

# SOME ASPECTS OF INDIA'S BALANCE OF PAYMENTS, 1961-75

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By

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CERTIFICATE

This is to certify that the thesis  
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payments - 1961-75" submitted by Shri V.K. Dube, ~~7.5.1977~~,  
for the award of Ph.D. Degree of the Institute  
embodies original work done by him under my  
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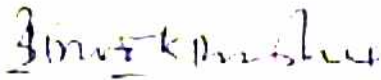
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INTRODUCTION

In the recent years the economists of world have been trying hard to give a most systematic concept of balance of payments and various effective measures to improve upon the disequilibrium in external payments position. The policy makers, all over the world are concerned with this problem, as the attempts are being made to finance the deficits in the balance of payments through various means and provisions. This is because the countries of the world want to avoid undesirable and painful adjustments to the balance of payments.

The balance of external payments is one of the most important sources of information about a country's economic position. It shows whether a country is paying its money internationally; whether it is lending or borrowing from other countries; and whether its currency is becoming ('stronger' or 'weaker'). A good deal can be learnt about the characteristics of a nation's economy from its balance of payments. Apart from it a country's gross national product is also closely related to its balance of payments.

The concept framer of balance of payments have never been satisfied merely with explaining, but has always aimed at evaluation and policy recommendation. Quite frequently concern with problems of economic policy

has given rise to innovation and improvement in the concept itself.

To give a precise definition, it can be defined as the balance of payments of a country consists of the payments made, within a stated period of time, between the residents of that country and the residents of foreign countries. It may be defined in a statistical sense as an itemized account of transactions involving receipts from foreigners on the one hand, and the payments to foreigners on the other. Since the former relate to the international income of a country, they are called 'credits' and, since the later relate to international outgo, they are called debits. It shows for some stated period of time the flow of that nation's receipts from the rest of world and of its payments to the rest of world.

The economists like Meade, J.E. (1951), Machlup, F. (1950, 1958, 1965, 1966), Johnson, H.G. (1961), Host, Madsen P. (1962), Swan, T. (1963), Kindleberger, C.P. (1965), Lederer, W. (1963), Cooper, R.N. (1966), Fellner, W. (1966), Fleming, J.M. (1968), Kenen, P.B. (1966), Niehans, J. (1966), Scitovsky, T. (1966), Smith, J.S. (1967), have substantially contributed to the various aspects and components of balance of payments and policies.

In a developing economy like India, foreign exchange constraint is an important factor in stimulating development

efforts. Balance of payments position is the most determining factor in a country's gain or loss of foreign exchange. Hence a study of international balance of payments of India is of vital importance for the successful implementation of India's developmental plans. The economic policies (external and internal) of the country are very much influenced by the current and expected position of balance of payments. Hence the study is of great importance for the country and this critical juncture of plan effort 'when we have to run in order to keep still', in the phase of growing population at the rate of around 3.2 per cent per annum.

The present study has been divided into five chapters centering its focus on various aspects of balance of payments.

The period under study is of fifteen years i.e. from 1961 to 1975. In the first chapter various concepts of balance of payments have been critically analysed. Prof. J.E. Meade, Prof. Fritz Machlup and Prof. B.J. Cohen have been given much weightage.

The second chapter deals with the various causes of imbalance in the balance of payments and the remedies to overcome such crises. The rupee devaluation of June 1966 has been critically analysed in this part of thesis. It was important to study the various causes which forced the then government to devalue the rupee in terms of

foreign currencies. The analysis highlighting various aspects of economy has been presented in this chapter.

The economic growth in India is heavily restrained by the inadequacy of developmental finance in terms of internal resources. Hence a need of foreign fiscal participation or assistance was realised. Foreign capital ought to enter into the scheme of financing the developmental process in India and it is indubitably an obligation on the part of latter to provide a favourable climate in this regard. India could get fiscal external assistance mainly in the form of government loans. The role played by the assistance of international financial institutions is also of great importance and relevance in terms of India's economic development. The gross aid utilization and gross national product is having a positive correlation in case of India. The external assistance could stimulate economic growth of India.

In the fourth chapter of the thesis the oil crises and our external balance of payments position have been discussed.

In 1973, a great change occurred in the world due to rocketing price hike of crude oil. Not only the developing countries, but advanced economies like U.S.A., U.K. and Japan, also found themselves in uncomfortable situations which reversed the trend of their surplus external payments into deficits. The impact of

oil price hike on India's balance of payments has been analysed in this chapter. Apart from it, the development of indigenous petroleum industry is of great importance and it has been also highlighted.

The final chapter reveals the summary, findings and conclusions of all chapters with suggestions to boost the 'receipts' in the international field.

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CHAPTER I

CONCEPT OF BALANCE OF PAYMENTS

One of the basic problems of international economic policy is to find the effective means for restoring external balance to a country whose balance of payments is seriously in 'surplus' of 'deficit'. It becomes essential to examine the reactions upon the level of economic activity in the various 'deficit' and 'surplus' countries of the world of alternative means of removing the disequilibrium in their balance of payments caused by national measures adopted to achieve full employment. The term 'balance of payments' is an ambiguous one. It is often used loosely without any precise definition of what it is intended to cover, and such loose usage of the term is the cause of much muddled thinking of the subject\*.

The balance of payments although a very widely tackled field has still remained neglected as regards India. In recent years Dewakar (1968), Bala Subramaniam (1968), have worked out problems of private foreign capital in India and the theory of foreign aid and India's economic development respectively. Das (1968) worked out the problem of foreign aid, balance of payments and economic development of India during the plan period. Bryant (1968) showed a correlation between national targets and international inconsistencies

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\*Meade, J.E., 1951, "The theory of international economic policy - Vol. I on Balance of Payments", p. 4.

of the balance of payments accounts of different nations. Da Costa (1966) studied the exchange rates with special reference to developing countries and the relationship to balance of payment accounts. Lederer (1961) studied the effects of changes in domestic or foreign demand of international payments whereas Balogh (1961) and Rothwell (1963) studied respectively the correlation between balance of payments and economic development and the national growth to the payments deficit. Lederer (1961 and 1962) gave the methods for measuring the balance of payments. Some writers like J.E. Meade (1956) and Lund Berg and Hill (1963) worked on the price mechanism and the international payments.

Philip Bell and Peter Kenen examined the components of private foreign short term capital accounts and of U.S. balance of payments. Thomas D. Wellet studied the relationships between international trade and short term capital.

In a developing country foreign exchange constraint is an important factor in stimulating or impeding development efforts. Balance of payments position is the most important determinant of a country's gain or loss of foreign exchange. Hence a study of international balance of payments of India is of vital importance for the successful implementation of India's developmental plans. The economic policies (external and internal) of the country are very much influenced by the current and the expected position of balance of payments. Hence the study is of great importance for the country at this



critical juncture of plan effort when we have to run in order to keep still. in the face of a population currently growing at a rate of 3.2% per annum.

In this chapter entitled 'Concept of balance of payments', I have tried to explain the various concepts given by Prof. J.E. Meade, F. Machlup and by the I.M.F. I am highly indebted to Prof. B.J. Cohen for his 'balance of payments policy' which has helped me in critical examination of various concepts. Prof. J.E. Meade's neat concept has its own place in the international economics. Before we proceed into the details of various concepts I have given first priority to Meade's concept which has its own peculiar merits.

#### J.E. Meade's Version of Concepts of Balance of Payments

Meade has also attempted to demonstrate the effect of unfavourable balance of payments on full employment of policy. Meade's Volume I\*, accordingly was devoted to "an examination (1) of the reactions upon the level of economic activity in various deficit or surplus countries of the world of alternative means of removing the disequilibrium in their balance of payments and (2) of the reactions upon the balance of payments of various national measures adopted in order to achieve or to maintain full employment".

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\*Meade, J.E., 1951, "The theory of international economic policy - Vol. I". The balance of payments. Oxford University Press, London.

In the accounting sense, the balance of payments cannot be out of equilibrium. Like other accounts, the total receipts are bound to be equal to total payments, if included all the items of receipts and payments. But for our purpose we are not interested in 'accounting sense'. Prof. Meade has given the example of an imaginary country to show the two sides of the table as equal. Further, the receipts of a country constitutes not only the value of exports but also the value of gold exported, or other monetary reserves transacted. The countries generally use gold export and export of other monetary reserves to acquire purchasing power. In Meade's terminology the account of a country's international receipts and payments has been divided into two parts (i) trade items, and (ii) transfer items.

The trade items constitute of two sides, one representing receipts and other representing payments. We include in trade items the visible exports and imports, and invisible exports and imports. In the same fashion the transfer items have been further subdivided into unrequited receipts or payments and capital receipts or payments.

Now it is important to take care of the main sources of receipts of a country. The following are the main sources of the income for a country engaged in international transactions:

(1) Sale of countries exports goods to foreign country.

The country may export goods to the rest of world and in return they earn foreign currency or gold.

(2) The country may render shipping and financial services to the foreigners, or in other words sales of invisible services to the foreigners. Further if the residents of the country in question have lent capital to foreigners in the past or or own land or other income bearing property, in the foreign countries they will during the period be receiving interests, dividends or rent on these foreign investments. So these are the payments for current services rendered by foreigners which the residents obtain, i.e., services obtained from the use of land or other assets which in fact belong not to them but to the residents of other countries. Another kind of receipts may be of foreign money which residents of the country obtain from foreign tourists visiting the country and who purchase goods and services within the country during their stay in the country - goods and services which do not appear in the visible exports of the country.

The country is receiving payments for the services which it renders to foreigners, in the same way the residents may use services which are provided by foreigners. And for the use of such services the country

may have to pay interest on capital used by the residents but owned by foreigners. The citizens of the country (compiling) may tour foreign countries and may spend money there for the use of services etc.

The difference between IMF's and Meade's classification is that Meade has taken broad categories and that too under one head, while standard presentation divides the head under wide categories each explained separately from items 3 to 8.

Transfer payments can be defined as "those payments from the residents of one country to those of another which are not payments for a simultaneous flow of goods and services in the opposite direction" - such payments we shall call transfers.

The transfer payments have been further subdivided into two divisions:

1. Unrequited transfers,
2. Capital transfers.

Unrequited transfers can be defined as payment from some person or body in one country to another person or body in another country of which no present of future quid pro quo is demanded. The example of such kind may be gift, the emigrants may send some money for their parents, or the government of a country may receive a

reparation payment or some other indemnity from the government of the foreign country.

Capital transfers consist of loan, purchase of capital assets for which no current return in the form of an immediate import of goods and services is obtained but for which some future benefit is expected.

Further Meade defines different sources from which the capital can be acquired which give the purchasing power over foreign goods and services.

The government, corporation, company or individual may borrow money from the government, corporation or company or individual. The direct borrowing of the government from government, issue of new securities by the borrowing agencies in the capital market of the lending country or the borrowings by the borrowing agency from the banks of the lending country are some of the transactions which we take into consideration under this head. The debt can be of any kind i.e. short-term or long term.

So in this way we find that Meade has also tried to cover different transactions included in the balance of payments. After classifying different transactions we are in a position to distinguish between certain senses in which the term 'balance of payments' may be used - though not - as it has turn out, yet in position

to define disequilibrium in a country's balance of payments.

If the imports of a country exceeds exports g in so it measures the disequilibrium. Part of this excess import is financed by rendering services to the foreigners, i.e. by receipts of interest on capital or of fees, commissions etc. charged for services provided to foreigners. And whatever is remaining as residual in trade items (taking into consideration the export/imports of goods and services) we call it balance of trade. The balance of trade is a very important concept, but it still in no sense measures the disequilibrium in the country's balance of payments.

Now say, the trade balance is in deficit, in no sense it measures the disequilibrium in the balance of payments. The country in question may, for example, be an undeveloped country in which there is a great scarcity of capital, and in which for that reason, the yield on capital development is much more higher than in the other more developed countries. In such circumstances there is a natural flow of capital funds from other countries to the country in question, which will provide the finance for the excess imports in the country during its period of capital development.

The capital inflow can be set against deficit. The different important categories of balance of payments (as

shown in the table) have their own uses. The balance of trade is of importance when we are considering the repercussions of external changes on the domestic economy of a country or the repercussion of domestic changes in a country's economy upon its external position.

Moreover the simple truism represented by relationship between rows 3, 4, 5 of our table, namely, that a country's balance of trade and its balance of unrequited transfers must be offset exactly by its capital transfers is important. And as in our imaginary example, shown in the table, if a country purchases more goods than it sells (\$ 180 million) and can only offset part of this (\$ 80 millions) by way of gift from abroad, then the difference (\$ 100 million) must represent the extent to which its capital position vis-a-vis the rest of world has worsened in the period in question.

And Prof. Meade has given the base for furtherance of the theory by stating such important conclusion. The balance of capital transfers (Row 5 of Table 1) is often called that country's "Net foreign disinvestment" when it is desired to draw attention to the fact that it means a net worsening to that extent of country's external capital position. So by inclusion of all items we find that the table is balanced and the net deficit completely disappears.

In Meade's analysis in first phase he shows the accounting sense for which, like other accounts, the

TABLE I:\* The Balance of Trade and Balance of Transfers

Notes: + means surplus of receipts  
 - means deficit of receipts

	(\$ in millions)
1. Balance of Visible Trade (Exports-Imports)	650 - 900 = -250
2. Balance of Invisible Trade (Visible Export-Invisible Imports)	160 - 90 = + 70
<hr/>	
3. Balance of Trade	810 - 990 = -180
<hr/>	
4. Balance of Unrequited Transfers (Gift, Indemnities etc. received from foreigners - payments made or given to them)	110 - 30 = + 80
5. Balance of Capital Transfers or Net Foreign Disinvestment (Borrowing from capital repayment by foreigners, sale of assets to foreigners - Borrowing to foreigners)	180 - 80 = +100
<hr/>	
6. Balance of Transfers	290 - 110 = +180
<hr/>	
7. Balance of Trade and Transfers	1100 - 1100 = Nil
<hr/>	

The net deficit disappears completely  
 with inflow of capital.

\*The Table given is imaginary, hence name of the country  
 and year have not been mentioned.



balance of payments table will always be balanced. In the second stage, while calculating the balance of trade, the remaining deficit is set against the receipts of unrequited transfers. At the final stage the inflow of the capital removes the net deficit and it shows the worsening of country's capital position with the rest of the world. The balance of trade account can be deficit if the importers of a country decide to import more. There are many important consequences which may happen as a result of the changes of plans on the part of importers.

If the increase in imports is substantial the authorities of the country may take immediate steps by enforcing exchange control regulations or import restrictions may be implemented to dissuade the importers from spending the additional amount. In 1964, England put a surcharge of 15% on imports to restrict their increase. Or the authorities might take immediate steps by a deflationary fiscal policy involving the raising of higher rates of taxation on the people who wished to purchase more.

The another consequence may be that the increased demand for foreign currency by the importers might be allowed to cause the price of home currency to rise. The net gain of this to the importers would be zero. But for our purpose we assume that the liberal government does not

take any of the step mentioned foresaid. Or that there is no state intervention even after the substantial increase in import demand.

The practical implication of this increased demand of import would require someone to be financed for the additional requirements. For a period of time the private exchange dealers would provide adequate finances for additional purchasing power. These exchange dealers are likely to hold reserves of home-currency and foreign currency (from where the imports would be acquired) and they may conduct the business at a fixed price (at which they are willing to deal). The plans of the private exchange dealers change from time to time in view of the changing market conditions.

The finances that is supplied by the private foreign exchange dealers with increase in import demand, would represent a capital receipt in the balance of payments. And this capital receipt would eliminate the deficit of balance of trade. This movement of exchange dealers capital from foreign currency to home currency was unplanned and in fact took place as incidental and unforeseen result of increased demand for foreign means of payments by the country's importers. It would last only until the exchange dealers readjust their plans.

The second implication of increased import demand would be tackled by central bank of the country. For

instance the R.B.I. may supply additional purchasing power to the importers in the form of foreign currency or gold or notes or deposits of foreign currency at a fixed price in terms of national currency i.e. Rupees. It all entirely depends upon the position and attitude of the central bank. If the central bank has adequate deposits of foreign currency and is determined to keep exchange rate stable, the movement of funds may last for a long time on a large scale. It will entirely depend upon the monetary policy of the central bank. The transaction of private exchange dealers could last only for a short period while the central bank can continue its operation for a long time.

Now, say, if the central monetary authority finds that they are continuously losing their foreign exchange reserves and are having more domestic money among its assets, may restrict the exchange business. Now once again these movements have taken place merely as an incidental and unforeseen result of the increased demand for foreign means of payments by the importers. The transaction can take place so long as the central monetary authority commands the necessary reserves for foreign currency.

The another type of governmental transaction may prolong indefinitely if the government of the foreign country is advancing money to the government of deficit

country or the residents of foreign country to the residents of the deficit country, simply because an excess of foreign payments over foreign receipts in all other items of balance of payments of the latter country is unforeseen and it is desired to meet the deficit without exchange rate variation, import restrictions or other alternative methods.

Accommodating payments may be made by the private exchange dealers or by public authorities (loss of gold by Central Bank or provision of special aid by the government of surplus country (As O.P.E.C. countries are providing to the third world under oil facility). These type of transactions may be automatic i.e. unplanned and unforeseen (like changes in the balance of private exchange dealers or loss of gold by Central Bank) or they may be discretionary i.e. planned and foreseen (i.e. special government aid).

"The distinguishing feature of accommodating transaction is that they have taken place only because the other items in balance of payments are such as to leave a gap of the size to be filled"\*.

So according to Prof. Meade, the accommodating takes place only when there is a gap to be filled in balance of payments. The countries import demand has exceeded and

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\*Meade, J.E., 1951, "International Economic Policy", Vol. I, Balance of Payments, p. 11.

presently the country don't have the adequate supplies of the funds. So some sort of accommodation is essential. What ever the country has imported, the finances are required to meet this deficit. In this context when the deficit is forseen any country or individual may provide adequate finances to meet the existing deficit and we will call it as accommodating transaction.

"The distinguishing feature of autonomous payments is that they take place regardless of the size of the other items in balance of payments"\*. So all the transactions that take place regardless the size of other items in balance of payments.

For instance the example of autonomous receipts are, all commercial exports, i.e. the goods and services exported to foreigners, gifts whatever the residents are getting from foreigners, the emigrant's remittance or repatriate payments which are made for motive quite other than to put balance of payments into balance and the capital movements which are taking place on the initiative of private exchange dealers because it appears more profitable to them. The capital invested by other country in one country with profit motive. This type of transaction we consider as autonomous transactions. It has nothing to do with any accommodation in our balance of payments.

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\*Meade, J.E., 1951, 'The International Economic Theory', Vol. I, Balance of Payments, p. 11.

To give a meaningful economic concept of balance and imbalance Haberler distinguishes between 'autonomous' and 'accommodating' international transaction. Haberler explains "under a strict gold standard the problem would be simple: all transactions except gold movements would be autonomous and the deficit or surplus could be measured by gold movements (strictly monetary gold movements). Gold for industrial purposes and gold exports from gold producing countries constitutes a complication even under gold standard conditions. Even in the 19th century short term capital movements began to erode the simplicity of pure gold standard. Later the advent of the gold exchange standard, adopted during the inter-war period and resumed after second world war by many countries which kept their international-reserves not entirely in gold but partly in liquid sterling or dollar balances - hence sterling or dollar exchange standard, and specially the increasing importance of governmental transactions, have considerably complicated the definition of surplus and deficit"\*.

As Haberler has rightly stated that it is necessary to make a distinction between accommodating and autonomous transaction. There was no problem in the context of the gold standard. We can call all transactions of gold as accommodating one. The accommodating receipts can be of

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\*Haberler, Gottfried, 1969, "Money in the International Economy", II Edition, p. 27.

many kinds. The loss by a central bank of its holdings of gold is accommodating receipts. The same way, sale of holdings of foreign currency in order to provide purchasing power to importers of the country at the current rate of exchange is also accommodating transaction.

The receipts by the government of a country in question of funds from a foreign government either by way of loan (for instance Anglo-American loan of 1946) or by way of gift as aid under European Economic Programme was also accommodating transaction.

The measure of disequilibrium in the country's balance of payments is now gold plus accommodating capital movements or usually defined as short term capital movements, or 'liquid liabilities and assets'. The difference between 'short term' and 'liquid' is that the latter includes purchases and sales of long term government securities. Concretely, many countries hold part of these reserves in bank balance in New York and U.S. government bonds, both short term and long term.

'Official compensatory financing' is another phrase often used which, strictly interpreted, leaves out private short term capital flows. 'Changes in international reserves' is another roughly equivalent expression.

If we are in position to measure different accommodating and autonomous transactions, it would be easy to

give a correct statement regarding 'surplus' or 'deficit' in balance of payments. But the dividing line between 'autonomous' and 'accommodating' transactions is very hazy.

A persistent surplus is criterion of 'under valuation' and a persistent deficit in a country's balance of payments is criterion of 'over valuation' of its currency. The imaginary example given in Table I has been rewritten in another form to show the autonomous and accommodating transaction.

TABLE II: The Balance of Payments

( $\$$  in millions)

1. Balance of Autonomous Trade	790 - 990	= -200
2. Balance of Autonomous Transfers	10+40 - 20 - 50	= - 20
3. Balance of Payments	840 - 1,060	= -220
4. Balance of Foreign Accommodation	20+100+140-10 -10	= +220
5. Balance of Autonomous and Accommodating Transactions	1,100-1,100	= Nil

Now we are in a position to measure the actual surplus or deficit in the balance of payments of a country. Our imaginary country has a deficit in its balance of autonomous trade of  $\$$  200 millions. It has further deficit



on account of autonomous transfers of \$ 20 millions. Our country has therefore a deficit of autonomous trade and transfers of \$ 220 million and this is true deficit. So autonomous trade and transfers are important items to examine deficit or surplus of balance of payments. Further Meade believes that the existence of an actual net balance of accommodating finance would be too much narrow criterion of a disequilibrium in the balance of payments. And our analysis was confined only in the situation where there was no state intervention.

If the country operates rigid exchange control which prevent natural inflow of goods and services or the monetary authorities are not ready to loose monetary reserves or gold or other need for foreign accommodation then the country is certainly in acute balance of payments difficulties and would be appropriate to say that the country has attained equilibrium in its balance of payments.

Further the country may avoid actual deficit in its balance of autonomous trade and transfers by the adoption of some policy. For example the authorities may deflate the domestic national expenditure and income in order to reduce the demand for imports, so as to avoid need for foreign accommodation even at the expense of mass unemployment at homes. There is no visible deficit in the balance of payments but in fact the country is suffering from acute balance of payments difficulties.

The price of foreign currency may be allowed to rise in terms of home currency. This type of mechanism will also avoid the inside deficit in the balance of payments. The foreign exchange value of the currency of the country with the excess demand for foreign currencies will depreciate. And the element of uncertainty will increase among traders at home and abroad.

But for our purpose we need only realise that each moment of time, even in the disequilibrium of process of adjustment, a market rate of exchange between the home currency and foreign currency will appear at which the demand for foreign currency is just equal to the supply of foreign currency, and there is no actual deficit or surplus.

The variation in the exchange value of a country's currency is thus itself a symptom of a disequilibrium in the country's balance of payments.

Depreciation of the currency will take place when the demand of the foreign currency exceeds the supply of foreign currency. The accommodating finance would be required if the exchange rate is to be kept stable. The actual amount of accommodating finance used in any period of time is accommodating finance.

The potential deficit means the amount of accommodating finance which it would require necessarily to

provide in any period in order to avoid any depreciation in the exchange rate without the employment of exchange controls, import restrictions or other government measures especially devised to restrict the demand of foreign currency. And thus potential deficit is the proper measure of balance of payments.

### The Three Concepts of Balance of Payments

As previously stated the term 'balance of payments' is an ambiguous one. Three fundamentally different ideas are continually called by the same name. What is indiscriminately called the balance of payments may be:

1. Accounting balance i.e. the balance of credits and debits.
2. A programme balance i.e. the balance of needs and desires.
3. Market balance i.e. a balance of supply and demand (which was first given by Fitz Machlup in 1950).

All the three concepts are closely related, and they all figure directly in the making of balance of payments policy. It would be essential to examine critically all the three factors separately.

### The accounting balance of payments:

It is the systematic record of a country's economic transactions between the residents of a country and foreign

residents for any specific period of time (most conveniently a year), the statistical record shows the character and dimensions of the country's international economic relationships with the rest of the world. It enumerates the country's trading position, changes in its net position as foreign lender or borrower, and changes in its official reserve holdings. The systematic record of this kind is very useful to the financial authorities of the nation in connection with policy formulation.

#### Double-entry book-keeping

The accounting balance of payments is constructed according to the principles of double-entry book-keeping. Every economic transaction has two sides, a debit and a credit. Both sides must be recorded. The credits are represented with positive sign (+) and debits with negative sign (-). Any transaction giving rise to a receipt from the rest of the world, increasing net claims on foreigners, is recorded as a credit in the accounting balance. The receipt itself either may take the form of a rise of residents' foreign assets or balances of foreign currencies; or it may take the form of a decline of foreign liabilities or of foreign balances of local currency; whatever its form, the receipt is recorded as debit. Conversely, any transaction giving rise to a payment to the rest of the world, increasing net liabilities to foreigners, is recorded in the accounting balance as debit,

the payment is recorded as credit. For exports of a particular country, the exports will appear as a credit entry because they give rise to receipts from abroad. Likewise, such items as foreign tourist expenditure in a particular country, foreign spending on that particular country's shipping or air lines, and foreign purchases of that particular country's insurance are all entered as credits in the balance of payments. Being sales of that resident country's (in question) services, they give rise to receipts from abroad. These receipts, which increase net claims of the country on foreigners, are themselves recorded as debit. These exports and sale of services to foreigners would be entered in the balance of payments accounts in the following fashion.

Credits (+)	-	Debits (-)
(1) Exports	-	Increase of net claims on foreigners (Receipts from exports)
(2) Sales of Services	-	Increase of net claims on foreigners (Receipts from sales of services)

By the same token, the country in question imports of foreign goods and services will appear as debits in the accounting balance, while the corresponding payments to the rest of the world are entered as credits in the following fashion.

Credits (+)	Debits (-)
Increase of net liabilities to foreigners (payment for imports)	Imports of goods and services.

As far as the unilateral transactions are considered, they similarly appear twice in the balance of payments, despite the fact that they are actually one sided transactions which lacks quid pro quo (no return in future is expected). A person or government transfers commodities, services or money to some other person or government, but receives nothing in exchange. But it is a system of accounts, and all transactions are accounted for. If any items are given away, the fact must be recorded, the quid pro quo must be supplied. The method for doing so is to make an entry indicating the character of the gift on the scale of the account opposite to the entry for the item given or received. This not only 'accounts for' the gift, but also preserves balance in the accounts. The example of the kind is; when an immigrant remits part of his earnings to the 'old country', the net change in claims on foreigners, the primary entry, is recorded as credit. But at the same time a debit is entered listing the unilateral transfer, usually as a 'private remittance'. This is the statistical quid pro quo, the analogue to the import item listed when payment is made for a foreign commodity or service in the following fashion:

Credit (+)	Debit (-)
Increase of net liabilities to foreigners (transfer payments)	Private remittance

The same way, a debit is entered listing each government grant as the accounting counterpart of the credit recording and transfer payment either in 'kind' (export of goods or services) or 'in cash' (remittance of cash or financial claim) in the following way:

Credit (+)	Debit (-)
Export of goods or services (transfer payment in kind)	Government grant

Credit (+)	Debit (-)
Excess of net liabilities to foreigners (transfer payment in cash)	Government grant

Regarding financial transaction as the purchase and sale of foreign assets and borrowing from and lending to foreigners, also appear on both the credit and debit sides of the accounting balance. International investments may be entered as direct investments if they involve an outright extension of domestic enterprise abroad through the

purchase of a permanent interest in a foreign company or through the establishment of a new foreign facility. If, however, they involve a loan or a purchase of securities issued by foreign controlled firms, they are entered as 'port-folio' investments. When an investor at home acquires an earning asset abroad, a payment is made to foreigners. The payment of such kind is recorded as credit, while the investment itself is listed as debit; and the same rule applies whenever a financial liability abroad is liquidated. Conversely, any financial transaction which adds to foreign liabilities or reduces foreign assets is listed as a credit, with the corresponding payment appearing as a debit in the following way:

Credits (+)	Debits (-)
Increase of net liabilities to foreigners (payments for net investments)	Net external investment by residents (acquisition of earning assets abroad or liquidation of liabilities)
Credits (+)	Debits (-)
Net internal investment by foreigners (acquisition of earning assets locally, or liquidation of liabilities)	Increase of net claims on foreigners (receipts from net investment)



For sale of gold by central authority is recorded like -

Credit (+)	Debit (-)
Official sale of gold or other reserve assets	Increase of net claims on foreigners (receipts from sale of gold or other reserve assets)

The sale of gold by central authority is recorded as credit, with the corresponding receipt entered as a debit. And the same rule applies to a sale of any other reserve asset held by the authorities.

As previously stated, the balance of payments statement has been divided into two parts known as current account and capital account. Vertically the balance of payments is divided into credits and debits according to principles of double entry book-keeping; and horizontally it is also divided into two major categories according to the broad nature of the transactions concerned and their relationship to the national economy.

The current account consists of all transactions relating to the reporting country's current national income and current expenditures. These include exports, imports of goods and services along with unilateral transfers. These are 'current' transactions; they give rise to or are a part of current national income. They are distinguished from transactions in financial assets - 'capital'

which directly affect wealth and debt, hence national income in future periods but not national income produced or consumed currently. When a particular country's investor makes a portfolio investment abroad, purchasing foreign securities or lending abroad, he acquires a foreign asset - a claim on foreigners - which will earn income in the future. In the current period, however, national income is not affected directly by the transaction; the creditor debtor position of that particular country alone is altered by the exchange of one type of financial asset for another (while the national income is not affected directly, it is affected indirectly in an opportunity-cost-sense - that is, in the sense that instead of investing abroad the investor might alternatively have invested or consumed at home).

In parallel way, the same holds true when a particular country's (reporting country) subject makes a direct investment abroad. Short term liabilities (say currency or demand deposits) are exchanged for an equity asset, and while the international creditor debtor position of the reporting country is directly affected, its current income is not. All such private or official transactions affecting the international investment position of a country rather than its current income are segregated from the current account and grouped instead in 'capital account' of the balance of payments. The capital account also includes all reserve transactions

(since these too affect the country's international investment position).

The current account includes all the transactions of merchandise imports and exports; transaction (freight and merchandise insurance), travel (goods and services, including transportation, purchased outside the country of residence); investment income (interest, dividends and profits on securities or property owned outside the country of residence); other services (insurance, royalties, commissions, fees and government transactions not recorded elsewhere); private transfers (personal and institutional remittances), official transfers (pensions, separations, and grants). This way we find that the current account consists of all transactions relating to the reporting country's current national income and current expenditure.

On the other hand, the capital account consists of the direct investment (transactions involving a permanent interest in enterprise outside the country of residence); portfolio investment (transactions in assets and liabilities outside the country of residence with an original maturity of more than twelve months); short term investment (transactions in assets and liabilities outside the country of residence with an original maturity of twelve months or less); government capital (official transactions in assets and liabilities outside the country of residence, excluding reserve assets); official reserve transactions (change in

the reporting country's monetary gold stock, holdings of convertible foreign currencies and net position in the International Monetary Fund and for reserve-currency countries, changes in liquid foreign liabilities.

These items are entered in the current account and capital account of the balance of payments. In the current account the most important items is merchandise or visible trade (Prof. J.E. Meade also calls it visible trade). This is the oldest and still the most basic form of economic relationship between nations. The commodities which are produced at higher costs in the nation or which cannot be produced at home are imported and in exchange the commodities that can be produced relatively inexpensively at home are exported. For any nation, the difference between merchandise exports and imports (credits and debits) is called the balance of trade, and this is usually watched by the financial authorities almost as closely as the balance of payments as a whole. Balance of trade is said to be favourable or active when exports exceed imports; and as 'unfavourable' or passive when imports exceed exports. That this should be so is a testament to the durability of mercantilist thinking, which traditionally places the greatest stress on an earned foreign surplus as the most direct means to national wealth.

Economists, long ago exposed the fallacy of mercantilist thought: the real gains from trade are to be

found in the cheaper imports made available for home consumption, not in expanded export sales. But even within the mercantilist way of looking at things this view of balance of trade seems misguided, for it obviously ignores the presence of the other items in the current account. In fact a marked excess of merchandise imports over exports may be quite consistent with a total current account balance or even surplus if the country happens to be a large net seller of services or a regular recipient of grants or separations, e.g., U.K. in the 19th century was having a trade deficit more than covered by net invisible earnings from shipping and dividends on foreign investments etc. Apart from this qualification, though, in the end we are compelled to admit that there may be some political sense to this view point, at least within the limited context of balance of payments policy. It is, much easier for the financial authorities to maintain overall payments balance when the balance of trade is in surplus than when it is in deficit.

Regarding external financial assistance, why are donations like these recorded in the current account, with exports and imports of goods and services? In at least one sense transfers differ from current trade - they confer purchasing power on their recipients without a quid pro quo in the form of income produced. Nevertheless, on the basis of modern income theory, we may argue that donations belong properly in the current account; they are

a unique part of the invisible sector, certainly private remittances there. They come mainly out of the current incomes of the donors, and they enter normally into the consumption of the beneficiaries. Moreover, they tend to be made on recurring basis which changes slowly from year to year. But this is not true in case of official donations such as grants, which are once for all transfers of purchasing power more akin to capital investments than to current trade. But precisely because such transfers are in fact final, they are very unlike a capital transaction, which by definition either gives rise to claim or debt, or takes place in settlement of a claim or debt. A logical case can be made, therefore, for including these, too, in the current account. So defined, the current account shows exactly (with opposite sign) any change in the international investment position of a country. In these illustrations we have adhered to the usual practice of entering all transfers, official as well as private, in the current account.

The capital account consists of all changes in claims on or of the reporting country owned or owed by other countries. These are divided into three main categories of transactions. The first category comprises of all investments by residents abroad, particularly by the direct extension of national enterprise overseas. Portfolio investments, mainly long-term bank loans and net purchases of new foreign securities issues and short-

term investments, mainly bank loans and commercial credit etc. Government investments abroad consist principally of loans to foreign official agencies for economic assistance or military purposes. The second category of capital account comprises of all investments in the reporting country by foreign residents. Most of these investments involve liquid dollar and sterling liabilities, which together with gold make up the major portion of the world's monetary reserves. The dollar, pound, yen, D mark, are the principal 'reserve' currencies.

The transactions in official reserve assets' refer to changes in the monetary gold stock of the financial authorities, in official holdings of convertible foreign currencies, and in the country's net position in the International Monetary Fund.

It is important to mention here that since the balance of payments is constructed as an accounting identity, with each transaction, theoretically recorded twice, the sum total of debits and credits should in theory always be equal. The capital and current account should always be equal (with opposite signs). But if we come across the real situation it is rarely so. Data collection is a tedious task, and that too absolutely accurate, on both sides of every transaction. Generally the various entries - exports and imports, transfers, capital and reserve transactions - can only be tabulated or estimated singly, by methods of varying degrees of

accuracy, and then summed. As a result despite the best efforts of statisticians, the current and capital accounts rarely 'balance' statistically.

The reason is, sometimes, the coverage of the data tends to be inadequate; it is known that for several reasons some important items still manage to escape the statisticians' net. In other cases, errors are committed in the process of estimation; such inaccuracies are virtually impossible to avoid. We also face problems which arise in trying to consolidate without duplication the data collected from independent sources by a variety of techniques. To the extent that these empirical deficiencies cause the observed totals of debits and credits to differ, it is necessary to add a balancing item for "errors and omissions". Every payment account has one. Its purpose is to ensure that in accordance with the theory of double-entry book-keeping, the balance of payments always balances in accounting sense.

As we have previously stated that apart from 'errors and omissions' the current account must always equal the capital account (with opposite signs) - what is the significance of it? In fact we mean by this statement - that if increase in claims on foreigners are to exceed increase in liabilities to foreigners by any amount - that is, if a country is to be able to invest in foreign - the exports must be made to exceed imports. There must be a



credit on the current account - to match the debit on the capital account. Similarly, a country may borrow abroad only to the extent that it can promote a net inward movement of real goods and services. For a net financial transfer to occur, a real transfer must occur.

It does not mean that the individual transfers of financial assets must be accompanied by a corresponding transfer of real goods or services. When we are talking of balance of payments, for a country as a whole, the individual's act is not yet a capital outflow; it is simply an exchange of short term liabilities for a long term asset. For a country as a whole, an export of capital can be accomplished only on a net basis, by a corresponding transfer of real goods or services. In short, the transfer of goods and services itself is the capital export; it is what economists call a 'real transfer'. The corresponding movements of financial assets, while obviously related to the real transfer, is not itself a true capital movement. It is merely a 'monetary transfer', a movement of financial capital. For a movement of financial capital to translate itself into a true foreign loan or investment, a real movement of capital must take place: the country must somehow export goods and services above the value of the goods it imports. A country cannot borrow from abroad, in a real sense, except to the extent that its current account is in deficit. The excess of imports over exports is the

real transfer of capital; the corresponding net increase of foreign liabilities is itself merely a monetary transfer. It can be written as follows also.

Current account = Capital account

$$X - M = I$$

where X represents exports of goods and services, M represents imports of goods and services and I represents net foreign investment. When the current account is in surplus the country is investing abroad (export exceeds imports); when the country is in deficit, the country is borrowing or disinvesting abroad (as imports exceeds exports).

It simply states that any difference between the current receipts of an individual economic unit and its current expenditures must equal the changes in its net investment position when income exceeds spending in the current period, the unit is investing (saving); when spending exceeds income the unit is disinvesting (using previously accumulated savings or borrowing). Thus it is not only in accordance with the theory of double entry book-keeping that the balance of payments must always be balance. It is also related to the fundamental theory of economic activity: that the sum of the current and capital accounts of a country must be zero is an economic truism. We can witness net international financial transfer without a corresponding real transfer.

The economic relationship between the accounting balance of payments and two other important social accounts is also important. These are the national income and product account and the balance of international indebtedness. Now if we talk of national income and product account - it is a systematic statement of the total value of goods and services produced and consumed by the residents of a country during a particular time (which is usually one year). It provides a framework within which the current operation of the economy can be recorded. The national income account is also recorded on the same double entry of book-keeping principles. On the debit side of national income, we list the 'allocations' of national income: consumption, savings and taxes. On the credit side we record the 'sources' of national income, categorized in terms of the alternative modes of expenditure on domestic product. In a theoretically closed economy, where there are neither exports nor imports; the only source of national income are domestic private expenditures on consumption and investment and government spending.

But if we come across the real world situation we find that there is open economy in the real world. Buying and selling varies from country to country. Hence if any country exports it must be added to the national income. In the same way the exports must be deducted from the national income because imports effect the domestic

expenditure which is a part of national income. But as far as the accounting identity is concerned the national income and the product account must always be 'balance' i.e. the allocation of national income must just equal to the source of national income.

The notation of national income and product account can be mathematically expressed as

$$C + S + T = C + I + G + (X - M)$$

where C represents consumer expenditure, S represents domestic savings, T represents tax payments, I investment expenditure and G government expenditure <sup>or</sup> spending. It is evident that in a closed economy the total of domestic expenditure (C + I + G) can neither exceed nor fall short of current income (C + S + T), i.e. the 'real absorption' must equal national income. Mathematically -

$$Y = A$$

where  $Y = C + S + T$  (real income)

and  $A = C + I + G$  (real absorption)

If the government budget is balanced it means that in the closed economy the domestic investment equals the domestic savings, or

$$S_d = I_d$$

where  $S_d$  is domestic savings

and  $I_d$  is domestic investment.

But these equalities of domestic savings and domestic investment are not the requirement of the open economy. If we include the foreign trade, the domestic absorption can vary from national income (the domestic absorption may increase or decrease of national income) but only to that extent by which exports are less than or greater than imports or only to the extent that there is a net deficit or surplus in the current account of the balance of payments. So we find that the real absorption varies with increase or decrease in exports and imports or more precisely the variations of the current account as it is a open economy. Conversely, there can be no net current account surplus or deficit except to the extent that the domestic economy absorbs less or more than its current income

$$Y \begin{matrix} > \\ < \end{matrix} A = X \begin{matrix} > \\ < \end{matrix} M$$

Alternatively,

$$S_d \begin{matrix} > \\ < \end{matrix} I_d = X \begin{matrix} > \\ < \end{matrix} M = \dagger \text{ If (net foreign investment)}$$

It clearly states that a country cannot lend or invest abroad, by a current account surplus, unless it is able to 'save' the current domestic output needed to accomplish the real transfer. The volume of domestic investment must be suppressed below the level of domestic savings. By the same criterion, a country cannot invest for domestic purposes beyond the level of its domestic savings to the

extent that it is able to borrow or attract investment from abroad.

The next important concept to be examined is the balance of international indebtedness which we may define as a systematic statement of the total claims of a country's residents on foreign countries and of the total claims of residents. It is a record of the stock so it differs from both the balance of payment accounts and the national income and product account in one way i.e. it is related to a given point of time such as the end of the year while the balance of payments and national income covers a specific period of time which is generally one year. In recording the balance of indebtedness, the same double entry book-keeping principles are applied. A country's international liabilities and assets are summed up and the difference between the two is 'net balance of indebtedness'. When this 'net' is positive, the country is presumed to be creditor and when it is negative, the country is debtor.

Further apart from variations in the current market value of outstanding claims and liabilities, no change is possible in country's balance of international indebtedness, except to the extent that there is a net inward or outward movement of financial claims. Or in other words it is to the extent that there is net deficit or surplus in the capital account of the balance of payments (variations in (±) If). We can say that a net improvement of a

country's international investment position requires that it reduce national absorption relative to national income. It saves a portion of its resources so that they can be invested abroad. The country should borrow or 'disinvest' in order to live beyond its means if they want to deteriorate international creditor debtor position. Mathematically the notation would be

$$+If = Y \begin{matrix} > \\ < \end{matrix} A$$

So far we have discussed the concept of balance of payments in accounting sense. As a general rule of double entry of book-keeping the resultant of two accounts, capital and current account, should be zero. In accounting sense, the balance of payments is always balance. Then what is the actual criterion of measurement of 'balance', 'surplus' and 'deficit'. But it is evident that many countries face of balance of payments difficulties. The sum of both the accounts is not the criteria of the 'balance' but certain categories of debits and credits are taken in measuring the 'balance' of balance of payments. Certain groupings of items which are segregated, from the main body of balance of payments (as being different in some significant respect from the rest) are examined to see whether the balance of payments is 'surplus' or 'deficit'. Now I will deal with very important aspect of measuring the balance. What actually we have the proper measure for it?

As previously stated, the balance of indebtedness reflects the fluctuations or variations (inward or outward movements) of capital as seconded in the capital account. So the capital account is important in this respect. The balance of indebtedness is a 'stock' which reflects the real situation of a country's international investment at a particular point of period of time. But the payments account is a 'flow'. It is designed to show the happenings of the current international economic relationships of the reporting country over a period of time. Its main concern is with increase or decrease of foreign liquid assets (including official reserves) and liabilities. These are money assets and liabilities having a sufficient degree of liquidity to be regarded as means of international payment.

The changes in the net liquid position of a country should be reflected while measuring the 'surplus' or 'deficit' of the balance of payments. The total capital balance cannot serve the purpose in reflecting the 'deficit' or 'surplus' notation of balance of payments. For the identification of changes in the net liquidity position of a country, we can look into certain items within the total capital account.

Now if we analyse the different transaction, once again we have to go back to Prof. J.E. Meade for his version of two types of transactions - the autonomous and accommodating transactions. The basic difference between



the two transactions is the 'objective behind the happening'. One transaction can take place for its own sake while for the another there is a necessity to occur that particular transaction.

The autonomous transaction does take place for their own sake, either for profit making or for satisfaction's sake. The different countries of the globe are having different conditions in terms of income, requirement, prices, interest rates, productivity, etc. So the basic source of the autonomous transaction is the diversity in various countries in various aspects. The autonomous transactions take place for their own sake regardless the size of the other items in the balance of payments. The gift sent by the resident of a country to the other country is a example of autonomous transaction. In the same way as the previous example has yielded satisfaction to the sender, the another resident may find better profits for his product in the foreign country. Hence in this example the objective behind the transaction is 'profit' and the transaction is taking place for its own sake. The autonomous transactions are deliberate and voluntary or optional in character. The merchandise transactions i.e. exports, imports of the goods and services are the best example for autonomous transactions as they take place with objective of earning the profit. The unilateral transactions which has generally the objective to reduce fundamental

differences between the incomes of individuals or nations. Any country may give certain loan or donation to other country for the sake of development, or for the sake of development, or for the betterment of the masses of that nation in the form of gift. And another transaction that is included in it is long term capital movements motivated with the desire to earn more profit or higher returns with a speculative objective or to find a safe refuge for one's capital. It is important that the autonomous transactions take place regardless the size of other items of balance of payments i.e. for their own sake.

