.4
1982-83	178132	14293	8.0	5.0
1983-84	207589	15831	7.6	10.8
1984-85	231343	17134	7.4	8.2
1985-86	262243	19658	7.5	14.7
1986-87	292949	20096	6.9	2.2
1987-88	333115	22244	6.7	10.7
1988-89	394376	28235	7.2	26.9
1989-90	450601	35416	7.9	25.4
1990-91	529537	47797	8.2	22.0

Note : Data Computed by the Author for GDP/IMP, Annual Variation.

Source : CMIE, Basic Statistics, 1994.

TABLE-5.2.A

DIRECTION OF TRADE : IMPORTS  
Percentages.

Country Groups	1970-71	1975-76	1980-81	1985-86	1990-9
I. OECD Countries	63.8	61.3	45.7	53.6	54.0
II. OPEC Countries	7.7	21.9	27.8	17.4	16.3
III. Eastern Europe	13.5	10.7	10.3	11.0	7.8
IV. Other LDCs	14.6	5.9	15.7	17.6	18.4
V. Rest of the World (ROW)	0.4	0.2	0.5	0.3	3.4
Total Imports	100.0 (1634)	100.0 (5265)	100.0 (12549)	100.0 (19658)	100.0 (43193)

Source: RBI's Report on Currency and Finance, various issues.

Note : Figures in the parenthesis are total value of Imports Rs Crores.

TABLE-7.1.A

INDIA'S BALANCE OF PAYMENTS AND FINANCING

Rs. Crores

YEAR	Current account	Capital account	Total deficit or Surplus	External assistance	IMF + SDRs	Reserves
1970-71	- 445	- 462	- 907	+ 743	+ 75	+ 89
1971-72	- 402	- 312	- 749	+ 783	-	- 34
1972-73	- 252	- 582	- 834	+ 778	-	+ 56
1973-74	+ 1301	+ 392	- 909	+ 731	-	+ 178
1974-75	- 645	- 378	- 1023	+ 908	-	+ 115
1975-76	+ 294	- 706	- 1000	+ 1830	-	- 830
1976-77	+ 1526	- 1348	- 178	+ 1574	-	- 1396
1977-78	+ 1735	- 1535	+ 200	+ 1355	-	- 1555
1978-79	+ 173	- 108	- 281	+ 1231	+ 126	- 1076
1978-80	- 2350	+ 1099	- 1251	+ 1494	+ 126	- 369
1980-81	- 1657	- 983	- 2640	+ 1729	+ 395	+ 516
1981-82	- 2317	- 1750	- 4067	+ 1812	+ 637	+ 1618
1982-83	- 2296	- 1132	- 3428	+ 2160	+1893	- 625
1983-84	- 2262	- 246	- 2508	+ 1870	+1410	- 625
1984-85	- 2852	+ 1608	- 1244	+ 1953	+ 217	- 926
1985-86	- 5956	+ 2769	- 3187	+ 2481	-	+ 707
1986-87	- 5830	+ 2042	- 3788	+ 3056	-	+ 732
1987-88	- 9296	+ 3885	- 5411	+ 4454	-	+ 956
1988-89	-13556	+ 7247	- 6309	+ 4860	-	+ 1449
1989-90	-12413	+ 6183	- 6231	+ 4998	-	+ 1232
1990-91	-17369	- 5648	-11721	+ 6095	+3334	+ 2293

Source: Reserve Bank of India, Report on Currency and Finance, Vol II, Various Issues.

TABLE-7.3.A

INDIA'S BALANCE OF PAYMENTS  
Rs. Crores.  
CURRENT ACCOUNT (NET)

YEAR	MERCHANDISE	INVISIBLES	TOTAL CURRENT ACCOUNT
1970 - 71	-305*	-14	-332
1971 - 72	-438	+37	-402
1972 - 73	-251	-1	-252
1973 - 74	-379	+1680	+1301
1974 - 75	-977	+333	-644
1975 - 76	-566	+861	+294
1976 - 77	+321*	+1204	+1526
1977 - 78	-103*	+1837	+1735
1978 - 79	-1817*	+1989	+172
1979 - 80	-3369*	+3135	-235
1980 - 81	-5967	+4311	-1657
1981 - 82	-6121	+3804	-2317
1982 - 83	-5776	+3480	-2296
1983 - 84	-5871	+3604	-2262
1984 - 85	-6701*	+3848	-2852
1985 - 86	-9557*	+3630	-5956
1986 - 87	-9354	+3530	-5830
1987 - 88	-9296	+3364	-5853
1988 - 89	-13556	+3146	-10410
1989 - 90	-12413	+1025	-11388
1990 - 91	-16934	-435	-17369

Note : \* includes Non monetary gold.