On the other hand accommodating transactions are based on reverse objective - not at all based on own sake. But there is a fundamental objective behind these transactions. The autonomous transactions take place with a express objective to fill the gap in the balance of payments, i.e., the other items are such as to leave a gap to be filled. The objective of these transactions is to 'accommodate the gaps', sometimes automatically and sometimes by choice. The automatic situation arises when the private foreign exchange dealers adjust for increase or decrease of their balances to earn more profits, or the government helps the importers by providing finances with the objective to keep stable exchange rates. Regarding the 'choice' aspect, the surplus countries make provisions to finance the deficit countries with the objective to help

them in coming out of the crisis (i.e. balance of payments difficulties). The accommodating transactions are mostly in cash or liquid form. They also include the official reserves\*. They are 'residual' money flows in the balance of payments - and by nature as they show the increase or decrease of the liquidity of the country. Now as they show the variations in the liquidity of the country, they are the best measure of 'deficit' or 'surplus' in the balance of payments.

So the exact measurement of balance can be visualised when we are in position to know the variations of the liquidity. The deficit appears in the balance of payments when the total receipts of the autonomous transactions falls short of autonomous transactions requiring money receipts or conversely the 'surplus' occurs in balance of payments total autonomous transactions involving money receipts exceeds the total autonomous transactions requiring money receipts i.e. if the credit in autonomous transactions is greater than debit of autonomous transactions the country is attaining the favourable balance of payments.

The 'deficit' shows that the country is losing liquidity to others i.e. the net liquidity position of

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\*The movements of goods which correspond to a 'unilateral transfer in kind' or foreign investments involving the shipment abroad of domestic plant and equipment. These are exceptions. These are accommodating transactions. But in relative terms these exceptions do not in fact figure prominently in the balance of payments. They are generally ignored as exceptions.

the country is deteriorating; the country is running down its liquid foreign assets (which also includes official reserve assets), while in case of surplus the liquidity of foreign assets is increasing, i.e., the surplus balance of payments occur when autonomous money receipts exceed autonomous payments.

To categorise the autonomous and accommodating transaction, it is very difficult to study the motivations of the individual's transactions i.e. to determine which transactions are undertaken for their own sake and which have their source in other transactions elsewhere in the account. The mere statistical data cannot help us in allocating the source or motive of the transactions. Moreover, it is very difficult to distinguish autonomous and accommodating transactions at all, except to the extent that it is possible to associate the motivations of transactions with certain classes of transactions or with certain kinds of transactions which are visible (or observable). It is important to remember here that the definition of 'surplus' or 'deficit' is an analytical problem, but the accounting framework of the measurement is essentially classificatory - and there are unlimited ways to arrange data to make it more informative for the particular context.

So if we thoroughly examine the definition of 'surplus' or 'deficit', practically it would be very difficult to draw a marking line between autonomous and

accommodating transactions. So there is no 'unique' way for this measurement of balance, only alternative observed measures which, given the country and time period, more or less closely approximate to the precise analytical concept.

Various alternative measures are there in order to derive a most complete picture of international payments position for a country. Most countries of the world follow a simple and straight definition - a single summary measure of surplus or deficit. The international transactions are divided into two categories, for this purpose, shading into one another. These are the 'basic' balance and the 'official settlements' balance\*.

Further the surplus and deficit could easily be found out if we could simply place all autonomous transactions inside the main body of balance of payments (which we call 'above the line') and all accommodating transactions outside it (which is called 'below the line'). But the process of drawing the demarkation line is not so elementary. Theoretically we may analyse the distinction between autonomous and accommodating transactions, but practically it is hardly of any use. For the balance of payments policy formulation it is very useful. There are a lot of empirical difficulties associated with this concept. For instance, as previously stated it is very

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\*Cohen, B.J., "Balance of payments policy", Penguin Modern Economics, p. 42, 1973.

difficult to identify the source of motivation behind the transaction whether it has taken for its own sake or with some specific objective.

The basic balance places only current account transactions and long term capital movements 'above the line' (i.e. above the demarkation line). These are supposed to make up the autonomous transactions that determine the 'basic' course of the balance of payments. And 'below the line' we record all the short term capital flows and the items 'errors and omissions' (they represent unrecorded movements of private short term capital) as well as official reserve transactions. The short term capital movements are placed 'below the line' because all such transactions may be considered accommodating, some responding passively to the balance on other transactions, others to short term changes in monetary policy and credit conditions. Secondly the division segregates below the line the transactions most prone to volatile and possibly erratic shifts. The transactions which are placed above the line are assumed to be stable in short run, and in the long run they change gradually due to major forces in the domestic and international economy.

For the identification of trends in the balance of payments, the basic concept is useful because it forms, in fact, the basis for several national measures of balance. But for the analytical distinction between autonomous and accommodating transactions the 'basic

balance concept' is defective, as it is based on artificial assumptions. Thirdly the 'basic balance concept' distinguishes between short term and long run transaction of capital but in practice we don't find these types of transactions so similar. There are as often persistent trends in short term capital movements as in the so-called basic transactions, just as there are as often large transitory elements in the later as in the former. Many short term capital movements are not accommodating in any sense. Only in some way, certain so-called basic items, particularly in the portfolio investment and merchandise trade accounts, do appear to be responsive to monetary policy. Private financial transactions just cannot be divided satisfactorily along this dimension.

So we find that there are a number of drawbacks with 'basic balance concept'. So looking at the impracticability of the concept various countries used the alternative of this 'basic balance concept'. This is known as 'official settlements balance'. The International Monetary Fund has also urged all countries to use this systematic concept of balance of payments. In the 'official settlements balance' which distinguishes not between types of transactions but rather between types of transactions we place all private short term capital movements alone above the line, as also the errors and omissions. The only item which is placed below the line is official reserve transactions. Because the official

reserve transactions reflects governmental or official intervention in the foreign exchange market, and which truly represent accommodating flows. These transactions are performed by those transactors whose functional is purely accommodating in the present international monetary system. In other words we can say that the task of the 'accommodation' is entirely in the hands of financial authorities. They do have the responsibility of maintaining exchange rate stable. The official transactions of financial authorities in terms of losses or gains of reserve assets and liabilities to foreign official authorities provide the best index of the financing required by surplus and deficits, and hence they constitute the most accurate measure of balance.

This concept has also got shortcomings and it is also criticised on many grounds. For instance, some private short-term capital flows - bank loans to finance trade, commercial credit are purely accommodating transactions according to this concept and at the same time there are certain official transactions which has nothing to do with the 'accommodation'. For instance, some times the Central Banks (as RBI) decide to borrow in foreign capital markets to increase their reserves or conversely to sell these accumulated reserves to domestic commercial banks when they plan to drain internal liquidity. It is clear that these decisions which have been taken by the official entity are purely autonomous as the decisions



of the individuals or private transactors. So the transactions of the official entities are autonomous in nature some times. Need not to say that the 'basic balance' and 'official settlements' concepts are important developments in context of systematic thinking of the conceptual framework of balance of payments.

B.J. Cohen\* has itemised all the major categories of transactions usually distinguished in the balance of payments. The alternative measures of 'surplus' and 'deficit' are defined by the different lines that are drawn segregating transactions 'above' from transactions 'below'. For the official settlements concept the formulation is given at the bottom of the list, which includes below the line only changes in gross monetary reserves, excluding changes in the country's foreign liquid liabilities. However, this procedure is not common. Generally, we include the liquid liabilities to foreign official institutions, as in the more conventional version of the official-settlements balance shown second from the bottom. Other items can be included in the financing of surplus or deficit such as changes in liquid liabilities to private foreigners, changes in liquid assets privately held by residents and the errors and the omissions items. The concept of basic balance is

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\*Cohen, B.J., "Balance of payments policy", Penguin Books, p. 168.

approached more closely when these aforesaid three items are shifted more below the line. When all of them are shifted down the basic balance as identified (as shown in the Table). The year 1970 brought a significant change in the presentation of the balance of payments data specially in the official presentation of these data. From an approximation to the basic balance concept, the British authorities shifted to a extreme formulation of the official settlements concept. The significant change was regarding the items which were previously included as 'monetary' (including autonomous changes in liquid liabilities to foreign official institutions), were moved above the line, on the grounds that any attempt to continue distinguishing between long term and short term capital was bound to be unrealistic and arbitrary. The

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The general practice with most of the countries is this that they employ some variation of the two concepts as measure of balance. The U.K. measure of balance closely approximated to the basic balance concept, the only important difference being that errors and omissions were placed above rather than below the line. The reason behind it was that the British authorities believed that the so-called 'balancing item' mainly reflected gaps in their trade and long term investment statistics rather than movements of unrecorded short term capital. So they separated the item from the remainder of private short term capital and official reserve transactions, which were collectively labelled 'monetary movements' in the standard U.K. presentation. These monetary movements defined surplus or deficit in the British balance of payments.

TABLE    Alternative Measures of Payments Balance,  
Surplus or Deficit

Categories of transactions	Alternative measures of balance
(a) Exports of goods and services.	
(b) Imports of goods and services.	
(c) Unilateral transfers, net.	
(d) Transactions in long term capital, net.	
	Basic Balance
Errors and omissions, net ('balancing item').	
Private transactions in non-liquid short term assets and investments (net).	
	(Net liquidity balance)
Private transactions in liquid short term assets and investments (net).	
	Official settlements (conventional formulation)
Official transactions in short-term assets and investment in country of residence not connected with special financial support ('autonomous' changes in liquid liabilities to foreign official institutions), net.	
	(Official financing)
Official transactions in short-term assets and investments in country of residence connected with special financial support ('accommodating' changes in liquid liabilities to foreign official institutions), net.	
	Official settlements (extreme formulation)
Transactions in official reserve assets (net).	

The objective was to group together all transactions affecting the need for official finance, through this new presentation. And below the line we record remaining transactions of few categories of pure accommodating in nature - specifically changes in gross monetary reserve of the country, changes in official currency's (of the country as sterling for U.K.) liabilities overseas that were the direct counterpart of foreign financial support of the Pound (as in the case of U.K.). This concept of 'official financing' is presently the standard measure of 'surplus' or 'deficit' in Britain's payments account.

The United States of American had a different measure of balance which they adopted in 1955 named the 'overall' or 'liquidity' balance. In this measure all the official reserve transactions including changes both in gross reserves and in liquid liabilities to foreign official institutions was placed below the line of official reserve transactions. However, the American measure in addition includes changes in liquid liabilities to private foreigners. The changes in liquid foreign assets privately held by Americans, were placed above the line. But it had two separate distinctions for U.S. assets abroad, the distinction was (as in the official settlements concept) by type of transactor, official versus others; for foreign assets in the United States, the distinction was (as in the basic balance concept) by

type of transactions, short term versus long term\*.

But this concept of liquidity or overflow balance concept can be criticised on many grounds. It draws a very sharp and artificial distinction between private foreigners and foreign financial authorities. It implied that American reserve assets were needed to protect the dollar only against the withdraws of foreign holdings, whereas historical experience shows that outflows of domestic capital typically played a significant role in payments deficit and speculative runs on a currency. Moreover, at the same instance it implied that all foreign holdings represented an equal threat to the dollar whereas in fact only foreign financial authorities could directly draw down U.S. resources. So in fact, in the practical situation therefore (at the same time in the economic sense also) the concept was assymetrical, depending on the perspective, it included either too less or too much to be useful as a direct measure of the ability of the U.S. government to defend the dollar.

This was the reason for which in early 1960's many famous economists of U.S.A. advocated replacing the

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\*Lederer, W., "The balance on foreign transactions: problems of definition and measurement", Special papers in International Economies, No. 5, Princeton, International Finance Section, p. 47.

liquidity with one of the variants of basic balance concept. Peter Kenen, leading American Economist advocated changing over to the official settlements concept in his article "Measuring the United States balance of payments" which was published in "Review of Economics and Statistics"\*.

In the American context there was dissatisfaction with the liquidity measure. In the year 1971, the traditional liquidity concept was finally rejected completely and the new form of official presentation was accepted. Even today, in U.S.A. it employs three separate measures of balance in the standard payment account. The official settlements concept (first adopted in 1966) is still practised and in addition to it two new measures have been put to use. The concept of Lary\*\*; the classic basic balance concept or in other words "balance on current account and long term capital", is one of newly introduced concept. The another newly introduced concept is called "the net liquidity balance", essentially a variation on the classic basic-balance theme. Apart from current account and long term capital, this measure also places the errors and omissions item and private transactions in nonliquid short-term capital, above the line. Its purpose is to segregate below the line official

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\*Kenen, P.B., "Measuring the United States balance of payments", Review of Economics and Statistics, 1964, Vol. 46, pp. 139-44.

\*\*Lary, H.B., "Problems of the United States as world trader and banker", National Bureau of Economic Research, Chapter I and Appendix A.

reserve transactions together with just that part of private short term capital which is liquid. To conclude, we can say, that the net liquidity measure together with the basic balance and official settlements concepts are now all adopted by the American authorities to identify 'surplus' or 'deficit' in balance of payments.

Need not to say that the United States is an exception in this regard. Most of the countries in the world continue to apply a single summary concept of deficit or surplus to their balance of payments, in spite the well-known fact that there is no one right measure of balance. So there can occur many defects in measurement of the balance of payments.

R.N. Cooper related the defects of measurement in balance of payments to the balance of payments policy in his article "The balance of payments in review"\*.

According to Cooper the defects of measurement of balance will transform defective policy of balance of payments. When the measurement of balance is not accurate, how do the policy be presumed accurate and effective. The objective of the financial authorities is to maintain a 'balance' of autonomous money payments and receipts.

Practically in the real sense if we analyse the situation, the accounting balance of payments no symmetry

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\*Cooper, R.N., "The balance of payments in review", 1966m Journal of Political Economy, Vol. 74, pp. 385-94.

between total surplus and total deficit exists because of the asymmetry of national concepts. It is clear that most countries use some hybrid of the two main concepts of balance. Further, as various nations are using various concepts for measure of balance of payments we don't find any homogenous concept for all the nations.

So the 'accounting concept' alone cannot be used for the policy formulation of a country. But the accounting concept has got its own uses. It can give the authorities a complete statistical record of a country's International economic relations. The changes of variations in the country's financial and commercial status can be compared. In other words, the 'weak' and 'strong' areas can be examined. In short, the accounting balance can be a rather powerful instrument for expost description of events. But it is not a strong instrument for ex ante analysis of events. The 'accounting balance' can give approximation of balance of payments in the past, as it is a classificatory device. The governments need to know the real situation of balance in the past. But at the same time the authorities need to know the present and future balance of transactions, i.e., the extent of equilibrium or disequilibrium of autonomous, intended transactions. At the same time, authorities need to know the present situation of net liquidity of the country. Are the autonomous money payments in the near future likely to exceed or fall short of anticipated money receipts?



The authorities main problem is analytical, not descriptive. And for this purpose the 'accounting balance' is inconvenient, cumbersome, ineffective and not of much use for the authorities.

### The Programme Balance

To define programme balance of payments we can say "It is a systematic statement of sources and uses of foreign funds, expected or planned over a future period of one or more years (of a particular country). This concept of programme balance is based upon calculation of domestic consumption and investment requirements, and upon a programme of meeting an excess of requirement over resources by recourse to foreign finance expected or sought. In other words, the programme balance is necessarily a forecast of countries' foreign exchange needs and desires - a kind of accounting balance of future. We can define the deficits and surpluses in terms of gaps between needs and desires on one hand, and on the other hand the amounts of foreign exchanged expected to become available from all regular sources i.e. from the exports, foreign investments, etc.

All countries are not computing a complete programme of balance of payments. The emergence of this concept was to supplement the mechanism for national planning of the domestic economy. For the developing countries this concept is very useful because it forecasts the requirements

of finances from the foreign countries. The third world countries do need the foreign capital either for domestic consumption or for capital formation. The programme balance works like an indicator for showing the requirements of foreign capital and the same time the tenure for which it (capital) is required. It would be more appropriate to say that programme balance is confined to third world countries only in the present context.

The ex ante character of the programme balance is self-evident. Being an indicator of future developments, it helps the financial authorities of a country to examine critically the appropriateness of current policies and plans which are directly affecting the international economic position of the nation. The programme balance indicates the future projections and accordingly the country may alter its policies to strengthen its international economic position. In acquiring the finances from foreign countries the 'political judgment' also plays significant role. The programme balance is highly subjective in this respect. We project foreign financing requirements in relation to certain standards of needs and desires, or in other words in relation to certain rates of domestic investment and to certain levels of domestic consumption - and these investment and domestic consumptions are the matter of political judgment. With the change in financing there would be a change in these standards also. So the programme balance is based on

psychology. In context of policy formulation of payments it is no more useful. Secondly in conducting the payments policy the programme balance is no more useful than is the accounting sense. Need not to say, the programme balance is best applied as supplement to other tools of analysis and in particular, the market balance of payments.

### The Market Balance

The market balance is an ex ante concept which compares autonomous spendings and receipts given present and expected future incomes, prices and interest rates. It is a model of a given situation in the foreign exchange market, characterized by the effective demand and supply of foreign exchange at the current exchange rates and at alternative, hypothetical rates. We conceive demand and supply in terms of schedules. The demand for foreign exchange shows the sum of demands of importers (wishing to import commodity or anything else), donors abroad, investors and the like, all those who purchase foreign currency to carry out their external transactions. Whenever in any external transaction the foreign currency is purchased it represents the demands of foreign exchange.

On the other hand the supply of foreign exchange represents the sum of foreign donations, foreign demands for the country's exports, securities etc. In this case the foreign transactions must generally sell their

currency for local currency in order to effect local payments. The rate of exchange is the product of interaction of demand and supply schedules. The point of interaction when the demand schedule meets the supply schedule - decides the exchange rate of a particular country.

The accounting balance describes historically while the market balance demonstrates the current or whatever is existing in the present stage - the balance of autonomous international transactions. In other words the balance of autonomous international transactions can be historically described by the accounting balance and currently by market balance. The coverage of the market balance does not quite match up to that of accounting balance. In accounting balance we find not only all foreign exchange transactions but many entries which, since they represent necessarily book-keeping operations, never pass through the exchange market at all. This include transactions such as unilateral transactions (unilateral transfers in kind), barter dealings, and the direct investment of plant and equipment.

In the same fashion some transactions take place entirely in foreign currency only such as reinvestment of income earned from foreign securities or subsidiaries. Conversely, in certain cases, some international economic intercourses, in fact, take place in local currency only between the residents of reporting country and never

involve any foreign currency. In case of imports, the freight is paid and this freight is recorded in the payments account, even that paid to domestically operated carriers. So it is said that the market balance of payments is less comprehensive than the accounting balance of payments. The accounting balance of payments gives a more clear picture of countries participation in the world economy.

The most important thing for the financial authorities of a country is the extent of balance or imbalance of the country's autonomous, intended transactions. The primary information that the financial authorities need for payments policy is the extent of balance or imbalance of autonomous, intended transaction. And for this purpose the market balance provides a much more useful tool of analysis than does the accounting balance. The market balance demonstrates the real situation of 'equilibrium' or 'disequilibrium' of a country's balance of payments. The two factors - demand and supply show the real status of a country's position in the international economic field when the demand for foreign exchange is equal to supply of foreign exchange at the given rate, the meaning is that the autonomous transactions requiring foreign money payments must be equal to autonomous transactions involving money receipts. And the balance of payments in such a situation is perfectly in equilibrium. When the demand and supply of

foreign exchange are not equal it is implied that autonomous receipts are also not in equilibrium so the balance is in 'disequilibrium'.

The payments adjustment reconcile any such differences between autonomous demand and supply of foreign exchange.

Many famous economists have given much importance to this problem of payments adjustment. Fritz Machlup calls the theory of adjustment of balance of payments as nearly 250 years old. If we consider Isaac-Gervaise (1720) as its first successful expositor; and well over 200 years, if we credit David Hume (1752) with this fact. Improved by Smith (1776), Thornton (1802), Ricardo (1812) and John Stuart Mill (1849), to mention only the major architects of the classical design, and renovated by Taussing (1927), Haberler (1933), Viner (1937), and Meade (1951), to cite some of the chief builders of the neoclassical style, the theory is still being remodelled\*.

This is the basic issue of payments policy. The whole concentration of balance of payments is based on it only. To examine the accounting balance is not the major problem, to identify a surplus or deficit in the recent past and match it by an equivalent flow of reserves.

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\*Fritz Machlup, 'Trade, growth and balance of payments', 1965, North Holland Publishing Co., Amsterdam, p. 185 (Total p. 267).

Prof. B.J. Cohen brand the accounting balance as "ancient history" practically for the financial authorities, because these authorities are much more bothered about the current developments. And besides, as already stated previously, it is difficult to know which particular empirical measure ex post most closely approximates to autonomous balance ex ante. Secondly, for the financial authorities it is not essential problem to examine the programme balance, to identify foreign financing requirements in the near future and undertake to bring them in line with foreign financing potentialities.

The programme balance is very subjective and contingent and is useful for the current context. Both the balances have their own use - and both of these problems often occupy the makers of policy.

For the financial authorities the basic issue is market balance. The task of the financial authorities is to examine the market balance, identification of pressure on exchange rates, and the intervention to eliminate them (pressure) directly or indirectly. The main problem of balance of payments policy is to manage the foreign exchange market. According to provisional definition of I.M.F.; "the balance of payments of a country may tentatively be defined as a systematic record of the economic transactions during a given period between its residents and residents of the rest of the world, for

convenience referred to as foreigners or sometimes, for greater clarity, as non-residents\*. This simple definition, however, is subject to a number of qualifications and exceptions. So a more precise definition was given by IMF.

The final definition of balance of payments was given by IMF in a more systematic manner. According to the final definition of IMF, "the balance of payments is a system of accounts covering a given period that is intended to record systematically (a) flow of real resources, including the services of the original factors of production, between the domestic economy of a country and the rest of the world, (b) changes in the country's foreign assets and liabilities that arises from economic transactions, and (c) unrequited transfers, which are the counterpart of real resources or financial claims provided to, or received from, the rest of the world without requital"\*\*.

IMF has categorised all the different items that balance of payments constitutes. These main categories are used in the IMF 'Year Book' - based on the third edition of the Manual.

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\*I.M.F., Balance of payments Concepts and Definition, p. 4..

\*\*I.M.F., Balance of payments Concepts and Definition, p. 14.



Standard Category in the Year Book\*

## A. Goods and services:

1. Merchandise
2. Non-monetary gold
3. Freight and insurance on merchandise
4. Other transportation
5. Travel
6. Investment income
7. Government not included elsewhere (n.i.e.)
8. Other services

- Net goods and services

Trade Balance (1 and 2)

Net Services (3 and 8)

## B. Unrequited transfers:

9. Private
10. Central government

- Unrequited transfers (net)

Net Total (1 through 9)

Net Total (1 through 10)

## C. Capital and monetary gold:

Non-monetary sectors -

11. Direct investment
12. Other private long term

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\*Designated as "basic global" tables in Volume 5 through 20 of the balance of payments year book.

13. Other private short term
14. Local government
15. Central government (n.i.e.)

Monetary sectors

16. Private institutions: liabilities
17. Private institutions: assets
18. Central institutions: liabilities
19. Central institutions: assets

## CHAPTER II

### THE CAUSES OF IMBALANCE IN THE BALANCE OF PAYMENTS AND REMEDIES - INDIAN PROFILE

### The Various Methods used in Correcting Imbalances of External Payments

The balance of payments is an important source of the measure of a country's international position. Since December 1973 most of the non-oil producing countries have been facing serious balance of payments difficulties. The balance of payments problems encountered in under-developed or developing countries in recent years may be divided into three main types of internal factors i.e. changes in price level, increase in population and sectoral imbalances. And under the external factor we give much weightage to unfavourable terms of trade and cyclical changes in income levels of developed countries.

To meet these difficulties of balance of payments the 'causes' of difficulties have to be carefully examined to meet the challenge. The policy of the government to meet the difficulties is formulated in the background of the causes that have given rise to the problems in the context. The government may enforce the automatic market response by either keeping the exchange rates fixed and encouraging the necessary price and income changes by means of deflationary monetary and fiscal policies. Or the government may opt to hasten the exchange rate change by devaluation of the local currency. Thirdly the government can impose restrictions of various kinds viz.

tarrif, quota etc. on imports. To encourage export, the government can subsidize exports for capital inflows. The effect of such actions is to bridge up the gap between demand and supply schedules for foreign exchange by shifting the two curves until they intersect at the prevailing parity.

Fourthly the government of the deficit country may introduce exchange controls. The existing schedules, the prevailing parity and the payments gap all remain as before; however the free market is suspended.

Further, they can finance the imbalances either directly by selling spot exchange or indirectly by intervening in the financial and exchange markets to induce inward movements of short-term capital. Here again the existing schedules and prevailing parity remain, but under this option the payment gap is closed by accommodating flows of public and private funds.

The government of the deficit country may adopt deflationary measures to get rid of external payments difficulties. If the imports are more than exports, the deflationary policies would result in a fall of prices of the domestic goods in comparison to the imported goods. At the same time by adopting the deflationary policies the government may reduce the supply of money in circulation by increasing the interest rates. Under the fiscal policy the incidence of tax can be increased. The government can reduce the transfer payments and expenditure on public

utility works. If the money supply in the country is reduced by strict fiscal and monetary policies it would not allow the worker's wages to rise. It would result in reduction in disposable income of the consumer. And if the consumer does not have adequate purchasing power at disposal - it would obviously effect the import and imports demand. Now as the consumers demand for goods and services has fallen it would give rise to fall in prices of the goods. The domestic goods would be cheaper than imported goods - so obviously the imports would be reduced substantially - to the extent of reduction in the prices of domestic goods. Imports fall to the extent dictated by the marginal propensity to import.

The fall in the prices of domestic goods would accelerate its demand in the foreign market. The increase in demand of domestic goods in foreign countries depends upon the price elasticity of demand for exports of the country. As a consequence of the low price of the domestic goods the supply curve of the foreign exchange world steep up with positive magnitude. So the price induced movements of the demand and supply curves will decrease the deficit with income effects.

Another important way of correcting external payments position is by imposing restrictions. The country can impose restrictions on imports to discourage them. The restrictions can be quantitative or qualitative in nature

of which ultimate objective is to discourage the growing imports of the country. These restrictions can be imposed through 'open' or 'global' quota. Or another way of introduction of restrictions is by licencing or permits policy. This restriction always leads to a rise in the price which the consumer is willing to pay above the price at which the foreign exporter is ready to offer. This import restriction does not leave any gap between demand and supply curve. The authorities automatically get the revenue in the form of import duty in case of fiscal measures, and in the form of profit if the multiple exchange rates have been introduced. But in case of quantitative restrictions (which limits a particular imports) there tends to be a margin between demand and supply prices. This margin goes either to dealer and officials who grant the licences (in case of licences given to individuals for imports) or to the man who has received the licence in a system where the administrative machinery is honest.

The third possibility is the profit enjoyed by the middle man who sells the licence to somebody after receiving it from the authorities. Another possibility can be the accrue to margin to exporters of the community if they charge higher prices due to increased demand of the product. The profit may go to the government if import fee is imposed on the import of the commodity. If the fifth possibility turns out to be true - it would help the country to some extent in connecting external payments problems.

Another way for correcting external payments deficit is through export restrictions. If the export restrictions are introduced it would lead to increase in the prices of goods in the foreign markets. The total value of exports in terms of foreign currency would increase or fall according to foreign elasticity of demand.

The government may grant subsidies to boost the exports of the country. If the price elasticity of demand is inelastic for exports the deficit country can impose export duties to earn more foreign exchange. And it would help in correcting the external payments position. The exchange control system also helps the authorities in elimination of balance of payments problem. Under this system all import operations are regulated and controlled by the financial authorities. If this system is effectively imposed the country can effectively get rid of external payment crises. The export and import which are transacted or operated without the permission of financial authorities is considered 'illegal'. The government is having full record of exports and imports - so it can regulate its operations as per balance of payments policies.

Under the multiple exchange rate system the financial authorities enjoy monopoly powers. It may vary the exchange rate of foreign currency in terms of domestic currency as per situation. If the country desperately require more foreign exchange, the government may increase



the value of foreign currency in terms of domestic currency. At the same time the value of foreign currency can be lowered in terms of domestic currency when government is having adequate foreign reserves at its disposal. The 'foreign exchange control authority' may use the rationing of foreign exchange to the various importers of the country. An innumerable range of combinations of export and import duties and subsidies can be arranged by such multiple rates. If they are so arranged so as to cause decrease in the value of exports from the domestic country, then external balance will be attained without any quantitative limitations.

Another factor of correcting the balance of payments disequilibrium is capital movements viz. short term and long terms. The long term capital movements take place if the yield on capital abroad is higher in comparison to the domestic market. These long term capital movements can be controlled by the government by raising the yield of the capital in the home market. The short term capital movements takes place due to fear of political instability or due to a fear of currency depreciation or social unrest etc. It can be controlled by the government in administering a stable political system. Due to political stability not only the short term capital movements which are 'out go' in nature would be discouraged but at the same time it would attract foreign capital also to get rid of the external payments problems.

The next measure which the deficit country may adopt to come out of external payments crises is 'devaluation'. In the present chapter I have shown the impact of June 1966 devaluation of India's balance of payments. The devaluations means lowering the value of domestic currency in terms of foreign currency. It is considered to be a compromise between stable exchange rates. It has been officially mentioned in the charter of International Monetary Fund. The impact of devaluation can turn out to be useful in eliminating the balance of payments deficit, the exports are boosted up with a check on imports. It avoids the deflationary contraction of income typical of adjustment when exchange rates are fixed. The devaluation as a measure for correction of external payments difficulties is not frequently used by the government but it is considered to be surgery - which is not required in the minor cases. The devaluation has some merits of the easier adjustment process of fluctuating rates and of stability of exchange rates over considerable periods.

The most important factor on which the effectiveness of devaluation depends is the elasticity of demand and supply of foreign exchange. If the elasticity of demand and supply are very low, devaluation would not either restore equilibrium at all, or would have to be excessive. The exchange rates are maintained by different countries a limit (only to particular extent the countries can appreciate or depreciate their currencies) in the stable exchange rate

system. Now because the stable exchange rates are maintained except when the external payments are heavily under strain, speculative short-term capital movements would normally be stabilising in nature. With an upper limit to exchange rate fluctuations established either by attachment of the currency to gold or by strong official support, the speculators would be anxious to sell foreign currencies, accumulated with them, as balance of payments pressures forced rates towards this limit, having confidence that they could be repurchased later at lower prices. This act of support of speculators would thus minimise gold losses or the need for official sales of foreign exchange. In case of fluctuating exchange rates, the governmental intervention is not possible, hence this advantage cannot be made available under that system. Secondly under the fluctuating exchange rates systems where with no official intervention to the limit rate variations - a rise in rates would be likely to induce destabilising speculations (because the speculator will have no limit and is having no check of the government also) or the purchase of foreign currencies in the hope that rates would still increase more.

Further in a country of major deficit in the external payments position, the near certainty of devaluation would provoke destabilising speculations. As previously stated, the short term capital 'out go' would take place in the country and it will return at a substantial profit after the devaluation has occurred. As the devaluation in a

particular country would not only affect its trade but at the same time it would be very much effecting the trade of other countries also adversely. However, there is a danger, that devaluation may become competitive. Hence, International Monetary Fund has set up certain guidelines in this context to keep world trade safe and sound in the modern age.

### Devaluation and its Impact - Theoretical Analysis

Devaluation means - lowering down the value of domestic/local currency in terms of foreign currency. Devaluation encourages exports - as after the devaluation the domestic product becomes cheaper in the world market (as the value of domestic currency has gone down in terms of foreign currency as a consequence of the devaluation) in comparison to the foreign products. For the residents of the country (in which the devaluation has taken place) the imports have now become costlier in comparison to the domestic products. In the world market the exports have become cheaper hence its demand would go up. With increase in demand more foreign exchange earnings would be earned to solve the external payments problem. If we want to restore a stable equilibrium in the balance of payments, the autonomous receipts must be equal to the autonomous payments. As a consequence of devaluation the autonomous payments tends to decrease (as imports have declined) and receipts to increase (as the exports have rocketed high). Both

commodity and financial transactions constitute the autonomous categories.

Devaluation changes exchange rates, unless a simultaneous, equally heavy devaluation is carried out abroad. As previously stated, as a consequence of devaluation the value of domestic currency is lowered down in terms of foreign currency, hence the export prices are decreased while the import prices are increased in terms of domestic currency. The devaluation brings about a rise in the domestic price level, unless paralleled by a deflationary policy. The imports become costlier to the residents and probable increase in exports serves to accentuate the inflationary tendency. If the prices are not kept in limit the country would not be benefitted by the act of devaluation.

There are two approaches for analysing the impact of devaluation. One approach is Marshall-Lerner approach and another is absorption approach.

In Marshall-Lerner approach the domestic elasticity of demand for imports and external elasticity of demand for country's exports are taken into consideration. These elasticities of demand determine the extent of improvement in balance of trade with inclusion of devaluation. If the demand for imports is inelastic, as a consequence of devaluation the imports would become costlier in the home market. On the other hand if foreign demand for country's

exports (which plan to devalue its currency) is inelastic, it would mean less earning for the devaluing country. As the demand for exports in the foreign market is inelastic, even after fall in prices it would not result into more earnings as the demand of exports is not increasing. So in case of inelastic demand of exports in foreign market the devaluation is no way going to give positive results to a greater extent to the balance of payments.

According to Marshall-Lerner approach the devaluation of currency would improve the balance of trade if the sum of elasticities of demand exceeds unity, given permissively high elasticity of supply.

The Marshall-Lerner conditions only apply to the demand for commodity exports and imports. But the capital movements also plays a significant role in correcting external payments position of a country. The policy makers, all over the world are concerned with this problem, as the attempts are being made to finance the deficits in the balance of payments by attracting private short term capitals. This is because the countries of the world want to avoid undesirable and painful adjustment to the balance of payments. The international trade has also got a great deal of influence over the capital movements. It has not only got an effect on the traders' actual and desired portfolios but has also got a great influence on the stocks of the international currencies by which it is judged if the international liquidity is judged.

The Marshall-Lerner conditions only apply to the demand for commodity exports and imports as we take into consideration the elasticities of demand of exports and imports. The response of capital movements to devaluation must also be considered in evaluating impact of devaluation on balance of payments. Secondly for the Marshall-Lerner conditions the elasticity of supply coefficients must be enough large. The country should be in a position to meet the increased demand of its exports or in other words having adequate supply at disposal for exports.

Under the Marhsall-Lerner conditions the income, all other prices and cost remain unchanged, is assumed, in analysing response along supply and demand schedules. I need not say this as microanalysis. But when the exports varies it will obviously tend to occur variations in income, wages, interest and profits. With change in income the demand schedule will also shift. On the other hand variations in cost exerts a shift in supply schedules. Hence the variations in prices and income force the schedules to shift and bring about a new equilibrium price and quantity; the elasticities measure only movements along the schedules and not the consequences of movements in schedules themselves. If the trade plays a very important role in national income, there would be a greater change in the income and cost expected. Hence the approach is based on unrealistic assumptions.

Another important approach is absorption approach. The essence of the absorption approach is to view the balance of payments as a relation between the aggregate expenditure and receipts of the economy, rather than as a relation between the country's credits and debits on international account. Another way of defining balance of payments position in terms of 'deficit' and 'surplus' is the difference between national income and expenditure which includes consumption and investment. It can be defined in the following way also -

$$B_p = R_f - P_f \quad (i)$$

where  $B_p$  indicates balance of payments,  $R_f$  means aggregate receipts by residents from foreigners and  $P_f$  means aggregate payments by residents to foreigners.

If the aggregate receipts exceed aggregate expenditure, the balance of payments is said to be favourable. Conversely if the aggregate expenditure exceeds the aggregate receipts, it implies that the balance of payments of the country is deficit. And the proper means should be adopted to increase the receipts so that the deficit may be eliminated.

The real income of a country includes the aggregate consumption and investment plus the exports. Mathematically the real income of a country can be defined in the following way:



$$Y = C + I + X - M \quad (\text{ii})$$

where Y represents the output, C represents consumption, I investment, X exports and M represents imports. The imports are deducted from the total out as it has been produced by the foreigners.

The net exports are equal to the difference between the total output and aggregate consumption and investment.

$$Y - (C + I) = X - M \quad (\text{iii})$$

The absorption of goods in a country can be derived by adding consumption and investment (C + I). Now suppose if we denote (C + I) as 'A' - i.e. absorption, the above equation can be written as

$$Y - A = X - M \quad (\text{iv})$$

Or in other words we can say if absorption is deducted from real income it would equal the net exports. Now as if there is a direct relationship between real income and exports. We can conclude that if the real income exceeds the absorption (C + I) then exports must exceed imports (X > M). Conversely if the absorption exceeds the real income the imports would exceed exports and the country would have deficit. The basic objective of devaluation is to reduce absorption in the country. If the absorption is reduced substantially the devaluation will tend to eliminate external payments deficit. Further if the output has

recorded a greater change in comparison to the absorption, then also the imbalance in the balance of trade would improve; as the exports are having greater change of magnitude in comparison with imports. Mathematically it can be expressed in the following way:

$$dy - dA = dx - dm \quad (v)$$

Moreover the absorption depends on real income and prices in addition to other factors.

$$dA = e(dx) - D \quad (vi)$$

The above equation implies that the change in absorption is equal to the marginal propensity to absorb  $e$  multiplied by the change in income, where the marginal propensity to absorb is the sum of the marginal propensity to consume and to save. While  $D$  includes all the changes in absorption as a result of non-income factors; or  $D$  shows the change in absorption at a given level of real income. If value of  $dA$  is substituted in equation (v) -

$$dy - e(dy) + D = dx - dm \quad (vii)$$

$$\text{or } dy(1-e) + D = dx - dm \quad (viii)$$

Devaluation tends to accelerate exports of the devaluating country. In case of under employment of resources, the real income of the country would rise by the amount of increased export times the international trade multiplier. The increased real income would increase consumption depending upon marginal propensity to consume or absorb.

Prof. J.M. Keynes has given the concept of this multiplier effect where he considers 'effective demand' as the sole reason of increase in national income. If  $e$  is less than unity it would increase production to a greater extent than absorption and thereby improve the balance of trade of the country.

So far we have discussed the situation in which the resources are not under full employment. In case of full employment of resources in the economy as a consequence of devaluation the balance of trade would be affected through real cash balance effect. Suppose if the money supply is kept constant and the devaluation increases the prices, as a consequence of rise in prices the real value of cash balances decreases. To maintain the real value of cash balances (as it was before devaluation) the individuals will have to save to a greater extent. And if the savings are higher, the absorption will definitely fall. Now the reduced expenditure on goods bring a fall in income and a fall in absorption depending upon marginal propensity to consume.

The devaluation can effect the distribution pattern of income. If the income is moved from poor people with higher propensity to consume to rich people with lower propensity to consume, then the absorption for a given level of income would be reduced. Hence it would result in improvement of the balance of trade. The money illusion

also increases the absorption as people buy more despite the price rise which has resulted in a fall in real income.

The balance of payments deficit implies either hoarding by residents or credit creation by monetary authorities. Moreover, the deficit is associated with higher velocity of circulation - will tend to be self-correcting. A deficit in external payments requires credit creation to keep it going. The deficit in the balance of payments may be due to two <sup>st-</sup>reasons viz. low ratio of international reserves in comparison to domestic money supply - in such a case the natural self-correction of the deficit cannot occur or another reason can be credit creation by the government to meet the deficit. In elasticity approach the balance of trade is separately considered while the absorption approach emphasise the monetary character of a balance of payments deficit and its relation to the functioning of the entire economy. But both the approaches are neglecting one factor which very much affects the external payments problem. The absorption approach does not take into consideration the price effects while the elasticities approach ignores the income effects.

#### Policies to be Adopted After Devaluation

The exports are encouraged to meet deficit in the external payments position. Hence for the effectiveness of the devaluation it would be essential to maintain a proper

relationships of the supply and demand conditions. It would assure the desired flow of exports and imports. Inflation must be checked in the country to make devaluation more effective. Devaluation lowers down the value of domestic currency in terms of foreign currency. Hence the cost of production of certain goods and commodities may rise. For instance the price of the raw material, which is imported, would increase the cost of production of export goods. So this price rise should be checked by the government. Secondly devaluation makes imports dearer hence cost of food would go up and it may induce an inflation in home produced food. Hence the cost of living goes up. Here it would be important to mention that the wages should not be increased equivalent to devaluation. The wages in the export industries may be raised to some extent to boost the exports of the country. The exports become cheaper as a consequence of the devaluation hence the demand of the exports would increase. The country must have adequate supply to meet the increased demand. The government should formulate its policy in such a manner that after the devaluation country's exports demand may be fully matched with the supply.

To improve a check on consumption at home to boost export can be the government's policy. Moreover if the governmental expenditure, investment on public utility works are properly regulated it would definitely check in rise in wages and cost. And as the imports are already dearer

the exports would increase with a multiplier effect. Moreover, other measures should be adopted by the government like credit control which directly curtails the consumption demand for investment and governmental use of resources.

Now if the devaluation is carried out with such precautions as mentioned above, it would prepare the way for improvement in balance of payments. The subsequent policies to devaluation as on bank credit and investment on wages and subsidies, on governmental expenditure and taxes - would determine the extent of corrections in external payments.

Devaluation brings about an improvement in external balance of a country to some extent. But inflation is such a factor which must be checked by the government for an effective result of the devaluation otherwise the whole objective is absolutely flopped. In inflation the aggregate demand of output <sup>exceed</sup> excess aggregate output. Need not to say inflation causes deficit in the external payment position as the exports do not take place in such conditions. The domestic demand of the output is already greater than the aggregate output - hence this excess home demand would match by the imports. So on one side the exports are discouraged in inflationary conditions while on the other side the imports tend to rise with increased demand for output. And if the imports are continuously increasing it will tend to cause unemployment in the economy. The extent of deficit in the balance of payments caused due to increasing home demand

and the extent of rise in prices will depend upon the elasticity of home demand for import and the elasticity of home supply for exports. (In case of no restrictions on foreign trade). If these two elasticities are greater, the payments deficit would also be greater.

The rise in prices in the domestic market would increase the demand for imports. Hence the basic objective of the devaluation is to encourage exports and to discourage imports. As a consequence of devaluation the imports would be costlier so that if no change in money income takes place, real income and real demand will be reduced. The goods freed in this way are needed as extra exports to pay for the same volume of imports. Now secondly the devaluation would make exports cheaper for the other countries hence their demand of exports from the devaluing country would increase. But the goods are already scarce in the economy. So it's very essential to check inflation in the home market. If the devaluation is accompanied by appropriate measures to achieve desired adjustment in aggregate home demand, it would bring improvement in external balances position.

#### Highlights of Indian Economy in pre conditions of Devaluation before 1966

#### Devaluation of Rupee in June 1966 - Indian experience

After independence Indian government thought of economic development through various developmental plans and

heavy industries to foster the economic growth in the country. For these developmental plans and public utility works a huge amount of capital was required. The government borrowed capital from foreign countries and also allocated resources inside the country. The deficit financing was used to a greater extent during this period. In a short span of post-independence era India had to face two wars viz. Chinese aggression and Pakistan's attack. Hence the abnormal price rise in the country was witnessed. The prices of Indian product in the world-market were costlier in comparison to other countries. So the exports had not a rising trend while the imports were continuously increasing. Until 1962, the price rise was in reasonable limits but after 1962, the price rise was very high. Moreover, after the Chinese aggression government became much aware of defence expenditure. The result was, for the first time after independence, in the year 1962, the defence expenditure suddenly increased upto Rs.400 crores a year. All these factors combined together resulted in a steep price hike in the country as compared to other countries. Table II(1) and II(2) depicts the trend in price rise between 1960-65. The price rise was only 2% in Japan, 12.5 in Pakistan, 7% in Germany in comparison to 32% in India. Moreover, the Rupee was over valued in the world markets.

In context of the foreign trade - the Indian position was not satisfactory. The imports were continuously increasing which resulted in foreign exchange crises. Indias



TABLE II(1): Index of Wholesale Price and Export Prices in India - 1950-1965

Year	Wholesale Price Index	Price in percentage	Export index	Rise in percentage
1	2	3	4	5
1950	98	-	98	-
1951	108	10.2	143	45.9
1952	95	-12.1	117	-18.2
1953	94	-1.0	100	-14.6
1954	90	-4.3	102	2.1
1955	82	-8.8	100	-2.0
1956	92	+12.2	101	1.1
1957	98	6.5	101	-
1958	100	2.0	100	-1.1
1959	104	4.0	100	-
1960	111	6.8	109	9.0
1961	113	1.8	111	1.9
1962	115	1.7	106	-4.5
1963	119	3.5	106	-
1964	134	12.6	106	-
1965	146	9.0	112	5.6

Sources: (i) I.F.M., International Financial Statistics, July 1966.

(ii) O.M.F. Supplement to 1965-66 issue of International Financial Statistics.

TABLE II(2): Index Number of Wholesale  
Prices (1958 = 100) - General Index

Year	India	U.S.A.	U.K.	Japan	West Germany	Pakistan
1955	82	93	92	99	97	...
1956	93	96	96	104	99	...
1957	98	99	99	107	100	100
1958	100	100	100	100	100	100
1959	104	100	100	101	99	98
1960	111	100	102	102	100	103
1961	113	100	105	103	102	108
1962	115	100	107	101	103	111
1963	119	100	108	103	104	110
1964	134	100	112	103	104	109
1965	141	102	115	104	107	120

Source: IMF, International Financial Statistics,  
July 1966.

imports (c.i.f.) during 1950-51 were Rs.650.20 crores. A steep rise was recorded in imports during 1951-52 while in 1952-53 it declined to Rs.669.88 crores which further lowered down to Rs.571.93 crores in 1953-54. But by the end of the first plan (1955-56) the import had increased to Rs.774.25 crores. The Indian foreign trade recorded an increase of 19% from the period of the beginning of 1st plan to the end of 2nd plan.

During the second plan period the trend of increasing imports continued to rise. By the end of the second plan an increase of 73% in imports was recorded which amounted to Rs.1121.62 crores. In the third plan period also as India had been using capital for the developmental projects the imports continued to mount up. The imports increased upto a level of Rs.1350.44 crores in 1965-66. On the other hand the rise in exports were relatively very low. In 1950-51 the exports (f.o.b.) were recorded worth Rs.600.64 crores. At the end of first plan the increase in imports was very less and the total exports recorded in 1955-56 were Rs.608.90 crores. By the end of plan the exports accounted to Rs.642.07 crores in 1960-61. During the third plan period a bit increase in exports was witnessed by the Indian economy. At the end of third plan Indian exports accounted for Rs.802.85 crores in the year 1965-66. The percentage of increase in exports over the corresponding periods were only 1.3, 7.0,

and 34.0 resulting in deficit of trade balance by 234%, 867% and 1,000% respectively as shown in Table II(3). The Table II(3) depicts the sharp rise in imports of India during 1950-51 to 1965-66. The demand for foreign exchange during this period was tremendously increasing. The reasons of increased demand of foreign exchange were the imports required for developmental projects and military equipments. While the export earnings were not sufficient to meet this increased burden of imports. Ultimately the government had to introduce import restrictions to bridge the gap in trade deficit. This import restriction resulted in lesser imports of machinery and transport equipment including electrical and non-electrical machinery apparatus, appliances and railway vehicles etc. fell from 35.6% of the total import till in 1963-64 to 35.1% in 1965-66. In case of manufactured goods, including paper and paper boards, newsprint, silk yarn and thread, iron and steel and metals declined from 20.7% in 1960-61 to only 15.5% in 1965-66. Import of chemicals declined from 8.8% in 1962-63 to 7% in 1965-66. Although the government introduced certain import restrictions but it could not come out to be more effective because still the prices of imports were cheaper in comparison to home produced goods. So despite all efforts by the government the full potentials of import substitution could not be realised.

In India as agriculture was totally dependent on monsoon - every other year country had to face drought and

TABLE . II (iii) INDIA'S FOREIGN TRADE MERCANDISE (RS. IN CRORES)

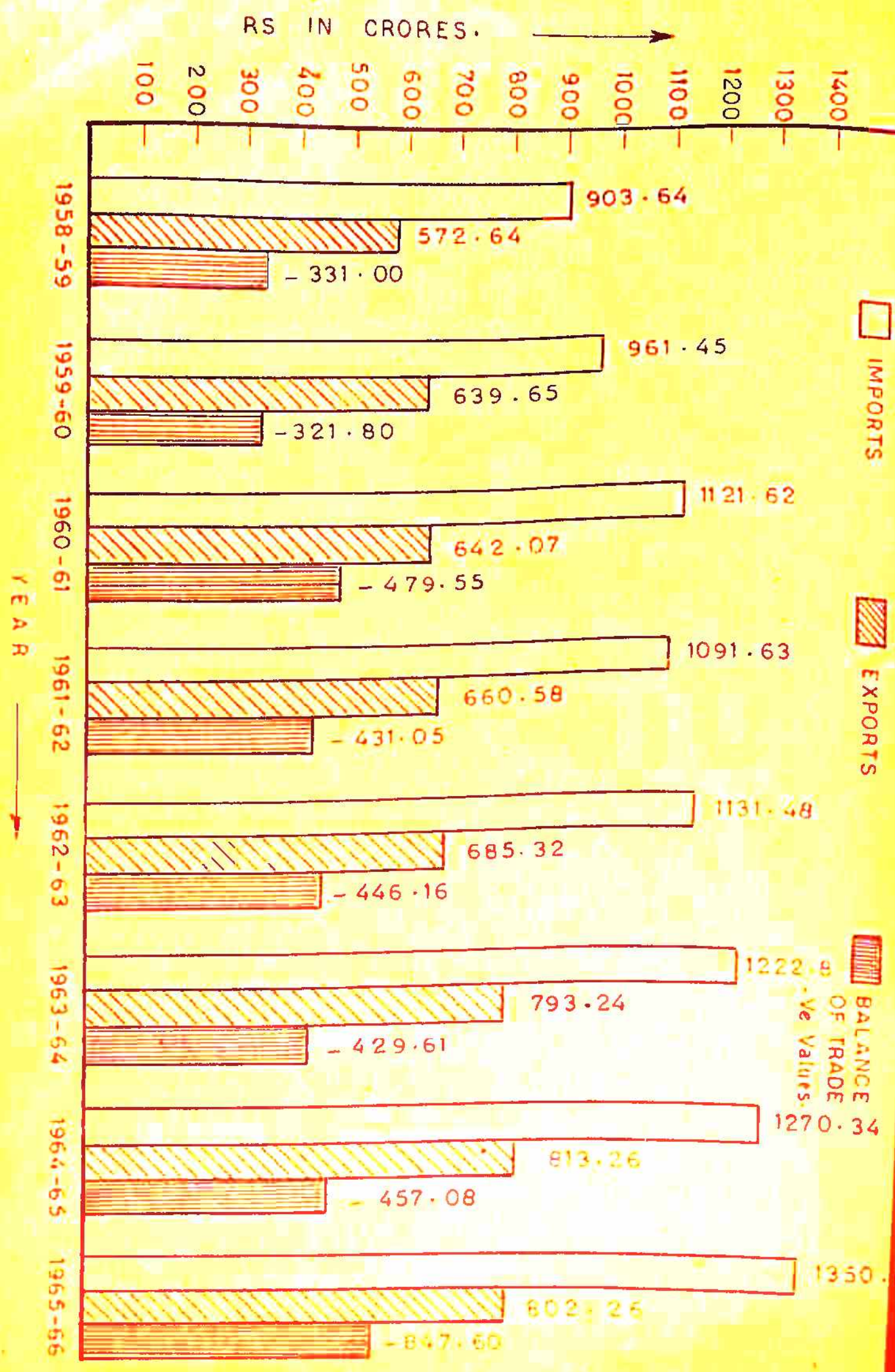


TABLE II(3): India's Foreign Trade  
(Merchandise)

(Rs. in crores)

Year	Merchandise		Balance of Trade
	Imports (c.i.f.)	Exports (f.o.b.)	
1950-51	650.22	600.64	- 49.58
1951-52	943.13	732.99	- 210.14
1952-53	669.88	577.37	- 92.51
1953-54	571.93	530.62	- 41.31
1954-55	656.26	593.54	- 62.72
1955-56	774.25	608.90	- 165.35
1956-57	902.91	619.62	- 283.29
1957-58	1036.40	635.14	- 401.26
1958-59	903.64	572.64	- 331.00
1959-60	961.45	639.65	- 321.80
1960-61	1121.62	642.07	- 479.55
1961-62	1091.63	660.58	- 431.05
1962-63	1131.48	685.32	- 446.16
1963-64	1222.85	793.24	- 429.61
1964-65	1270.34	813.26	- 457.08
1965-66	1350.45	802.85	- 547.60

Source: (1) Report on Currence. Finance 1964-65  
(Statement 10)           

(2) R.B.I. Bulletin, August 1966, September 1966,  
(Statement 37)

flood crisis. It resulted in a continuous swelling up of the food imports for the masses. The import of food grains rose sharply from 10.7% of the total imports in 1961-62 to 22.2% in 1965-66. It created an acute shortage of strategic raw materials (due to import restrictions of the raw materials, components and spares tended to decline) and maintenance imports which were essential for the developmental process.

As far as the export during this period are considered - they did not increase in accordance with the imports. The imports bill was continuously increasing while the export could not rise substantially. Despite our planning the exports failed to finance our imports resulting in huge trade deficit. The percentage of imports financed by exports earnings continuously declined except for occasional improvements.

In 1950-51, India's 92.3% imports were financed by exports. This huge percentage of exports for financing imports declined to 78.6% in 1955-56 and 57.2% by the end of first plan i.e. 1960-61. At this juncture the government became aware of the seriousness of the situation. The government introduced the concept of export incentives to generate export promotion in the economy. Due to this export promotion policy of the government the exports financed 59.6% in 1965-66 of the total imports in comparison to 57.2% in 1960-61. If we take the average of exports financed for imports, in Indian case we find that 83.7%

imports were financed in first five year plan through exports, 62.4% in second plan period and 60.8% in the third plan period. Hence the percentage of exports in financing imports had been continuously declining during this period. The exports as a proportion of national income remained at about 5%, the share in world exports fell from 2.1% in 1950 to 1.2% in 1960 and to only 1% in 1965.<sup>1</sup>

Despite the exports incentives of government to various export industries the results did not show substantial achievements. In fact a slight fall in exports was witnessed in 1965-66 in comparison to the previous year. The sole reason of it was the hyper inflationary conditions in the home market. This inflation resulted in the higher cost of production and diversion of supplies to domestic market. Hence the exports could not increase to a greater extent. Also exports were adversely affected by the Indo-Pakistan war of that year. Moreover the export earnings of the traditional items also declined in 1965-66 against 1964-65. The export of traditional items like cashew kernel, tea, coffee, cakes, oil, tobacco, oils (animals and vegetables), manganese ore, cotton textiles, etc. were also declining. And the other exports like raw cotton and waste, leather (undressed), raw-wool etc. remained constant. A few items of exports like jute manufactures, spices, mica and iron ore recorded an improvement in their business. The

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1. The Fourth Five Year Plan - Draft Outline, pp. 92-96.



other reasons of decline in export earnings were, inflationary tendencies in the home market, higher propensity to consume (as the per capita income happened to be very low) and inelastic demand for most of the exports.

The foreign exchange reserve position of India was fast deteriorating. On the other hand the imports were swelling up tremendously while the exports were declining. The second reason was regarding the servicing burden of external aid which was fast growing and substantially increased during third plan imposed serious strains on India's foreign reserve position. The servicing burden for foreign aid which accounted to Rs.58.2 crores in 1960-61 mounted upto Rs.147 crores in 1965-66. Moreover the average earnings of invisible services which accounted for Rs.78 crores a year in the second plan declined to Rs.12 crores a year during the first four years of the third plan. It implies that the payment on account of dividends, royalties etc. had been increasing as also the emergence of various leakages and diversion of remittances from abroad to unauthorised or unofficial channels. The national defence remittance scheme proved to be useful to some extent in improving the earnings from abroad. The scheme was introduced by the government to acquire foreign exchange reserves to meet increasing import demand. The scheme was for a temporary period and it gave government of India foreign exchange reserves worth approximately Rs.30 crores. The gap in the balance of payments (see Table IV(4)) was also increasing. The net deficit (including net

TABLE II(4): India's Imports of Principal Commodities 1960-1966

(Rs. in crores)

Commodity	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
1. Food	214.06 (19.07%)	147.87 (13.4%)	171.41 (15.6%)	214.40 (17.5%)	323.72 (25.9%)	340.82 (34.5%)
(a) Cereals	181.38 (16.1%)	116.9 (10.7%)	144.26 (12.7%)	179.6 (14.0%)	232.14 (20.9%)	309.11 (24.3%)
(b) Others	32.68	30.17	35.15	34.8	40.58	31.71
2. Beverages and Tobacco	0.79	1.65	1.06	1.11	0.77	0.50
3. Crude materials including hides and skin, copra, crude rubber, raw wool etc. (except fuel)	155.36 (13.8%)	129.89 (11.9%)	127.20 (11.2%)	124.45 (10.2%)	128.34 (9.5%)	121.55 (8.7%)
4. Mineral Fuels	69.52	95.86 (8.7%)	87.97 (7.8%)	104.49 (8.5%)	66.67 (5.1%)	68.35 (4.9%)
5. Animal and Vegetable oils	4.60	8.62	5.63	4.87	5.62	15.35
6. Chemicals	85.70	89.76 (8.2%)	100.52 (8.8%)	95.88 (7.8%)	94.54 (7.0%)	104.85 (7.5%)
						(contd.)

Note: The bracketed figures indicate the percentage of respective items in total imports.

Table II(4) (contd.)

Commodity	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
7. Manufactured goods including paper and paper boards, newsprint, silk yarn and thread, iron and steel, non-ferrous metals and metal manufactures	234.16 (20.7%)	221.16 (20.3%)	203.95 (18.02%)	200.41 (16.3%)	216.58 (16.2%)	215.85 (15.5%)
8. Machinery and transport equipment including electrical and non-electrical appliances, machines and apparatus and railway vehicles.	332.98 (29.6%)	367.52 (33.7%)	387.38 (34.1%)	436.98 (35.0%)	477.76 (35.4%)	489.47 (35.1%)
9. Miscellaneous manufactured articles	17.40	21.69	30.73	33.54	22.70	18.62
Grand Total	1121.62	1090.06	1131.48	1222.85	1349.03	1391.97

Source: (1) Report on Currency and Finance - 1965-66.

(2) Eastern Economist - Annual Number, Dec. 51, 1965, 10, 1430.

TABLE II(5): India's Exports of Principal Commodities

(Rs. in crores)

Commodity	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
<b>1. Food</b>	198.00	214.00	234.00	250.00	261.00	241.00
(a) Cashew Kernel	18.191	18.17	19.36	21.41	29.00	27.40
(b) Coffee	7.22	9.00	7.61	8.31	13.42	13.00
(c) Tea (Black)	122.61	121.40	128.22	122.20	122.50	102.70
(d) Spices	16.60	17.50	13.80	16.02	16.73	23.09
(e) Oil Cakes	14.30	17.32	31.80	35.37	39.76	34.64
(f) Sugar	3.30	15.33	17.93	27.10	21.45	11.84
(g) Others	15.10	15.27	15.26	19.45	17.40	28.80
<b>2. Beverages and Tobacco</b>	15.80	14.99	18.90	22.50	25.78	21.20
<b>3. Crude minerals, Inedible except fuels</b>	112.00	118.38	111.08	131.98	137.47	135.05
(a) Manganese ore	14.05	10.44	7.88	8.26	13.13	11.05
(b) Hides and skins (raw)	9.50	8.22	10.71	9.60	9.05	9.55

(contd.)

Table II(5) (contd.)

Commodity	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
(c) Cotton (raw and waste)	11.60	20.35	17.04	16.84	14.28	13.10
(d) Mica	10.15	9.66	10.36	9.20	9.74	111.27
(e) Iron ore	17.00	17.41	19.83	30.40	37.40	41.10
4. Mineral fuel, lubricants and related materials	7.40	5.90	6.48	9.76	12.29	9.32
5. Animal and vegetable oil	9.80	6.50	13.65	20.00	7.38	4.55
6. Chemicals	7.20	7.82	7.84	6.92	10.20	11.50
7. Manufactured goods	263.34	269.80	266.70	319.40	326.70	343.20
(a) Leather and Leather manufactured	24.97	24.45	22.63	26.38	27.35	28.46
(b) Cotton textiles	57.55	48.26	46.21	54.34	64.16	63.30
(c) Jute manufactured	135.15	144.80	155.70	157.40	168.40	182.30
8. Machinery and transport equipment	7.19					
Total	642	660	685	793	805	817

Source: Report on Currency and Finance 1965-66 (Statement 71).

current account and net capital account transactions but excluding official loans) increased from Rs.230 crores in 1950-51 to approximately Rs.800 crores at the end of the third plan. Most of the deficit of balance of payments was met through external aid from U.S.A. (including PL 480) and IMF etc. (the short term accommodation). The result was that the foreign exchange reserves (excluding gold) which amounted to Rs.785 crores at the beginning of the 2nd plan declined to Rs.235 crores at the end of December 1965 which further declined to Rs.184 crores at the end of the third plan (see Table II(5)).

Despite various measures like export promotion, subsidy, import restrictions the government tried to correct the imbalance of external payments. But these policies could not yield desired results. Hence a surgery was required to achieve desired corrections in the external payment position of India.

During the first plan and second plan period India had been suffering from foreign exchange reserve crisis. This was the beginning of the developmental period. The governmental requirement of capital was very high. The rate of saving being too low as the marginal propensity to consume was higher - the needed capital for its increased demand of imports. The inflationary tendencies were prevailing in the home market and the price of home produced goods were comparatively higher in the world market. Exports

were shrinking while the growth in imports mounted up sharply. All these factors combined together in resulting acute shortage of foreign resources. By the end of 2nd plan and in the post era the shortage of foreign exchange continued to rise despite the IMF assistance. On import front, restrictions were introduced while for export promotion government was giving subsidy for the export. But despite government efforts the desired results could not be acquired by the economy and the trade deficit continued to rise. So during this period government of India had no other alternative other than devaluing rupee. The devaluation would stimulate exports. But the stimulus would have different impact on traditional and non-traditional exports. On behalf of the government, hence on 5th June 1966 - Mr. Sachindra Chaudhary broadcast the concept of devaluation in the then prevailing economic conditions. As a consequence of this devaluation the exporters of the country would earn relatively higher in comparison to the pre-devaluation situations. The Indian Rupee had been devalued by 36.5% with effect from 2 a.m. of June 6, 1966. The value of a rupee was refixed at 0.118489 grammes of fine gold per Indian Rupee as against the previous value of 0.186621 grammes of fine gold. As a result of the devaluation, the exporter, previously who was getting Rs.476 for the export worth \$ 100, would get after devaluation the sum of Rs.750 against the exports of same \$ 100. So in this way a stimulus was created to boost exports of the country. Apart from lowering the export

prices in the world market it would induce flow of investment in the export industry which ultimately would strengthen our export position. Moreover the import substitution would also be encouraged as the imports had become costlier in the country. The investment in 'import substituting' industries would increase and hence our own industries would flourish not to meet only home demand but also to meet export demand. As the investment is increasing, the saving would also tend to rise. Apart from export promotion the 'remittance' (invisibles) would also be effected. It would encourage remittance in India. A huge amount of capital is outflowing in the form of 'profit' and 'royalties' resulting an increase in the foreign exchange reserves. But as the imports were discouraged by the devaluation, the home industries would move faster towards self-reliance.

The anti-social practices would also be discouraged through devaluation (anti-social activities such as under invoicing of exports, over invoicing of imports etc.). The smuggling is also discouraged by devaluation. The imported articles were attractive for the public as they are cheaper than the home made ones now in the changing circumstances have become costlier. In export promotion the impact of devaluation would differ from commodities to commodities. For this purpose, broadly we divide the commodities into two parts - viz. conventional and non-conventional commodities exports. Or



TABLE II(6): India's Balance of Payments Gap and its Financing

(Rupees in crores)

	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
1. Net Deficit	-464	-408.8	-403.2	-525.5	-703.4	-800
2. Financing through						
(a) External assistance including PL 480	+416	+344.1	+449.1	+560	+091	+759
(b) I.M.F. - short term accommodation (net)	-11	+58.4	+11.9	-23.8	-	95.3

Source: RBI Bulletin July 1966 and other issues.

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for analytical purpose we define our exports in terms of those commodities in which India is a major exporter. And the second category is that in which India is a marginal exporter.

In the first category of commodity exports the elasticity of demand was almost inelastic. Hence in case of devaluation export duties could be levied on the export of these commodities. We include in the first category the commodities like tea, jute, manganese ore and cotton textiles etc. The second category of export would be stimulated by devaluation. The export of these commodities would be boosted with this act. Moreover, the pre-devaluation group of economists predicted in Indian case that the devaluation will not prove more inflationary as compared to the system of import tariffs, and export subsidies. They contended that the devaluation would result in more earnings of foreign exchange. The industrial growth would increase as the demand for export is increasing. All these factors would result in rise of the real income. And with a given level of money expenditure if the real income is rising, the price level would definitely tend to fall. Hence inflationary conditions will not prevail in the post-devaluation span.

Since there is no need of 'subsidy' to the export industries, the devaluation has a fiscal advantage. The government will not be faced with the problems of raising financial resources for this purpose.

The devaluation brings an improvement in external payments position to a limited extent. It underlies the basic objective of export promotion and import restriction. The exports are encouraged through devaluation while the imports are discouraged. Under the inflationary conditions devaluation can bring about an expansion of exports and a contraction of imports in the devaluing country, and a shift in the direction of trade in all countries, only if the causes of inflation are removed.

No doubt, the devaluation would provide a better corrective to the price rise and distortion of the past than the remedial measures. Moreover the devaluation will facilitate a better allocation of our resources and strengthen the foreign exchange position on an enduring basis. If the inflation is properly checked in the country, the devaluation would give rise to a stimulus to exports as well as import substitution hence it would lead a country towards self-reliance.

TABLE II(7): India's Foreign Exchange Reserves  
from 1955-56 to 1965-66.

(Rupees in crores)

End of the Year	Foreign Exchange Reserve
1955-56	824.6
1956-57	681.1
1957-58	421.2
1958-59	378.9
1959-60	362.9
1960-61	303.6
1961-62	297.3
1962-63	293.1
1963-64	305.8
1964-65	249.7
1965-Dec.	285.4
1965-66	184

Source: Economic Survey 1965-66 (Government of India)  
Appendix Statistical Table 6.1.

Table II(8): Export Price Index of India, Pakistan, Ceylon and Japan

(1958 = 100)

Year	India	Pakistan	Ceylon	Japan
1950	98	150	103	102
1953	100	104	98	113
1954	102	111	109	103
1955	100	107	114	109
Percentage rise in 1955 over 1950	2	-28.7	10.7	6.9
1956	101	102	106	114
1957	101	109	102	110
1958	100	100	100	100
1959	100	94	104	104
1960	109	114	104	105
Per cent rise in 1960 over 1955	9	6.5	-8.8	-3.7
1961	111	119	95	100
1962	106	115	93	97
1963	106	110	93	100
1964	106	111	93	101
1965	112	130	94	100
Percent rise in 1965 over 1960	2.8	14.0	-9.6	-4.8
Percent rise in 1965 over 1950	14.8	-13.3	-8.7	-2.0

Source: IMF - Supplement to 1965-66 issues of International Financial Statistics.

**TABLE II(9):** Trend in Export Prices of Lending Countries

(1958 = 100)

Country	Export Price Index in		Percentage Rise in (ii) over (i)
	1950 (i)	1965 (ii)	
1. West Germany	76	109	43.4
2. U.K.	77	109	41.6
3. Sweden	73	103	41.1
4. Norway	79	102	29.1
5. U.S.A.	83	106	27.7
6. Canada	80	99	23.8
7. France	84	102	21.4
8. India	98	112	14.3
9. Switzerland	99	113	14.1
10. Japan	102	100	-2.0
11. Venezuela	86	92	7.0
12. Italy	103	94	-8.7
13. Malaysia	123@	106	-13.8
14. Australia	149	113	-24.2
15. Brazil	104	99	-4.8

@ 1952 Index.

Source: Column (i) I.M.F. Supplement to International Financial Statistics 1965-66.

Column (ii) I.M.F. International Financial July 1966.

## Impact of Devaluation on India's Balance of Payments

Previously I have analysed the economic conditions of the country before 1966. The exports of the country were contracting on <sup>hand</sup> while the imports tended to mount up rapidly on the other hand. The foreign exchange reserve position of India was fast deteriorating. In such conditions when the external trade deficit was continuously increasing she had not any other alternative excepting devaluation. The influence of the trade unions forced the employers including government to increase wages of labour. But after devaluation, to what extent India could induce corrections in its balance of payments is the basic purpose of this study.

Many economists have studied the impact of devaluation in Indian context. Some of the economists are worth-mentioning here. S. Hazara<sup>2</sup> compared exports and export prices of 24 main commodities (which constituted 40% of the total exports) in India during 1959-65. Hazara concluded that the evidence is not sufficient to justify that during 1959-65 price mechanism played its due role in export trade. Further Hazara has tried to assess export performance from 1965-66 to 1967-68 in the light of post-devaluation measures taken by Indian government. He finds that out of 23 price elastic commodities ten showed increase in exports during

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2. Hazara, S., "Two years of devaluation", Foreign Trade Review, Oct. Dec. 1968, pp. 319-336.

1965-66 - 1960-67. For some commodities Hazra finds increase in volume of exports but actual export earnings declined. The dollar prices of exports declined in case of almost all commodities. Total export earnings declined much more than decline in real exports. The basic reason of decline in export earnings was due to less production, and stiff competition in the world market.

Regarding export prices of Indian commodities after devaluation he concludes that during June-May (1966-67), do not provide sufficient evidence that they tended to be stabilised in course of the year after devaluation. 1967-68 export prices are varying in nature. Hazra finds that in Indian case, with the estimated values of elasticities, in the growth process there is a built in mechanism to worsen the balance of payments deficit. The export duties levied by the government has eaten up all the profit of the exporters. So the prices of Indian exports have gone up in the world market. He also finds that the Indian exports are not price elastic and the elasticity of imports with respect to commodity production is higher than the elasticity of exports with respect to commodity production. The market for Indian export commodity abroad was also not stable. Finally Hazra suggests the improvements in the marketing techniques and with stable Indian commodities export prices abroad. Moreover, the imports of food grains which have shown a substantial increase should be eliminated by increasing yield and productivity with the help of various innovative measures in



agriculture.

Another attempt for estimates of the price and income elasticities of demand of Indian exports and imports has been carried out by D. Wadhwa.<sup>3</sup> In his mathematical analysis Wadhwa finds that the devaluation is not likely to improve India's balance of payments since prices are rising faster in India than her trading partners abroad.

C.C. DaCosta<sup>4</sup> of Bombay University has also estimated the elasticities of demand both with respect of price and income for Indian exporters for a period covering 1953 to 1962. According to his analysis the low income elasticity of demand is due to agricultural nature of our exports. As income rises, consumers shift to higher standard and better food. This study does not include less developed countries for which income elasticity of demand may be high. DaCosta finds that the prices for the products of developing countries are most susceptible to the world market influences. Hence elasticity of substitution should be taken into consideration. He finds that the elasticity of substitution are fairly high for key Indian exports. DaCosta concludes that the sum of elasticities of demand is below unity, hence

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3. Wadhwa, "Elasticity of demand for Indias exports and imports and the question of the devaluation of Indian Rupee", *Foreign Trade Review - Annual Number, Jan-March 1974*, pp. 264-377.
  4. DaCosta, C.C., "Elasticities of demand for Indian Exports - An empirical investigation", *Indian Economic Journal*, Vol. XIII, No. 1, pp. 41-45.

devaluation would be inadequate. Further there is a perfectly inelastic demand curve for imports. DaCosta's estimates of elasticities has a downward bias. He does not consider export elasticities of new manufactures and invisibles which has quite high elasticity. Moreover, trend available is not included in the study which raises the magnitude of elasticity on the basis that long run elasticities are higher than short run.

The authors like Hazara, DaCosta and Wadhava have adopted the elasticity approach for their analysis. Some economists like V.C. Shah, have worked out an absorption approach. A few economists have carried out their studies on general equilibrium approach, also like Kanta Marwah. V.C. Shah<sup>5</sup> in his analysis infers that the main burden of improving external payments situation would fall on exports rather than imports. India is the exporter of agricultural products and the overall demand elasticity for these exports is not high. Devaluation can boose<sup>sh</sup> India's exports which ultimately would induce corrections in its external payments position. Shah's findings are confined to a period of 1962 to 1967. According to his study the findings reveal that the year to year changes in absorption exceeded annual changes in GNP except in 1966-67. In pre-devaluation years the absorption was higher than GNP. The export industry of

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5. Shah, V.C., "Devaluation - The Indian case", Indian Economic Journal, July-Sept. 1970, pp. 117-138.

India are monopolistic or oligopolistic in nature and hence the home market had favourable conditions for short run diversion of output from domestic to foreign market (after inclusion of export incentives, subsidies etc.). According to Shah the devaluation has taken place at a wrong time. Indian exports are mostly agriculture oriented (70% of the total exports accounted for agricultural products) and 1965's drought had tremendously reduced the output of agricultural exportables. From the point of view of generating exportable surplus of agricultural and <sup>st</sup> atriculture based commodities by reducing inventories and by diversion from domestic to world market, June 1966 was the most inappropriate time for the devaluation decisions of the government. The government's liberal credit policy resulted in cost-push inflation as a consequence of 1965's severe draught. As far as the long run exports are considered in case of non-traditional exports - they can play a dominant role because of liberal import policy and liberal industrial licencing system. Finally Shah concludes that devaluation with subsidy and tariffs can work effectively to bring desired corrections in the external balance position.

Kanta Marwah studied the impact of 1966 devaluation quantitatively.<sup>6</sup> According to Marwah's study the

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<sup>6</sup>Marwah, K., 'Measurement of devaluation: Indian Case Study, The Econometric Annual of the Indian Economic Journal, Vol. XVII, No. 6, pp. 734-738.

change in terms of trade and devaluation-induced income and price effects the findings reveals that during 1966 and 1967 the real value of Indian imports declined by 15.1% and 24.8% respectively. If measured in the terms of real value export earnings hardly changed in 1966 and in fact declined by 2.2% in 1967. (At constant prices). But if it is measured at current prices the 36.5% devaluation of Rupee in June 1966 resulted in an increase in total Rupee payments for imported goods during 1966 and 1967 which increased by 8.2% and 13.8% respectively. The total Rupee earnings of total exports during 1966 and 1967 registered an advance of 14% and 6.7% respectively. In terms of U.S. Dollars at constant price imports and exports showed a decline. But the relative decline in imports is higher than decline in exports. So it resulted in improvement in India's external payments position. The deficit on merchandise decreased by 37.1% and 20.8% in 1966 and 1967 respectively at U.S. Dollars current price.

According to this study the devaluation of June 1966 have proved responsible for reducing the trade deficit half of the size what would have occurred in its absence.

At this stage after critical analysis of various economists it becomes essential to present a micro analysis of export import trend in the post devaluation era. To what extent devaluation could prove effective it all

depends upon the improvements in exportables. To analyse the effectiveness of devaluation we have to see whether the exports could offset the deficit caused by imports or not. Another important constraint is 'price'. If the price is not kept in reasonable limits the devaluation does not prove to be effective. Secondly what was the policy of the government in the context of traditional and non-traditional exports. Moreover the home elasticity of supply of exportables could be improved upon or not. Hence the follow up measures are also important to be considered. For the purpose any follow up measure has to take into consideration the factors which influence the aggregate demand in the economy as a whole.

So to find out the impact of devaluation I have taken export import figures of the post devaluation era. And then a comparison can be carried out and on the basis of this comparison we can conclude the extent of improvement in our external payments position, if at all is there.

For an effective result of devaluation the exports should increase to bridge up a gap of deficit in the balance of payments. Apart from substantial increase in export earnings the imports should show a downward trend. If the export earnings are increasing it would result in foreign exchange surplus and finally it would help in eliminating the deficit of external

payments.

### Impact of Devaluation on Exports

To measure the effectiveness of the devaluation I have analysed the exports of India in two major categories viz. traditional exports and non-traditional exports. The traditional exports constitutes the explorables in cotton yarn and cotton manufactures, jute yarn and jute manufactures, coffee, tea, oil-cakes, cashew kernels, hides, skins, leather and leather goods and its manufactures, vegetables etc. while the non-traditional exports are iron ore, engineering goods, iron and steel, chemicals, sugar, manganese ore and fish and fish preparations etc. We have analysed the impact of devaluation separately on these two broad categories of exportables. The foreign demand for traditional exports is inelastic while the foreign demand of non-traditional exports is elastic. Therefore, even if the traditional exports are given export incentives the export earnings cannot be increased as the foreign demand for them is inelastic. But if the non-traditional exports are given incentives it will definitely induce a multiplier effect as the foreign demand for them is elastic. So the non-traditional export promotion need a careful study for formulating an effective policy which is mission oriented i.e. framed with an objective to boost non-traditional exports of the country. For our purpose in the beginning I have shown the impact of

devaluation of traditional and non-traditional exports followed by the governmental policy to improve the balance of payments position.

Since 1964-65 we find a continuous decline in exports of jute, which is one of the most important traditional exports of India, in real and monetary terms. This trend has been recorded upto 1970-71. As the foreign demand of traditional exports is inelastic, the export earnings can only increase if there is inflationary tendencies in the world market or the exports are increased tremendously. The low exportable surplus, strong competition (especially with Pakistan), slow growth of demand were the reasons accounted for lesser earnings in jute export. Moreover the synthetic substitution of jute had taken place on the one hand while on the other hand the jute's cost of production mounted up. So the devaluation could not produce desired results in case of jute. The exports of tea has also declined in the post devaluation era. The reasons that accounted for export decline of tea weree excess supply over demand, strong competition with Ceylon and East Africa and as a consequence of higher supply a sharp fall was witnessed in the export earning of tea. The export of tea was recorded 199 million Kgs in 1970-71 against 212 million Kgs in 1964-65. Moreover the export earnings of vegetable oil also declined during this period. Because of the low production of oil seeds, the

export earnings declined sharply and were recorded at the lowest level in 1969-70. The exports of oil cakes also declined upto 1969-70 (55 million against 84 million in 1965-65) and were boosted in 1970-71, due to price hike in oil cakes and tremendous increase in exportable surplus. The exports of coffee and pepper increased while tobacco declined. Sugar exports increased in 1970 while before it had a decreasing trend.

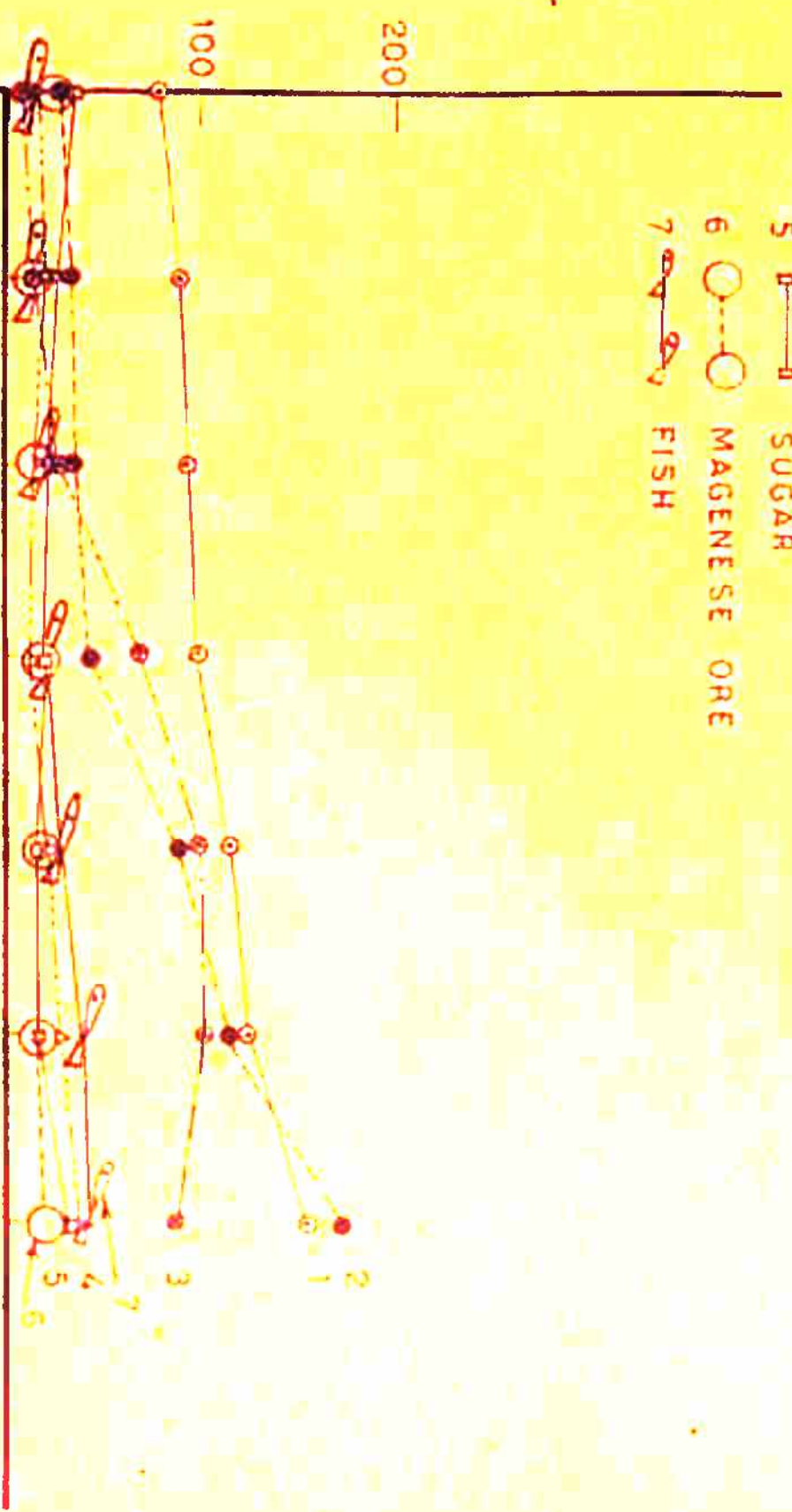
The exports of cotton yarn and cotton fabrics could not earn more foreign exchange during 1965-67. But after 1967, modest improvement was witnessed in export earnings of cotton. The export earnings from cashew kernels declined despite the price rise, because of less exports and strong competition with East Africa and Brazil. So in some cases export earnings increased while in other commodities it had a fluctuating nature. As previously stated the foreign demand of traditional exports is inelastic, hence we should concentrate our analysis more on non-traditional exports of which demand is elastic in nature.

The Table II(10) clearly speaks the variations of Indian exports from 1964 to 1971.

The iron ore export earnings increased during this period due to increased demand of iron ore from steel industry in the world market. Moreover during this period several iron ore mines were searched out in



- 1 ○ ○ IRON ORE
- 2 ● ● ENGINEERING GOODS
- 3 ○ ● IRON AND STEEL
- 4 ▲ ▲ CHEMICALS
- 5 □ □ SUGAR
- 6 ○ ○ MAGENESE ORE
- 7 ○ ● FISH



TRADITIONAL

- 1 ○ ○ JUTE YARN
- 2 ▲ ▲ COTTON YARN
- 3 ● ● TEA
- 4 ○ ○ COFFEE
- 5 ○ ○ HIDES
- 6 ▲ ▲ VEGETABLE OILS
- 7 ▲ ▲ HIDES
- 8 × × VEGETABLE OILS

TABLE II(10): India's Principal Exports

(In U.S. Dollars million)

Commodity	1964-65	1965-66	1967-67	1967-68	1968-69	1969-70	1970-71
<u>Traditional Exports</u>							
(1) Jute yarn and manufacture	354	384	333	312	291	275	254
(2) Cotton yarn and manufacture	157	147	105	109	113	117	126
(3) Tea	262	241	211	240	209	166	198
(4) Coffee	28	27	21	24	24	26	33
(5) Oil cakes	84	73	67	61	66	55	74
(6) Cashew kernels	61	58	61	57	61	76	70
(7) Hides, skins, leather goods including manufacture	85	91	117	94	80	132	116
(8) Vegetable oils	22	14	9	10	21	12	14
<u>Non-Traditional Exports</u>							
(1) Iron ore	79	89	94	100	110	126	156
(2) Engineering goods	30	35	31	44	90	119	174
(3) Iron and steel	9	16	32	69	99	103	90
(4) Chemicals	15	20	14	16	23	30	39
(5) Sugar	38	22	21	21	14	12	37
(6) Manganese ore	28	23	19	15	18	15	19
(7) Fish and fish preparations	14	14	23	24	30	42	42
Total (including others)	1714	1692	1542	1598	1810	1884	2047

Source. (1) Economic Survey 1967-68, (11) Economic Survey 1972-73.

the country. The exports of iron ore became nearly double in 1971 against 1964-65.

Export of hides and skins, leather and leather products also rose during this period. The exports of manganese ore declined due to low prices in the world market. Though export earnings of manganese ore were higher in 1970-71 against 1969-70. But in comparison to 1964-65 the export earnings in 1970-71 were of lower magnitude.

#### Indian Non-traditional Exports in the Post-devaluation Era

The foreign demand for non-traditional exports is elastic in nature, hence devaluation can substantially increase the export earnings through non-traditional exports. The important commodities that we have included in non-traditional exports are iron ore, engineering goods, iron and steel, chemicals, sugar, manganese ore and fish and fish preparations etc.

The non-traditional export of iron and steel showed a substantial improvement in export market. During the five year plans India paid special attention for the development of its heavy steel industry. The Rourkela, Bhilai, Durgapur and Bokaro's steel plants had been working efficiently to increase its production of steel. The foreign demand of Indian steel was increasing in the countries of East Africa, South East Asia and West

Asia. The political factors were also responsible for boosting India's export of steel. The Suez Canal was closed during this period hence the cost of freight of European steel tremendously increased in the world market. Therefore India had a strong competitive stand in the world-market. So we find an increasing trend in case of export earnings from steel. The export earnings of engineering goods substantially increased between 1964-65 and 1970-71. In the year 1970-71 the export earnings of engineering goods accounted for \$ 173.9 million against \$ 30 million of 1964-65. The demand of Indian engineering goods was continuously increasing in the world market. The closure of Suez Canal was also responsible for a better competitive stand in India's favour. The demand for mild steel pipes, railway wagons, coaches, electric wires and cables, bicycles, diesel engines, automobile and automobile's parts substantially increased in the world market. Hence the export promotion in these industrial could manage to earn foreign reserves for India in meeting the balance of payments deficit.

The export earnings from fish and fish preparations substantially increased during 1964-70. For the first time India witnessed a situation in which export earnings of the non-traditional exports was playing a dominant role.

Trade Policy since Devaluation of 1966

The current revival of interest in devaluation among policy makers makes this an appropriate time for reconsidering our conclusions about the effect of exchange rate changes. Crucial to the analysis is the endogeneity of domestic prices, for a devaluation which leads to a rise in domestic prices is really a net devaluation of smaller magnitude. In fact, if domestic prices rise by the same percentage as the devaluation, then the relative prices of imports and exports are unchanged, leaving the trade balance unimproved. Hence it is essential to give a serious thought in formulating a policy in context of traditional export and non-tradition export.

In context of traditional exports the Indian government levied export duty on these exportables to compensate for the loss of foreign exchange as a consequence of devaluation. The competitiveness of traditional exports in the international market was maintained by reducing export duties gradually as per market conditions.

As far as the non-traditional exports are considered they had been enjoying a lot of concessions before the devaluation. These concessions were in the form of customs or excise duty drawbacks, railway freight concessions, income tax exemption, export credit facility, compensatory support, import entitlements etc.

The domestic prices of engineering goods were higher than international prices between a range of 40 to 60% and in some cases the international prices were 100% higher than the domestic prices of engineering goods. In the pre-devaluation era cash assistance for export was provided at rates from 10 to 20% of the f.o.b. value of exports to iron and steel, engineering goods and chemical goods, and certain other products. This cash assistance was granted to more exportable goods at a higher rates as per the performance of the export industries.

For the export promotion government established some institutions like Trade and Development Authority, Project and Equipment Corporation. The supply of raw materials to the public sector industries was made available and the public sector undertakings were given more weightage for their export stimulus. The tax concessions were given to export industries to boost their exportables. The income on export of know-how was made income tax free. The export market development allowance was granted to Indian export industries. Under this concession the Indian tax payers were allowed a deduction of one and a half times of expenditure incurred for developing export markets from their income for tax assessment. Moreover, blanket foreign release permits were given to recognised export houses. The minimum turnout limit was reduced to Rs.5 lakhs in case

of other goods. This concession was mainly given for advertisements, trade fares, business visits and market studies etc.