Source : RBI, Report on Currency and Finance.

TABLE-7.4.A

INDIA'S BALANCE OF PAYMENTS  
Rs. Crores.  
CURRENT ACCOUNT (NET)

INVISIBLES

YEAR	TRANSPORT - ATION	INSURANCE	MISCELLA NEOUS	TRAVEL	INVEST MENT INCOME	GNIE
1970 - 71	+28	-0.5	-22	+10	-254	+7
1971 - 72	+43	-5	-28	+12	-227	+5
1972 - 73	+51	+5	-24	+19	-256	+8
1973 - 74	+37	+8	-35	+40	-263	+11
1974 - 75	+84	+13	-4	+79	-165	+44
1975 - 76	+64	+14	+9	+168	-169	+72
1976 - 77	+65	+21	+11	+247	-126	+31
1977 - 78	+66	+3	+52	+486	-95	+34
1978 - 79	+45	-2	+76	+501	+8	+23
1979 - 80	+66	+15	-4	+831	+264	-1
1980 - 81	+7	+14	-6	+1076	+484	+40
1981 - 82	-85	+15	+29	+920	+339	+71
1982 - 83	-291	-11	+279	+946	-282	+43
1983 - 84	-276	+39	+505	+839	-544	+20
1984 - 85	-274	+5	+1064	+489	-996	+21
1985 - 86	-212	-5	+899	+778	-950	-7
1986 - 87	-60	-19	+117	+1236	-1250	-3
1987 - 88	-246	+1	-353	+1364	-2535	-65
1988 - 89	-187	+41	-169	+1492	-2928	-96
1989 - 90	-346	+58	-64	+1716	-4875	-159
1990 - 91	-196	+40	+289	+1910	-6732	-284

Contd. on Next Page

TABLE-7.4.A  
(Contd.)

INDIA'S BALANCE OF PAYMENTS  
TRANSFER PAYMENTS

YEAR	OFFICIAL	PRIVATE
1970 - 71	+53	+123
1971 - 72	+75	+162
1972 - 73	+44	+154
1973 - 74	+1691	+191
1974 - 75	+8	+274
1975 - 76	+175	+528
1976 - 77	+216	+739
1977 - 78	+270	+1023
1978 - 79	+296	+1043
1979 - 80	+339	+1624
1980 - 81	+438	+2257
1981 - 82	+293	+2220
1982 - 83	+270	+2526
1983 - 84	+255	+2774
1984 - 85	+440	+3101
1985 - 86	+307	+2821
1986 - 87	+525	+2976
1987 - 88	+615	+3165
1988 - 89	+702	+3223
1989 - 90	+897	+3798
1990 - 91	+827	+3711

Source : Reserve Bank of India, Report on Currency and Finance  
Vol II, Various Issues.



TABLE 7.5.A

INDIA'S BALANCE OF PAYMENTS  
Rs. Crores.

CAPITAL ACCOUNT (NET)

YEAR	PRIVATE		BANKING	LOANS	OFFICIAL		TOTAL
	LONG TERM	SHORT TERM			AMORTIZATION	MISCELLANEOUS	
1970 - 71	-29	-1	-8	+656	-188	-30	+400
1971 - 72	-3	-2	+9	+616	-210	+80	+490
1972 - 73	-7	-0.6	+8	+586	-245	-65	+283
1973 - 74	-37	-2	-0.8	+891	-1991	+130	-1093
1974 - 75	-26	-1	-47	+1553	-237	-294	+940
1975 - 76	-55	-0.6	+27	+1326	-284	+445	+570
1976 - 77	-8	-3	+117	+879	-316	-474	-1201
1977 - 78	+75	+1	+69	+631	-417	-523	-1720
1978 - 79	-22	-5	-8	+582	-408	+99	-761
1979 - 80	-40	-0.3	-82	+895	-476	+296	+224
1980 - 81	+77	+0.5	+13	+1665	-611	-236	+916
1981 - 82	+118	-17	-13	+1257	-576	-278	+492
1982 - 83	+208	+9	+68	+1689	-611	-539	+825
1983 - 84	+696	+0.2	+182	+1782	-693	+219	+2186
1984 - 85	+1093	-1	-193	+3034	-727	+184	+3390
1985 - 86	+2092	-1	-186	+3683	-1152	+1366	+4894
1986 - 87	+2257	+9	-70	+6462	-2588	+114	+4893
1987 - 88	+1726	+6	+75	+6832	-2834	-172	+5899
1988 - 89	+2316	-4	-265	+8437	-3067	+1172	+6493
1989 - 90	+3048	-9	+59	+8428	-2990	+12021	+6911
1990 - 91	+1875	-5	-632	+5813	-5725	-18594	+7056

Source : Reserve Bank of India, Report on Currency and Finance  
Vol II, Various Issues.