The export credit facilities were given to the export industries. In August 1967, the banks introduced a preferential rate of discount of  $4\frac{1}{2}\%$  for the refinancing of pre-shipment credit to exporters of engineering goods. In short the export credits were provided for the promotion of non-traditional export. In 1966, the import replenishment scheme was introduced by which the registered exporters could obtain against the export of certain specified items, replenishment, from the most preferred sources, of imported materials. In certain cases the exporters were allowed by the government to import banned items for quality control of their product and export promotion. The basic objective of the trade policy during this period was to give a stimulus to the exports which may in due course of time play a dominant role in India's foreign trade. Keeping the objective of export promotion the government granted many concessions to the exporters which worked as 'incentive' for them.

#### Imports in the Post-devaluation Era

Now the next important constraint of the external payments is 'imports'. I have critically analysed the impact of devaluation on India's imports.

A comparative study has been carried out in terms of pre-devaluation and post-devaluation span. Our economy was import hungry in the beginning - the devaluation resulted in costlier imports to Indian residents, hence the objective of analysis here is to examine the trend in imports after the devaluation.

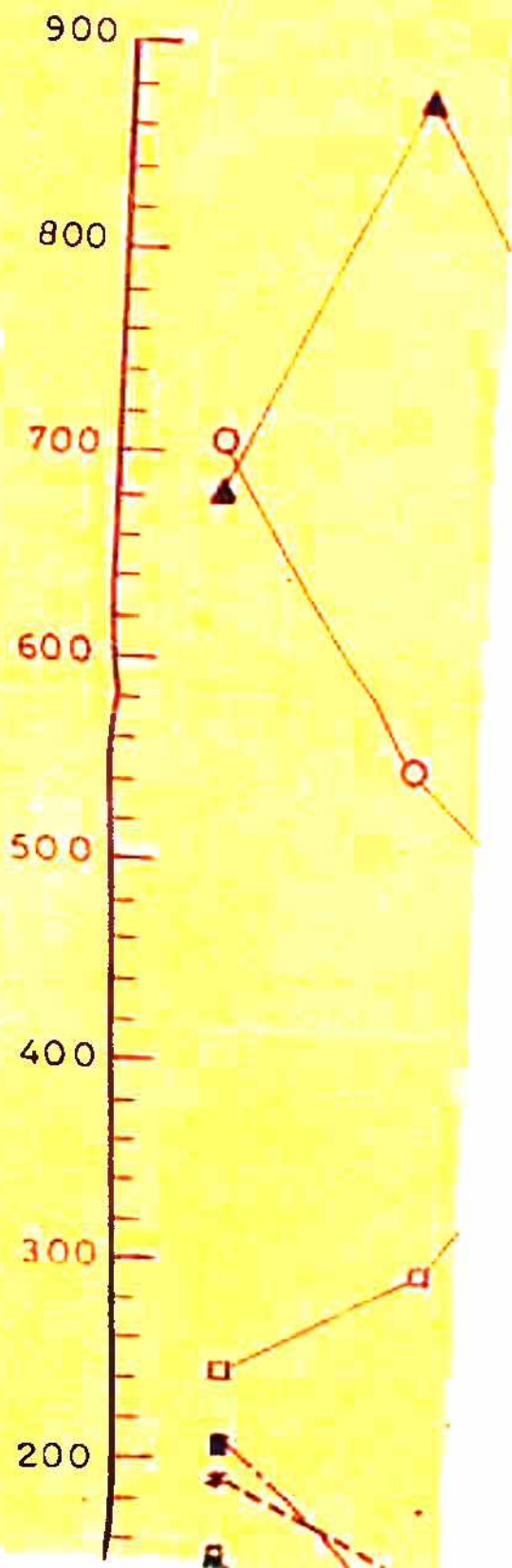
In the post-devaluation era i.e. from 1966 to 1970, the imports substantially declined with an exception of 1970-71 when the increase in imports was recorded at a rate of 3.3%. The devaluation caused price effects which in result immediately effected the imports, hence a 6.3% decline in imports was recorded immediately after the devaluation. As a matter of fact Indian economy is agriculture oriented, and the agriculture mostly depended on monsoon. In 1965-66 and 1966-67 India was badly hit by severe drought conditions hence she had to increase her food imports by 28.3% during 1966-67 against the imports of 1965-66. After devaluation Indian government imposed import restrictions. Apart from it the prices of raw materials and intermediate goods were having a rising trend. Hence immediately after the devaluation Indian economy recorded a declining trend in the import of raw materials and intermediate products like raw cotton, raw jute, petroleum and petroleum products, unprocessed cashew nuts, raw wool, non-ferrous metals etc. The import restrictions and import quotas were more effectively imposed after the devaluation. Due to poor harvest of



cotton the imports of raw cotton increased in 1966-67. In the same way due to low production raw jute its imports increased in 1966-67, but in the later part it had noticed a sharp declining trend. Moreover, the basic reason of increase in imports of petroleum and petroleum products were the accelerated refining capacity of Indian refineries. The government wanted to develop its indigenous petroleum industry. The import of iron and steel also showed a declining trend upto 1970-71. The export of cashew kernels were sufficiently increased after devaluation, hence the import of unprocessed cashew kernels had also recorded an increasing trend. Cashew nuts are also imported unprocessed for the export purpose. As previously stated the harvest of agriculture products was poor after the devaluation hence in some years India had to import more of the agriculture products. Imports of vegetable oil was also increased in the post-devaluation span. The imports of machinery and transport equipment also declined. The government stressed the need for import substitution in such cases. So the home market was producing sufficient import substitutes of such goods.

Share of imports in the total estimated supply - has continuously declined in almost every commodity except Newsprint and manmade fibre. The share of newsprint imports to total supplies increased from 73.9% in 1965-66 to 79.6% in 1970-71 while in case of fibre the share of its imports to total estimated supply increased

IN . U . S . MILLION DOLLERS



- 3 RAW JUTE
- 4 CASHEW NUTS
- 5 PETROLEIUM
- 6 FERTILIZERS
- 7 RON AND STEEL
- 8 NON FERROUS METALS
- 9 RAW WOOL
- 10 ANIMAL AND VEGITABLE OILES
- 11 PAPER
- 12 Machinery ARY AND TRANSPORT
- A NON ELECTRICAL
- B ELECTRICAL
- C TRANSPORT

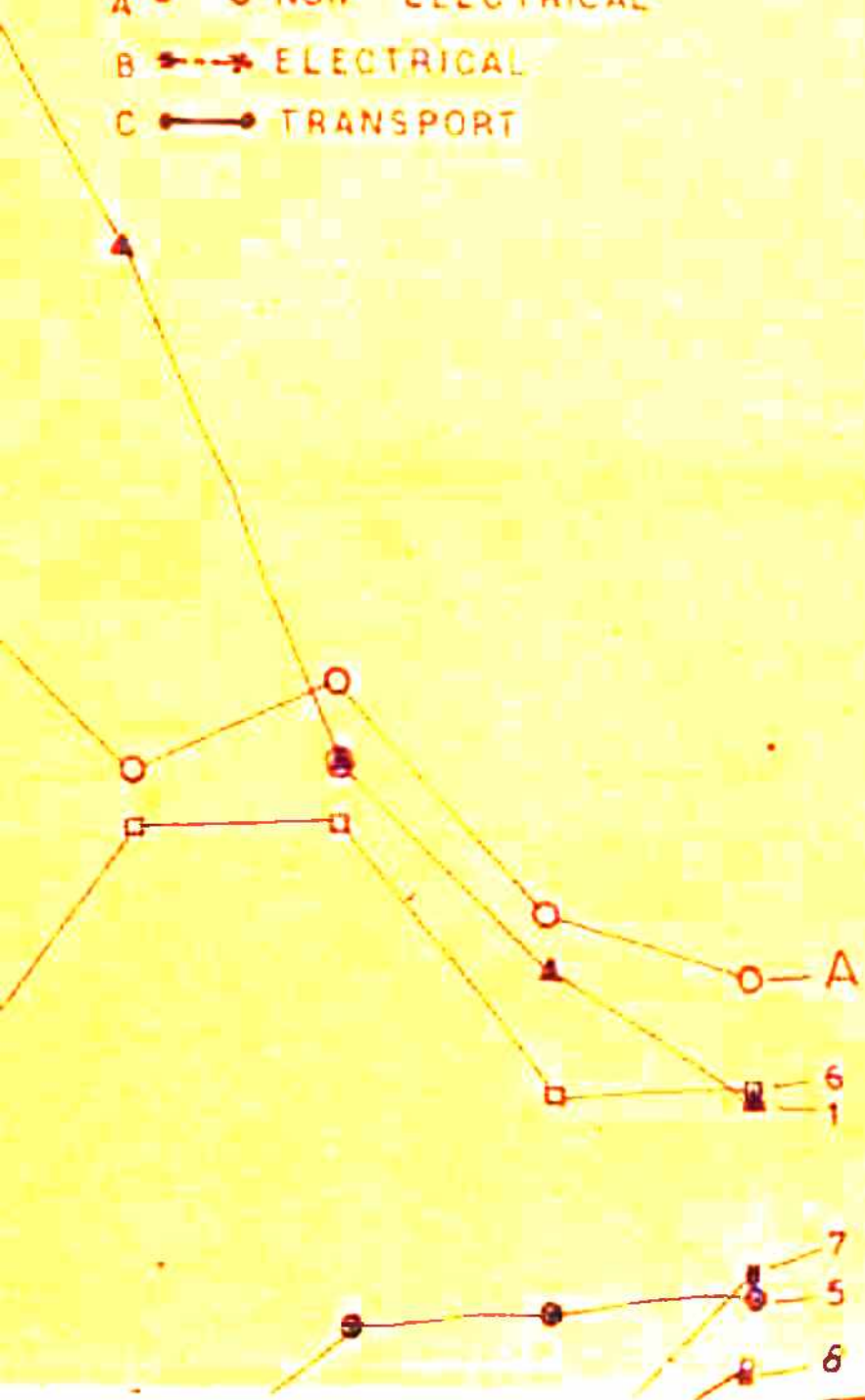


TABLE II (11): India's Principal Import - 1965-66

(In U.S. million dollars)

Commodity	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71
1. Cereals and cereal preparations	676	868	691	449	348	284
2. Raw cotton	97	75	111	120	110	131
3. Raw jute	12	27	2	12	1	0.1
4. Cashew nuts (unprocessed)	32	31	33	42	37	39
5. Fertilizers and chemicals	245	295	416	418	266	289
6. Petroleum products and lubricants	143	84	100	176	184	191
7. Iron and steel	206	130	142	115	107	196
8. Non-ferrous metals	144	114	118	119	99	159
9. Raw wool	11	16	16	15	22	20
10. Animal and vegetable oils and fats	32	20	46	26	39	51
11. Paper and paper boards and manufactures	26	29	24	24	32	33
12. Machinery and transport equipment	1033	768	671	685	528	527
(a) Non-electrical machinery	701	544	449	488	374	344
(b) Electrical machinery	184	141	114	109	86	94
(c) Transport equipment	148	83	108	88	68	89
Total (including others)	2958	2770	7676	2544	2109	2179

Source: Economic Survey 1967-68, 1972-73.

from 6% to 10%. Soda Ash, Caustic Soda, Bleaching Powder's import share in the total supply was almost negligible. The share of imports of iron and steel, paper and paper boards total supply declined moderately. Indian government was very much aware of scientific progress in the country. The advancement of technology and textile machines (either through imports or through indigenous research) could result into substantial decline of imports of textile machinery, machine tools, aluminium and ammonium sulphate etc. Hence we find in the above analysis that the imports which happened to create a burden on India's external payments position, declined during this period.

As far as the import policy during the post-devaluation is considered, it had two basic objectives. Firstly, it ensured the requirements of imports for priority purposes and secondly, to stress more emphasis on import substitution. As a result of indigenous industrial growth some imports were further declined as the country was in a position to produce its own product. So the import policy of the government was formulated with the objective of import substitution. It not only developed indigenous industries but at the same time strengthened the foreign reserves position of the country.

## Conclusion

Economists have different opinions about the effectiveness of Rupee devaluation. Some Economists are of the opinion that 'the devaluation of Rupee' in June 1966 was ill-timed. In 1965 India had to face severe drought conditions. And as the Indian exports were then agriculture-oriented - the devaluation could not work much effectively. Apart from it, the foreign demand for our traditional exports is inelastic, hence the devaluation will not alter much changes in external payments position. According to S. Hazara's analysis the actual export earnings declined in the post-devaluation era.

It is needless to mention that the roots of Indian trade in the world market were not so deep. India had then started its developmental plans for which a huge amount of capital was required. The deficit financing was also used for credit creation. Apart from it India had to face two wars in a short period of time. The foreign exchange position was also fast deteriorating. Hence in such circumstances when the imports were exceeding exports, the economy was at a stagnant stage. So some stimulus was required to boost the exports of the country. If we analyse the post devaluation period in Indian context, the effective governmental policy with various concessions to export industries resulted in favourable export promotion. The best part of the trade was substantial increment in the non-traditional exports

and import substitution of consumer goods by capital goods, and of imported consumer goods by home produced consumer goods.

In my analysis I have tried to analyse the effects of devaluation on output and balance of trade. I have done so by extending aggregate supply and demand analysis to the open economy. This general framework is useful for the study of a wide variety of questions arising in international trade, particularly because it stresses the endogeneity of the domestic price level, a variable of crucial importance in determining the trade balance.

Another aspect of study for which I could not devote much attention due to the scarcity of time is the relationship between terms of trade and the level of output which is invariant to the rate of exchange. When the supply of labour is positively related to the real wage and the labour market, there exists a unique relation between the terms of trade and the level of output which is invariant to the rate of exchange. This is due to the asymmetric effect which foreign prices have on the demand for and supply of labour. As a result successful devaluation reduces the terms of trade, output, and employment. In Indian context the year 1967-68 witnessed the most favourable terms of trade when the index stood at the level of 124 (1958=100). Between

1960-61 to 1966-67, the terms of trade numbers have fluctuated between 108 and 115. It is also significant that the favourable terms of trade movement can be attributed to rising export prices accompanied by declining import prices.

Normally, it is believed that the higher export prices of India are the result of high domestic cost brought about by the high domestic inflationary pressure. This belief is strengthened by the experience of many industrialized countries where export prices reflect their domestic cost of production. As a matter of fact the tendency of export unit value index and domestic price index in these countries moving not only in the same direction but also by and large in the same magnitude had been very strong. It is true that there has been a continuous inflationary pressure on the economy as shown previously, wherein the domestic wholesale price index numbers of India have been higher and steadily increasing compared to the wholesale price index numbers of various countries. But it is doubtful whether this rise also determined the course and magnitude of India's export prices. For a number of export products the international price is given and cannot be altered in response to rising cost of production, because India's share in the total world export trade is very small i.e. less than 1 per cent. The number of commodities in which she has to adhere to international prices include some important products as coffee, cotton, textiles and engineering



goods. The introduction of various export incentives designed to assist the exporter to enable him to overcome the inhibiting effect of higher domestic costs also provides evidence to the limited effect of higher cost of production on export prices of a number of products.

The rising domestic cost in India could be partly or wholly passed on to foreign buyers when India's share in the world exports of a particular commodity is large enough to enable her to influence the world price. OPEC share in total world oil supply is substantially higher and finally OPEC members could influence the oil prices. Comparatively, although India's share in the total world's supply is not so high in any particular commodity she still enjoys such a position in case of three major exports viz. tea, jute manufactures and mica. In tea, India's share in the world exports is 40%. To some extent, the high cost of production has influenced the export prices of these commodities. Yet the extent to which the high cost can be transferred to foreign buyers is limited by the oligopolistic character of the world market in these products. Ceylon's export of tea, Pakistan's export of jute textiles and Brazil's competition in mica had determined the extent to which India could transfer her high domestic costs to foreign buyers without risking its share in the world exports. Further, the competition from close substitutes to these products also have limited India's ability to transfer the high cost to foreign buyers.

As stated, the result of successful devaluation reduces the terms of trade, output and employment under Indian conditions. Furthermore, any policy which reduces output, such as reduction in the nominal money supply, likewise reduces the terms of trade and improves the trade balance.

In the classical model of Joanne Salop<sup>7</sup>, devaluation is not alone in its ability to improve the balance of trade without raising unemployment. However, when downward rigidity of money wages is introduced, the rate of the exchange rate as a policy instrument increases. If initially there is unemployment because of wage rigidity, devaluation raises prices and increases the demand for labour, just as other expansionary policies do. But the other policies simultaneously increase the terms of trade and improves the balance of trade. Moreover, although contractionary monetary policy improves the balance of trade, it simultaneously increases the level of unemployment.

The effectiveness and its importance as a policy instrument rests on its unique ability to reduce the relative price of domestic goods and improve trade balance at the same time.

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7. Salop, Joanne, 'Devaluation and the Balance of Trade under Flexible Wages', in Trade Stability and Macro Economics, p. 151.

Further for the desired results in correcting balance of trade the stability of Indian exports commodity market is also essential. But in the post devaluation era we do not witness the stability in the Indian export market abroad. Improvement in marketing techniques was also required. Another highlight of rupee devaluation was the faster rate of decline in imports in comparison to exports increase. The importance of import substitution was given much emphasis. And moreover when the production of commodities increased, the flow of export commodities has been diverted from external markets to the home market. The biggest drawback on Indian scene during the period was tremendous increase in imports of food grains. The country had faced serious droughts in 1965-66, hence despite devaluation had to import food grains in large quantities to feed its masses. So as Indian economy is agriculture-oriented, we should try to gain self-sufficiency in agricultural production. The country's agricultural production should not only meet the internal demand but at the same time she must have 'surplus' to export abroad and to keep stocks at home for lean years.

The government's liberal credit policy resulted into cost push inflation. As a measure of effective devaluation, the government must control prices, otherwise the devaluation of the currency will not generate desired improvements in the trade balance.

In the developmental phase of an economy, there is shortage of internal sources so the exports are likely to grow. So the country must have adequate export earnings to finance these imports. Devaluation changes the prices of exportables with the competitors. But alone devaluation cannot lead to boost export earnings unless the necessary follow up measures are not adopted by the government.

The import important follow up measure is 'price stability'. As already mentioned the liberal credit policy of the government with other factors, resulted in price hike. The Indian government did not take strict measures to control the prices, which have resulted in higher cost of production. So after devaluation the cost of production must be reduced in order to stand in the competitive market abroad. So the export incentives must be provided to 'infant exports'. Such assistance need only be temporary, as the primary objective should be to reduce cost. Indian government granted many concessions to export industries for export promotion. And to some extent it yielded favourable results. The basic reason for higher cost of production in India is lower productivity of the factors of production. So the management efficiency should be improved to increase the productivity. The Indian government did not pay much attention to pricing policy during this period. The public utility works were carried out by the government, hence the governmental

expenditure was greater than receipts. Deficit financing happened to be considered as a popular source. In 1965 - Indo-Pakistan war took place. So all these factors combined together resulted in price hike. It is clear from the analysis that if the 'price line' is not kept in control devaluation will not yield desired results.

The government should encourage non-traditional exports. In order to minimise higher cost of inputs, it would be appropriate to supply to export industries the basic raw materials at international prices. The financial burden is not likely to be too big and will be well within the means of the country. In case of some commodities, the government should adopt dual pricing policy. The dual pricing policy can be followed in case of steel. Quality control must be introduced by the government. In the modern context the 'branded products' have greater demand in the international market. Hence India should gain 'goodwill' by exporting quality goods in the international market.

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CHAPTER III

INFLOW OF FOREIGN AID  
AND ECONOMIC GROWTH

The foreign capital plays very important role in the development of a developing country like India. After independence India badly required the foreign assistance in various sectors of the economy.

In the present chapter I have critically analysed the various sources of foreign aid to India, their terms and conditions of the loan, and how it (foreign aid) has accelerated our economic growth. Further, the 'time and circumstances' have also played a vital role in allocation of the foreign aid to India so 'the political strings' are also important to study.

To start with, the concept of the foreign aid should be given first priority to understand the subject deeply.

The foreign aid or external assistance means the explicit transfer of resources between countries on a concessional basis. This concept first emerged in 1941, during the 2nd world war period in the form of 'Lend Lease' arrangement between the United States and its allies. It evolved on a regional pattern in the shape of grants made by U.S.A. under Marshall plan for the reconstruction of Europe and later it developed its international character.

The motive of the foreign aid is a combination of social, political and economic factors. The origin of the concept of foreign aid can be regarded as the aforesaid three factors. Regarding political factor, a large number of erstwhile Asian and African colonies and dependencies had attained their independence. These states rampaged by long periods of poverty, hunger and lack of even basic civil amenities had a hypersensitivity to their economic backwardness which was further whetted by their intensely nationalistic outlook. Moreover, the examples of American industrialisation and independence, Japan's rapid industrial growth and Russia's bold economic experiments, these states were imbued with a strong determination and will to lift their economy from the morass of poverty and free it from external dependence. This explosive mixture of hope and frustration was increasingly propogated by international forum of U.N.O. where the numerical strength of such underdeveloped countries kept on increasing. Though poor and backward these newly independent states together constituted too viable a political force to be ignored in the postwar world torn between the conflicting ideologies of totalitarianism and democratic capitalism.

The safeguarding of the American national security through restricting the penetration of Soviet influence has been acknowledged <sup>as the</sup> political motive behind the U.S. foreign aid. The two powerful nations U.S.A. and U.S.S.R.



are trying to take these newly independent countries 146  
into the purview of their intensity. The cold war also proved as an important political factor in the development of the concept of foreign aid.

Now if we take economic factors into consideration, the financial institutions acting as the major purveyors of international credit has disappeared and the bottom fallen out of international trade after the depression of 1929. So the developed countries objective was to boost up the slackened demand of their product in the developing countries and at the same time they wanted to guide the investment of the 3rd world countries as per their interests. So the developed countries undertook the foreign aid with the objectives guiding the investment in the recipient countries along such lines as served the interests of their own economy.

The third factor of the origin of foreign aid social or moral aspect. In this context this is the moral duty of rich and developed countries to help the poor or developing countries. The objective of granting foreign aid on humanitarian considerations has been thoroughly contended and raised controversy.

To conclude the objectives of foreign aid it may be said that they are provided by a compound of politico economic interests tempered with an enlightened and constructive outlook and global strategic considerations in a troubled world. of bilateral aid by adopting the

consortium technique and thus combining the advantage of both bilateralism and multilateralism.

In the present chapter I have analysed the different types of aid which India has received from various sources through various channels and its impact on economic growth of the nation since 1960.

### Importance of Foreign Aid in Development

For a developing country it is very essential to develop its industrial sector where a vast majority of the masses may be absorbed. The technological advancement and rapid industrialization plays key role in the modern context of the development. The developmental programme, if financed by taxation and by domestic savings, imposes a strain on the balance of payments. It may be concluded that a still greater strain is imposed by a programme envisaging creation of gainful jobs for absorbing a vast unemployed manpower, mainly through industrial expansion which in turn requires a huge capital investment. In a developing country like India, there is a lack of capital. For developmental plans to be non-inflationary it is essential to get foreign aid partly for financing the capital goods (for developmental projects) and partly for import of consumer goods.

The capital industries yield direct returns to the economy, greatly multiply the financial resources, spur the expansion and diversify and increase its range,

and thus exercise a catalytic effect on national productivity. Such industries are capital intensive and foreign resources intensive - which cannot be provided by developing economy due to its inadequate resources and low propensity to save. (As the national income is very low, and the bulk of the income received is consumed by the masses.) In the modern age of rapid technological advancement the establishment and promotion of producers' industries at an increasing pace is vital for lifting the economy from static stage and launching it on the self-sustaining growth process.

So the foreign capital assumes importance in the context of growing need for capital for development purposes, and for correcting the balance of payments disequilibria caused by increasingly larger imports in developing countries.

Taking historical perspective, it is clear that there is hardly any instance of capitalist country which could develop at a rapid speed with the amount of capital accumulated within it and that a good deal of the earlier industrial development, practically in all of them, has been due to the inflow of foreign capital. The economic historians have demonstrated that the process of industrial revolution in England was accelerated by some of the immigrants who brought with them capital and technology. Once the U.K. was fairly developed, the outflow of a very large amount of capital continued for about fifty years,

beginning in 1925, to different countries in which European countries, especially France and Germany, along with U.K. exported capital to the United States for its economic development<sup>1</sup>.

Sometimes the borrowing from abroad increased so much that it was not possible for the borrower to service the past loans from its own surplus so that fresh loans were sought for servicing of loans and for repayment of the past loans.

During 1874 to 1879, U.S.A. was borrowing to such an extent that its own trade surplus was not sufficient enough to service the debt and it became necessary to allocate for this purpose a part of the foreign exchange available out of the new loans. A similar situation was faced by Canada during the period of its industrial growth between 1900 and 1913 and from 1920 to 1929 when Canada had to service the past loans by incurring fresh loans<sup>2</sup>.

Barabara Ward says the growth of cereals in North America and Russia, timber exports from Sweden, British investment in Czarist Russia, British capital in Australia since 1945 - are all examples of crucial economic advantage gained from foreign resources<sup>3</sup>.

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1. Khan, Mohd. Sabbir, "India's Economic Development and International Relations", Asia Publishing House, Bombay, 1961, p. 55.
  2. Ibid., p. 55.
  3. Ward, Barabara, "India and the West", Publication Division, 1965.

It is clear that Soviet Russia was in a position to bring about rapid economic development without any inflow of foreign capital, even so there had been a sustained inflow of foreign capital between 1881 and 1913, specially from France which had established the base on which the industrial revolution could stand. Moreover, the ruthlessly low level of living of the masses which was enforced by the Central Planning Authority cannot easily be practised in countries with liberal social and institutional conditions. As post-second world war impact of foreign resources on the home economy, Marshall plan gets the credit for the reconstruction of war torn economies of Europe; Greece, Israel, Korea, and Taiwan which are now virtually economically independent, owe their spectacular rapid economic growth to foreign resources; Australia, South Africa and Canada have attained a higher degree of economic maturity through external indebtedness which is still not eliminated, nor even considerably reduced. It is interesting to quote from the report of the Royal Commission on Canada's Economic prospects<sup>4</sup>:

"The growth of Canada at any stage in its history would have been much slower without large supplies of capital from foreign countries, principally from the U.K. and the U.S.A. All our periods of great economic activity

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4. Conan, A.R., "Capital, Imports into Sterling Countries", Macmillan, 1960.

and expansion in peace time have been characterised by heavy inflows of capital from abroad; in periods of economic stagnation, we have been importing very little capital".

Indonesia and Burma are the examples of economies which stagnated because of their reluctance to avail of foreign resources. It is thus very clear that national effort may not be an ideal substitute for foreign resources in a developing economy geared to the object of bringing about a rapid economic growth.

#### The Role of External Resources

Historically, if we analyse the role of external assistance in the national development, the various countries of the globe show a great diversity. But to frame a hypothesis, it would be essential to examine the relationship between the external assistance and economic growth of the nation. Need not to say, that the importance and contribution of the domestic savings has a greater impact on the national economic development (if compared to the external assistance).

The United Kingdom, although assisted first by Dutch investment, was a net exporter of capital from the late 18th century onwards. France and Germany borrowed abroad in the early stages of industrialization but not on any

large scale and mainly to finance raily development. There was also some direct investment specially by British entrepreneurs in those and other European countries but this investment, though of importance because of its impact on local industry, did not give rise to any large scale transfer of capital.

Finland did not borrow much, Denmark only changed from being a net lender to a net borrower after industrialisation was well advanced. Swedish borrowing, though heavier and extending over a longer period, also came relatively late; and Norway borrowed most of all. The Norwegian government issued bonds abroad from the middle of 19th century onwards, first for the modernization of agriculture, and later for railway construction while private investment moved into mining, pulp and paper and hydroelectric schemes.

Russia was the largest borrower of Europe. Like most continental countries she imported capital for railway development, mainly in the sixties and seventies of the 19th century, but later on investment tended to be in industries including textiles, mining, steel and oil. However, it was probably exceptional in Europe for foreign borrowing to exceed one tenth of net domestic investment.

In other continents there was just a great diversity in the part played by foreign capital as in Europe. The U.S.A. was by 1914, the largest single debtor in the world

but in comparison with her own enormous resources, the debts were almost negligible. So within the span of the First World War, though herself a belligerent power, she became a net creditor. In the early stages of industrialization Japan's foreign borrowing was insignificant throughout, apart from a short burst after 1903 mainly to pay for the war with Russia. In Canada, New Zealand and Australia, foreign <sup>capital</sup> played a greater role and in fact financed half the net domestic capital formation.

Even in these thinly populated countries the average contribution made by foreign capital over the years was much lower. It may be inferred from the instances in the foregoing that whereas foreign resources undoubtedly form a very useful agent of economic development, it is more appropriate to consider this as an accompanying and reinforcing and not the preliminary factor in the growth process. Collectively, the brunt of the investment burden of an economy committed to planned development has to be borne by internal resources raised and progressively augmented through taxation and increasingly stimulated national savings.

The external resources, being scarce and limited, have to be restricted to such components of capital projects as necessarily involve import of machinery, equipment and materials that cannot be produced indigenously for the time being. The foreign capital, therefore, plays



a supplemental role. It is nevertheless obvious that in a developing economy the contribution of foreign capital, though quantitatively supplemental, is qualitatively very significant and crucial leading to the induction of ultimately import substituting modern production technologies in the home industries for lack of which even potential domestic savings may go waste.

### Foreign Private Capital and Economic Growth

There are three principals on which the foreign private investment rests. The most important is - it provides foreign exchange. Secondly the foreign private investment raises the domestic income and thirdly the domestic skills are developed in the nation. The increase in domestic income is due to payment of wages and sallaries by foreign undertakings to the local people who are absorbed in their industries. Further these foreign undertakings buy local supplies and pay local taxes. This foreign investment generates employment in income in the country. If the economy is working under employment of labour and resources (man and material), in that case the foreign investment plays very significant role in the national development. The domestic skill (which is untrained in the beginning) is developed by the private foreign investment resulting in strong foundation of the industrial development. These foreign investments

introduce new techniques of the production, technical processes, operative skills and managerial expertise in the host country. Because of their imperative need for this intangible resource - endowment, many countries went out of their way in the past to invite foreign entrepreneurs as one of the principal agents for procuring it. The recently emerged independent developing countries are sceptical about consequences of foreign private capital e.g. firstly, the constant direct drain on foreign exchange resources of the country by dividends, royalties, secondly the probabilities of concealment of production secrets. Thirdly, the demand of foreign firms for holding controlling shares or even full right of property. Fourthly, the over-concentration of industries in particular regions or over-concentration of resources in particular industries takes place. Finally, the vulnerability of weaker sections like the small scale industries to the resourceful foreign entrepreneur. In the later stage, the developing nation develops its own technical know how and organisational base. Then the government directs foreign investment in accordance with her national policy interests and planned priorities and targets.

It is important to notice here that the characteristic of the flow of foreign capital in the pre war period was that it constituted normal commercial loans and suppliers' credit operated on profit maximization motive and followed strictly the capitalist rule of the game or the 'laissez

faire' philosophy or consideration of 'assistance or accommodation' to comparatively poor nations struggling for their economic uplift.

### Channels of Foreign Aid

The foreign aid or external assistance means the explicit transfer of real resources between countries on a concessional basis. There are two channels of foreign aid by which a country can secure the external assistance. The two channels of foreign aid are - bilateral and multilateral channels. If the aid is given by one country to the other i.e. inter-governmental lending then it is said to be bilateral channel. On the other hand if the lending is through the international agencies it is multilateral channel. The two channels of foreign aid have their own merits and demerits. The channel of the aid has a lot of impact on the nature of aid, so it would be essential for our purpose to analyse the positive and negative points of these two channels.

The bilateral aid was severely criticised in 1960's and serious doubts have been raised about its effectiveness and true development promotion character. The first drawback with the bilateral aid is this that the aid through this channel is with political strings and designed to meet the ends of cold war rivalry. The two blocks of the world U.S.A. and U.S.S.R., are politically motivated to impress

the developing nation in their own support. The another criticism is regarding the real value of aid. The real value of the foreign aid through this channel is much less than the nominal value as the aid is source-tied. The prices of the products or machineries (which the receiver country procures from this aid) is higher in the markets of aid donor country. So in this way the basic objective of aid is promotion of export industries of the donor country. Moreover the bilateral aid tends to influence the development plans of the recipient country along the pattern more consistent with the national interests of the donor country. Thus it is said that the bilateral aid channel is alleged to exact quid pro quos in the political as well as economic fields.

The shortcomings of the bilateral aid channel gave rise to an antithesis in the form of another channel of aid known as multilateral aid. In multilateral aid the aid is given through various international agencies such as International Bank of Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC). It is assumed that the aid through multilateral agencies is free from 'strings' and also bring in a more 'systematic and equitable distribution of the aid burden itself'.

Practically if we analyse the operations of multilateral aid, it has also got its own shortcomings. The

first criticism against it is this that these agencies tend to apply stringent and monetary criteria, which is sometimes extremely narrow and irrelevant principles, in judging and influencing economic development plans and thus their operations become limited.

The second drawback with multilateral aid is regarding political strings. These agencies have a strong impact of advanced countries in their operations as the rich countries share of donation is very high. And the decision making power is concentrated in the hands of rich nations only. Further, these agencies lack trained personnel and official organisations for expert scrutiny of the proposals of and evolving and rendering coherent plans to the recipient country.

Lastly these multilateral agencies do not have adequate funds at their disposal. For instance, of the total net financial flows from all sources to the developing countries during the period 1960-67 estimated by the Development Assistance Committee at \$ 78.3 billion, the share of multilateral agencies came to \$ 5.2 billion or only 6% of the total.

We have seen the shortcomings of both the channels. In the present context there is an increasing awareness that the bilateralism needs to be reformed rather than completely switched over to multilateralism. A good deal

can be achieved through multilateralisation.

The Role of Foreign Aid in Context of Economic Growth in India

The foreign aid has its international character. By nature, it is explicitly the transfer of real resources between countries on concessional basis. On the other the flow of private foreign investment is motivated by normal commercial calculus of profit and loss and does not contain an element of aid and concession by any criteria. So in the present context we are considering only those aid disbursement by governments or other official entities. Whole disposition is decided outside the normal commercial frame of trade and investment.

India received the foreign assistance either in the form of grant or aid. We grants as resource transfers without any quid pro quo. The grant leaves no backlog of debit services and therefore, this is a more useful agent of aid. It is important to mention here that after the first plan there has been a sharp decline in the percentage of grants to the total external assistance received by India, from 34.8 per cent at the end of First Plan to 3.7 per cent during the First Plan.

TABLE III(1): Share of Grants in External Assistance to India

(Rs in crores)

Period	Total External Assistance	Grants	Share of grants in total external assistance(%)
1. During 1st Plan	317.7	110.6	34.8
2. During 2nd Plan	2252.6	253.0	11.2
3. During 3rd Plan	4531.0	167.0	3.7
4. 1966-67	1131.4	97.1	8.6
1967-68	1195.6	60.7	5.1
1968-69	902.6	65.2	7.2
1969-70	856.3	26.1	3.0
1970-61	791.3	43.5	5.0
<b>Total</b>	<b>11978.6</b>	<b>823.2</b>	<b>6.9</b>

Source: Economic Survey 1971-72

If we take the situation of grant in international scene we find that the decline in the share of grants has not been so steep; it has registered a fall from nearly 62% (\$ 3881.5 million) of the total bilateral and multi-lateral aid (\$ 5,860.7 million) in 1964 to 48% (\$ 3418.0 million) of the total (\$ 70.94.9 million) in 1968.<sup>5</sup> This is understandable because of large commitments of military assistance and defence support of the United States, who remains the major donor country in the world ever since the inception of the doctrine of foreign aid. Still U.S.A. plays very important role in granting loans and grants to the third world countries.

### Loans

Loans have three salient features, e.g., maturity period, grace period and cost of loan. By examining these three features of loan we may conclude the nature of the loan. The maturity period which is also known as amortization period is the period for which loan is made. If the maturity period is long, it is not burdensome for the recipient country. The second feature is grace period - the actual period from which the repayment of the loan starts. The cost of loan means - the rate of interest at which the loan is given. For soft loan, the maturity and

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5. Hawkins, E.K., "The principles of Development Aid", Penguins, 1970.



grace period is long and the interest rate is low. And if the maturity period and grace period is short and the rate of interest is high - the loan tends to be hard loan.

For our purpose, important countries which share most of the loans to India, like U.S.A., U.S.S.R., U.K., Japan, West Germany have been taken into consideration. It is essential to examine the terms and conditions on which the loan was sanctioned to India. The extent to which we witness political strings is also important. After analysing the terms and conditions I have tried to derive a relationship between economic growth and external assistance.

It is needless to say that the foreign assistance from various countries gave basic foundation to various sectors of the economy. The heavy industries like Iron and Steel industry's set-up was possible due to foreign collaboration only. The United States helped in stimulating pump priming projects like education, health, sanitation and railway development. The development of intermediate industries gave a strong footing to the heavy industries in India. But before deriving a relationship between economic growth and external assistance it is essential to examine the variations amongst the three features of loan which vary from country to country. It is important to mention here the loans which are repayable in local currencies of the recipient country are also soft

loans. The external assistance from U.S.S.R. could stimulate our economic growth with a faster speed as these loans were repayable in terms of rupees also.

Under the Bilateral Aid I have taken few major Aid donor countries like U.S.A., U.S.S.R., U.K., West Germany, Japan and some other countries which contributed in accelerating India's economic growth.

### U.S.A's Aid

U.S.A., for the first time initiated in granting external assistance to India. It started with lend-lease arrangements during war and was followed by the Marshall plan immediately after the end of the war. But those were regional programmes and were confined to Europe only. The announcement of the Point Four Programme in 1949 by President Truman and the enactment of the act for International development of 1950 lent U.S. aid programmes on international character. The developments of 1950 lent U.S. aid programmes an international outlook and made them part of U.S. national policy. The Korean war broke out in early 1950's shifted the U.S. foreign aid efforts predominantly to the direction of military assistance. It was only in 1956-57 when the U.S.S.R. appeared in the foreign aid field that the problems of development assistance evoked serious thinking and led to systematic and purposeful planning in the U.S.A.

India received a total aid of \$ 8,802.92 million (Rs.66,021.9 million) at current rates from U.S.A. including the grants amounting to \$ 312.73 million upto 1969-70. The breakdown of the U.S. aid is as follows.

TABLE III(2): Category-wise Total U.S. Aid from 1950 to 1969-70<sup>b</sup>

(In \$ million)

Sl. No.	Category	Aid	
1.	Technical Cooperation	463.11	(a) Including \$ 617 million payable in rupees and \$ 2791.49 million in dollar. The later consists of \$ 2308.90 million AID loans and \$ 482.5 million Exim Bank loan.  (b) Includes \$ 98.86 million from other than U.S. Govt. sources e.g. U.S. Banks (repayable in dollars).
2.	Development Financing	3408.49	(a)
3.	Wheat Loan/PL 480	4931.32	(b)
		8802.92	(c) Includes \$312.73 million as grants.
		1951-56 = 180.93	
		1956-61 = 92.63	
		1961-66 = 35.72	
		1966-67 = 2.65	
		1968-69 = 0.80	
		<u>312.73</u>	

6. Source: Ministry of Finance, External Assistance 1969-70.

### Technical Cooperation of U.S.A.

The Indo-US technical cooperation programme was for the first time started in 1951 with underlying four objectives - Firstly, the use of foreign technicians and experts, secondly the provision for specialised training abroad for Indians, thirdly the procurement of demonstration equipment not available within India for pilot projects. And finally the payment of costs for contract services. If we look at the statistical part of the implementation of Indo-US technical cooperation programme the services of 1958 experts and training facilities for 5104 Indian nationals in U.S.A. and other countries were provided upto 1969-70. The I.I.T. Kanpur was also assisted under this programme. Various agriculture universities, eradication of malaria and promotion of family planning programme were also done. U.S.A. provided technical cooperation to India in terms of loans, grants and technical support activity.

### Development Financing

In a developing country the stress is given on establishment of heavy industries like Iron and Steel industry. India had very sad experience in getting aid for the establishment of key heavy industries with U.S. collaboration. A small portion (\$ 88.86 million) provided under development financing relates to development assistance loan. Upto June 30, 1954, development assistance

was entirely in the form of grants and thereafter provided mainly as loans. The loan position is repayable in Dollars or Rupees at India's option and carries an interest of 4% if repaid in rupees and 3% if repaid in dollars. The grace period of Development Assistance loan is four years (which is very short) and the maturity period is spread over 36 years. This assistance has been mainly utilized for irrigation, river valley projects and Delhi Thermal plant.

Further, an additional dollar aid of \$ 18.32 (Rs.137.4) million was provided as loan from Asian Economic Development Fund for Orissa Iron ore project carrying an interest of 3.5% per annum with grace period and maturity period of 3 years and 31 half-yearly instalments respectively. The development loan fund (D.L.F.) which is an autonomous U.S. Government Corporation granted loans amounting to \$ 510 million (Rs.3825 million). These loans are also repayable in rupees with interest rates ranging from 3.5 to 5.75 per cent per annum and maturity periods from 5 to 20 years.

The Agency for International Development (AID) constituted on November 3, 1961, under U.S. Foreign Assistance Act of 1961. India was provided A.I.D. loans amounting to \$ 2308.9 million (Rs.17316.8 million) upto 1969-70. The maturity period of A.I.D. loans is 40 years including a grace period of 10 years. The loan is repayable in Dollars at interest rates ranging from 3/4%

during first 10 years and  $3/4\%$  during remaining 30 years to  $2\%$  and  $3\%$  per annum respectively. Most of these loans were extended directly to private concerns and other corporate enterprises.

The D.L.F./A.I.D. loans totalled \$ 2818.9 million (Rs.21,141 million) upto 1969-70. And these loans were extended in public sector mainly for development of railways and power projects and strengthening of International Credits and Investment Corporation of India and National Small Industries Corporation of India.

On the other hand loans were granted to private sector also. The loans were given to various concerns in cement, refractories, automobiles and chemicals and transport enterprises. The important receivers of the U.S. aid under this programme in Private sector are - Delhi Cloth Mills Ltd., Premier Automobiles Ltd., Napco Bewel Gear of India Ltd., Tata Locomotives and Hindustan Motors. Nearly  $64\%$  (\$ 1789.2 million) of these loans catered for maintenance imports. The U.S. Exim Bank started giving loans to India from 1957-58. The total loan given upto 1969-70 amounts to \$ 482.59 million (Rs.3619.4 million). The current Exim Bank loan carry an annual interest of  $6\%$  plus  $1/2\%$  commitment fee on undisbursed loan amounts in public sector and an interest rate varying from  $5\frac{1}{2}\%$  to  $6\%$  in private sector. The grace period is 2 to 7 years with a maturity period 12 to 16 years. The loan is repayable in dollars only.

The biggest drawback with the U.S. Exim Bank loan is that the loan is source-tied. India can only purchase U.S. made capital goods. Nearly 55% of these loans (\$ 270 million) have been authorised to the Indian Government for procurement of miscellaneous capital equipment popularly known as general line of credit.

The remaining loan which totals \$ 212.59 million have been granted for specific projects, \$ 106.08 million in the public sector and \$ 106.51 million in private sector. The main beneficiaries of the project loans are: Diesel Loco Works, Varanasi (\$ 48.75 million); Air India (\$ 57.33 million) in the public sector; The Coromandel Fertilizers (\$ 27 million); Orient Paper Mills (\$ 18.5 million); Hindustan Aluminium Co. (\$ 18.5 million) and Union Carbide (\$ 7.59 million) in private sector. Need not to say that with this U.S. Exim Bank loan the intermediate industries could flourish in India.

### Wheat Loan

U.S. assistance happened to be life saving in nature - it is said due to wheat loan only India faced many droughts and floods during the period of 1950 to 1970.

The wheat loan of 1951 marks the beginning of the programme of U.S. Aid to India. The wheat loan totals \$ 189.66 million, was used to procure two million tons of wheat to meet an acute shortage of food grains in India.

The loan is repayable in dollars and carries an interest of 2.5% per annum. The repayment of the wheat loan was scheduled to start on June 30, 1957. But due to serious foreign exchange crisis faced by Indian economy in 1957-58, the U.S. government deferred the 18 semi annual instalments of interest and principal due from December 31, 1958 to June 30, 1967. This deferment resulted in extending the present terminal date of payment from June 30, 1986 to June 30, 1995 without any additional interest on account of this deferment.

#### PL 480

The public loans 480 and the Food for Peace Programme for disposal of U.S. surplus agriculture commodities under PL 480/665 India received nearly \$ 4710.42 million (\$ 4642.80 million under PL 410 + \$ 67.62 million under PL 665). In fact during second plan period PL 480/665 assistance constitutes as much as 75 per cent (\$ 2410.07 million) of the total \$ 3212.69 million U.S. aid.

Under section 402 of PL 665, large quantities of wheat and cotton costing \$ 67.66 million were purchased during 1955-57. Of this \$ 41.3 million have been provided under Development Assistance Loan and the balance of \$ 26.36 million under Technical Cooperation programme.



Concluding Analysis of U.S. Aid to India

The U.S. aid to India has attracted many severe criticism from leftist block of the country. The biggest criticism against the U.S. aid is about its nature. It is said to be hard loan to India. The terms of loan are hard in nature. Excepting imports under PL 480, the set of financial condition and the set of foreign exchange condition attached to U.S. aid loans are strict. The inflow of foreign aid resources, according to Lester B. Pearson, in his report on Partners in International Development, made a very substantial contribution to Indian economic growth and industrialization, mainly by relieving the foreign exchange constraints and permitting higher investment and better utilization of capacity than would otherwise had been possible.<sup>7</sup>

The biggest drawback is this that the U.S. aid is source-tied. The price level of equipment and plant in U.S.A. companies vary unfavourably with other European countries and Japan. But as the aid is source-tied - India was bound to purchase U.S. made equipments and plants, might be at higher rates as compared to other countries.

The risk of dictation of collusion monopolistic prices under such tying cannot be ruled out. This undermines the real value as compared to the normal value of aid.

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7. Banerjee, Brojindra Nath, "Foreign Aid to India", Agam Prakashan, Delhi, 1977, p. 116.

In fact, the aid of this kind promotes the export of American industries. The inflow of aid under such conditions tend to subsidize indirectly American Export industries and seem to exact in advance economic quid pro quos.

The assistance under PL 480 assistance is also not without hard elements. It is a sort of dumping programme necessitated by the requirement of disposal of accumulated farm surpluses in order to support farm prices in U.S.A. The another advantage which U.S. government could take out of PL 480 assistance was in terms of high charges of freight of U.S. shipping concerns. The wheat was to be brought only in U.S. ships and the freight was comparatively very high.

Besides nearly 20% of assistance under PL 480 blocks free foreign exchange resources which would have otherwise become available on account of U.S. government expenditure in India and cooley loans. In the later paid we notice a further hardening of terms on PL 480 assistance e.g. raising the interest rates and making the counterpart funds increasingly convertible in foreign currency. Thus U.S. aid loans are costly to India in one sense. Barbara Ward has rightly commented "They (U.S. loans) do not constitute an aid in any direct sense. They are exports credits for the donor country. To call them 'aid' stretches the word until it is almost deprived of meaning"<sup>8</sup>.

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8. Ward, Barbara, "India and the West", Publication Division, 1965.-

The U.S. aid is mainly linked to food supplies, maintenance imports and equipment for transport and infra-structure like health and education. For the national development it is essential to establish capital goods producing industries. The U.S. capital flows do not promote the establishment of capital goods producing industries and consequently the economic independence of India.

The structure and direction of U.S. aid tend to maintain status quo rather than foster the rapid industrialization of the developing nation like India.

Out of total U.S. official capital flows upto 1969-70, nearly 56% are on food imports, 39% on development financing and 5% on technical cooperation.

The U.S. capital flows financed mainly the irrigation and river valley projects, power projects and transport, and a few intermediate industries like motor vehicle production.

It is important to mention here that the U.S. government stubbornly refused the Indian government for the establishment of steel plant in public sector in spite of continuous efforts of the government till 1962.

In the words of Barbara Ward the U.S. economic support to Indian Plans has been in the "spirit of preventing the worst but not in the Marshall spirit of ensuring

the best"<sup>9</sup>.

The U.S. foreign aid is also not without political strings. The suspension of U.S. aid during Indo Pak War in 1965 and 1971, President Johnson's four month delay at the end of 1966 in sanctioning PL 480 agreement with India who badly needed food imports at that time and the conditions imposed in 1965, that India must pay in foreign currency the entire cost of PL 480 freight not just 50% as previously, are cited as instances proving political strings in U.S. aid. Barbara Ward says in this connection, the American economic aid to India has been channeled through the "harassing and humiliating route of three steps forward and two back"<sup>10</sup>.

And there are certain other criticisms also regarding the U.S. aid to India. But we should not forget that after independence India had to explore its resources by fostering the rapid industrial development. In that context the U.S. aid has a deep and profound impact on Indian planned development efforts.

The credit of initiation of granting aid for the first time goes to U.S.A. only in 1951. In 1951 India could get external assistance from U.S.A. which was followed

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9. Ward, Barbara, "India and the West", Pub. Div., 1965, pp. 212.

10. Ward, Barbara, op. cit., pp. 212.

by several other countries in the later stage. The U.S. aid has been in large doses - upto 1971-72, the U.S.A. authorised aid totalling Rs.5040.6 crores against the total authorization of Rs.10,279 crores from all sources. In other words the U.S.A. alone contributed 50% of the total world aid authorised to India upto 1971-72.<sup>11</sup>

The U.S. aid has played critical role in India's resource mobilization efforts. The U.S. aid is having life saving character. It could provide food to millions of drought and flood hit hungry masses in India.

The food grain imports under PL 480 enabled India to stave off starvation and contain inflation within manageable proportions, which happened to be a recurring feature due to repeated droughts severely depressing economy. India could overcome serious balance of payments and foreign exchange crisis developed - intermittently in her economy during the sixties. Barbara Ward says "India has been bailed out from crises to crises during sixties" by the U.S. economic assistance.

No doubt, India had to face several times political and economic instability in the nation due to this U.S. external assistance.

In spite of the contention that U.S. economic aid has been inimical to the establishment and growth of heavy

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11. Economic Survey 1971-72.

industries in India, it has to be recalled that the generous magnitude of U.S. economic aid made a very sizeable contribution to the development of irrigation, agriculture production capacity, power projects, transport and communication development, and intermediate industries promotion. The break through in agriculture has imparted the impetus of self reliance to the economy. The development of intermediate industries has provided a platform for the heavy capital industries. The U.S. contribution to the development of India's infrastructure and technology has also been no mean and the pay off from these long terms objectives is now clearly visible.

But in the later part the percentage of U.S. aid to India has been continuously decreasing due to several reasons. Firstly U.S.A. had to face 'Dollar crisis'. Their own economy was not stable. So they reduced the quantum of aid to other countries. Secondly President Nixon's attitude towards India was also not favourable. India's growing terms with U.S.S.R. also contributed to U.S. anti-Indian attitude.

Thirdly India's continuing diminishing requirements of cereal imports and likely elimination of PL 480 import from 1973-74. Lastly India's determination to achieve rapidly self-reliance and self-sustaining growth and progressively reduce her import bills dependence on foreign loans which, no doubt, contain howsoever implicitly

economic and political strings and leave a mounting backlog of debt service charges.

Foreign Aid to India from U.S.S.R.

Bhilai Steel Plant gets the first credit of aid from U.S.S.R. in 1955. U.S.S.R. assisted India not only in developing the public sector but a capital intensive industry like steel. India got the assistance of Roubles 122.36 million (Rs.1,019.6 million) from U.S.S.R. for Bhilai Steel Plant. The credit authorised by U.S.S.R. upto 1970-71 totals to Rs.739.6 crores which in comparative terms comes to less than 9% of credit of Rs.8,640.5 crores including PL 480 loans or over 12% of credit of Rs.6,121.7 crores excluding PL 480 loans authorised from world sources and nearly 15% of U.S. credit of Rs.4,850.6 crores including PL 480 loans or nearly 32% of U.S. credit of Rs.2,341.7 crores excluding PL 480 loans authorised during the same period.<sup>12</sup>

Although U.S.S.R.'s assistance to India started late and having low magnitude but it has a unique distinction of making extremely favourable impact on India's economy due to its character and direction. Pandit Jawahar Lal Nehru's intimate relations with Khrushcheva resulted in very good tie in the context of the public sector's development in India. Mrs. Indira Gandhi, in the later part could

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12. Economic Survey 1971-72.

manage to get the favourable response from U.S.S.R. in fostering the economic growth.

The most important characteristic of a loan is its cost at which it is taken. It is needless to say that the Soviet terms and conditions of the loan are much lenient than United States. The rate of interest is low and the loan is repayable in rupee also. The Soviet credits are soft, the interest rate is 2 to 2.5% per annum, the repayment of the loan is to start after completion of delivery of equipment, the maturity period being 12 years and the provisions are usually generous for the training of Indians for operating the plants. Apart from these easy financial conditions, the Soviet loans are repayable in rupees through export of Indian goods and thus these loans do not strain India's foreign exchange position but it also stimulate the exports of the country.

Secondly the U.S.S.R's loans are historically very important for India. Soviet loans were given to India when she had no alternative except to depend on the west. India had draw complete blank with the capitalist countries of the west for their assistance in establishment of industries producing capital goods. The Soviet assistance helped India in launching a big programme of the construction of heavy and core industries which would generate multiplier effects in the economy.



Thirdly the Soviet assistance gave moral courage to India and strengthened its bargaining power with the west. This resulted in softening of the terms and conditions with the capitalist's loan. West Germany and U.K. granted loan to India on easy terms after the U.S.S.R. The Soviet assistance was predominantly in the public sector which has been almost a bug bear to the western countries. It helped India in developing a potent public sector as a counter veiling force against the predominating internal private monopolies. The basic concept of government of believing in socialism could work out in a better way.

U.S.S.R. has granted assistance to mostly the public sector undertakings. The important Soviet aided projects are steel plant of Bhilai and Bokaro, Heavy Machine Building Plant at Ranchi, Coal Mining Machinery Plant at Durgapur, Heavy Electrical Plant at Raipur, Oil Refineries at Barauni and Koyali, Power plants at Korba, Neyveli, Singarauli, Bhakra and lower Seleru, oil exploration at Cambay and other areas and Drug projects.

Russia has given grants also to India. U.S.S.R. has authorised by way of grants worth Rs.27.4 million (Rs.12.4 million for the Central Mechanised Farm, Surat Garh and Rs.15 million for five other Central State Farms) for agricultural machinery; Rs.5.7 million for equipment

for the I.I.T. Bombay in addition to the technical assistance. Further for vaccine worth Rs.68.38 million for small pox eradication was given to India. The complete cost of equipment, apparatus, drugs, ambulance and Soviet specialists for the Kalawati Saran Childrens Hospital, New Delhi was also granted.

The significant role played by U.S.S.R. in fostering the economic development cannot be overlooked when we analyze the overall development. The heavy and core industries provide a solid foundation for the development. The development of agriculture is very essential in India with the help of technical innovations in the specific fields. India does not have the shortage of land and manpower. But what is required is the technical skill and modern equipments, better seed and fertilizers, irrigation and rural electrification to achieve the target of bumper harvest. The Soviet assistance has shown us a way with latest appropriate technology for agriculture and now we have to utilise it in the best possible manner to provide food for our masses.

Fourthly we can well imagine the shortage of foreign exchange reserves had there been no Bhilai and Bokaro steel plants. These two heavy industries could help us in saving great amount of foreign reserves and at the same time we could establish the capital intensive industries in the nation.

External Assistance from U.K.

United Kingdom also contributed through foreign aid in our heavy industries and other sectors of the economy. U.K. for the first time gave us the foreign assistance in 1951 in the form of grants for technical assistance under the Colombo Plan. Since the formation of Aid India consortium, Britain has been extending long term loans to India.

The important U.K. aided projects are - steel plant, Durgapur; Heavy Electricals, Bhopal; FACT, Alwaye; Ropeways of Coal Board; Oil India; Sulphuric Acid Plant at Sindri and Security Paper Mills at Hoshangabad.

The 70% (£ 291.5 million which equals Rs.5247 million) of the total aid was assigned for non-project use and 30% of the total aid which amounts to be £ 419 million (Rs.7542 million) was for project use (Rs.2295 million or £ 127.5 million is 30%). U.K. has been one of the first consortium countries to appreciate the importance of non-project tied aid. The non-tying aid helped India to use these loans for various crucial purposes, particularly for balance of payments and debt relief assistance.

The interest rates on U.K. assistance was originally  $6\frac{1}{2}\%$  per year. But on the consequence of consortium meeting of June 5, 1963, the British government decided to waive interest charges for the first 7 years on these loans

given after this date. This waiver reduced the effective average rate of interest from about  $6\frac{1}{2}\%$  to  $3\frac{1}{2}\%$ . Commencing with the general purpose loan, no interest is payable on British loans signed on October 20, 1965. So the terms and conditions of the British loan is softened and reached the interest free stage with maturity of 25 years including a grace period of 7 years.

Referring to the grants aspect U.K. has provided India grants totalling £ 1.73 million (Rs. 31.1 crores) upto 1969-70 under the Colombo Plan and the grant is mainly for technical assistance, provisions for equipment and books for various scientific and research institutes including I.I.T. Delhi is made. Moreover, provisions of nearly 306 British experts in the technology and for the development of training centre is made. U.K. provided grants through the Aid India consortium as £ 2.7 million in March 1969-70 for imports of wheat from Argentina; £ 1.2 million in 1969-70 was given for import of wheat under food aid programme for three years U.K. also contributed in the form of gift of fertilizers worth £ 120,000 since 1967. So in this way the contribution of U.K. in agriculture and industrial sectors is valuable. Apart from technical help U.K. has also provided non-project aid which India has used in the critical years of the actual shortage of foreign exchange reserves.

### Aid from West Germany

The next important country to be mentioned here is West Germany. The first drive of foreign aid of West Germany was launched in 1958 with the agreement of Rourkela Steel Plant and it totals upto 1969-70 to D. Mark 4755.16 million (Rs.9743.6 million at current rates). The West Germany's cash assistance upto Second Five Year Plan was DM 1,176.56 million (Rs.2,410.8 million). India could use this assistance in strengthening its foreign reserves position.

Moreover, an increasing trend of linking credits to projects and programmes since 1963-64 is clearly visible. The West Germany has assisted India in various key projects. Some of the important projects are Rourkela and Bhadravati's Steel and Iron Projects, Tata Engineering and Locomotives, Kalinga Pig Iron Works, Neyveli Lignite Corporation, Rourkela Fertilizer Plant, Neyveli Briquetting and Carbonisation Plant and Hindustan Shipyard.

The terms and conditions of German loans are considerably softened over recent years. The interest rate was 3% per year with the maturity of 25 years inclusive of 7 years grace period until 1968-69. In 1969-70, these terms have been made further softened with a lower interest rate of  $2\frac{1}{2}\%$  per year and maturity period extended to 30 years including a grace period of 8 years. The debt relief has been also provided by lowering the interest

rate on earlier loans and refinancing the debt repayments.

The technical assistance of West Germany amounts to Rs.38.6 million on June 30, 1969 for I.I.T. Madras. Machineries and services worth Rs.10.71 million were provided for Prototype Centre, Okhla. For the agriculture developmental projects Rs.1.75 million were provided for fertilizers and agriculture machinery upto 1969-70. The T.V. Centre, Delhi was given equipment amounting to Rs.1.97 million.

In nutshell we can analyse that the German aid was in terms of cash and technical assistance which could provide agriculture machinery equipment and fertilizers. At the same time the heavy industries like steel plants were also assisted. In context of transportation the Hindustan Shipyard and in communication the T.V. Centre of Delhi could reach to its heights due to German collaboration only. These projects were assisted by West Germany which lead to a way of development with higher economic growth.

#### External Assistance from Canada

Canada started economic assistance to India right from 1951 as a participant of Colombo Plan scheme and later in 1958 extended it as one of the founder members of 'Aid India Consortium'.

Canada's assistance is mostly in terms of grants. Canada has given nearly 62% of the grants (Canadian Dollars 568.60 million) and only 38% (Canadian Dollars 342.26 million) in the form of loan. This Canadian grant was very useful to India during the period of foreign exchange crises. Secondly the 50% of the Canadian loan, C.\$ 118.26 million upto 1968-69 are the medium terms ECIC (Export Credit Insurance Corporation of Canada) credits, and carry an interest of roughly 6% with maturity period of 15 to 20 years inclusive a grace period of 3 to 6 years. The assistance to the tune of C.\$ 3.921 million has been provided during the three year 1968-71 by way of debt relief and cash assistance to offset interest charges.

The remaining approximately 50% of the loan (C.\$ 120.70 million) upto 1968-69 are long term development loans for project and non-project purposes. These loans are repayable over 50 years inclusive of a grace period of 10 years and carry a service charge of 3/4% and a commitment fee of 3/4% which have also been abolished since April 1966. Thus, these Canadian loans are now free of charge e.g. the cost of loan is zero. Canada has also provided technical assistance upto 1969-70 in the form of services of 78 Canadian experts and training facilities to 1,128 Indians in Canada.

### External Assistance from Japan

Japan joined the race of foreign aid to India in 1958. Since 1958 to 1969-70 it amounts to 186.21 billion Yen (Rs.3864.6 million at current rates). The interest charges range from 4 to 5 $\frac{3}{4}$ % per annum and maturity period from 10 to 15 years with a grace period of 3 to 15 years. The supplier's credit of Japan was extended to India totalling Yen 1,693.05 million upto 1969-70 made available directly to Indian importers for purchase of textile machinery, ships and capital goods. The credit under suppliers credit scheme of Japan carry an interest upto 6% with maturity period of 5 to 10 years. The Japan loans have been used for the import of non project items like transmission equipment, electrical goods, trucks, tractor components and to finance fertilizer and chemical projects, power projects, alloy and foundary projects. The technical assistance of Japan provided 90 experts from Japan to India and 416 Indian trainees were sent to Japan for technical training upto 1967-68.

### Multilateral Aid Channel

Apart from these major donors of the external assistance many countries have provided assistance to India either by way of loans or grants. The International Bank of Reconstruction and Development (IBRD) has also provided Yen 1,047.65 million (Rs.7857.4 million) at current rates upto 1969-70. But the lending terms of



IBRD is hard in nature as it operates on commercial basis. The World Bank (IBRD) acts as a link between the borrowing country's government and lending country's government. The loans of the World Bank carry interest charges at the rate of 7% per year. The maturity period varies, of late it has been 25 to 30 years with a grace period of 5 to 10 years.

Before coming into the details of the World Bank loan I would like to introduce another important agency International Development Association (I.D.A.) an affiliate of the World Bank. I.D.A. was established in 1960. The loans which India has received upto 1969-70 from I.D.A. amounts to \$ 1,127.63 million (Rs.8457.2 million at current rates). These loans are soft termed loans. The loans are repayable in foreign currency; except a services charges of 3/4 of 1% per year. The loans are interest free and after a grace period of 10 years the principal is repayable at the rate of 1% per year for first ten years and 3% per year for the succeeding 30 years. India has used approximately 50% of I.D.A. loans for import of maintenance items and the rest for highway construction and improvement, tube-well irrigation, irrigation projects, food protection and drainage power expansion, telecommunication and railway development.

The other countries which have provided foreign assistance to India are given in Table No. III(3).

TABLE III(3): Aid from Other Countries to India

(Rs, in crores)

S. No.	Country	Assistance upto 1970-71		
		Loans	Grants	Total
<u>Consortium Members</u>				
1.	Australia	19.2	1.2	20.4
2.	France	125.6	-	125.6
3.	Italy	104.2	-	104.2
4.	Netherlands	55.5	1.4	56.9
5.	Belgium	16.9	-	16.9
6.	Denmark	10.4	0.8	11.2
7.	Sweeden	9.7	6.5	16.2
8.	Norway	-	6.9	6.9
<u>East European Countries and Others</u>				
9.	Czechoslovakia	58.7	0.4	59.1
10.	Yugoslavia	54.0	-	54.0
11.	Switzerland	22.9	-	22.9
12.	Poland	22.5	-	22.5
13.	European Economic Community	-	3.8	3.8
14.	New Zealand	-	4.0	4.0
15.	Hungary	0.7	-	0.7
16.	Bulgaria	0.4	-	0.4
17.	Australia	-	51.9	51.9

Source: Economic Survey - 1971-72. The annual amount of assistance upto the end of third plan is calculated at predevaluation rates and thereafter at post-devaluation rates.

The second channel of the external assistance is multilateral aid. The World Bank has provided upto 1969-70 the total \$ 1047.65 million (Rs. 7,857.4 million at current rate). The terms and conditions of the World Bank lending is hard as it operates on commercial basis. The main advantage of World Bank loan is that these are not source-tied, and can be used to procure capital goods and services through competitive tendering from any of the Bank's member countries (and also Switzerland). So the real value of World Bank's credits is higher than those received through bilateral channels like United States of America. The assistance of World Bank has been used by India largely for development of steel plants, railways and communication, power generation and transmission and other industries (including loans of ICICI). The World Bank has also provided grants totalling \$ 1.20 million for foreign consultants and to meet foreign exchange component of certain technical studies.

The International Development Association (I.D.A.) has provided India upto 1969-70 the sum of \$ 1127.63 million (Rs.8457.2 million at current rate). The terms and conditions of IDA is soft. Nearly 50% of the IDA loans have been used by India for import maintenance items and the rest for highway construction and improvement, tube well irrigation, food protection and drainage etc.

The Financial Terms of Foreign Loans

The debt service charges and amortization payments constitute a heavy financial burden on the recipient country and uncater its external viability. In India's case Table III(4) shows that this burden has increased alarmingly from 23.8 crores during First Plan to Rs.450 crores in 1971-72. This is visualised to further rise to Rs.650 crores by the end of Fourth Plan.

TABLE III(4): India's External Debt Servicing Burden

(Rs. in crores)

Period	Amortisation	Interest payments	Total Debt Servicing
First Plan	10.5	13.3	23.8
Second Plan	55.2	64.2	119.4
Third Plan	305.6	237.0	542.6
1966-67	159.7	114.8	274.5
1967-68	210.7	122.3	333.0
1968-69	268.5	144.0	412.0
1970-71	289.5	160.5	450.0

Source: Economic Survey 1971-72

If we look at the world wide situation, the external debt of developing countries rose by nearly 114% during 1961 to 1967 i.e. from \$ 21.6 billion in 1961 to \$ 46.2 billion in 1967. The interest and amortization payments increased from \$ 2.3 billion in 1961 to \$ 4 billion in 1967; these are further likely to increase to \$ 10 billion in 1975<sup>13</sup> or we can say out strep the current public aid flow of \$ 7194.9 million in 1068 by nearly 50%.

It is important to mention here that the lending terms of U.S.A. are comparatively hardest in the world and it allows no relaxation while the British terms and conditions have been improved during sixties through increasing the share of interest free loans and extension of maturity period. Secondly it has been urged that resource transfers from developed countries should be on more concessional basis. The magnitude of grants should be increased in the foreign economic assistance; for foreign loans the rate of interest should be lowered to 2 and  $2\frac{1}{2}\%$  and the maturity period extended from 25 to 40 years.

### Tying of Foreign Aid

There are two types of restrictions attached to aid flows. One is procurement tying and second is project

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13. Da Costa, G.C., "Debt Repayment by Developing Countries", Economic and Political Weekly, Annual Number, 1970..

tying. The procurement tying restriction considerably reduces the real value of aid flows by tying them to purchases in the donor country and preventing the recipient country to use them for procurement of equipment, plant and services at competitive world market prices. The second restriction i.e. the tied loans constitute a drawback in utilization of the resource transfer, the project designing and preparation of layout etc. being obviously a time consuming process. So the short falls between the amounts of aid authorised to and those actually utilized by developing countries is a commonly visible feature. In Indian case Table III(5) depicts the picture clearly.

TABLE III(5): External Assistance Authorised to and Utilized by India\*

Sl. No.	Period	Total external assistance authorised including loans, grants, PL 480/665 etc.	Total Utilization	Short-fall (Col. 3 (-) Col. 2)
1	2	3	4	5
1.	Upto III Plan	5711.6	4508.8	1202.8
2.	1966-67	1506.5	1131.4	375.1
3.	1967-68	718.8	1195.6	-476.8
4.	1968-69	946.8	902.6	44.2
5.	1969-70	634.3	856.3	-222.0
6.	1970-71	761.9	791.4	-29.5
Total		13564.1	11978.6	1585.5

\*Economic Survey 1971-72. Conversion in rupees is at the predevaluation rate of exchange upto the end of Third Plan. However, for the year 1966-67 and onwards as well as for the total is at the post-devaluation rates.

In Table III(5) we find a tremendous improvement in the utilization tempo of foreign reserve transfers by India from 1967-68 onwards. This is due to the reason that India is keeping ready well conceived projects and shopping list in advance.

The Pearson Commission has recommended that such ties (restrictions) should not be attached to aid flows so that a greater amount of free foreign exchange is made available to developing countries.

If we look at the facts we come across the conclusion that most of the aid has been given through bilateral channel only and the bilateral aid cannot be without political strings and economic stings as well. The total aid disbursements during the period 1964-68 through the bilateral and multilateral channels are given in Table III(6).

It is observed from the Table (Table III(6)) that though aid flows from developed countries multilateral agencies nearly doubled from \$ 374 millions in 1964 to \$ 736 in 1967. These constituted only 10% of the total aid flows and 90% continued to flow through bilateral channels. In the later part believer of theories of bilateral aid channel started supporting multilateral channel of aid. But it also attracted a lot of criticism. The basic criticism against multilaterism was due to the

TABLE III(o): World Air Flows During 1964-68

(U.S. \$ in million)

Year	Total Official Bilateral Aid (Net)	Total Official Multilateral Aid (Net)
1964	5485.8	374.9
1965	5761.1	451.8
1966	5919.1	512.7
1967	6413.7	736.0
1968	6436.2	658.7

Source: Hawkins, E.K., "The principles of Development Aid", Penguins, 1970.

linkage between voting rights and contribution in the international institutions. It resulted into the monopoly of rich nations in these international institutions which again introduced the 'political strings' in the operation. The developed countries dominated in the institutions and get the decision making heavily concentrated with them even in such world bodies. The repeated interferences from the World Bank to coerce India into accepting the dictates of western capitalist regimes in the past is the gross example of the doubtful neutrality of such international bodies. The professed neutrality of multilateralism thus comes to be adulterated with the partisan spirit of bilaterism. Secondly the multilateralism handicapped by paucity of planning personnel and monetary



expert staff, suffers from dilatory and halting decisions.

The multilateralism came into lime light an anti-thesis against bilaterism. In the present stage as a compromise, the consensus now seems to favour the setting of bilateral aid in the multilateral frame. In fact, since early sixties various broad based groups have been formed with developed countries as their members. These groups are used as a common forum and coordinating agency for providing bilateral aid. The famous amongst such groups are: the Development Assistance Committee (D.A.C.) of the Organisation for Economic Cooperation and Development (OECD), the International Development Association (IDA); and Aid India Club popularly known as Consortium. Several countries have also set-up a separate national agency exclusively devoted to planning administering and implementing these aid programmes e.g. the Agency for International Development (A.I.D.) etc.

### Indian Experience of Foreign Aid

In Indian case the experience of foreign aid has not been altogether pleasant and wholesome. Using external assistance as a lever, India's arm has been twisted time and again in the past and attempts made to dictate and influence her national and economic policies. The motivation of exacting quid pro quos implicit in the foreign aid, her mounting debt service charges, developing conflicts and stress in the world aid flows and last though not the

TABLE III(7): Foreign Aid Utilized for India's Development from April 1951 to September 1971

Sl. No.	Source	Amount authorised by aid providing source (Rs. in crores)	Amount utilized by India	Share of total foreign aid utilized by India (in %)
1.	U.S.A.	7184	6784	56.3
2.	World Bank and IDA	1764	1478	12.3
3.	West Germany	1004	907	7.5
4.	Britain	849	715	6.0
5.	U.S.S.R.	1031	670	5.6
6.	Canada	648	532	4.4
7.	Japan	372	328	2.7
8.	Italy	184	132	1.1
9.	France	181	102	0.9
10.	Czechoslovakia	97	66	0.6
11.	Netherlands	76	55	0.5
12.	Australia	63	61	0.5
13.	Yugoslavia	29	29	0.2
14.	Poland	57	28	0.2
15.	Switzerland	36	26	0.2
16.	Belgium	32	22	0.2
17.	Austria	24	21	0.2
18.	Sweden	26	14	0.1
19.	Denmark	14	10	0.1
20.	Norway	12	10	0.1
21.	New Zealand	6	5 less than	0.5
22.	Hungary	13	-	-
23.	Bulgaria	11	-	-
		13713	11995	100.0

Source: As given by Banerjee, Brojendra Nath, "Foreign Aid to India", Agam Prakashan, Delhi, 1977, p.125.

least the brightening up of her domestic economy have led the Indian planners to project a progressive reduction in her reliance on external assistance compared to the Third Plan, the foreign aid requirements net of debt servicing (repayment and interest) are visualised to be reduced to about half by the end of the Fourth Plan and completely eliminated by 1980-81. In short "self-help" and 'inward oriented development strategy' to be the dominant themes of the future economic development.

### Private Foreign Investment

So far we have been taking the lending (official) from the various countries. The private foreign investment which moves around the calculus of the profit is also important. During the pre-independence period there are varying estimates of private foreign investment in India during the pre-war period. In the memorandum submitted by the Associated Chamber of Commerce (an organisation representing the British interests in India) to the Indian Statutory Commission appointed in 1928, the foreign private investment in India upto 1930-31 estimated at £ 530 millions. According to another estimate the total foreign private investment in India just before the outbreak of the Second World War is placed in the region of Rs.8500 to Rs.9500 millions.<sup>14</sup>

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14. United Nations, Economic Bulletins for Asia and the Far East, Vol. XXIII, No. 1, June 1962, p. 1.

In the post-independence period, the hopes of Indian leadership that independence itself will remedy all the ills, were soon dashed to the ground. The influx of 5 to 6 million refugees, loss of raw material and surplus foodgrains producing areas to Pakistan, the steep inflation in prices, and severe balance of payments difficulties, ultimately leading to rupee devaluation in 1949, developed strains after strains on national economy. The relief, and that too for a short time, was provided only by the Korean boom in 1950-51. There is no developmental activity in Indian economy worth mentioning during this period.

In 1945's government industrial policy which envisaged nationalization of a number of industries e.g. coal, mineral, oil, iron and steel, transport in the interest of co-ordinated development. The objective of the government was 'socialism' after the independence and the government was determined to remove the disparities amongst its masses.

After the independence the Indian leaders came across realities and a need was felt for big resource mobilization for launching Indian economy on a 'take-off' to self-sustaining growth. In the industrial policy of 1948 no stress was given on the nationalization of any specific industry and rather conceded that the private sector, probably directed and regulated, has a valuable role to play.

Pandit Jawahar Lal Nehru gave a statement in the parliament on April 6, 1949 and assured of a liberal and hospitable treatment to foreign private capital, main features of which were: a non-discriminatory national treatment to foreign interests, permission to send profits and remittances abroad as well as capital remittances of concerns, if any compulsively acquired; and guarantee of fair compensation if and when foreign concerns are compulsorily acquired. By 1953, it was generally conceded that Indian terms for investment of foreign capital matched with code published by International Chambers of Commerce in the U.S.A.<sup>15</sup>

This liberal government policy resulted into positive gains. By end of 1956, outstanding foreign investment totalled nearly Rs.478 crores and thus increased by 222 crores over mid 1948 which amounts to Rs.256 crores.

The net inflow of capital during this period of seven and a half years was of the order of approximately Rs.75 crores. If the single bulk investment of Rs.45 crores by oil concerns is taken apart, then the annual average of outstanding investment and net capital inflow during this period comes to nearly 29.5 crores and Rs.4 crores respectively.<sup>16</sup>

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15. Kidron, Michael, "Foreign Investment in India", Oxford, 1965.

16. Kidron, Michael, "Foreign Investment in India", Oxford, 1965, and also Weiskoff, Thomas E., "Dependence and Imperialism in India", in Friedman E Seldon M. (eds.), "Imperialism in India".

Further in 1951 and 1953 the agreements were made with three foreign oil companies in which the terms were dictated by these foreign companies.

But during the third plan situation improved. The bumper harvest of 1953-54 and due to the cumulative effect of the Korean boom 1950-51 and a alround spurt and development generated by the First Plan, the private sector in India got its feet and moved on to pragmatism and dynamism. In industrial policy resolution of 1956, the private sector was branded as an agency for planned national development.

The break in the foreign private investment was also induced due to the U.S.S.R. participation in economic assistance to India since 1955. Soviet assistance was predominantly in the public sector. Moreover the Soviet investment was in producer-goods industries which was so far discouraged by the western countries. The Soviet assistance was in fact 'aid' not trade in true sense. It is interesting to see the records that first Soviet aid was given in the private sector viz. to Birla Hindustan Gas Co. and Hindustan Files at Calcutta.

The inflow of private foreign capital has maintained its tempo since Second Plan period. During a little over five year period i.e. from 1962 to March 1967, the foreign assets rose by 546 crores to Rs.1225 crores and the total inflow of foreign private capital amounted to nearly

Rs.320 crores during this period.<sup>17</sup> Against an average number of 10 during the years 1951 and 1957, the new capital issues with foreign participation licenced during 1961-62, 1962-63 and 1963-64 increased to 44, 53 and 47 respectively with authorised foreign investment of Rs.12.16 crores, Rs.13.54 crores and Rs.16.16 crores up. The foreign equity capital in all subsidiaries taken together rose from Rs.98.5 crores in 1960-61 to Rs.127.7 crores in 1963-64, though as a proportion of total declined from 82.1% to 78.5%. Similarly of the total 144 agreements up to 1965 between Indian subsidiaries of foreign companies and all foreign companies 105 or nearly 75% were entered in between 1956 and 1965.<sup>18</sup>

### The Indian Experience of Private Foreign Investment

The private foreign investment, no doubt accelerated the economic growth but in certain resources it proved very costly to India also. The Indian experience has shown that the remittances abroad on account of current profits, dividends, interests, royalties, fee and salary constitute the annual repatriation of capital or amortization of principal and forms the long term direct change on foreign resources. The profitability of the foreign controlled companies is very high, who as a group earned a gross

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17. Thomas, E., "Dependence and Imperialism in India".

18. Bagchi, Amiya, "Aid Models and Inflow of Foreign Aid", Economic and Political Weekly, Annual Number, 1970.

return of 13% or 14% of their capital during the sixties and 13.8% during 1963-64. The dividends remittance abroad from foreign companies rose from Rs.10.32 crores in 1960-61 to Rs.16.24 crores in 1966-67. The margin is still wider in case of companies presuming a monopolistic prices like international oil companies whose remittances abroad alone amounted to Rs. 41.2 crores during 1956-60 out of a total outflow of Rs.71.3 crores.\*

There are doubts about the initial making up the values of goods, supplies or services of foreign country. The foreign companies keep these things as secret. Further the typing of Indian subsidiary or associated concern to the foreign partner and thus ensure sales outlets for the latter even at inflated prices. For technical know how and other considerations in cash or kind are provided to foreign partners apart from the royalties. The private foreign investment is seen to graft new technical processes and managerial skill in the host country. The foreign investment as import intensive in content involving initially the import plant, equipment and subsequently that a maintenance material.

#### Foreign Aid from International Agencies

Referring to multilateral channel of foreign aid I have discussed in brief the contribution of internal

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\*The oil aspect is dealt in details in the Fourth Chapter also.



agencies in fostering India's economic growth. The role of U.N. Special Agencies has, however, been more commendable and impressive from economic and sociological view points. The Charter of U.N. (Article 55) lays down that U.N.O. shall - promote higher standards of living, full employment and conditions of economic and social progress and development, solutions of international economic, sound health and related problems, and international cultural and educational cooperation.<sup>19</sup>

To further such objectives as outlined in the foregoing concerning the economic development and improvement of general health of all nations, the U.N.O. has set up a number of agencies like IBRD, IDA, IFC and IMF etc. For my purpose I have stressed the contribution of World Bank (IBRD) IDA, IFC and IMF. These agencies have contributed a lot in Indian economic development.

#### IBRD, IDA Contributions

The IBRD visualises that the interest of its developing member countries can be best served by its long term commitment to a particular set of priorities. The 'economic infrastructure', 'social infrastructure' have been the area favoured for the loans of World Bank and affiliates. The objective has been to assist in developing

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19. Ganguli, B.N. and Sen, S.R., "The role of the United Nations in the development of less developed countries", *International Studies*, 5(4), 353, 1964.

the horizons of economic progress of developing countries through the agency of World Bank group without its deep involvement in the specifics of their development plan. The Bank has always sought to promote the development of private industries. It is contributing to projects such as the production of steel directly also. It has also financed the industrial firms in several countries through their National Development Banks. The era of economic growth and political change after the war brought a marked increase in the demand for development capital. The need for effective use of external capital has been increasing faster than the ability of service conventional loans like that of World Bank. Secondly some countries have already begun to draw closer so the limit of the debt they can prudently consume of conventional terms. It was the awareness of the problem which led to the founding of International Development Association (IDA) as an affiliate of the World Bank. The IDA extends low-interest long term credits to the developing countries. Development credits to the developing countries are given on identical terms. Each credit is for 50 years without interest. Amortization is to begin after 10 years period of grace; thereafter, in most cases one per cent of the principal is repayable annually for 10 years and 3% is repayable annually for the final 30 years. A service charge of  $\frac{3}{4}$  of one per cent per year payable on amounts withdrawn and outstanding is made to help meet IDA's

administrative cost. IDA's primary objective is to provide developmental loans for countries whose balance of payments prospects would not justify them incurring or continuing to incur external debt entirely on conventional terms. The World Bank has been providing long term capital for the economic development of India since 1949-50. Upto the end of First Plan its commitments were relatively small and limited to a few projects connected with the development of railways and power in the public sector and the expansion of two steel plants in the private sector. Total authorisation upto the end of First Plan was Rs.57 crores.<sup>20</sup> These loans were intended for purchases in hard currencies to avoid pressure on the dollar pool of the sterling areas.

India could get substantial increased amount of foreign capital for Second Five Year Plan. In the Second Five Year Plan period, the total authorisation reached Rs.263 crores. Another Rs.70 crores became available in the first year of the Third Plan. Thus the total sanction of loans from IBRD to India upto the end of March 1962 amounted to Rs.390 crores. The sixty per cent (approximately) this sanction was for the public sector projects and nearly 40% for the private sector.<sup>21</sup> The IDA, which started its operations on 8th November 1960 sanctioned six loans to India during a short span of  $1\frac{1}{2}$  years. It gave

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20. India's Balance of Payments - 1948-49 to 1961-62, Reserve Bank of India, Bombay, 1963, p. 47.

21. Ibid.

India Rs.51 crores upto March 1962 mainly for road construction and five other irrigation, drainage, food protection and thermal power.<sup>22</sup> Aid authorised by IBRD and IDA upto December 1963 aggregated to Rs.546 crores comprising Rs.403 crores from the former and Rs.143 crores from the later.<sup>23</sup>

The World Bank group has sanctioned loans to India in various sectors of the economy which total \$ 3185 million (Rs.2325 crores). These consist of the World Bank loans of \$ 1,110 millions (Rs.810 crores), IDA credits of \$ 2033 million (Rs.1484 crores) and International Finance Corporation's Investment commitments of \$ 42 million (Rs.30.6 crores).

World Bank has been assisting India since 1949-50 and has taken a close interest for last 18 years. It has been able to provide assistance in several other ways also, notably by bringing together for consultations a group of industrialized countries interested in helping to finance India's further development. The World Bank has financed many projects of railways, ports, airways, highways, and also in agriculture for equipments, irrigation and river valley and other projects. In industry, the Damodar Valley

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22. India's Balance of Payments 1948-49 to 1961-62, Reserve Bank of India, Bombay, 1963, p. 49.

23. Report on currency and finance 1963-64, Reserve Bank of India, 1964, p. 21.

Corporation was assisted by IBRD. The electric power projects, iron steel and coal projects and in various projects of telecommunication India got substantial aid from IBRD.

The World Bank has not aided India in agriculture and industrial sector only but important projects like population planning, welfare programme were also aided.

The World Bank has made in all nine loans from 1955 through 1971 totalling \$ 259.93 millions to provide the foreign exchange resources for the Industrial Credit and Investment Corporation of India (ICICI), a privately owned Development Bank. The World Bank also provided technical assistance to India in various forms.

#### Aid from International Finance Corporation (IFC)

Sometimes it is inconvenient for the governments to finance the private enterprises and the governmental guarantee might amount to official interferences in the business. These limitations gave rise to birth of a new institution for direct external investment without any kind of governmental interference in terms of guarantee in the development of private industries. International Finance Corporation an affiliate of IBRD was established in July 1956. The IFC seeks to create investment opportunities by bringing together domestic and foreign investors and experienced management. It provides finances to the private

industries without governments guarantee. Moreover it endeavours to stimulate the flow of private capital into productive investment in member countries. IFC does not charge uniform rates of interest on its loans. The interest rate in each case is fixed in relation to all the relevant circumstances, particularly the risk involved and the prospective return on its entire investment. IFC charges a commitment fee of 1% per year on the undisbursed portion of its investment.

In India has made its investments of \$ 10,864,948 (net of cancellations \$ 8,036,224) till June 30, 1964. The IFC investments in India added to local and other resources, enabled three long planned high priority industrial projects to proceed, which otherwise would have been further delayed due to shortage of capital. The year's commitments were \$ 1,211,00 for the Fort Gloster Industrial Ltd.; \$ 3,450,001 for the Mahindra UGINE Steel Company Ltd., and \$ 1,380,000 for Lakshmi Machine Works Ltd.

In September 1963, IFC made a commitment of \$ 1,211,000 by which it helped to complete the financing of an \$ 8.4 million programme to enlarge and diversify the electric cable production of Fort Gloster Industries Ltd. The expansion project was intended to directly benefit the power development programme in India and satisfy the heavy and increasing demand for all types of cables, generated by the growing industrialization of country.

The another commitment of IFC to Mahindra UGINE Steel Company Ltd., a new Indian industrial company to service as an alloy steel plant located at Khopoli in the State of Maharashtra. The development of the alloy steel industry was given high priority in the Third Five Year Plan, because alloy steel is used extensively in mechanical industries like machine tools, automobiles.

The Indo-Swiss collaborated Lakshmi Machine Works Ltd. received a loan from IFC in October 1963. The new Indian company established for operating a cotton textile machinery plant at Coimbatore in South India. By making modern equipment available in the domestic market, the new plant would enable India's important cotton textile industry to carry forward the expansion and modernization of its factories, which at present are severely restricted by a lack of foreign exchange to pay to imported equipment. Upto June 1972, the loans made to India by IFC aggregate to \$ 42 million.

### International Monetary Fund

The basic objective of IMF is establishment of currencies and balanced expansion of world trade. It provides for adjustment of exchange rates and specifies that any major change in exchange practices will be submitted to international consultation before it is put into effect.

The basic objective of IMF is to promote a freer system of world trade and payments as a means of helping its members to achieve economic growth, high levels of employment and improved standard of living.

The IMF has provided India gross assistance upto the end of 1961-62 to the amount of Rs.262 crores. Between 1947-48 and 1961-62, India had to take recourse to the Fund on three occasions. In 1948 the drawing of \$ 100 million was effected partly in 1947-48 and partly in 1948-49. It was repaid in six instalments by 1956-57. The second time, early in 1957, an amount of \$ 200 million (Rs.95 crores) was drawn and this too was fully repaid by 1961-62. Third time in August 1961, India had again to seek IMF assistance and a part of the drawing of \$ 250 million (Rs.119 crores) made on this occasion in several foreign currencies, was used to repay the outstanding instalments of the earlier drawing.<sup>24</sup> The Funds assistance was again made available to India as standby credits on July 9, 1962 and July 9, 1963 of the value of \$ 100 million each<sup>25</sup> and India repurchased \$ 50 millions in 1963-64 from I.M.F.

The U.N.O. has also assisted India in industrial development and productivity, national resource development

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24. India's Balance of Payments, Reserve Bank of India, Bombay, 1963, pp. 55-56.

25. International Monetary Fund - Annual Report - 1964, Washington DC, Table 5, p. 11.



and power, transport of communications, statistics and population and in promoting financial institutions. There is no need to say that India has benefitted by UNO's assistance in fostering economic growth and in raising the standard of living of the masses.

If the foreign aid is taken into consideration in coherence to the five year plans it is clear the First Five Year Plan was largely oriented towards agriculture, massive imports of capital equipment were not involved. Consequently, against the total outlay of Rs.3,360 crores the amount of foreign assistance actually utilized during the plan period came only to Rs.201.7 crores<sup>26</sup> or roughly 6.3% of the total investment. The Second Plan entailed nearly a doubling of the total outlay - from Rs.3,360 crores to Rs.6,750 crores, of which Rs.1,430.2 crores<sup>27</sup> or nearly 21.1% was foreign assistance actually utilized. This sharp rise was mainly due to the catering of large size producer's goods industries in this plan which happened to be highly capital- and foreign resources-intensive. The external assistance further rose to the order of nearly Rs.2,423 crores in the Third Plan, the rise having been precipitated to set off adverse balance

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26. Ministry of Finance 1968-69.