TABLE-8.2.1.A

FOREIGN DIRECT INVESTMENT BY INDUSTRY (ACTUAL)  
Rs. Crores

YEAR	PLANTATION	MINING PETROL	MANUFACTUR - ING	SERVICES	TOTAL
1987	153 (8.7)	8 (0.4)	1492 (85.6)	89 (5.1)	1742 (100.0)
1988	171 (8.3)	7 (0.3)	1768 (86.4)	99 (4.8)	2045 (100.0)
1989	200 (8.7)	9 (0.4)	1990 (86.4)	103 (4.4)	2302 (100.0)
1990	256 (9.4)	11 (0.4)	2298 (84.9)	140 (5.1)	2705 (100.0)

Sources : CMIE's Basic Statistics, 1994.

TABLE-8.2.2.A

FOREIGN PORTFOLIO INVESTMENT BY INDUSTRY (ACTUAL)  
Rs. Crores

YEAR	PLANTATION	MINERAL PETROL	MANUFACTUR -ING	SERVICES	TOTAL
1987	5 (1.1)	10 (2.1)	404 (88.2)	39 (8.4)	459 (100.0)
1988	9 (1.2)	17 (2.1)	600 (83.4)	93 (12.9)	719 (100.0)
1989	8 (0.8)	13 (1.3)	874 (89.2)	84 (8.5)	979 (100.0)
1990	10 (0.8)	36 (2.7)	1078 (85.7)	134 (10.6)	1258 (100.0)

Source : CMIE's Basic Statistics, 1994.

TABLE-8.4.1.A

FOREIGN INVESTMENT APPROVED BY COUNTRY  
Rs Crores.

YEAR	USA	SWITZ.	JAPAN	UK	GERM.	NEITH.	OTHERS	TOTAL
1975	1.2	0.3	0.1	-	0.6	-	0.8	3.2
1976	-	-	-	-	-	-	-	-
1977	1.8	0.4	-	0.6	0.7	0.1	0.2	4.0
1978	4.7	0.5	0.1	0.5	0.9	-	2.6	9.4
1979	2.2	-	-	1.4	0.4	-	1.5	5.6
1980	1.6	0.1*	1.9	0.8	0.6	0.2	4.2	9.6
1981	2.2	0.1*	0.6	0.7	5.4	0.1*	1.7	10.8
1982	5.0	1.1	25.1	1.6	3.7	-	26.1	62.8
1983	13.8	1.1	16.0	9.8	4.8	2.6	13.4	61.8
1984	8.9*	0.1*	6.1	1.8	2.8	-	92.8	113.0
1985	39.9	0.1*	15.6	3.7	11.8	0.4	53.7	126.0
1986	29.3	3.2	5.6	7.7	20.1	7.2	33.5	106.9
1987	29.5	8.8	6.9	8.4	10.3	1.1	42.6	107.7
1988	97.1	2.7	17.4	13.9	31.0	1.0	76.5	239.7
1989	62.1	7.7	8.7	33.0	120.3	2.3	82.4	316.6
1990	34.4	13.5	5.0	9.0	19.5	3.7	42.9	128.3
1991	185.8	35.5	52.7	32.1	41.8	55.9	130.2	534.1

Sources : CMIE's Basic Statistics, 1994.

TABLE-8.4.1.A

FOREIGN INVESTMENT APPROVED BY COUNTRY  
Percentage.

YEAR	USA	SWITZ.	JAPAN	UK	GERM.	NEITH.	OTHERS	TOTAL
1975	37.5	10.3	4.0	-	21.5	-	26.5	100.0
1976	-	-	-	-	-	-	-	-
1977	45.5	10.2	-	16.8	18.5	2.5	6.5	100.0
1978	50.1	5.6	1.4	5.4	9.5	-	28.0	100.0
1979	39.3	-	-	26.2	7.8	-	26.5	100.0
1980	16.9	0.8	20.0	9.1	6.7	2.0	44.3	100.0
1981	20.7	0.3	5.7	6.5	49.8	0.6	16.0	100.0
1982	8.0	1.9	40.0	2.6	6.0	-	41.5	100.0
1983	22.5	1.8	26.0	15.8	7.8	4.3	21.7	100.0
1984	8.0	0.4	5.4	1.6	2.5	-	82.1	100.0
1985	31.6	0.6	12.4	3.0	9.3	0.3	42.6	100.0
1986	27.4	3.0	5.2	7.2	18.8	6.8	31.3	100.0
1987	27.4	8.2	6.4	8.0	9.6	0.9	39.5	100.0
1988	40.5	1.4	7.4	5.8	13.0	0.7	32.0	100.0
1989	19.6	2.4	2.7	10.4	38.0	0.7	26.0	100.0
1990	26.8	10.5	4.0	7.0	15.2	2.9	33.5	100.0
1991	34.8	6.6	10.0	6.0	8.0	10.4	24.3	100.0

Sources : CMIE's Basic Statistics, 1994.