27. Ibid.

of payments and stave off starvation through increasing food imports due to repeated crop failures and outbreak of hostilities during this period.

In the Third Five Year Plan the proportion of external assistance was of the order of Rs.8,577 crores which comes to 28.3 per cent. During the three Annual Plans for 1966-67, 1967-68, and 1968-69, the external assistance gained further momentum and is estimated to be Rs.2,426 crores or 35.9% of the total outlay of Rs.6,765 crores.<sup>28</sup>

In consistency with its central objective of growth with stability, the Fourth Plan marks a distinct departure from the previous plans in that it envisages to reduce progressively the dependence on external assistance and to promote more vigorously the mobilisation of internal resources for filling in the consequent gap. The percentage of internal resources to the total outlay is anticipated to be 78 in the Fourth Plan against 59 in the Third Plan and 54 in the three annual plans.

The share of the external assistance (net of loan repayments but without allowing for interest payments) in the public sector plan outlay is visualized to fall from

28% in the Third Plan and 86% in the three Annual Plans to nearly 17% in the Fourth Plan.<sup>29</sup>

Further against a total outlay of Rs.24,882 crores, comprising of Rs.15,902 crores (revised to Rs.15,898 crores) in the public sector and Rs.8,980 crores in the private sector, the Fourth Plan caters for the external assistance of Rs.2,614 crores (revised to Rs.2,540 crores) or roughly 10% of the plan outlay.<sup>30</sup>

The foresight and the soundness of judgment of the planners in aiming at self-reliance and seeking the near complete independence of development planning in India from external accommodation, has been amply borne out by the recent developments in December 1971 when certain countries unilaterally and abruptly suspended, as a political pressure, a part of their commitments for economic assistance.

This was a short description of foreign assistance to India in Five Year Plans. The foreign assistance is directly related to the economic growth and development. It would be essential to go into the another important head - under the purview of qualitative role of external resources in the national development.

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29. Planning Commission - Fourth Five Year Plan - 1969-74.

30. Planning Commission - Fourth Five Year Plan - 1949-74 and Planning Commission, Fourth Five Year Plan - Mid term Appraisal.

TABLE III(8): Inflow of Foreign Assistance -  
Gross and Net : 1961-62 to 1973-74

(Rs. crores at post-devaluation rates)

Year	Gross aid utilisation	Amortisation payments	Interest payments	Total debt (Col. 2+3)	Service as % of Col. 1	Net inflow of aid
	(1)	(2)	(3)	(4)	(5)	(6)
1961-62	532	91	52	143	27	389
1962-63	699	76	61	137	20	562
1963-64	929	85	72	157	17	772
1964-65	1139	109	82	191	17	948
1965-66	1216	121	106	227	19	989
1966-67	1131	160	115	275	24	856
1967-68	1196	211	122	333	28	863
1968-69	903	236	139	375	42	528
1969-70	856	268	144	412	48	444
1970-71	741	290	160	450	57	341
1971-72	834	299	180	479	57	355
1972-73	666	327	180	507	76	159
1973-74	786	332	180	512	65	275

Sources: Upto 1965-66, Reserve Bank of India, Report on Currency and Finance, 1971-72 For later years, Government of India, Economic Survey 1973-74.

## Impact of External Assistance on GNP

In this section of the chapter I have tried to establish relationship between inflow of foreign aid and GNP and NNP. For this purpose in the beginning I have taken the inflow of foreign aid since 1960-61. The following table (Table III(7)) depicts the real picture of inflow of foreign assistance to India upto 1973-74.

### Trend in Inflow of Foreign Capital

There are four salient features of this Table III(7) which depicts inflow of foreign assistance since 1961-62 to 1973-74. It is important to notice the dramatic impact of the rising burden of the total debt service payments can be seen from the fact that the net inflow of the aid has dropped from Rs.989 crores in 1965-66 to Rs.275 crores in 1973-74. The total debt services as per cent of the gross aid utilisation increased from 17% in 1963-64 to 65% in 1973-74.

India cannot blame anyone for this trend. The rising burden of the debt service is a problem of simple arithmetic, which could have been easily foreseen by anyone.

Thirdly the major mistakes which India committed were two. Firstly - it went on borrowing a little too freely and the second reason is, it failed to develop

its exports to a point where exports exceeds imports by handsome margin.

The only way a country can repay its debt or pay the interest thereon is through the proceeds of its export surplus. No such surplus on a significant scale is yet in sight. All these years we have been making all our debt service payments only by borrowing in addition to the net borrowing required for other purposes. So the borrowing was merely for debt service payments in some cases. This is one aspect of the picture.

The other phase is the contribution of the external aid to the national income and per capita income. We come across the fact that with increase in inflow of aid the G.N.P. and N.N.P. are also increasing. So to do analyse the impact of foreign aid I have compared the annual changes in GNP, NNP, at constant and current prices. Table III(9) shows the data for GNP, NNP etc. since 1960-61.

TABLE III(2): Gross National Product and Net National Product (Revised Services)

Year	Gross National Product (Rs. crores)		Net National Product (Rs. crores)		Per Capita - Net National Product (Rupees)		Index No. of N.N.P. Base 1960-61		Index No. of Per Capita Net National Product Base 1960-61	
	At Current Prices	At Constant Prices or at 60-61 Prices	At Current Prices	At 1960-61 Prices	At Current Prices	At 1960-61 Prices	At Current Prices	At Constant Prices	At Constant Prices	At 1960-61 Prices
1960-61	13,999	13,999	13,269	13,263	305.6	305.6	100.0	100.0	100.0	100.0
1961-62	14,799	14,513	13,987	13,729	315.0	309.2	105.5	103.5	123.1	101.2
1962-63	15,727	14,880	14,795	13,993	325.9	308.2	111.6	105.5	109.6	100.9
1963-64	17,978	15,686	16,977	14,771	365.9	318.3	128.0	111.4	119.7	104.2
1964-65	21,113	16,870	20,001	15,885	422.0	335.1	150.8	119.8	138.1	109.7
1965-66	21,806	16,113	20,637	15,082	425.5	311.0	155.6	113.7	139.2	101.8
1966-67	25,279	16,324	23,883	15,240	482.5	307.9	180.1	114.9	157.9	100.8
1967-68	29,652	17,640	28,102	16,494	555.4	326.0	211.9	124.4	181.7	100.7
1968-69	30,417	18,184	28,729	16,991	554.6	328.0	216.0	126.1	181.5	107.3
1969-70	33,669	19,350	31,770	18,092	600.6	342.0	239.5	136.4	196.5	111.9
1970-71	36,558	20,334	34,476	19,033	637.3	351.8	259.9	143.5	208.5	110.1
1971-72*	38,814	20,708	36,535	19,367	650.7	350.2	275.5	146.0	216.2	114.6
1972-73*	42,077	20,460	39,573	19,077	700.4	337.6	298.4	143.8	229.2	110.5
1973-74*	51,902	21,403	49,148	20,034	851.8	347.2	370.6	151.1	278.7	115.6
1974-75*	63,375	21,478	60,120	20,075	1022.4	341.4	453.3	151.4	334.6	111.7

\* The revised services replace the earlier estimates of national income and are based on methodology explained in the Brochure on revised services of national product for 1960-61 to 1964-65.

\* Provisional. x Quick estimates.

Source: C.S.O., Monthly Abstract of Statistics, Vol. 29, Number 8, August 1975, Table II, p. 1. 20

The following Table shows the annual charges and percentage charges in the gross utilization of foreign aid.

TABLE III(10): Gross utilization of Foreign Aid\*

Year	Gross utilization of foreign aid (Rupees in crores)	Annual charges in gross aid utilization	Percentage charges in gross utilization of foreign aid (on preceding year)
1962-63	699	+167	31.4%
1963-64	929	+230	32.9%
1964-65	1139	+210	22.6%
1965-66	1216	+77	6.68%
1966-67	1131	-85	-7.0%
1967-68	1196	+65	5.75%
1968-69	903	-293	-24.5%
1969-70	856	+47	5.2%
1970-71	791	-65	-7.6%
1971-72	834	+43	5.4%
1972-73	666	-168	-20.2%
1973-74	786	+20	18.0%

+ Indicates increase

- Indicates decrease

\* The data are based on C.S.O., Monthly abstract of Statistics, Vol. 29, Number 8, August 1976, Table II, p. 1.



The second important factor is G.N.P. The G.N.P. is taken for 15 years i.e. from 1960-61 to 1974-75. The following Table depicts the real picture of annual changes in G.N.P. at current prices with the variations in percentage also.

TABLE III(11): GNP at Current Prices (in Rupees)

Year	GNP at Current Prices	Annual Changes in GNP	Percentage Changes in GNP
1961-62	14799	800	-
1962-63	15727	928	6.28
1963-64	17978	2251	14.3
1964-65	21113	3315	18.45
1965-66	21866	753	3.57
1966-67	25279	3413	15.6
1967-68	29652	4373	17.3
1968-69	30417	765	2.58
1969-70	33669	3452	11.35
1970-71	36558	2744	8.1
1971-72	38814	2256	6.17
1972-73	42077	3263	8.4
1973-74	51902	7825	18.6
1974-75	63375	11473	22.1

Data are based on the same source of Table III(10).

The third important table is Table III(12) which shows annual changes and percentage changes in GNP at constant prices.

TABLE III(12): G.N.P. at Constant Prices (in Rupees)

Year	G.N.P. at Constant Prices	Annual Changes	Percentage Changes
1961-62	14513	+514	-
1962-63	14880	+367	2.53%
1963-64	15686	+806	5.44%
1964-65	16870	+1184	7.56%
1965-66	16113	-753	-4.46%
1966-67	16324	+211	1.31%
1967-68	17640	+1316	8.05%
1968-69	18184	+544	3.08%
1969-70	19350	+1166	6.4%
1970-71	20334	+984	5.08%
1971-72	20708	+374	1.84%
1972-73	20460	-248	-1.19%
1973-74	21403	+943	4.6%
1974-75	21478	+75	0.38%

The data are based on Table III(10).

The graph clearly shows that for one year i.e. from 1962-63 to 1963-64 the total utilization of gross aid increased. Then for continuously three years there was a sharp decline in gross aid utilization on account of two wars i.e. China's and Pakistan's aggression of 1963- and 1965 respectively.

Between 1966-67 and 1967-68 we find an increase in gross aid utilization by 5.78% (while the previous year records a reduction by 7%). Further in the year 1968-69 there was a tremendous fall in gross aid utilization of the decade (it reduced by 24.5%). The next year again gross aid utilization shows remarkable increase of 5.2% in 1969-70. The year 1970-71 was of all in gross aid utilization (decrease of 7.6%) which followed by an increase of 5.4% in 1971-72. The year 1972-73 again shows decrease of 20.2% which was followed by an increase of 18% in 1973-74. We find that the gross aid utilization is of the fluctuating nature and the curve shows sharp rises and falls in the gross aid utilization.

The another variable is G.N.P. at constant and current prices. The G.N.P. at constant prices moves in the same direction of alternation in gross aid utilization except for certain periods. My hypothesis speaks -

"With increase in gross aid utilization of foreign aid there is an increase in G.N.P. (in normal circumstances) in India; and with decrease in gross

utilization of foreign aid these trends to occur a decrease in GNP".

In my analysis I find that the G.N.P. and gross aid utilization are highly correlated. At some places although I don't get support of my hypothesis, but it does not mean that there does not exist any relationship between two variables. The hypothesis is not supported by data of those years which have witnessed war. And of course, war is an unusual phenomenon and does not come under the purview of "normal circumstances". The war has very much effected the situation. The analysis shows the impact of war on GNP and gross aid utilization in 'unusual way' as compared to the normal period.

### The Correlation between Gross Aid Utilization and G.N.P.

Between 1962-63 and 1963-64 the GNP at constant and current prices is increasing with increase in gross aid utilization. The first phase which does not support my hypothesis is between 1963-64 to 1964-65. In this period the GNP is increasing while the gross aid utilization declines. But this period is 'not normal period'. India had to face China's attack and the impact of war resulted in counter directional alternation in GNP and gross aid utilization.

During 1964-65 to 1965-66 the GNP and gross aid utilization, both are falling. Again we find correlation between the two variables.

The years 1965-66 to 1966-67 show the alternation in counter direction of GNP and gross aid utilization. It was due to Indo-Pak aggression of 1965 and in war our hypothesis does not get any evidence in its support.

Between the year 1966-67 to 1970-71, there is a complete correlation of alternation of annual increase and decrease of both GNP and gross foreign aid utilization.

From 1971-72 to 1973-74 the GNP at current prices is increasing. At constant prices, however, between 1971-72 and 1972-73, the GNP was falling; this was largely a consequence of post Bangla Desh war effect on prices. Between 1972-73 and 1973-74, the GNP was rising both at current and constant prices, but the greater rise in GNP at current over GNP at constant prices was due to price rise (inflationary tendencies in the world even).

Between 1973-74 and 1974-75 the price rise was so high, that despite the fact that the rate of increase in GNP at constant prices fell from 4.6% to 0.35%, the rate of increase of GNP at current prices rose from 18.6% to 22.1%.

So in this way we find that apart from exceptions i.e. war years (1963-1965, and 1971) we find that the gross aid utilization is highly correlated to GNP (current and constant prices were taken into consideration to show the arguments in support of the hypothesis).

The GNP at constant prices show a high correlation with gross aid utilization and the only three exceptional years are due to three wars.

CHAPTER IV

IMPACT OF OIL PRICE HIKE  
WITH SPECIAL REFERENCE TO  
INDIA'S BALANCE OF PAYMENTS

## Introduction

Oil plays a very vital role in the economy of underdeveloped countries of the world. In the same way, the countries which are blessed by nature, having bountiful oil such as Venezuela, part of the middle east and north Africa, oil is economic life. 'Oil' is the only source of their national income and foreign exchange. Oil thus represents a great asset which could potentially provide all the capital necessary for economic development through 'unbalanced growth' which has been advocated by influential economists.<sup>1</sup>

The energy fuels are indispensable for modern industry and agriculture. Many studies have been conducted to draw a relationship between energy and the total economy and the energy source has been considered as fourth source of factor of production in addition to land, labour and capital. For just as capital without labour is useless, so too is sophisticated capital without energy. Energy is also a necessity for modern industrial process which involve chemical transformations. The manufacturing of cement or steel (which is very necessary for a developing country like India) both require great quantities of heat.

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1. Hirschman, Albert O., 1958, 'The Strategy of Economic Development', p. 98, (New Haven: Yale University Press).



In addition, for certain leading industries, energy is necessary as a basic 'feedback' i.e. where the energy source itself becomes part of final product. The pioneering study was prepared by the United Nations.<sup>2</sup>

The history of India's recent economic development, reveals numerous examples of idle production capacity owing solely to lack of available energy. Energy is indispensable element in the production process. Despite the fact that energy costs amount to only about two or three per cent of gross national product, its quantitative impact on key aspects of the economy is much greater.

For most of underdeveloped countries the cost of importing energy is a major burden on their scarce foreign exchange; oil imports typically account for between 5 and 10 per cent of oil imports. While on the other hand, energy costs are much more significant in the 'advanced' industries than in the backward industries or in agriculture. Agriculture in underdeveloped countries typically requires virtually no energy fuels, relying as it does almost exclusively on human and animal power. At the other extreme, the modern heavy industries, energy costs as a proportion of total costs have been estimated as follow: 25% in steel making, 20% in production of other metals, 10 to 15% in chemical production, 15% in railways,

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2. United Nations, Economic Commission for Latin America, "Energy Development in Latin America", Geneva 1957, p.4.

and 20 to 25% in motor transport. The light industries such as textiles lie in the middle, for this group energy costs probably account for somewhat less than 10% cost.<sup>3</sup> The energy costs are relatively most important for those industries which form the foundation of an industrialized economy.

Another aspect of oil's potential role in an underdeveloped country is worth mentioning i.e., oil's capacity to be a leading factor in the development process even without being exported. Most development economists would probably say that an indigenous petroleum sector is not well suited to playing a leading role, because crude oil production involves little 'backward linkage' as compared with an industry like steel which tends to generate demand for the output of other industries. This belief is mistaken in that it fails to take account of enormous potential for capturing capital from an indigenous crude oil production centre.

The potential arises from the fact that of all the major commodities involved in international trade, crude oil has by far the largest gap between the average cost of production and the price. The existence of this gap lays a basis for large capital generation by an indigenous crude

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3. Hirschman, Albert O., 'The Strategy of Economic Development', 1958, (New Haven: Yale University Press), pp. 100-112.

oil sector. It is particularly important because all of this potential capital is directly translatable into foreign exchange through import replacement (at least upto the point where indigenous crude oil production meets domestic consumption needs i.e. where demand of the crude oil equates the supply of crude oil).

Basic economic characteristic of the international oil industry is necessary for a full comprehension of oil's manifold impact on the underdeveloped countries. So we take into consideration the major aspects of world oil prices and costs and the size of the world oil trade and division of the profits. The basic economic tools of analysis used are the classic ones of supply and demand.

The theoretical upper limit to the price of crude oil is fundamentally determined by the maximum demand for the various refined oil products which can be obtained from this crude oil. That demand, as measured by the maximum price that consumers would be willing to pay for specified amounts of oil products, reflect in turn the value to them of using these products.

If we come across the realities of life, we find that there are substitutes for various oil products, and their prices reduce these theoretical upper limits. At one extreme, coal, natural gas, and nuclear and hydro-electric power all are relatively close substitutes for fuel oil and thereby drastically reduce fuel oil's top

price far below its value to users. At the another extreme, there is no substitute, in the short run at least for petrol in the motor car, and hence the upper limit to price tends to be closer to the value of petrol to car owners. And this is modified to some extent by the fact that over time motor cars themselves can be adjusted to reflect, and in turn affect, petrol prices.

The theoretical base to oil prices is the long run cost of production, including some minimum rate of profit for the capital invested for meeting different levels of demand. The long run production cost for refined product consists of the sum of the costs of getting the oil from the ground, shipping into the consuming centre, and refining it. The most critical factor effecting these costs is that discoveries of oil made since World War II have been so enormous that for all practical purposes there should be no need for any further expensive oil exploration to meet demand for many years to come, that is the only necessary costs in producing crude oil are the relatively minor ones of drilling development wells in proven fields and opening the wells.

The fundamental determinant of whether actual oil prices lie nearer the theoretical upper limit or lower base is the degree of monopoly versus competition in the industry. To understand the existing situation, it is instructive to theorize what prices would be in two different situations.

If we assume a perfectly competitive situation in which there were numerous independent firms at every level of the oil industry, the price of refined products to the consumer would be built up by simply adding the separate cost of producing oil, transporting it, and refining and marketing it. This is because competition at each level would drive profits down to the minimum necessary to keep enough capital in the industry to meet demand.

In case of monopoly of crude oil (with perfect competition still assumed at all other levels of industry) the situation changes drastically. The monopoly producer would ask himself what price should be charged for crude oil to maximise profit. The rational monopolist would charge the maximum price from the consumer of various refined products. This, will essentially depend upon the value of different oil products to consumers, combined with the ease of substitution by other energy fuels.

Historically car petrol has been a valuable product for the consumer, with no substitute, the monopolist would multiply the amount of motor gasoline which he could profitably squeeze out of a barrel of crude oil times the maximum price which could be obtained for the motor gasoline, with the refineries designed to maximise gasoline production, the remaining products which could be derived from the crude oil would then be multiplied by the maximum price which could be charged for each of them.

The general principle for 'profitable' or 'optimum' refinery operation is that the refinery should be designed to produce as much as possible of the highest priced refined product, subject to constraint that the cost of producing an additional gallon of high priced product - e.g., motor gasoline - plus the cost of the foregoing the potential production of a gallon of lower priced product - e.g. fuel oil - be less than the price of the additional gallon of gasoline; this rule would apply to production of any specific refined product.

Once the maximum revenue derivable from refining a barrel of crude oil has been determined by the monopolist, then the producer may calculate the maximum price obtainable for his crude oil by 'backing out' (or in other words deducting) marketing, refining, and transport costs from the final product price. In monopoly, the price of the oil to the consumer is no longer solely dependent upon cost. It depends upon the value of product to the consumer.

To go into the details it becomes essential to derive a relationship between price and cost. The discovery of large number of oil fields, particularly in the Middle East, the cost of producing crude oil today is much lower relative to its prices various estimates have been made in this connection. "..... Informed estimates of the producing cost of supply different Middle East crude oils have varied, in the past, from about 8 cents a barrel to about 45 cents a barrel .... One consumer government,

that the West Germany, indeed had a set of independent estimates of crude costs prepared on its behalf in 1962. These suggested that costs upto the ocean terminal averaged about 33 cents a barrel in the Persian Gulf in 1959 .... If compared the estimated average cost with similar estimates of about 90 cents a barrel for venezuela.<sup>4</sup> The organisation of O.P.E.C. has expressed the following view - "Production cost estimated in venezuela at over 50 cents per barrel, and in the Middle-East at about 25 cents per barrel ..."<sup>5</sup>

Moreover, the petroleum expert M.A. Adelman estimates "..... It is often said, that average or representative venezuelan development costs are five times Middle Eastern, and that Middle East development-operating costs are 5 to 10 cents."<sup>6</sup>

Michael Tenzer estimates a good rule of thumb for a long run production costs might be 10 cents per barrel for the Middle East and 30 cents for venezuela.

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4. Hartshorn, J.E., 1962, "Politics and World Economics", New York, Frederick A. Fraezer, p. 143.

5. As quoted by Michael Tanzer "The political economy of international oil in the underdeveloped concerns". From a paper presented at the IV Arab Petroleum Congress, November 1963, cited in Hussein Abdel Barr - "The market structure of international oil with special reference to the OPEC", p. 9.

6. Adelman, M.A., 1964, 'The world oil outlook', p. 58.

TABLE IV(1): Approximate Prices and Costs at Three Levels of the International Oil Industry

Levels	Price/Barrel	Cost/Barrel
Crude Oil Production	\$ 1.50	\$ 0.25
Transportation	\$ 0.25	\$ 0.25
Refining	\$ 0.50	\$ 0.50
Total	\$ 2.25	\$ 1.00

The foresaid figures highlight a characteristic of the economics of international oil industry which is of great importance for underdeveloped countries, profitability in the industry basically stems from the sale of crude oil. While this is explainable by our hypothesis of greater monopoly control in the crude oil production than in refining or transport, in the real world supply of low cost crude oil is not controlled by a single monopolist but by a number of companies, which number in recent years has been increasing. This raises a danger to the companies as a group that the great profits which can be derived from selling additional amounts of crude oil will tempt individual companies to cut prices in order to get additional sales, thereby ultimately destroying the monopolistic 'self control' which is the source of high profitability.

The basic mechanism which has served to support the companies monopolistic control over the worlds low



low cost crude oil has been their high degree of vertical integration. That is, by ownership of affiliated refining and marketing companies in various oil importing countries, each company has secured 'captive' outlets for the highly profitable crude which cannot be won away by competitors, to the extent that all of the major international companies have succeeded in doing thus, the pressure on crude oil prices has been reduced. The existence of these affiliate relationships is particularly important for underdeveloped countries, since affiliates of the major international oil companies tend to play an important role in the oil industries of underdeveloped countries than they do in the developed countries.

The main reason for it was, until recently, the oil business in the developing country was largely a marketing one, with the integrated majors having the competitive advantage of relatively low cost products from their huge refineries in the Middle East and Venezuela, it stems also from the fact that the markets were relatively small and local capital was relatively more backward.

These affiliates can charge higher prices for crude oil than those paid by independent refineries and was so widely recognised that it led to the expression "only fools or affiliates pay posted prices".

It becomes essential to have an overview of the world trade in oil and its quantitative significance for the following groups - The oil exploring underdeveloped countries, the oil importing underdeveloped countries, the developed countries and the international oil companies. We have taken the export data for each of the major oil exporting countries and covers the year 1964.

All value figures are F.O.B. (free on board) and such omit the impact of international transportation. This is sizeable, since oil accounts for almost half of all international sea trade in terms of tonnage. As such the figures are not directly comparable with the data on imports of oil which are generally shown in C.I.F. terms (exports F.O.B. + insurance and freight charges).

The data are the officially reported 'posted price' values of oil exports which are often quite different from actual market values. The divergence arises because in 1960's, despite a growing glut of crude oil, posted prices for oil have been held constant due to political considerations (in 1964), leading to wide spread discount off these posted prices.

The Table IV(2) shows the magnitude of the international trade in oil.

TABLE IV(2): Oil Exporting Countries (Year 1964)

Country	Oil exports in millions of dollars	Total in million of dollars
<u>Middle East</u>		4,800
1. Saudi Arabia	1,200	
2. Kuwait	1,200	
3. Iran	1,100	
4. Iraq	1,100	
5. Others (Oman, Muscat, Qatar)	200	
6. Libya	700	
7. Algeria	400	
8. U.S.S.R.		700
9. Venezuela		2,500
10. U.S.A.		400
11. Indonesia		300
12. Nigeria		100
13. Malaysia		100
North Africa		1,100
		<hr/>
Total		10,000

We draw the following conclusions from the foresaid Table of international trade.

- (1) The value of world exports of crude oil and refined petroleum product totalled \$ 10 billion. And out of these \$ 10 billions of petroleum product \$ 7.8 billion amount to be crude oil and remaining \$ 2.2 billion of refined petroleum products. If we measure in quantity crude oil exports were worth 4.1 billion barrels and of refined products 0.8 billion barrels.
- (2) Venezuela is the top amongst oil exporting country which alone exports one fourth of the total export of petroleum product. And in total 15 major contributors of oil exports are listed in the Table IV(2) by regional groupings.
- (3) The Middle East accounts for almost half of the total world export. Venezuela 25% and North Africa 10%. Moreover, 85% of the Middle East oil exports are crude oil, while almost 30% of Venezuela's are refined products. The Soviet Unions contribution in oil supply is 7% of world export, equally balanced with crude and refined products. U.S.A., world's largest oil importer, provides 4% of world exports, totally in speciality petroleum products.
- (4) The implicit average 'price' for crude oil (over-stated, because based on posted prices) ranged from

a low of about \$ 1.81 in most of the Middle East to \$ 2.10 in Venezuela, \$ 2.21 in Libya and \$ 2.37 in Algeria. The higher f.o.b. prices in these three latter countries reflect primarily the shorter transportation haul to major European and United States consuming markets.

From the point of view of underdeveloped countries, the principal features of this total export of \$ 10 billion oil are the following:

- (1) The oil exporting underdeveloped countries produce 90% of total export.
- (2) The salient feature of oil trade is this that out of 90% total world export of oil which they (underdeveloped countries) produce, 90% is exported to advanced or developed countries and remaining 10% is exported to developing countries. However, oil imports of the underdeveloped countries amount to about 15% of their imports from other underdeveloped countries. Hence oil is an important element of intra-underdeveloped country trade.
- (3) For five big contributors of oil export, Venezuela, Saudi Arabia, Kuwait, Iran and Iraw, payments by the oil companies to the governments aggregated \$ 2.6 billion or 38% of their combined oil exports of \$ 6.8 billion in the year 1964. The oil companies real profit (as opposed to reported profits) were probably near the same magnitude.

(4) The oil importing underdeveloped countries spend about \$ 1 billion on their imports of oil. On an f.o.b. basis, the oil imports of all underdeveloped countries as a group account for only about 3% of their total imports. But for some major underdeveloped countries oil imports are much bigger factor. In case of India (on the basis of C.I.F. of various years upto 1964) oil imports have accounted 6 to 9% of their total imports.

Now if we analyse the situation with reference to developing countries there will be some important features of the \$ 10 billion world oil flow.

The 90% of this \$ 10 billion is produced in oil exporting underdeveloped countries and also exported from underdeveloped countries.

Moreover 90% of this 90% goes to developed countries and only 10% to the underdeveloped countries. Hence, oil is an important element of the intra-underdeveloped country trade.

Further, for five countries, Venezuela, Saudi Arabia, Kuwait, Iran and Iraw, payments by the oil companies to the governments aggregated \$ 2.6 billion in the year 1964, or 38% of their combined oil exports of \$ 6.8 billion. The companies' real profits (as opposed to reported book profits) were probably near the same magnitude. The oil

importing underdeveloped countries spend about \$ 1 billion on their oil imports. On an F.O.B. basis, the oil imports of all underdeveloped areas as a group account for only about 3% of their total imports. For some major underdeveloped countries, oil imports are a much bigger factor. For example, on a C.I.F. basis, in various years oil imports have accounted for 6 to 9% of total imports in India.

### Oil Price Hike

So far I have tried to explain the economics of oil. And vital role that oil plays in development of any developing country.

It becomes essential to have a glance on oil history and the price hike that has taken place with the passage of time. In the modern context we can safely consider the 'oil' as basic source of energy. For developing countries, with rapid industrialization, the need and demand of oil is also increasing. Before going into the details of oil price mechanism, the fundamentals should be cleared first.

The weight of seven barrels of oil is about one ton. And each ton contains 35 gallons. One ton of oil is worth in energy equivalent to 1.5 tons of coal. Free world oil production in 1973 was 2.5 billion tons (1 billion = 1,000 million). The oil production of the world was 50 million barrels per day in 1973.

O.P.E.C. accounts for 60% of the total production of oil in world. All the big exporters of the oil are member of this organisation of petroleum exporting countries. The remaining 40% of the world production and 10% of world exports come from oil wells with much higher cost of production in North America or under the sea.

As it is clear from the analysis, the O.P.E.C. plays very important role in fixing the price of oil. And that is why O.P.E.C. is considered to be an international price fixing group.

Yom Kipper War of October 1973 changed the objectives of this OPEC. Before this war the basic objective of OPEC was defensive i.e. to keep the oil countries' tax and royalty take on each barrel of oil edging upwards even though the major oil companies held all the power of oil distribution in their hands. An effective monopoly will raise prices so long as each extra 10% on prices seems likely to cut its sales by less than 1% in the medium term.

But throughout the 1960's the \$2 a barrel which Western European countries were paying for their oil imports was much more like the price a competitive industry would have charged by producing and selling so long as the market price is above marginal costs. I have already mentioned previously that direct production costs of oil in the middle eastern deserts were as low as 10 cents a barrel.



Further by 1970's margins needed to cover cost of exploration and development were about 50 cents; and freight and insurance to Europe from the Middle East added a further \$ 1.30. Total production and delivery cost of a barrel of crude oil to Europe - \$ 1.70 - was just over £ 5 a ton (average cost). The cost of an extra ton of oil (marginal cost) was around £ 4 a ton.

In 1971-72, a ton of coal cost on average £ 7 to £ 8 to produce in Britain. But it takes 1.5 tons of coal to match 1 ton of oil. The equivalent cost was £ 10 to £ 12 a ton. The cost of coal from the least efficient (or most marginal) pits was considerably greater.

So through the post-war years there existed, a substantial 'rent' which could be obtained from pricing oil upto just below the price of substitutes, such as coal. The rent could have been mostly creamed off by producer countries as a monopoly profit. In 1960, OPEC was formed and it remained modest because of the following reasons:-

- (1) Resources for exploration, development, refining and distribution were in hands of the giant international oil companies. They had to put the money in to get the oil out before producer countries could have a hold over them. So at first OPEC negotiated with the companies rather than making unilateral demands.

(2) The identity of purpose and community of interest needed to make an oil cartel work was, at first, lacking among Arabs and other producers.

(3) The sufficient competition of oil companies resulted in low price as the supply of oil was ample.

So these were the three reasons after 1960, which could not allow price hike. Moreover, enough 'say' of giant international oil companies kept OPEC away from charging monopolistic price. So at this juncture we witness a situation in which the oil producers could not enforce their monopoly. But the inability of producer continues to exploit their monopoly, had the following consequences.

(1) The government of industrial countries creamed off part of the rent in taxes from oil consumers, hence redistributing the income internally. And the oil producers had ill feelings for this act of the importer countries. By September 1973, consumer government taxes made up about \$ 7.50 of the average of \$ 14.50 a barrel price to the consumer of refined oil products in western Europe.

(2) Some of the rent was taken by the distributing oil companies, who made a higher profit on cheap oil than on expensive oil, keeping some more expensive oil wells in other areas in production - partly because they did not want to be wholly dependent on the

possibly unstable Middle East. The American government protected its domestic oil production by import quotas.

- (3) With oil cheap and plentiful, industrial demand for it rocketed at a rate above even the growth in industrial output. In Europe during the 1960's real g.n.p. rose  $5\frac{1}{2}\%$  a year and oil consumption  $8\%$  a year. Between 1960 and 1970 the share of solid fuel in Europe's energy consumption fell from  $50\%$  to  $25\%$  and oil share rose from  $30\%$  to  $60\%$ .<sup>7</sup>

In 1960's Americans felt that they were allowing their domestic oil industry to make too large profits and sprout many millionaires. So Americans changed their tax policies and price control policies against domestic American oil and natural gas industries by tightening them, so supply stopped rising.

Another important change comes in 1970 when world oil demand temporarily exceeded world supply. OPEC began to flex their muscles and negotiated increase in royalties and taxes with the companies. These were passed on and oil price began to creep up. But the real break came with the Arab-Israeli Yom Kippur war of October 1973. Arab members of OPEC imposed oil sanctions against countries friendly to Israel and all oil products found that, faced

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7. Economist, London, October 1974.

by this small restrictions of supplies, industrial countries were willing to pay much higher prices from \$ 2 a barrel in mid 1973, the price of oil rose to \$ 10 in 1974.

Another important explanation of what is the pricing oil in this connection would be: The price of oil depends upon where it comes from, where it goes, its quality, what is done to refine it, and how it is taxed. Until each 1974 the system had:

Posted price of 'marker' crude, the price OPEC increased so sharply from \$ 2.47 a barrel on December 31, 1972 to \$ 11.65 in January 1974. The 'marker' grade is Saudi Arabian light crude, posted price of other oils are geared to this. (No body pays the posted price - it is the figure used to calculate income tax and royalty payments on equity crude oil.)

Equity crude oil belonging to the companies on which the tax and royalty payments are made. On an \$ 11.25 posted price, royalty comes to \$ 9.76 - but add to this the 16 cents it costs to produce the stuff.

Participation crude oil belonging to the host government (in proportion to its stake in the company) mainly sold for distribution by the companies at a 'buy-back' price geared to posted prices, of between \$ 10.46 and \$ 10.67.

Average price means what the cocktail of equity and participation oil averages out to - \$ 10.36 for a mix of 40% equity and 60% participation. (The drop in the posted price from \$ 11.65 to \$ 11.25 was offset by higher tax rates.)

Import cost f.o.b. is average price plus profits and capital charges up to this stage. What oil cost an importing country's trade balance "free-on-board".

Delivered price means import price, cif, which includes carriage, freight and insurance which adds another \$ 1 or so to Saudi Arabia crude delivered to Britain and rest of the world.

Product prices means we add refining costs, distributing costs and profits.

Consumer prices are the grand total including taxes levied by the consuming countries government.

Unitary prices means OPEC had officially adopted a unitary (for single) price system in 1973 thus scraping the nomenclature of posted prices, equity and participation oil. This gives a national government revenue on market crude of \$ 10.12 a barrel, but has yet to come fully into force.

Break Down - Who got what? Barrel of oil product sold in Western Europe.

Before oil crises: September 1973

Selling price	\$ 14.49	
Barrel of oil sold	\$ 7.45 (51%)	\$ 7.45 Consumer government share
	\$ 2.50 (16%)	\$ 2.30 (16%) - Producers government share
	\$ 4.74 (33%)	Industry costs and profits or losses

So if we analyse the oil price a barrel before September 1973, Yom Kippur's war, the total cost at which a barrel of oil was sold in Western Europe was \$ 14.49. In this \$ 14.49 a barrel of oil price, 51% of it i.e. \$ 7.45 was the share of consumer government. Further \$ 2.30 which is 16% of total selling price was the share of producers government. In aggregate 67% of the total cost a barrel was retained by two governments of consuming and producing countries.

The oil industry's costs and profits is only 33% of the selling prices i.e. \$ 4.74 a barrel.

But a substantial change took place after the Yom Kippur war of September 1973. The prices jumped suddenly from \$ 14.49 a barrel to \$ 24.48 a barrel in March 1973. The share of the consumer government was reduced from 51% to 38% of the selling price. In March 1975, the total price at which a barrel of oil was sold was \$ 24.48. And

38% of this price i.e. \$ 9.26 was retained by the consumer government. The share of the producer government increased from 16% to 46% i.e. \$ 11.33 (while they were previously getting on \$ 2.30 a barrel). The oil industry's costs and profits or losses were only \$ 5.45 (i.e. 19% of the selling price).

The production costs were as follows:

TABLE IV(3): Each Barrel of Oil Product Sold in Western Europe

Cost	Before oil crisis - Sept. 1973	After oil crisis - March 1975
1. Production	\$ 0.20	\$ 0.28
2. Transportation	1.06	1.12
3. Refining	0.57	0.82
4. Distribution, marketing etc.	2.33	2.45
5. Losses	0.58	0.78
Total	\$ 4.74 (33% of the selling cost)	\$ 5.45 (19% of the selling cost)

The oil price hike resulted into an increase in import bill of the industrial countries. The import bill of the industrial countries rose by \$ 60 billion a year, equipment to  $1\frac{1}{2}\%$  of their combined g.n.p.'s. This resulted into several serious consequences.

It resulted into cost inflation in industrial countries -

The cost inflation came into existence. The oil price hike accelerated the cost inflation in industrial countries which badly needed oil. The real or disposable income of the consumer declined because the oil price hike acted as tax on them without feedback in the form of expenditure. The balance of payments of the oil exporting countries was in surplus because they were spending only in fractions of their export earnings. Need not to say, the oil price hike strengthened their 'surplus' position in the international field while on the other hand the oil consumer countries had to face serious 'disequilibrium' position in their payments. The oil countries moved in substantial 'surplus' with the rest of the world - this amounted at its peak to perhaps a rate of \$ 70 billion a year.

The export earnings of the oil which are not fed back in the form of expenditure must be lent one way or another. Industrial countries running the biggest deficits were not the places where the Arabs would want to lend most money (Britain is exception in this regard). So either the countries like Italy with large deficits had to get out of the deficit or the OPEC money had to be recycled from countries which received it to the countries which needed it.



But in this course of action the danger was that, failing this, the world would sink into competitive deflation or wide spread trade protection.

The reaction to the oil price hike varied in different parts of the world. Industrial and non oil producing developing countries were faced by the fact - over \$ 70 billion had been substracted from world spending and added to Arabs savings. In general most countries failed to respond to the demand - deflationary impact of higher oil prices by reflecting home demand. Some countries like Italy and Britain further deflated demand, other like U.S.A. and West Germany kept on restrictive monetary and fiscal policies larger than they would otherwise have done. It resulted into 1974's worst post war recession.

Many industrial countries responded by trying to get their 'balance of payments' into surplus - France, Japan and Italy in particular. So the burden was transferred to other countries including less developed world. But this has yet to produce a backlash.

Thirdly the recycling of oil producer's found was at first left to banking system. Most of the money flowed to New York and London and was lent in the Euro-Dollar market, and other ways. But there was a limit to the extent that private banks could extend their operations, lending long and borrowing short, so governments stepped in - through the I.M.F., which directly borrows from the

oil producers to lend through its 'oil facility'. (In the later part of the chapter I have given more importance to IMF operations through 'oil facility'.) Secondly the governments stepped in through the governments of industrial countries which have agreed to recycle money among themselves from \$ 25 billion fund they have set up.

At the same time, due to oil price hike search for the (energy conservation) development of alternative energy resources have been given a boost. Most countries have attempted some form of energy conservation. It seems clear that by 1980 Britain will be able to get enough oil from North Sea to supply its own oil needs and to start some exporting. In case of India on shore and off shore drive for oil gives out hopes of India's attaining near self-sufficiency in oil by 1980's. In the later part of this chapter when we are considering the domestic production of the oil - the analysis would be made more comprehensive.

If we look at the shape of supply and demand curves of oil we find that before Yom Kippur war, October 1973, the supply of the oil was very elastic at low prices (i.e. increase in 1% prices caused increase in supply of more than 1%). After the Yom Kippur war the oil supply curve was jacked sharply (the supply curve shifted), but it is guessed that it has not been raised over its whole length.

The reason behind it lies in the geographical conditions of the oil exporting countries.

## Oil Industry in India

Prior to independence, and even after independence, the control of oil industry in India lay overwhelmingly with three private foreign companies, largely utilizing foreign physical resources. Of the 20 to 25 million barrels of oil consumed in the early 1950's, over 80% was imported refined products derived from crude oil produce and refined primarily in the Middle East.

During the early years of Indian First Five Year Plan (1951 to 1955), oil consumption and consequently imports of refined petroleum products increased rapidly. By 1954, when the consumption equalled 31 million barrels, the cost of imported petroleum products amounted to almost \$ 200 million or 15% of the India's total import bill, in fact, petroleum imports were three-fourths as great as food imports.

Due to large and growing drain on foreign exchange, the government of India successfully pressured the three largest marketers into building refineries in India, thereby reducing the oil import bill through substitution of imported crude oil for the more expensive refined products. Standard Vacuum built a refinery with a capacity of 9 million barrels a year in 1954, Burmah Shell a 15 million barrel refinery in 1954, and Caltex a 5 million barrel refinery in 1957.

The establishment of these indigenous refineries basically represented an involuntary or undesired step for the companies. But the advent of the refineries did not change product prices in India, since these were set as equal to product prices in the Middle East plus freight, insurance, and port charges necessary to bring the products into India, i.e. 'import parity'. Hence, with the establishment of indigenous refineries, the only change in the profitability for the companies would be the addition of profits derived from their Indian refineries minus the reduction in profits for their Middle Eastern or Indonesian refineries.

Since, as we have seen, the larger Middle Eastern and Indonesian refineries would be more efficient than the smaller ones built in India, it is clear that the net impact of the changes would be to reduce the companies' profit. In addition, the companies had to make a sizeable investment of close \$ 100 million in India, a country at that time considered susceptible to revolution and nationalization. The foreign companies were not certain about the political stability and government's policy during that early period after independence.

The need for developing an indigenous oil industry was greatly felt. Since the beginning of 20th century, the companies of American origin had been trying to obtain permission to explore refine or produce oil in India and Burmah which was consistently refused by the British

government.<sup>8</sup>

In 1951, 90% of India's requirements of petroleum products were met by imports. India was totally dependent on these foreign companies for the supply of petroleum. And this was a risk on the part of India. Further the Abadan crisis in Iran clearly drove home the need to develop adequate indigenous supplies, which would act as a standby in case of disruption of foreign oil supplies. (In 1951 the oil industry in Iran was nationalised which resulted in a crisis, for Persian oil products accounted for a major portion of India's consumption during this period.)

There is a basic question - viz. why did these companies agree to build these refineries? There are three important reasons in favour of it. The foreign oil companies visualised India as a promising growth market for oil and that, given the foreign exchange problem posed by importing refined products, ultimately they might jeopardize their whole position in India if they, did not accede to the government's desires.

The second reason for the establishment of refineries was, as long as they (oil companies) would still import their own crude oil, the reduction in profits emanating from the change was still worth accepting, when weighed against the possibility of being excluded from Indian market.

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8. Dasgupta, Biplap, 'The oil industry in India', Frank Cass and Co. Ltd., London, 1971, p. 38.

Such exclusion could come about from nationalization or by the government allowing other oil companies to build the refineries in exchange for guaranteed crude supply rights. This could ultimately result in complete or partial loss of the established majors' valuable marketing facilities in India.

The companies would still make about \$ 30 million in after-tax profits on the sale of the crude oil moving through the three refineries.<sup>9</sup> Thus, while they might expect to earn only about 10% per year on their refinery investment from refining operations as such, when the refinery is viewed as necessary for getting the crude oil profits, its profitability rises to about 40% per year, which was quite attractive.

The third reason was, the companies had the legal protection of refinery agreements negotiated between the Indian government and the companies. The essence of these long-term agreements provided that each company had the right of importing and refining oil from its own sources and the companies could not be nationalized.

So the formal agreements were done with Burmah Shell, ESSO and Caltex for the establishment of three coastal refineries in the 1950's. Thus refineries were established at Bombay (one owned by Burmah Shell and other owned by

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9. Tanzer, Michael, "The political economy of international oil and underdeveloped countries", 1970, p. 169.

ESSO) and the third refinery was set-up at Vishakapatnam owned by Caltex. It is important to mention here that the net saving in foreign exchange was estimated to be Rs.25 to Rs.35 per ton in spite of the fact that the refineries were operated under foreign ownership.<sup>10</sup>

The completion of major refineries by Burmah Shell and Standard Vacuum during the First Five Year Plan involved a significant change in the character and mode of the Indian oil industry. In the 1950's only 10 to 15 per cent of all products sold in India were refined indigenously, by 1955 the proportion was almost three fourths, despite the fact that the annual demand of the oil rose from 20 to 25 million barrels, to 35 million barrels.

On the other hand foreign investment in petroleum facilities in India increased from \$ 47 million in 1948 to \$ 218 million in 1955. Further the petroleum's share of total foreign investment in India increased during this period from 8% to 24% (and actually surpassed foreign investment in plantations (such as tea), which had historically been the major foreign sector in India).

During the period 1955-60, the period of Second Five Year Plan the government's pressure on oil companies increased.

Oil's negative impact on the foreign exchange position was a serious problem. These were two important

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10. Das Gupta, op. cit., p. 116.

reasons of serious thinking in the above context.

Firstly India could successfully achieve its targets of First Five Year Plan. The Second Plan envisaged much more ambitious targets, and in the course of pursuing this accelerated growth, imports increased rapidly, leading to a very deficit position in foreign exchange reserves. The second reason which increased the governmental pressure on these companies was from the 'local equity' or in other words - India became free recently during that time and frequently sought to promote indigenous business sector. The government was expecting to favour a change from private foreign control to indigenous private control of resources. The basic concept of self-reliance working behind the development of indigenous industry. The specific goal of the government pressure has usually been to induce foreign private capital to enter into partnership with local businessmen. And preferably local businessmen would have the majority of equity stock, but at least the local businessmen should have 50% partnership. The idea of the government was that the foreign companies would provide capital (particularly foreign capital which was scarce in the country), technical know how while local businessmen would contribute local currency capital along with knowledge of local conditions. The long term objective of the government behind this theory was that this type of partnership would develop a large indigenous business group and technical class.



The biggest drawback with the indigenous foreign refineries in India was about the prices paid by them to their parent companies - particularly for crude oil. These refineries were paying very high cost for crude oil and were purchasing from their parent concern only. During this period Soviet Union was ready to supply oil at a cheaper rate. Hence the need for indigenous oil industry was stressed by the government.

Keeping this objective in view the Oil and Natural Gas Commission was constituted in 1955. The O.N.G.C. was reconstituted again in 1959 into a statutory body by parliamentary act. The O.N.G.C. has discovered a number of oil fields in the country particularly in Gujarat and Assam. The Oil India Ltd. (O.I.L.) started operating in 1959 the oil fields of Nahorkatiya (Assam) discovered by AOC in partnership with Burmah Oil, and later in Arunachal Pradesh.


In public sector there are three refineries to process the indigenous crudes at Gauhati (Assam), Barauni (Bihar) and Koyali (Gujarat).

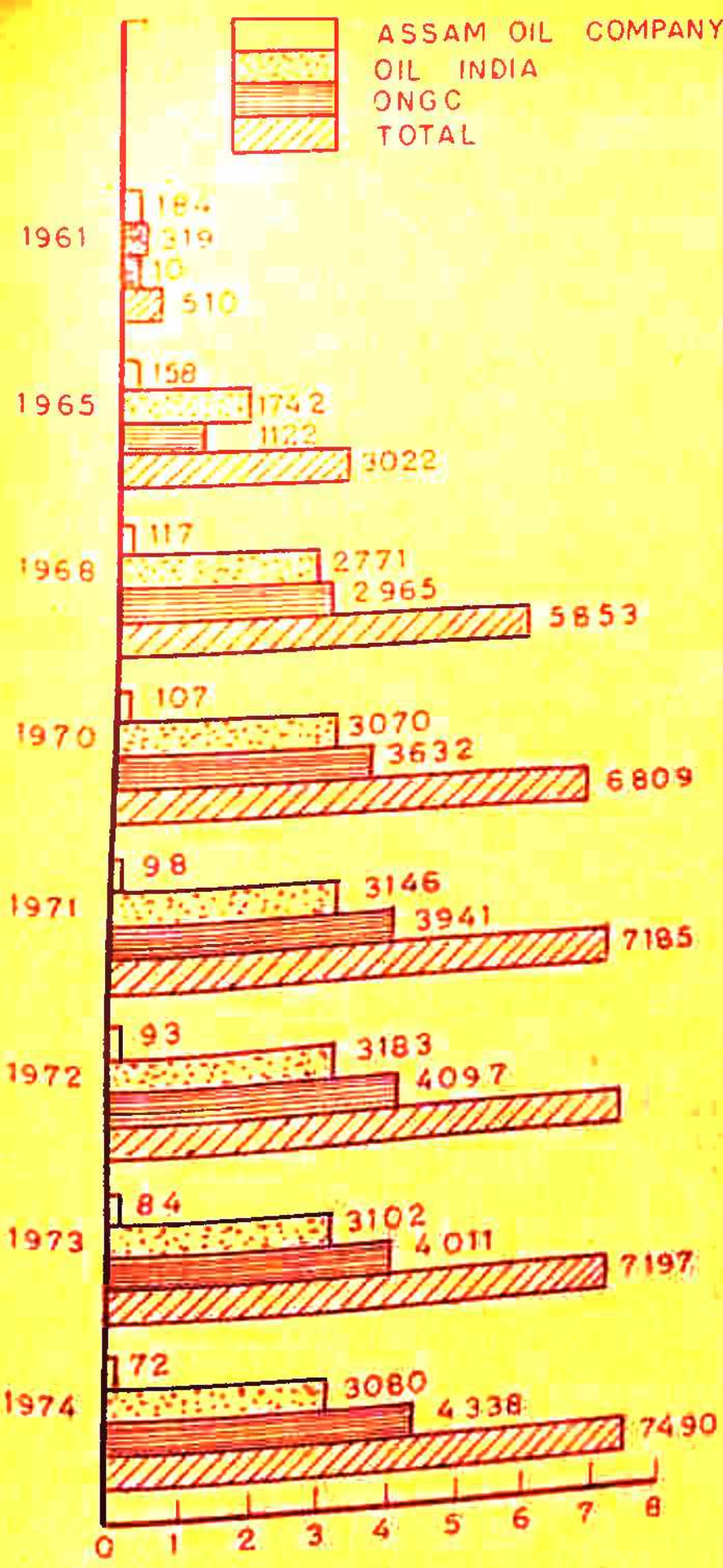
In 1960's the policy of Indian government changed. The government wanted to limit the operations of foreign oil companies in India. The import trade in oil products were made an exclusive privilege of the IOC from 1965. Each marketing company was guaranteed a share of the market which was related to its refinery output. Hence the major oil companies could expand their market share only by increasing aggregate refinery capacity under their ownership.

The foreign companies were eager to enter joint venture agreements but the Indian government is said to have disapproved the agreement of joint venture initially but in the later part the Indian government agreed in the establishment of new oil refineries in the joint sector with foreign technical collaboration.

The government of India entered into agreement in 1963 with Phillips Petroleum Company (U.S.A.) and Duncan Brothers Co. Ltd., Calcutta for establishing a refinery at Cochin. The year 1965 brought a joint venture programme of the government of India with National Indian Oil Company (NIOC) and AMOCO for the Madras refineries ltd. In 1967 a refinery was established with French and Rumanian collaboration under the charge of the IOC. The two other refineries are scheduled to be established in the Fifth Five Year Plan at Bongaigon and Mathura. The establishment of these refineries are in accordance with the growing need of the Indian economy. Moreover the policy of government of India in context of oil has been also flexible. The establishment of oil refineries brought dynamic changes in the production of the indigenous oil. Between 1961 and 1968 indigenous production of crude oil rose at a rapid speed. But in the later years it slowed down substantially. The following Table depicts the crude oil production in India through various companies.


 ASSAM OIL COMPANY  
 OIL INDIA  
 ONGC  
 TOTAL


 % INCREASE  
 DECREASE



29.6 %

83.0 %

93.7 %

16.3 %

5.5 %

2.6 %

-2.4 %

4.1 %

TABLE .IV (4) CRUDE OIL PRODUCTION OF INDIAN COMPANIES - 1961 - 74 (IN '000 TONNES)

TABLE IV(4): Crude Oil Production of Indian Companies  
(In ,000 tonnes)

Calender Year (Jan. to December)	Assam Oil Company	Oil India	ONGC	Total	% Increase or Decrease
1961	184	319	10	510	+29.5
1965	158	1742	1122	3022	+83.0
1968	117	2771	2965	5853	+93.7
1970	107	3070	3632	6809	+16.3
1971	98	3146	3941	7185	+ 5.5
1972	93	3183	4097	7373	+ 2.6
1973	84	3102	4011	7197	- 2.4
1974	72	3080	4338	7490	+ 4.1

(+) indicates increase

(-) indicates decrease

Source: "The government of India, Ministry of Petroleum and Chemicals, "Indian Petroleum and Chemical Statistics", 1973, and Ministry's Annual Report 1974-75.

In 1973, the production of crude oil declined by 2.4% and in fact, rose by only 4.1% to reach 7.5 million tonnes in 1974. During this period the crude oil production was only one third of the total demand of the crude oil. According to the estimates of the Indian Petroleum and Chemicals Minis try the crude oil production in India is expected to rise to 8.5 million tonnes in 1975 and further to 11 million tonnes in 1976.

The ONGC is taking technical assistance from USSR to develop indigenous oil industry which is based on Joint Techno-Economic Plan. Besides on shore drive for oil India has tried substantially, to explore oil in 'off shore' areas also. The gulf of Bombay is explored for oil. Apart from it, the Soviet seismic ship 'Academic Archangelski' (hired by the government of India from USSR for two years) collected the basic geographical and geological informations about the areas of Kerala, Kaveri, Mahanadi, Godavari and Ganga in the year 1964. In 1967, the USSR submitted its draft report to ONGC. It is said to have kindled world wide interest in Bombay high. The ONGC took keen interest in Bombay high and the drill ship 'Sagar Samrat' started its operation in Bombay high. The ONGC took too much time in taking final decision. After the report of Russian ship came in (1967) the ONGC took two years in deciding its plan of action and the final decision in drilling at Bombay high. The question before the government was whether to authorise foreign companies to give this contract at Bombay high or the operations should be performed by the ONGC. The drilling ship 'Sagar Samrat' came late. And this delay by ONGC has cost Indian economy substantially in terms of foreign exchange burden. The urgent need to tap all sources of oil production can be better appreciated if examined in the light of magnitude of our payments problem and the great dependence on foreign supply. As previously stated during sixtees government of

India took keen interest in establishing indigenous oil refineries in the country. Needless to say that the government policy resulted in a positive direction. The dependence on foreign oil decreased considerably. The statistics of the World Bank for India shows clearly that in 1968 the dependence on foreign crude oil became only 65% as compared to 90% in 1956. We could reduce the external dependence on crude oil by 25% in twelve years - it is of course a substantial achievement for a developing country like India. The following Table (Table IV(5)) depicts the extent of dependence on imports in the petroleum sector for India.

ONGC is working very effectively to explore and is engaged in drilling activities at various places in the country to gear up the indigenous petroleum production. It has finalised plans for the production upto 2 million tons per year by the end of 1976 from 16 wells drilled in Bombay high. In the sixties the external dependence on petroleum crude declined substantially in India context. The off shore drive for drilling the oil in various wells at Bombay high has given a new direction to the Indian oil industries production.

ONGC has divided the continental shelf into ten basins. The Bombay high is operated by ONGC itself and the remaining other basins of Kutch, Caveri and Bengal have been given to foreign oil companies of Canada and U.S.A. for drilling purposes.

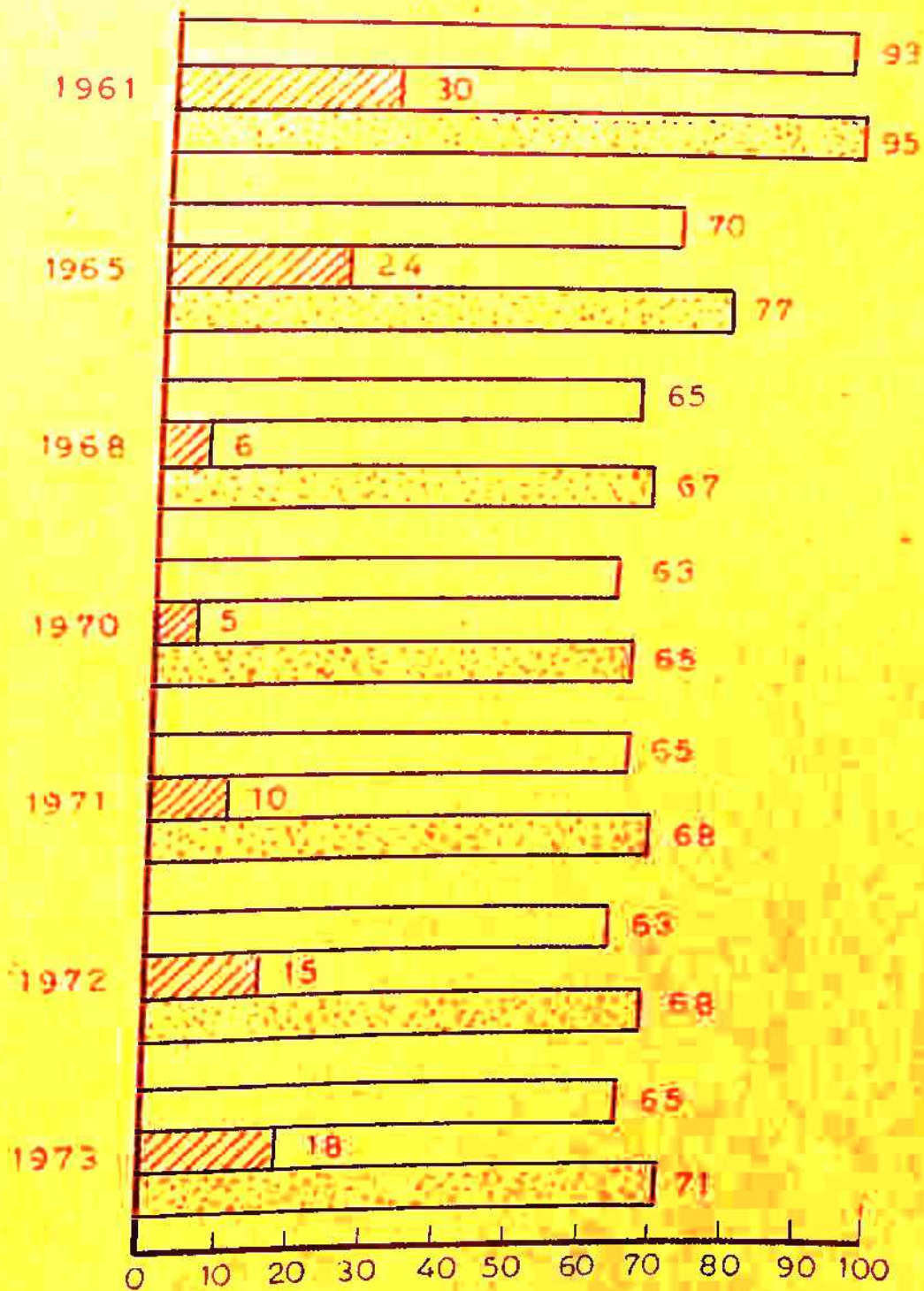
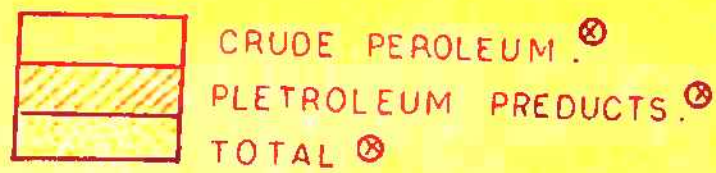


TABLE. IV (5) INDIA : PETROLEUM SECTOR EXTENT OF DEPENDENCE ON IMPORTS (IN PERCENTAGE)

⊗ for details consult table IV (5)

TABLE IV(5): India: Petroleum Sector - Extent of Dependence on Imports

		(In percentage)						
		1961	1965	1968	1970	1971	1972	1973
<u>1. Crude Petroleum</u>								
	Ratio of crude imports to refinery throughput	93	70	65	63	65	63	65
<u>2. Petroleum Products</u>								
	Ratio of products imports to net consumption	30	24	6	5	10	15	18
<u>3. Total</u>								
	Ratio of imports of crude and products to total availability*	95	77	67	65	68	68	71

\*Total availability is domestic refinery throughput plus imports of petroleum products

Source: World Bank, India: Energy Sector, 1975; and Government of India, Planning Commission, Draft Fifth Five Year Plan.



The three important ships of ONGC are Japanese 'Sagar Samrat', 'Haakon Magnus' of Norway and British drilling ship named 'Dalmaboya' and ONGC is getting another drilling ship from U.S.A. also. The 'Sagar Samrat' has so far drilled five oil wells upto August 1975, the first one drilled in February 1974 and the fifth one in May 1975. The first oil well was drilled upto a depth of 962 metres to get oil. The ONGC plans to drill 20 more exploratory wells during 1975-76. The oil at Bombay high in the form of lime stone formations (as we find in the Middle East).

The ONGC is signing various contracts with U.S. firm McDermott Company for fabrication yards in Dubai and for the execution of a two-stage turnkey project to solve the transportation problem of oil produced from the Bombay high to the shore. And this crude oil which is drilled at Bombay high would be taken to the shore terminal to be constructed at Salaya, in the Gulf of Kutch and later would be transported to Mathura in Uttar Pradesh. The refinery erected at Mathura is having 6 million tonnes capacity. The crude of Bombay high would be processed here.

The other seismic ship which India has taken from U.S.A. in 4 crores rupees is 'Anveshak'.<sup>11</sup> The American

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11. Decaying organic matter when buried changes to oil or gas through the action of bacteria. To form commercial accumulations, the oil should be able to migrate to a location where it can be trapped by overlying layers. Areas of such accumulation are known as 'sedimentary areas'. The dome-shaped anticlines are the most popular of such areas where the real rock becomes a cap and the porous rocks below the reservoir. Such formation is called 'structural' in oil jargon.

The American companies have carried out extensive seismic surveys, which have forecasted three structures in Kutch and four in Bengal area, with good prospects of yield. In September 1975, the drill ship 'Fredricksburg' (The Carlesburg group) started its off-shore drilling in 23,000 square kilometre area of Bengal and spudded its first well on September 22, 1975. In this contract the whole basic has been offered for seismic surveys, but the contractor has to select an area of 5000 sq. km. for exploration within 2 years, surrendering the rest of area to ONGC along with the data collected upto that particular time. The contracted area is to be reduced by 2500 sq. km. by the end of 36 months and at the end of seventh year, the contractor is to be left with the only producing areas.

The ONGC has also taken the project of oil exploration in north and north west of Bombay high. The special unit of ONGC has been constituted for this purpose to start the oil exploration immediately. In March 1975, the ONGC spudded its first well in Mandapam area. At the same time it is also taking up exploration work at Saurashtra off-shore area.

If we look at the statistics of ONGC oil exploration, we find that upto 1974-75 the total meterage drilled by ONGC in the country accounted for 1.96 lakh kilometers, as against the budgeted target of 1.91 lakh kilometers.

The operations of ONGC are not limited upto India only but it has taken some assignments abroad also. It entered into a contract with Iraq National Oil Company in August 1973, under which an area of 4200 square kilometers was allotted to India for exploration and production of oil. The first oil well in this area was spudded in August 1975. In Gulf of Iran, particularly in Rostam and Raksh, the ONGC's subsidiary Hydro-Carbons Pvt. Ltd. (HIDL) got a share of production from the field which is estimated to be 3 million tons during the Fifth Five Year Plan period.<sup>12</sup>

Various projects have been taken up in various states of the country by ONGC, particularly in Jammu, Rajasthan and Himachal Pradesh. In the eastern part the first well was spudded at Bakultala which is considered to be a promising location in the Baroda structure.<sup>13</sup> The ONGC has also indicated that West Bengal is also supposed to have rich oil and gas resources. But due to geological difficulties as the West Bengal area is having a marshy ground, exploration activity has not been taken up under intensive operations. The Oil India is operating in Arunachal Pradesh and also has struck a well at Kharsangh. However, it has been reported that some more follow-up drilling would be essential before the possibility of oil is confirmed there.<sup>14</sup>

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12. Ministry of Petroleum and Chemicals, Performance Budget, 1975-76.

13. Commerce, November 15, 1975.

14. Financial Express, November 1, 1975, p. 1.

Now, looking at India's case, Assam's refineries are 'resource based'. The Digboi and Nunmati refineries are located near the source of crude oil. Koyali refinery of Gujarat is also 'resource based'. The coastal refineries are established with a objective to process imported crude at Bombay, Madras, Cochin, Haldia and Vishakhapatnam. The Barauni refinery is established near the consumption area.

The second important constraint regarding the yield of petroleum products mostly depends on techniques of processing. In the modern age various techniques have been developed to achieve a needed product mix. The yield of middle and light distillates can be increased by a complex processing with 'visbreaking', hydrocracking' and 'catalytic cracking'.

While throughout the sixties naphtha was in surplus, a naphtha shortage is expected after 1983-84 when more petro-chemical plants are to be set-up, in the view of Fuel Policy Committee. Light distillates are expected to be in short supply right upto 1990-91. This warns us for not only advance refinery planning, but also, naphtha demand will have to be regulated by proper licensing of fertiliser and petro-chemical projects, and it must also be ensured that naphtha is not priced too low.

According to the draft of the Fifth Five Year Plan the target for a refinery capacity is of 39 million tonnes. At present, the existing capacity of a refinery is 24.5 million tonnes and the additional capacity approved during

the Fifth Plan is 13.9 million tonnes. The details of the refinery-wise capacity is given in Table No. IV(o). This capacity is estimated to result in a refinery throughput of 36 million tonnes, which can cater to a net consumption of petroleum products of 34-35 million tonnes, which would mean an annual average compound rate of growth of 9%. The expansion programme of Koyali refinery has been delayed and the Mathura refinery programme is expected to spill over Sixth Five Year Plan. The reasons for the delay were inadequate financial resources with the government and the alteration in the design of the refinery. Previously the Mathura refinery was designed to process imported crude of Iraq while now it has to process Bombay High crude.

The oil price hike imposed serious burdens on the governments of the third world countries. Indian government decided to curtail the consumption of oil products to the minimum. Hence the estimates of refinery capacity and product demand need to be amended in consonance with the structural change in oil.

The Fuel Policy Committee reports (August 1974) considered the possible reductions in demand of petroleum products due to oil price hikes, and on the assumption of a \$ 10 per barrel long term crude oil price, and a fifty per cent achievement of the substitution that could be achieved, with the best possible efforts between oil products, has forecast a consumption of 32.2 million tonnes of petroleum products in 1978-79, of which 24.5 million

tonnes would be consumed by the energy sector. According to the study of World Bank a figure of 31-32 million tonnes by the end of Fifth Plan is a reasonable estimate of consumption of petroleum products in India.

In case of indigenous production of crude oil the Fuel Committee has recommended more secondary processing of heavy end-products to produce larger middle and light distillates. The location of the refinery should be well judged. The product mix required in each refinery, the extent of secondary processing to be established and the feedback choices for the fertiliser industry should be examined by considering these options simultaneously, if necessary with the help of programme models.

### The Mechanism of Oil Pricing in India

The ONGC and Oil India are generating internal resources in oil exploration. But whether the ONGC and Oil India can generate sufficient internal resources to finance the production programmes depends much on the cost of production and pricing of indigenous crude.

According to the World Bank study for all domestic production, the average direct producing costs at present may be in the range of \$ 1.50 to \$ 1.65 per barrel. In the comparative study of cost of production, the cost of production of Assam crude is higher than the on-shore Cambay fields. Regarding the content, the Assam crude has a

TABLE IV(6): India: Estimated Refinery Throughput Capacity, September 1974

(million tonnes)

<u>1. By Refinery and Ownership</u>		
<u>(a) Public Sector</u>		
- Koyali	4.30	
- Barauni	2.80	
- Gauhati	0.80	7.90
<u>(b) Joint Sector</u>		
- Cochin	3.30	
- Madras	2.50	
- Hindusten Petroleum (Bombay)	3.50	9.30
<u>(c) Private Sector</u>		
- Burmah Shell (Bombay)	5.25	
- Caltex (Vishakhapatnam)	1.55	
- Digboi (Assam)	0.50	7.30
<u>(d) Total</u>		<u>24.50</u>

<u>2. By Location</u>	
(a) Inland refineries	8.40
(b) Coastal refineries	16.10

Approved Additions in the Fifth Five Year Plan Period

Existing capacity at March 31, 1974 24.50

Expansion of existing refineries

- Barauni (1976/77)	0.60
- Madras (1976/77)	0.80
- Koyali (1977/78)	3.00

New Refineries

- Haldia (1974/75 and 75/76)	2.50
- Bongaigon (1977/78)	1.00
- Mathura (1978/79)	6.00

Total above additions to capacity 13.90

Total existing capacity and above additions 38.40

Source: Draft Fifth Year Plan, Statistics of Ministry of Petroleum and Chemicals and Indian Oil Corporation in World Bank study - op. cit.

sulphur content of 0.3 per cent, the crude produced from Gujarat fields is lighter ( $36^{\circ}$ - $48^{\circ}$  API), with a sulphur content of less than 0.1 per cent. However, its wax content averages between 11 and 13 per cent and in winter the oil must be heated to flow.

It would be worthwhile to discuss the price mechanism of oil in India. What is the criterion and the mechanism by which the price of the crude oil in India is decided.

World's oil production in 1974 stood at 2800 million tonnes. United States of America alone is consuming 30% of the world oil production. Indian consumption in 1975 was less than 1% of total world's oil production i.e. 25 million tonnes.

Mr. S. Krishnamurthy has given price mechanism of oil in India in the systematic way. For my purpose I have taken his paper "The mechanism of oil pricing"<sup>15</sup> as standard source for oil pricing.

The product of a refinery are classified as light distillates (motor gasoline, naphtha, LPG etc.). The second product is middle distillates (kerosene, high speed diesel (H.S.D.), light diesel oil (L.D.O.), aviation turbine fuel

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15. Krishnamurthy, S., Chairman and Managing Director, Hindustan Petroleum Corporation, "The mechanism of oil pricing", Lok Udyog, May 1976.



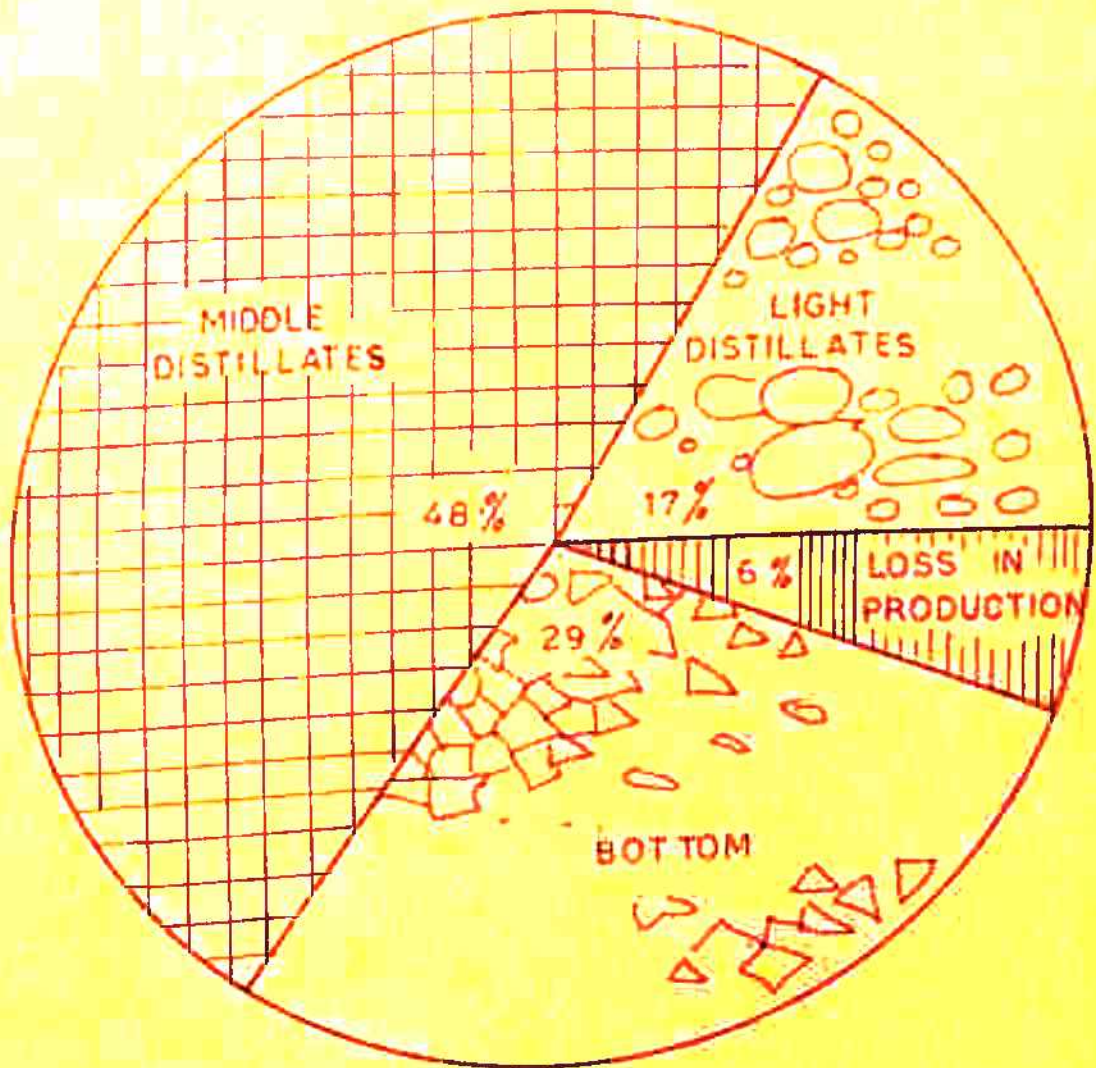


TABLE. IV (6) INDIA: ON AVERAGE EACH BARREL OF OIL'S CONVERSION INTO PETROLEUM PRODUCT (IN PERCENTAGE)

(A.T.F.) etc. And the third classification of the oil product is bottoms - which include furnace oil (F.O.), asphalt etc. And it depends on process established in each refinery, varying percentage of distillates etc.

In our country, on an average, each barrel of oil is converted to petroleum products as follows:

1. Light distillates	-	17%
2. Middle distillates	-	48%
3. Bottom	-	29%
4. Loss in production	-	6%

The pricing of oil product is considered to be a complex problem. The price of the petroleum product can be derived from the price of the crude oil as there tends to be a relationship between the crude oil and petroleum products. But the price of crude oil is varying. So despite the relationship, it is a complex problem of pricing the petroleum products due to variations in the price of crude oil.

Today, in the modern age, the demand for oil is increasing with a remarkable velocity. And most of the oil consuming countries including India produce only some crude oil and have to import the remaining balance of the requirements. The prices of crude from these two sources - imported and indigenous are widely different. The new sources of indigenous oil which have been drilled with a

large investment (and are in the ascending scale) is more costly as compared to existing old oil. The cost of production of off-shore is significantly higher than that of oil on shore. The sources of indigenous crude are different and hence the cost of production differs.

In U.S.A. the crude sources are recognised 'imported oil', 'released oil' and 'new oil' because the price of crude from different indigenous sources vary over a wide spectrum.

October 1973, brought the worst situation for oil consuming countries. The world witnessed a steep price rise on imported crude. It is important to mention here that before the oil price hike of October 1973 the indigenous crude was costlier than the imported crude. But after the price hike the cost of production of the indigenous crude turned out to be lower as compared to imported crude in most parts.

Mr. S. Krishnamurthy has given certain definitions which are very helpful in understanding the system of petroleum product price.

In case of imported crude the delivered price consists of the import price plus carriage freight and insurance. The delivered price in case of indigenous crude consists of the price due to the producer (ONGC in India) and the cost of pipeline transportation. The product price is derived by adding to the delivered price the refining cost of the refinery company the distribution cost of the marketing companies and profits.

The reason of cost difference lie in the different sources. In case of imported crude, carriage freight and insurance etc. are included apart from other costs of production.

The consumer price is derived by adding to the product price, the taxes levied by the central or state or both governments and the local authorities.

In India, the delivered cost of indigenous crude is approximately Rs.300/- per tonne, while the delivered cost of imported crude oil is approximately two and a half times more i.e. around Rs.750 per tonne. The natural solution to a system of uniform price all over the country for a product is to derive the weighted average of the different prices of crude to refineries. Today this weighted average in India is of the order of Rs.590 per tonne.

The consumer could get the benefit of lower cost of indigenous crude through the device of the weighted average of the price of indigenous and imported crude.

'Value stock accounting' (U.S.A.) system was popular in India till 1958 for pricing of petroleum products. This U.S.A. system was essentially 'cost plus percentage profit' price formula. Damle Committee, the first oil price enquiry committee in India, recommended to change this system to 'import parity' in 1961. There were two important

factors which recommended to change the system to 'import parity'. Firstly, a substantial volume of our requirements of finished products were met by imports (as the ONGC could not drill substantial indigenous crude oil) and it was found desirable to recognise the principle of import parity for pricing.

The second reason being - the agreement entered into by government with ESSO, Burmah Shell and Caltex for the establishment of refineries in India. The Fourth oil pricing committee headed by Dr. K.S. Krishnaswami, Governor, R.B.I., submitted a report to the government. And the result was, this system has been changed following the conventional definition of delivered price, product price and consumer price.

In India the delivered price means a weighted average of different prices of crude (in India). The refining cost vary from refinery to refinery - depending upon the size of the refinery, value of capital investment (again which has a relation to when the refinery was set up) and the operating efficiency as determined by the technology adopted by the refinery. Then how is the uniform product price derived? Dr. Krishnaswami Committee had an appropriate answer to this problem. The Krishnaswami Committee has formulated the concept of retention prices for each refinery which reimburses to them the refining crude cost as appropriate to each refinery. This concept of retention prices also recognises each company's operating efficiency as well

as capital employed and ensures a minimum return. This is a welcome improvement and has been appreciated by the Indian oil industry.

Today, the petroleum prices in India are administered in the following fashion.

(a) Ceiling selling prices are established at refinery points for major products like mogas, kerosene, HSD, LDO, FO, naphtha, solvents and LPG - both domestic and industrial.

(b) Selling price of lubricating oils and greases are frozen at a certain level and are thus regulated.

(c) Small volume/specialised products delivered to a few selected customers like carbon black feedstock, hot heavy stock etc. are not under price control at present.

The prices of petroleum products are almost controlled by the central or state governments despite the fact that there are some refineries and oil marketing companies operating in private sector.

According to the definition as stated previously, the consumer price is derived by adding to the product prices the taxes levied by the central government, the state governments and local authorities. In certain products the duties and taxes are substantial resulting in high price to the consumer. In case of mogas the duties and taxes constitute 73.5% of the price paid by the consumer in Bombay. This is the consequence

of a deliberate fiscal policy to discourage consumption of mogas.

Selling prices of petroleum products are administered in a planned and well thought manner by the government duly recognising the need for a correct price having regard to its end use and equitable distribution, having regards to scarcity. Fuel oil is an important source of industrial energy and its price is regulated taking due cognisance of the cost of alternative indigenous sources of industrial energy, namely coal and electricity. The government has granted duty exemption to fuel oil used for power generation under certain conditions. For naphtha which is used for feedstock for the manufacture of fertilizers and also for other industries, preferential price treatment is given, taking into consideration the end-use of the product. For fertilizer purposes the selling price of naphtha in India *is only Rs.596 per tonne while naphtha used for non-fertilization purposes the selling price comes to be around Rs.1,012 per tonne.*

The current pricing policy is oriented towards establishing lower prices for certain products and certain categories of consumers, while shifting the burden of other sectors of the community who can afford to pay higher prices. This pricing policy of the government is in fulfilment of the recognised socio-economic objectives where we find huge inequalities amongst the people of the country.

The notable feature of the new pricing policy is the formation of a co-ordination agency called 'Oil Coordination Committee'. This Committee consists the Secretary, Petroleum and Chemicals Ministry, representative of the Finance Ministry and Chairman/Chief Executives of all refineries marketing companies. This Committee is having their own secretariat comprising officers loaned by all the oil companies and has four divisions as follows:

1. Operation division - which coordinates on imports of petroleum products, product distribution, coastal movements, exports, etc.
2. Accounts and Finance - which reimburses to and receives from refineries and marketing companies.
3. System Analysis - which coordinates studies on industry supply/demand, investment plan etc.
4. Technical division - which looks into technical matters such as a crude yield, product specifications etc.

The centralised coordinating agency is essential as the problems of petroleum industry are getting more complex and involved day by day. Its composition provides for participative management by the different oil companies and can thus ensure success in the effort at optimisation of operations (refining, distribution, etc.) and achieving minimum cost.



The petroleum industry in India is well organised and will shortly be totally in public sector. The administration and control of petroleum products prices at present are not only well planned and organised but it is also objective oriented, meeting the current socio-economic requirements and duly recognised the long term perspective of energy resources and their planned utilization. Until July 1975, the pricing of indigenous crude was closely linked with the price of imported crude and the cost of production had no bearing on the pricing of indigenous crude. The pricing of imported crude plays very important role because the pricing of indigenous crude was also dependent on it and secondly the private sectors and joint venture refineries in India were also dependent on imported crude supply.

The oil companies had adopted the U.S. Gulf as a basing point for calculating crude oil and product prices of their exports until 1945. The crude imported to India even from Burma and Persia, the nearer sources, the price fixation was supposed to have come from U.S. Gulf only. So this parity price system was applicable to all oil companies regardless of the source of supply.

In 1945, the Persian Gulf was accepted as second basing point for price fixation. For the markets nearer to the Persian Gulf, the price of the product was equal to the f.o.b. U.S. Gulf price plus the ocean freight from the Persian Gulf to the market regardless the source of supply.

In Indian context, the government signed an agreement with U.S.S.R. in 1960 to import 3.5 million tonnes of crude oil at a discount of 20% to 25% off the posted price and to be paid in inconvertible rupees.<sup>16</sup>

By 1960 the Indian government had largely succeeded in getting the established majors to import crude oil rather than refined products, thus saving considerable foreign exchange. During this period the demand of oil had been increasing remarkably which resulted thereby increasing the total import bill. India's foreign exchange position had been deteriorating rapidly.

So in this critical situation the Indian government had five alternatives. Firstly the attempt to suppress the growth in oil demand, either through the price mechanism or through limiting imports. But as previously stated, oil is important source of energy and plays a vital role in the process of development - the government dissuaded this alternative. The crude oil was badly required for fostering the economic growth in the nation.

The second alternative before the government was to seek to find crude oil within India. It was a long term planning for which government took necessary action - but it could not solve the immediate problems.

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16. Das Gupta, op. cit., p. 185.

The third alternative was to force a reduction in the prices paid for imported crude by the established majors to their overseas affiliates. This was an alternative on which the governments focus was centered.

The fourth alternative was also important i.e. to import oil on barter basis, involving no outlay of hard foreign currency. This alternative could control the deterioration of foreign exchange position. The government paid much attention to it.

The fifth alternative was to secure western assistance in terms of foreign aid to purchase oil. The government at point worked along each of these lines but considerable efforts were devoted to third and fourth alternatives. And these two alternatives (3rd and 4th) soon became closely interrelated because the Soviet Union was the only practical source of barter oil, the pressure of Indian government were brought to bear on the companies to import Soviet oil.

The predicament of established majors came into the open in mid 1960 when it was revealed that Soviet Union had offered to supply India with large quantities of low priced crude oil on barter basis. The Soviet offer is said to be at a price which is twenty five per cent below what the British and American companies charge.

The Soviet offer had other advantages too. As in the case of earlier transactions of different kinds, the

Soviet Union is agreeable to accept payment in rupees and to spend it in purchasing Indian goods (which result in export promotion of Indian goods). India could not possibly expect more favourable terms at a time when her urgent need was to save foreign exchange during mid sixties.

The Russian offered to supply some 18 million barrels of crude oil per year or about half of India's crude imports at that time. Despite the long haul from the Black Sea to India, the Soviet crude oil was offered on a delivered basis at \$ 1.81 per barrel CIF Bombay or \$ 0.25 a barrel cheaper than the companies' CIF price.<sup>17</sup> Thus the Soviets were offering to sell oil to India at a price which would immediately save India almost \$ 5 million per year. Even more important, since the Soviet oil was to be paid for completely with rupees, the foreign exchange saving would amount to full cost of the displaced western oil or some \$ 33 million per year. (Despite the fact that Soviet offer was clearly an attractive one for India, no Soviet crude has ever moved through Indian refinery.)

The government of India stated to have asked the international majors to process Soviet crude in their refineries. But in July 1960, following the companies refusal to handle Soviet crude oil, the government owned Indian oil company signed a contract to import soviet products on a barter basis (particularly kerosene and

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17. Harold Lubell, "The Soviet oil offensive", Quarterly Review of Economics and Business, Nov. 1961, p.

automotive diesel oil, which were short in supply.)

Between 1961 and 1965 India imported a total of 10 million tonnes of refined oil fuels, of which Soviet products accounted for less than one fourth. The reason being the established majors flatly refused to process Soviet oil in their refineries. The worry of Soviet competition by western countries made them to give a discount of 15 cents per barrel of the posted price in the Middle East, rather than giving the consent to process Soviet crude.

The Indian government cancelled the agreement with U.S.S.R. and accepted the discounts offered by the established majors. At the same time, the government realised that it was in a position to bargain for larger price discounts. The government could get further discounts by threatening to reduce foreign exchange allocations. The discounts off the posted price of three types of crude imported to India for the period 1960 to 1968 are depicted in Table No. IV(7).

The ONGC experts visualised some more discounts as pointed out by oil price committee in 1969 that there was a large margin between f.o.b. price and f.o.b. cost of the crude oil.

In 1964, the price of crude oil paid by Gauhati and Barauni refineries to ONGC and O.I.L. (on the basis of import parity) was Rs.75 per tonne or Rs.10 per barrel. But in 1968



API - GRAVITY 34-34.9 - IRANIAN AGHA JARI  
 API - GRAVITY 31-31.9 - SAUDI ARABIAN - MEDIUM  
 API - GRAVITY 31-31.9 - KUWAIT

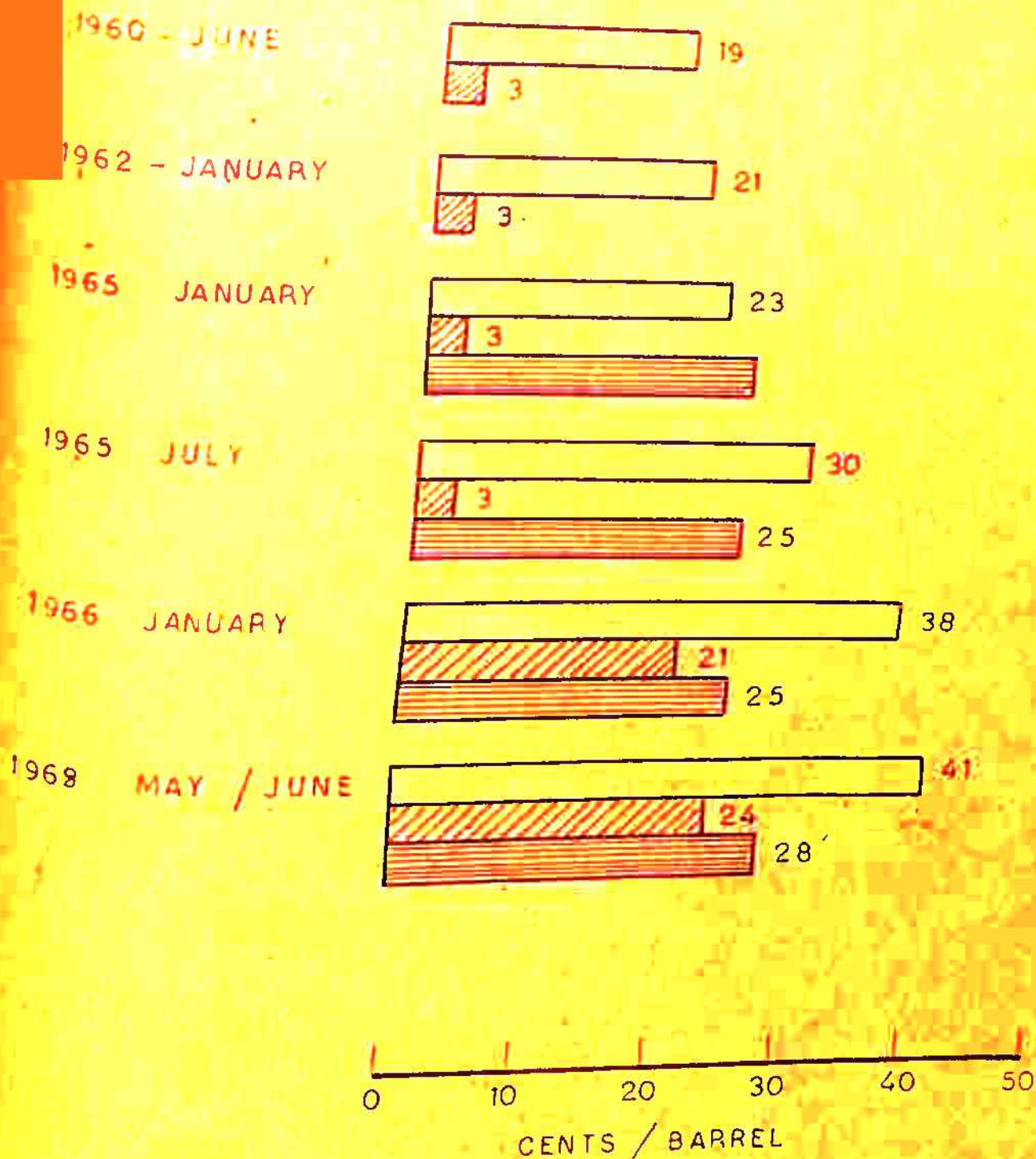


TABLE. IV (7) DISCOUNTS OFF THE POSTED PRICE OF THREE TYPES OF CRUDE BETWEEN 1960-68. (DISCOUNTS IN CENTS / BARREL)

TABLE IV(7): Discounts off the posted price of  
three types of crude between 1960-1968

(Discount in cents  
per barrel)

Period	Iranian Agha Jari	Saudi Arabian Medium	Kuwait
API Gravity	34-34.9	31-31.9	31-31.9
1960 June	19.0	3.0	-
1962 - January	21.0	3.0	-
1965 - January	23.0	3.0	25.0
1965 - July	30.0	3.0	25.0
1966 - January	38.0	21.0	25.0
1968 - May/June	41.0	24.0	28.0
Posting as on 15.5.69	1.79	1.59	1.59

Source: Report of the Oil Pricing Committee, October  
1969.

the price of the crude oil paid by these refineries rose to Rs.101 per tonne or Rs.14 a barrel.