TABLE-8.4.2.A

FOREIGN INVESTMENT APPROVED BY COUNTRY  
Percentage

COUNTRY	1977	1981	1986	1991
U.S.A.	45.5	20.7	27.4	34.8
Switzerland	10.2	0.3	3.0	6.6
Japan	-	5.7	5.2	10.0
UK	16.8	6.5	7.2	6.0
Germany	18.5	6.7	18.8	8.0
Neitherland	2.5	2.0	6.8	10.4
Others	6.5	16.0	31.3	24.3
Total	100.0	100.0	100.0	100.0

Sources : CMIE's Basic Statistics, 1994.

TABLE-8.5.1.A

FOREIGN COLLABORATION APPROVED BY COUNTRY (NUMBER)

YEAR	USA	SWITZ.	JAPAN	UK	GERM.	NEITH.	OTHERS	TOTAL
1971	43	14	35	55	47	4	45	243
1972	62	15	27	38	52	4	56	257
1973	48	10	36	53	64	2	47	260
1974	79	34	28	59	70	3	80	353
1975	55	27	23	54	65	5	49	271
1976	69	22	10	54	65	5	51	276
1977	54	23	20	59	58	4	47	265
1978	58	18	28	61	66	10	67	308
1979	48	14	12	63	61	6	63	267
1980	125	38	34	110	104	8	103	526
1981	85	26	27	79	78	9	85	389
1982	100	41	51	106	112	14	166	590
1983	135	47	58	119	139	13	162	673
1984	146	30	78	127	146	14	215	752
1985	197	42	108	147	192	16	322	1024
1986	189	42	111	130	189	26	280	957
1987	196	31	71	122	152	23	258	853
1988	191	41	96	134	183	15	266	926
1989	127	22	62	66	115	12	201	666
1990	120	35	47	101	133	12	218	950
1991	177	52	72	134	157	50	308	1520

Sources : CMIE's Basic Statistics, 1994.

TABLE-8.5.2.A

FOREIGN COLLABORATION APPROVED BY COUNTRY (PERCENTAGE)

YEAR	USA	SWITZ.	JAPAN.	UK	GERM.	NEITH.	OTHERS	TOTAL
1971	17.6	6.0	10.2	22.6	19.7	1.7	22.6	100
1972	24.1	5.8	10.5	14.8	20.2	1.5	23.9	100
1973	18.4	3.8	13.8	20.3	24.6	0.7	18.4	100
1974	22.3	9.6	7.9	16.7	20.0	0.8	22.7	100
1975	20.2	9.9	8.4	20.0	22.8	0.3	18.4	100
1976	25.0	8.0	3.6	19.5	23.5	1.3	18.4	100
1977	20.3	8.6	7.5	23.0	22.1	1.5	17.3	100
1978	18.8	5.8	9.0	19.8	20.1	3.2	21.7	100
1979	18.0	5.2	4.5	23.6	21.6	2.3	23.6	100
1980	23.7	7.2	6.4	20.9	19.7	1.5	19.5	100
1981	21.8	6.6	6.7	20.3	20.0	2.3	21.8	100
1982	16.9	6.9	8.5	17.9	18.2	2.3	28.1	100
1983	20.0	6.9	8.6	17.6	20.6	1.7	24.0	100
1984	19.4	3.9	10.3	16.8	19.4	1.8	28.0	100
1985	19.2	4.1	10.5	14.3	18.7	1.5	31.4	100
1986	19.7	3.3	11.5	13.5	19.7	2.7	29.2	100
1987	23.0	3.6	8.3	14.3	18.0	2.6	30.2	100
1988	20.6	4.4	10.3	14.4	19.7	1.6	28.7	100
1989	20.9	3.6	10.2	11.0	19.0	2.0	33.2	100
1990	18.0	5.2	7.0	15.1	20.0	1.8	32.7	100
1991	18.6	5.4	7.5	14.1	16.5	5.2	32.4	100

Sources : CMIE's Basic Statistics, 1994.