The year 1973 brought a substantial increase in the price of the crude oil in national and international sphere. The price of the indigenous crude rose to \$ 2.48 per barrel or around Rs.19 a barrel, in August 1973, to \$ 3.58 per barrel (about Rs.20 per barrel - which is just double of 1964 price) in the beginning of November 1973 and further to \$ 4.58 per barrel (Rs.36.64 per barrel) effective from August 1, 1974.

The increased import price of the crude oil could have been charged by the ONGC and Oil India also but the indigenous prices were not increased by the government. The pricing of the petroleum products which was till now based on 'import parity' system - also changed from 1957 onwards, separate f.o.b. prices for oil products were posted in the Persian Gulf. The Damle Committee (July 1961) and Talukdar Committee's (September 1965) report the larger discounts were recommended. It was quite obvious that these recommendations were not welcomed by established international majors. They were ready to give discounts off the crude oil price and off the product price.

The operations of international majors throughout the world, were vertically integrated, their refineries stood to gain by low crude prices; the loss to the producing company could be offset by the gain for the refinery company of the



same group. If the discounts were given off the product price, the entire international organisation stood to lose. Until recently, the prices of indigenous and imported products were priced as if they had been purchased from the Persian Gulf at discounts fixed by the government. As per recommendations of Shanti Lal Shah Committee (1969), changes in product prices were determined on the basis of the formula that for every change of 10 U.S. cents per barrel in the crude oil price, there would be a 4% change in the product price.

The government of India has also adopted the policy of increasing the product price, except lube base stocks and naphtha, upto a crude price of \$ 3.48 per barrel. For increase beyond \$ 3.48 a barrel, a scheme of compensation computed on the basis of the quantity of production of bulk refined petroleum products escalated by 7 per cent (for lube base stocks), to cover own fuel and loss.

The importance of 'import parity' principle in pricing the petroleum products declined recently. The Fuel Policy Committee (1974) **strongly rejected the import parity formula.** According to Fuel Committee recommendations - "in the coming years when India is likely to produce of the products by refining the crude within the country, the Committee does not see any particular advantage in maintaining the 'price parity' formula for fixing ex-refinery prices. As in any other country the prices of products at refinery level could be fixed with reference to the cost of producing

the product after attaining a reasonable return to the refiner.

The government of India linked the prices of petroleum products to a weighted average price of \$ 8.48 per barrel of imported and indigenous crudes after the global increase in crude oil prices between October 1973 and January 1974.

K.S. Krishnaswami Committee submitted a report on the mechanism of oil prices in India (February 1975). On the basis of the recommendations this committee, the concept of retention price was to take the place of import parity formula. As previously explained, Dr. Krishnaswami recommended that the retention price for each product and each refinery was to be arrived at after taking into account the average level of 'throughput', the pattern of production, the cost of crude oil, the refining cost, and a return of 10 per cent on net fixed assets and a 15 per cent return on working capital. A posted price of \$ 8.65 per barrel is reported to have been adopted for working out the retention prices of different petroleum products refinery wise. The higher cost of imported crude to refineries is being compensated from the crude oil price equalisation account (COPE). The refineries processing indigenous crude oil will credit the difference between \$ 8.65 and \$ 4.58 per barrel to COPE account.

Moreover, the product prices will take into account a return of 12% on capital employed by the marketing companies as Indian Oil Corporation, Hindustan Petroleum Corporation Ltd. and Burmah Shell.

The price hike of crude oil by OPEC brought the foresaid changes in the pricing policy of oil in India.

### Effect of Price Hike on Balance of Payments - Theoretical Analysis

We have so far examined the importance of oil, the oil industry in India, pricing of petroleum products and the various sources from where India is importing crude oil and petroleum products. After the Yom Kippur war of October 1973, the developing countries had to face serious balance of payments difficulties. Not only the developing countries but the advanced countries like Britain and U.S.A. found themselves in uncomfortable situation. In this part of the chapter I have critically examined the impact of oil price hike on India's balance of payments position.

Theoretically speaking there can be two factors which are responsible for balance of payments problem in developing countries. The two factors are - external and internal factor. We include changes in the price level, increase in population and sectoral imbalances under the head internal factor. Regarding the external factor we include the unfavourable terms of trade and cyclical changes in the level of income of developed countries. For our purpose,

both the factors are responsible for external payments problems of developing countries. In underdeveloped countries the basic objective of the government is to execute plans for development. Generally there is an acute shortage of capital in developing countries. So sometimes government uses the weapon of deficit-financing to finance the developmental plans to accelerate growth process. It results in rise in real income accompanied with a greater rise in money income. Now if there is a rise in real money income there will definitely be rise in demand for both consumption and investment goods. Crude oil is a source of energy, hence with increase in real income there tend to occur an increase in demand for it. The inflationary pressure generated in this manner adversely affects the balance of payments. Given domestic supply, excess demand creates inflation at home and exerts pressure on the balance of payments. The second internal factor responsible for balance of payments difficulties is population growth. For a developing country like India which is densely populated there is a scarcity of capital. With increase in population the unemployment increases which reduces productivity and the per capita income is also low. And all these factors result in smaller savings, which are essential for creating the multiplier effect in the country, to raise the national income. A large quantity of food is imported to feed the masses which also adversely affects the balance of payments of the country.

The third factor is imbalance in sectoral growth. In developing countries some industries are lagging behind. Such imbalances not only account for slow growth rates but also for balance of payments difficulties. Before 1960, the oil industry was not much cared by the government. The indigenous crude oil supply was not in a position to meet the demand for crude oil. The external factors include unfavourable terms of trade. For the development purposes the developing countries require capital goods - which they have to borrow from foreign countries. Secondly the export of developing countries consist of food and raw materials. The higher per capita income in the advanced countries does not warrant any great increase in the demand for consumption goods. The developed countries are not much affected if the demand for raw materials is increased as they are economising the use of such goods, and at the same time developing substitutes.

The exports of the developing countries are the imports of the developed countries, given a rate of increase in incomes in both the groups of countries, the imports of the former increases to a much greater extent than those of the later and consequently their balance of payments position deteriorates. Moreover the bargaining power of developing countries is also weak. This unfavourable trend in terms of trade stands much in the way of economic development of developing countries. The developing countries are totally dependent upon the increase in exports of a few

traditional commodities for raising the foreign exchange required for development. A slight fall in export earning in export earning upsets the whole economy of the developing nation. The prosperity or depression in the national economies of the developing countries is dependent upon the rise or fall in the export earning. The factors that constitute the export incomes are export quantity and export price. The more important factor in the short run for developing countries is export price. And for the developed countries it is export quantity which is more important. This is largely due to typical conditions of supply in agriculture and industry. The agriculture production cannot be immediately (in the short run) increased or decreased. It means when demand exceeds supply the prices will rise and if the demand falls short of supply the prices will decline.

The degree of concentration (in developing countries) of exports is greater, than that in advanced countries. Roughly 90% of the foreign exchange earnings of the developing countries are derived from the export of primary products. Their ratio of export earnings to national income is large- 68% in the case of Southern Rhodesia, 38% in Burma, 55% in Ceylon, and 34% in Peru - any variation in the demand for their exports will have a serious effect on their incomes. This explains why cyclical fluctuations in large industrial country like U.S.A. produce similar income changes in countries which are exporting primary commodities to countries like U.S.A.

In the present stage the balance of payments experience of developing countries has three characteristics viz. their imports are increasing substantially from the industrial advanced countries, the experts have comparatively declined as compared to increase in input their balance of payments problem has been aggravated by adverse price trend.

The decisions of the OPEC after 1970 have put developing countries in very critical position. The non-oil developing countries had a phenomenal deficit of \$ 22 billion in 1974. These developing nations which had witnessed a commodity boom in 1972 has tapered off; the recession in industrial countries caused a decline in demand of their products. These industrial countries were unable to reduce substantially their imports of the oil. But the relatively better developed countries like India tried to increase their exports of goods and services to some of the OPEC countries.

The balance of payments position of the non-oil developing countries like Mexico, Brazil, Phillipines, Sudan, Peru, Zambia, Yugoslavia, Korea badly deteriorates. These countries tapped the Euro-currency market to finance their deficits. It is worth mentioning here that the Euro-currency credits to non-oil developing countries rose from \$ 5 billion in 1973 to \$ 6.6 billion in 1974. The 2 billion dollar borrowings were concentrated in second quarter of 1975 (whole accounts to be 60% of the total borrowings of Euro-currency credits) to only four countries viz. Braxil.

Mexico, Peru and Spain.

The position became so serious with oil price in 1973, that the United Nations had to intervene in the situation to help the developing non-oil countries. On 2nd May 1974, the U.N. General Assembly was called to pass a resolution for setting up a U.N. Fund to help the countries seriously affected by the oil price rise.

The operation to help countries seriously affected by oil price hike was carried out by United Nations Emergency Operation (UNEO) with the help of the experts of World Bank, IMF, and technocrats of UNCTAD. The objective of this team of UNEO was to provide detailed projection of trade, current and capital account deficits of most serious countries (MSA countries). The projection study of deficits by U.N.O. was shocking. The projections of 1975 indicated an overall deficit for the MSA countries of 2-3 billions and the revised forecast of April 1975 indicated this deficit at \$ 3 billion. Need not to say, the oil price hike raised the deficit of the MSA countries tremendously. The problem before these countries was to find out the proper ways and means to come out of the crisis. Hence the international financial institutions came forward with a mission to assist the MSA countries. The International Monetary Fund provided, the oil facility to help the MSA countries. In the later part of the chapter various facilities and assistance of international financial institutions would be discussed in details.



## The Impact of Oil Price Hike on Advanced Countries

It is not the developing countries whose payments positions were deteriorated but the advanced countries were also not in comfortable position. A brief account of impact of oil price hike on advanced countries would be essential for the critical examination of post price hike situation.

The decision of OPEC to increase oil prices not only brought in sizeable oil revenues, but in the process also radically transformed the very pattern of international payments. The oil price hike with inelastic world demand made the revenues from oil to OPEC members jump from \$ 25 billion in 1973 to about \$ 95 billion in 1974, and the current account surplus (which only consist of 'oil earnings') was a sum of \$ 70 billion in 1974 as compared to \$ 5.6 billion in 1973.

The oil price hike reversed the payments position of the world. The advanced industrial countries which so far had a surplus balance of payments had to face a 'deficit' and the 'surplus' was continuously visible in the oil exporting countries account. The industrial countries moved over from a current account surplus position of \$ 10.2 billion in 1973 (before the oil price hike) to a deficit of \$11.5 billion in 1974 (after the price hike). The primary producing countries excluding the major oil exporters absorbed more than half of the adverse shift in the aggregate balance. The

export/import of oil alone resulted into surplus or deficit. Economists had never expected before that only one commodity price change will induce such high fluctuations in the international payments position.

The U.N. selected 41 countries which were branded 'MSA' countries - most seriously affected countries by oil price hikes which required immediate assistance in emergency. The criterion of selection of MSA countries was - the countries having less than \$ 400 per capita income with a projected balance of payment deficit for 1974 and 1975 of not smaller than 5% of the imports on an average. India was also declared MSA country. As previously stated the surplus of the oil producing countries substantially rose, on the other hand the deficit of the non-oil less developed countries in current account increased from \$ 9 billion in 1973 to \$ 28 billion in 1974, according to IMF projections study. And this deficit was projected to be \$ 35 billion in 1975.

The financing of the phenomenal balance of payments deficits posed a new challenge to the international financial system, which had already overstrained by the inflationary pressure and the disturbing effects of a system of floating exchange rates.

In Rome, January 1974, the IMF Managing Director Dr. J. Witteveen presented a note to the 'Committee of Twenty' pointing out attempts to solve the current account problems caused by oil price hikes. According to him "The attempts

to eliminate current accounts deficit through deflationary demand policies, import restrictions, and general resort to exchange rate depreciation would serve only to shift the payments problem from one oil importing country to another and to damage world trade and economic activity!"<sup>18</sup> The most seriously affected countries should initiate adjustments through currency depreciation and internal measures and that countries in a relatively more favourable situation accept the consequent deterioration in their current accounts.

It is important to mention that the additional import costs on account of oil in 1974 varied from \$ 5.6 billion in U.K. and Italy to \$ 16 billion for the United States of America, according to the 1975 Annual Report of the Bank of International Settlements (B.I.S.). The trade balance of industrial countries were in deficit in 1974 excluding Japan and West Germany. The industrial countries were having trade surplus before the oil price hikes. For instance the trade surplus of industrial countries was \$ 11 billions in 1972 and 1973 while after the oil price hike this trade surplus resulted into deficit of \$ 10 billion in the year 1974.

The deficit countries were left with few alternatives. Either they had to draw down their resources or they had to borrow from the international financial markets or from

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18. IMF Annual Report, 1974, p. 126.

multilateral agencies or to increase exports to OPEC countries which are providing oil. The deficit countries are not interested in drawing down their reserves as it is an indication of the countries financial strength with the rest of the world.

But in the case of developed countries they have great potentials to boost their exports to oil producing countries. Moreover the oil producing countries are also interested in developing their own economies which had got abundant of oil but in fact were backward and undeveloped. These OPEC members are interested in taking western countries assistance in the form of their goods and technical know-how. This is the advantage with the advanced countries while there are certain limitations with the developing countries especially with those whose per capita income is low.

The second alternative of borrowing to eliminate deficit is easy for both the developed and developing countries. The developed countries have also tried to attract foreign capital by offering higher rate of interest.

Amongst the advanced countries United Kingdom was badly affected by the oil price hike. It had trade deficit of \$ 12 billion and current account deficit of the order of \$ 8 billion. But despite the current account and capital account deficit the foreign exchange reserves of U.K. increased by \$ 460 million in 1974 with the heavy borrowings from Euro-Dollar market. The U.K.'s liabilities to foreign official agencies rose to about \$ 5 billion in 1974. The oil

companies purchased huge amount of sterling to pay tax to oil companies. The magnitude of U.K.'s current account deficits declined in first half of 1975, as compared to first half of 1974. In April 1975 £-sterling depreciated by 22.5% from the "Smithsonian" parity levels. Further again in October the depreciation increased to 29.5%. In 1974, most of the industrial countries had a tight monetary policy to keep a check on the rising prices while U.K. was more concerned with recessionary trends (caused by oil price hikes) and increasing unemployment. The Minimum Lending Rate of Bank of England was lowered from 13% in 1973 (Dec.) to 9.7% in April 1975. The consumer prices rose in U.K. from 9% rise in 1973 to 16% in 1974 as there took great increase in domestic credit expansion. The highest consumer price was recorded in August 1975 at 27% in comparison to 1974's consumer prices. The value of Pound-sterling was fast deteriorating. The oil exploring countries like Saudi Arabia and Kuwait stopped accepting oil's payment in Pound-Sterling which resulted in fall of proportion of oil exporters' revenues paid in sterling from 26.5% in the first quarter of 1974 to 18.2% at the end of 1974.

The Pound-Sterling which was considered to be a strong currency - now deteriorated and world was losing confidence in it. The sterling balances were reducing. And it has made difficult for U.K. to finance deficit in the future. England's official resources fell by \$ 940 million in the second quarter of 1975 and by another \$ 526 million in the third quarter. Now again the English government

TABLE IV(8): Industrial Countries - Balance of Payments 1972-1974

Country	Year	Balance on			Capital Balance Account	Overall Balance	Changes in Liabilities to foreign official agencies (In billions of U.S. Dollars)	Balance Financed by Transactions in Reserve Assets
		Trade	Service and private transfers	Current Account				
United Kingdom	1972	-1.6	+2.4	0.8	-3.7	-2.9	-0.1	-3.1
	1973	-5.7	+3.6	-2.1	+2.8	+0.7	-0.1	+0.5
	1974	-12.3	+4.1	-8.2	+3.9	-4.4	+4.7	+0.2
Canada	1972	+1.9	-2.3	-0.5	+0.8	+0.3	---	0.3
	1973	+2.7	-2.7	-	-0.5	-0.5	---	-0.5
	1974	+1.6	-3.3	1.7	+1.7	-	---	---
France	1972	+1.3	-0.3	+1.0	+0.8	+1.8	---	+1.8
	1973	+0.8	-0.8	-0.1	-1.7	-1.7	0.1	-1.7
	1974	-3.9	-0.9	-4.8	+4.7	-0.1	---	-0.1
U.S.A.	1972	-6.4	-0.6	-7.0	-3.3	-10.4	10.3	---
	1973	+1.0	+2.0	+3.0	-8.3	-5.3	5.1	-0.2
	1974	-5.5	+8.1	+2.5	-10.9	-8.4	9.8	+1.4

(Contd.)

Table IV(8) (Contd.)

	1	2	3	4	5	6	7	8
Italy	1972	+0.1	+2.9	+3.0	-3.7	-0.7	---	-0.7
	1973	-3.9	+2.8	-1.1	+0.9	-0.2	+0.3	+0.1
	1974	-8.2	+1.2	-7.2	+2.6	-4.6	+5.0	+0.4
Japan	1972	+9.2	-2.0	+7.0	-3.8	+3.1	---	+3.1
	1973	+3.7	-3.6	+0.1	-6.2	-6.1	---	-6.1
	1974	+1.4	-5.9	-4.5	+5.8	+1.3	---	+1.3
Federal Republic of West Germany	1972	+8.2	-5.5	+2.6	+2.2	+5.0	---	+5.0
	1973	+14.4	-7.8	+6.6	+2.5	+9.2	-0.4	+8.7
	1974	+22.7	-10.5	+12.2	-12.7	-0.5	+0.1	-0.4
Other Industrial Countries	1972	-1.2	+4.4	+3.2	-0.2	+3.0	---	+3.0
	1973	-1.9	+5.7	+3.8	-0.1	+3.6	+0.5	+4.2
	1974	-5.7	+5.9	+0.2	+0.4	+0.5	-0.7	+0.2
Total Industrial Countries	1972	+11.2	-0.9	+10.3	+11.0	-0.7	+10.2	+9.4
	1973	+11.0	-0.8	+10.2	-10.6	-0.3	+5.5	+5.1
	1974	-10.0	-1.6	-11.5	-4.5	-16.1	+19.0	+3.0

Source: International Monetary Fund, Annual Report, 1975.

decided to attract capital in London. The result was an increase in the Bank of England's minimum lending rate. It was increased from 10% to 11% and then 12% from July 1975 to October 1975. In spite of the tight monetary policy adopted by English government previously could not help to boost the value of Pound-Sterling. The balance of payments problem became so serious in 1975 that the U.K. had drawn \$ 840 million as IMF drawings from the fund. And under oil facility it borrowed from the Fund about \$ 1.2 billion.

#### U.S.A. and Oil Price Hikes

The tremendous price hikes in oil resulted in adverse trend in the U.S.A. balance of payments. The U.S. liabilities to OPEC increased from \$ 400 million in 1973 to \$ 9.7 billion in 1974.

The trade balance of U.S.A. which had been surplus was now deficit in 1974. At the same time a deficit of \$ 11 billion was recorded in capital account. The liquid liabilities to non-official institutions and persons increased by \$ 17 billion in 1974 as compared to a rise of only \$ 4 billion in 1973. Of this amount, the liquid liabilities to foreign commercial banks alone accounted for \$ 13 billions.

According to IMF Survey (March 10, 1975) the trade deficit in petroleum and petroleum product increased from \$ 7.5 billion in 1973 to \$ 25.1 billion in 1974 after the oil price hike. The trade deficit in petroleum and petroleum



products increased by more than three times in the span of only one year. The adverse effect of the oil price hike can be well imagined by this fact only that with the oil price hike the payments burden of the oil importing countries increased by more than three times. It is quite obvious that this excess burden which is the outcome of the oil price hike necessarily strained the balance of payments position of U.S.A.

According to IMF Survey (August 11, 1975) the American trade surplus increased to \$ 5.4 million in first six months of 1975 in comparison to the trade deficit of \$ 1.7 billion in the second quarter of 1974 due to the increased U.S. exports to oil exporting countries and a sharp decline in the oil imports of U.S.A. The U.S.A. imports were curtailed by 6.5% and exports were increased by 7% in 1975. The United States government adopted a liberal monetary policy in early 1974 due to oil price hike. But it resulted into inflationary tendencies hence in April the tight monetary policy was adopted by U.S.A. The U.S. Dollar was depreciated due to large expansion of U.S. banks' foreign lending.

Between January 1974 to May 1974, the Dollar underwent a depreciation of 6%. During the summer it recovered by 6%. But during early September 1974 and February 1975 again the dollar depreciated by 8.6%.

West Germany

In 1973, the West German trade surplus was \$ 14 billion. In 1974, despite the oil price the trade surplus rose to \$ 23 billion while the increased expenditure in oil was \$ 6.3 billion for the year 1974. The major reason for this trade surplus in West Germany was the recessionary conditions prevailing in the home market. Due to this recession West Germany could control imports of non-oil products. At the same time, the government adopted a policy of liberal exports credit which boosted her exports by 12% in the year 1974. Inflow of capital was also encouraged.

Due to Germany's monetary policy in 1974, it took a huge outflow of capital. The result was - in 1974 the capital account recorded a deficit of \$ 13 billion against a surplus of \$ 2.5 billion in 1973. The major cause of the outflow of capital was low interest rates in the domestic market. But these huge short term capital outflows were necessary for financing the deficit of other industrial countries and also to balance the mounting surplus of West Germany. The bank rate of the West German Bank was reduced to  $6\frac{1}{2}\%$  in October 1974 from 7%. The government adopted the policies to eliminate recessionary tendencies prevailing in the country. Further there was a remarkable decline in the bank rate viz. by September 1975 the bank rate was reduced to 3.5%. The worldwide recession affected the West German's capital-goods export but despite the adverse effect of recession she could manage to sustain a trade surplus. The

TABLE IV(9): Overall Balance of Payments

(million SDRs)

Countries	1973	1974	1974				1975	
			I	II	III	IV	I	II
Industrial countries of which	-1410	-13031	-2074	-3495	-2674	-4788	594	-627
U.S.A.	-4857	-6966	1165	-3356	-1409	-3366	-1810	-986
U.K.	+245	-3683	-512	-181	-653	-2337	-965	295
France	-1598	-64	-512	+3	+369	+76	700	955
Germany	+7888	-492	-101	+1124	-2057	+542	1720	-1349
Italy	-214	-3820	-1239	-1106	-416	-1069	-55	+50
Japan	-5266	+1027	149	831	-189	+236	+477	+379
Major Oil Exporters*	+2882x	+27469	+3675	+9166	+7686	+6942	+3708	2447

\* The major oil exporters include Algeria, Indonesia, Iran, Iraq, Kuwait, the Libya Arab Republic, Bahrain, Ecuador, Gabon, Oman, Qatar, Nigeria, Saudi Arabia, Trinidad and Tobago, The United Arab Emirates and Venezuela.

x Comprises - Algeria, Indonesia, Iran, Iraq, Kuwait, The Libyan Arab Republic, Nigeria, Saudi Arabia and Venezuela.

Source: IMF Survey, July 28, 1975 and October 28, 1975.

basic factor behind this trade surplus was the exports of Germany to OPEC countries. Despite this, there was a substantial decline in the trade surplus of Germany in 1975. As a matter of fact West Germany's current account surplus in first three quarters of 1975 aggregated DM 6.1 billion against DM 15.1 billion in the first three quarters of 1974.

### Japan

Japan had adopted a tight monetary policy. Even the IMF has also criticised and warned the Japanese government for their tight and strict monetary policy. Japan was very much dependent on import oil. But Japan bravely faced the oil price hike by increasing her exports. Due to substantial increase in export it could offset half of increased oil expenditure. Before 1974 Japan's monetary policy had restrictions on capital inflows. In 1974, the government adopted a liberal policy towards capital inflows. In 1974, the government adopted a liberal policy towards capital inflows. Due to it the capital account became surplus of \$ 5.8 billion against the deficit of \$ 6,2 billion in 1973.

In 1974 the net short term borrowings of Japanese banks amounted to \$ 8.4 billion. Japan also financed its current account deficit through borrowings and short term capital inflows. The another reason of deficit in the current account was global recessionary conditions. The demand of Japanese goods was reduced substantially in the

developing nations. The developing nations had been serving as big import market of Japanese goods. This adverse trend in the demand of Japanese goods from the developing countries accounted for nearly 50% of her exports. The Japanese exports in August 1975 were recorded nearly 13% below in comparison to the previous year.

For the first time in August 1975, a deficit in the capital account of Japan's balance of payments was recorded. The reflationary tendencies have badly hit the Japan's payments position.

Most of the industrial countries adopted the policy of borrowing to meet the deficit in the balance of payments account. As a matter of fact, the reserves have increased, though the relative increase in 1974 was smaller than 1973.

Although other industrial countries like Belgium, Austria, Luxemburg, Netherlands, Denmark, Sweden, Switzerland, Norway could manage to keep both current account and capital accounts surplus - but the 'surplus' declined considerably in 1974. The total reserves of the 'Group of Ten Countries'<sup>19</sup> increased by \$ 4 billion in 1974, as against a rise of \$ 9 billion in 1973 and \$ 8 billion in 1972. Among the developing countries, during 1974, the rise in reserve holdings of the oil exporting

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19. Canada, Belgium, West Germany, Italy, France, Japan, Sweden, Netherlands, U.S.A. and U.K.

countries did not occur through net transfers of existing reserves of oil importing countries.

According to Annual Report of IMF (1975) "the reserves were created on a large scale, chiefly through processes involving official placements of reserve deposits in the Euro-currency markets or the United States by some countries and borrowing from those markets by other countries".<sup>20</sup>

The oil price hike created balance of payments difficulties in the industrial countries. It resulted in the removal of capital restrictions. It encouraged the short term capital inflows. (The obvious reason to encourage short term capital inflows was to finance balance of payments deficit.)

The impact of energy price increase on the overall OECD price level is placed at  $3\frac{1}{2}\%$ , and something like half the acceleration of OECD's consumer price during 1974 (15 per cent) is attributed to higher energy prices. In 1973, the growth rate of OECD countries as a whole was of 0.6%. In 1974 the output of OECD countries as a whole declined by 0.4%. A further decline in economic growth was projected in the near future.

The official publication 'Economic outlook' of OECD countries has shown its projections of the overall

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20. IMF, Annual Report, 1975, p. 14.

current account deficit of OECD countries in the near future. By 1980, the OECD countries are expected to move back to surplus on the current account.

### Oil Price Hike and India's Balance of Payments

In the first ten years of OPEC operations it could not succeed in raising the price of the oil. Another reason was the entrance of a large number of independent oil companies which had been operating for oil exploration in the Middle East. The cost of production of oil was very low and the supply happened to be abundant. Due to competition of various oil companies the oil prices could not increase. These companies were giving large discounts on oil. The Iranian light crude, for example was offering a discount from 25 to 50 cents a barrel.

The excess supply of oil provoked people to switch over from coal to petroleum which happened to be a cheap source of energy. Secondly due to abundant supply of oil search of oil fields was discouraged. The industrial countries' consumption of oil increased tremendously. Industrial country like Japan which had been consuming 15 million tonnes oil in 1957 - now started consuming oil as a substitute of coal. The year 1973 brought Japan at the third position of world in oil consumption and the consumption of oil in Japan was recorded to be 200 million tonnes in 1973 as compared to less than 15 million tonnes in 1957.

The Arab-Israel aggression of 1967, brought ban on oil supply to certain countries. In the same year new *oil sources were searched in Algeria and Libya*. The supply of petroleum to U.S.A. was banned for some time on the grounds that U.S.A. participated with Israel to attack Cairo. The OPEC now become aware of their strength potential. Their bargaining power was very strong with the rest of world as industrial countries were totally dependent on OPEC fuel. In 1964, the OPEC could achieve enough profit in the form of royalties. In December 1970, at Caracas Conference the OPEC decided to eliminate the existing disparities in posted prices in member countries; and decided to establish a minimum income tax rate of 55% on company net income; to increase a uniform price to improve market conditions.

The absolute dependence of west on OPEC oil was the major reason of transfer of power from companies to the host governments. These host governments became aware of the importance of the energy source - oil. West Germany, Japan and U.S.A's oil consumption was continuously increasing and these countries were ready to pay any amount for this oil. The U.S. demand of oil became approximately double in 1973 as compared to 1970.

The 'Suez Canal Crisis' (1967), the sudden loss of 'manamoth tankers' in early 1970, the tanker tonnage was short of supply. The Trans-Arabian pipeline with a capacity of taking nearly half a million barrels per day was also



damaged and the Syrian government refused to allow any repairs to be made. Hence all these factors resulted in short supply of oil crippling the western refineries.

Libya and Algeria took advantage of this critical period in terms of demanding higher prices for their oil. The low sulphur oil of these countries had a great demand in the market. Moreover, if the oil is transported from Libya and Algeria the cost of transportation to companies also tends to be reduced. The Libian government curtailed the supply of oil to pursue these companies to pay higher prices. At the same time Venezuela which is one of the major oil exported raised its box rate from 52% to 60% and gave rights to the government to raise unilaterally the posted price.

In February 1971, with mutual consent of OPEC members the price of oil was increased by 35 cents per barrel, readjustment on gravity differentials and annual increase of 5 cents per barrel, besides 2.5 per cent of the posted price over a period of five years. The oil companies were assured if no further hike in oil prices by the host governments of the Gulf countries.

Algeria and Libya decided to secure longer shares from the oil companies which would outshadow the success of Gulf countries (OPEC members). In 1971, Algeria took over 51% of the French oil industries' assets and in April Libya raised posted prices by 90 cents. The oil companies were not bothered of this act of host companies as the

increased burden finally fell on consumer only. The devaluation of Dollar in 1971, provoked host countries to seek readjustment in posted prices to take into consideration the erosion in their oil revenues.

The bargaining power of OPEC countries was increasing with all the foresaid happenings. The Saudi Arabian oil Minister Sheikh Yamini gave the idea of participation in oil industry. In October 1972, this idea was implemented and as per the agreement the government ownership was to start with 25% in 1973, remaining constant through 1978, rising 30% in 1979 and 5% more in each year until 1982, and then by 6% in 1983.

In 1973, the posted price of the standard type rose from \$ 1.80, in November 1970 to \$ 3.01 per barrel, in October 1973 - a sharp rise of 67%. During the same period, the host government take-up price climbed from \$ 0.91 to \$ 1.77.

Due to 'commodity boom - 1972' the oil producing nations also thought to 'oil boom' in terms of higher prices for the oil. The OPEC held a meeting with the oil companies in October 1973 to increase 130% prices of the oil. The oil companies refused to do so. The Yom Kippur War of 1973, gave an opportunity to OPEC countries to force the world to pay higher prices. They curtailed oil production during this period. On October 16, 1973, the posted price of oil was increased from \$ 3.01 to \$ 5.12. Again on January 1, 1974 the posted price of oil further rose to

\$ 11.65 from \$ 5.12. In aother words the world witnessed a 287% increase in oil prices from October 1973 to January 1974. The host government could get on contract oil sold to oil companies in 1974 about \$ 7 per barrel and sold at auction was about \$ 11 per barrel. Between January 1, 1973 and January 1, 1974, the world witnessed a price rise of nearly 350% in oil.

As per the rough estimates of the World Bank study the average f.o.b. prices charged by the three private companies taken together, for their sales to India in each of the four quarters of 1974 as follows.

Quarters of 1974	\$ per barrel
(1) January to March 1974	8.70
(2) April to June 1974	9.60
(3) July to September 1974	9.75
(4) October to December 1974	10.25

We find a continuous increase in price of each barrel of oil from the first quarter of 1974 to the last quarter of 1974.

The national oil companies were also playing important role in production of the crude oil. In 1973, the share of the direct supplies of the national oil companies was 1/3 of the total imports which rose over half in 1974. The government of India have further curtailed the imports through private companies sources for the year 1975-76. Burmah Shell and Caltex could directly import only about

1.8 million tonnes and 0.5 million tonnes respectively, while their refinery capacities are 3.75 million tonnes and 1.25 million tonnes respectively.<sup>21</sup> Their rest of the requirements would be met by the government by sales at 93% of the posted price, which exactly equals to the same amount which these refineries had been paying previously to their own sources of supply.

The import bill of India was continuously increasing with oil producing countries like Saudi Arabia, Iran and Iraw. In 1975-76, India has entered into bilateral agreements with oil producing countries Iran, Iraw and Abu Dhabi on a deferred payments basis. The oil credits expected are approximately Rs.230 crores.

So in this way there happened to be a heavy strain on India's payments position due to oil price hike. If we critically examine the overall exports and imports position of India in the early 70's we find that after an exceptional trade surplus of Rs.134 crores in 1972-73 our foreign trade has reverted to its usual phenomenon of trade deficit.

Another highlight of the period that government has been widely publicising is the fact that in 1973-74, our exports increased by 23%, but it conveniently underplayed the fact that concomitantly the imports also rose by 44%. The revised figures for the first four months of

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21. The Economic Times, May 26, 1975.

1974-75 are issued. During the last 20 years the world exports increased by 585%, while India's exports increased by 167% only. India's share in the world exports have been shrinking throughout these 20 years (Table IV(10)).

Another important highlight of India's trade balance is regarding the percentage increase of exports and imports. Between 1948-49 and 1973-74 - India's imports rose by 4.7% and exports rose by 5.3%.

Oil is an important source of energy. The large amount of oil is required for the commercial energy consumption. According to the report of the Fuel Committee (1974) the consumption of commercial and non-commercial energy (original units) is depicted in Table No. IV(10).

Table No. IV(10) clearly states that there has been a tendency of higher consumption of commercial and non-commercial energy in oil. As far as the percentage share of oil is considered in commercial energy consumption we find that since 1960-61, the percentage share of oil in commercial energy consumption has been continuously increasing. In 1960-61 the percentage share of oil in commercial energy consumption was 53.4% which rose to 44.05% in 1965-66. And again in 1970-71 the percentage share of oil rose to a level of 49.3%.

In the previous years India's demand for oil had been greater than its indigenous production of oil. It resulted in huge imports of oil from OPEC countries. The

TABLE. IV (10) INDIA: CONSUMPTION OF ENERGY (ORIGINAL UNITS) 1960-71  
 (IN MILLION TONNES).

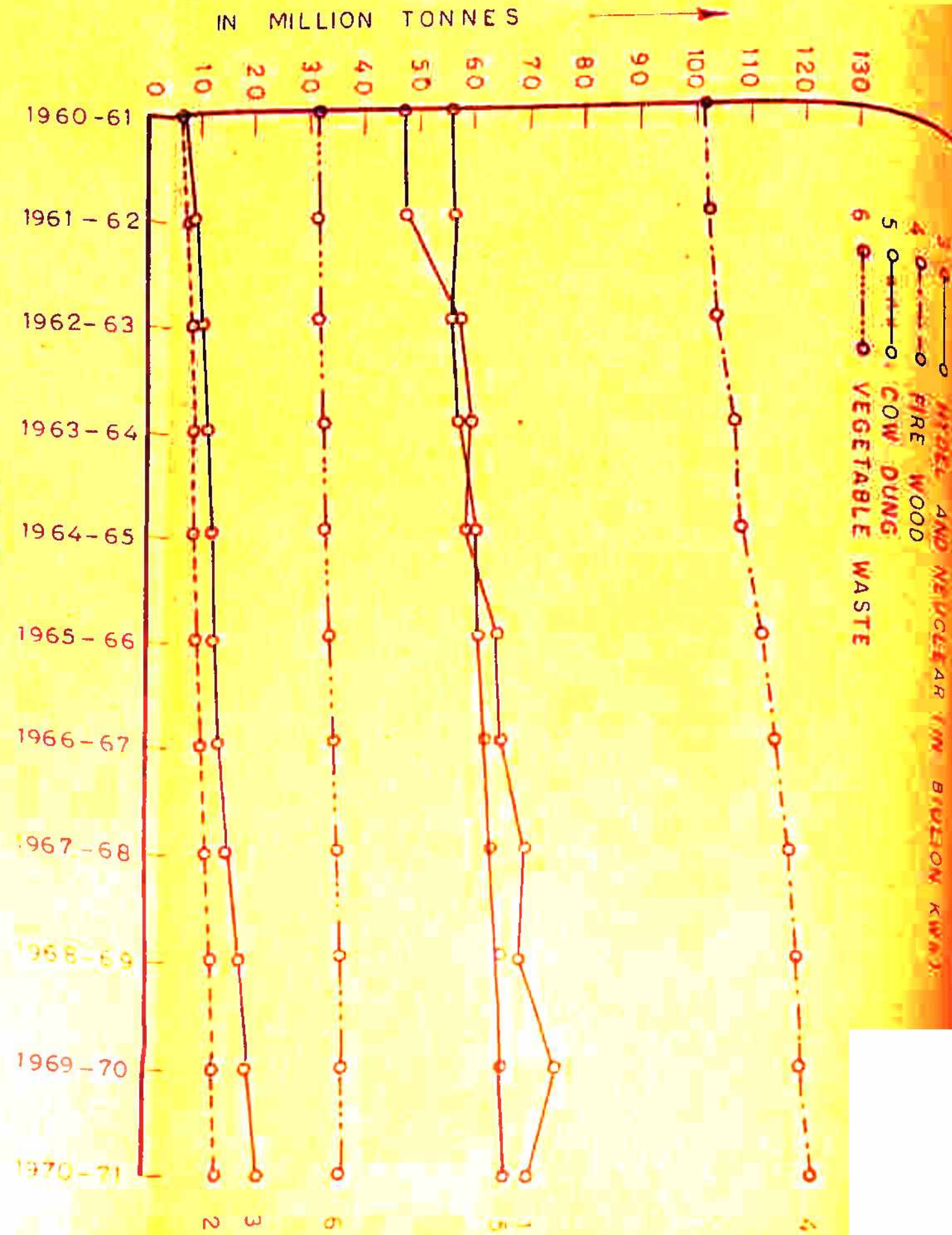


TABLE IV(10): India: Consumption of Commercial and non-Commercial Energy (original units) from 1960-61 to 1970-71.

(in million tonnes)

Year	Coal*	Oil**	Hydel and Nuclear (in billion Kwh)	Fire-wood	Cow-dung	Vegetable waste
1	2	3	4	5	6	7
1960-61	47.1	6.75	6.57	101.04	55.38	31.08
1961-62	47.4	7.44	8.23	102.39	56.10	31.51
1962-63	57.1	8.39	9.83	103.58	56.75	31.87
1963-64	58.4	8.64	11.55	106.88	58.57	32.89
1964-65	58.7	9.29	12.42	108.19	59.30	33.28
1965-66	64.2	9.94	12.74	111.82	61.28	34.41
1966-67	65.3	10.63	13.86	114.21	62.60	35.13
1967-68	69.2	11.28	15.54	116.92	64.07	35.97
1968-69	68.4	12.66	17.96	118.54	64.98	36.46
1969-70	76.7	13.86	19.41	120.25	65.92	37.0
1970-71	71.1	14.95	22.09	122.76	67.28	37.77

\* Coal used for power generation.

\*\*Exclusive of oil products in non-energy sector.

Source: Report of Fuel Committee 1974, p. 9.

following table depicts the imports of mineral fuels and lubricants. The price rise of oil has increased the payments burden of India as it has been importing the petroleum from the OPEC countries. The imports figures are depicted in the following table.

It is clear from the Table IV(11) that the quantity of import of petroleum and petroleum products has been continuously increasing. In 1971 - the import of petroleum and petroleum products amounted to 161.8 million rupees which rose to 170 million rupees in 1972. In 1973, there was sharp increase which resulted in more than doubled import of petroleum and petroleum products. It rose to 467 million rupees in early 1974 against 466.9 million rupees in 1973. This was the effect of sharp increase in the oil prices by OPEC countries. In December 1974, again there was a peak increase in imports of the petroleum and petroleum products which amounted to 1016 million rupees.

Apart from this, if we examine India's imports with oil producing countries, we find that the import bill of the India has been continuously increasing since 1970 with the OPEC members.

The major oil producing companies like - Saudi Arabia, Iran, Iraq and Kuwait are the main source of oil supply to India. The main source of imported crude in 1973 was Iran. Iran supplied almost 70% of the total



TABLE IV(11): Imports by Commodity - Mineral Fuels and Lubricants etc.

(Monthly average or calendar month)

(in billion rupees)

	Mineral Fuels and Lubricants etc.	
	Total	Petroleum and Petroleum products
1961	79.9	79.9
1971 - (a)	162.1	161.8
1972	170.2	170.0
1973	467.2	466.9
1974	964.0	964.0
1974 - June	937.7	937.7
1974 - July	859.0	858.8
1974 - August	721.7	712.7
1974 - September	826.0	826.0
1974 - October	836.1	836.1
1974 - November	367.0	366.9
1974 - December	1016.4	1016.4
1975 - January	489.1	489.1
1975 - February	812.4	812.4
1975 - March	999.5	999.0
1975 - April	830.0	830.0
1975 - May	842.8	842.7
1975 - June	1153.1	1153.1
1975 - July	981.7	981.7
1975- August	937.9	937.8

(a) - in terms of post-devaluation rupee.

Source: C.S.O., Vol. 29, Number 8, August 1976.

imported oil to India. In 1971-72 India import bill of Iran was worth 1263.6 million rupees. But 1972-73 brought a decline in imports from Iran by 3% (the imports were worth Rs.1219.8 million in 1972-73). A substantial increase in imports was recorded in 1973-74 from Iran. The tremendous increase in import bill was due to oil price hike. A 119% increase (Rs.2675.8 million) in imports was recorded in 1973-74, as compared to year 1972-73. The basic reason of this 119% increase of import bill was again the oil price hike by OPEC members. As previously mentioned Iran is supplying about 70% of India's total imports of oil in 1973. In 1974-75 there was again an increase of 77% in import bill with Iran. India's imports from Iran were recorded at a amount of Rs.4726 million in the year 1974-75.

The second major oil supplying source to India is Saudi Arabia, which accounted for approximately 25% of India's imports of oil in the year 1973. As Saudi Arabia own 60% of 'ARAMCO' and Iran and Iraw have also nationalised the oil industry's operations within their territories, and as the share of imports of crude oil on a government to a government basis is increasing in all probabilities, prices paid for crude oil imports would stabilise at 93% of the posted price of respective crude imports. So we find a tremendous increase in value of imports from Saudi Arabia also from the year 1972-73. We find a continuous increase in India's imports from Saudi Arabia, Iran, Iraq

and Kuwait - the major oil exporters of the world. In 1971-72 India's imports from Saudi Arabia accounted for Rs.283.4 million. It increase in 1972-73 by 58% (Rs.448.25 million) as compared to the previous year. The year 1973-74, the year of the tremendous oil price hike, brought again substantial increase in imports of 193% from Saudi Arabia. The imports in 1973-74 were of the order of Rs.1315.3 million against the imports of Rs.448.25 in 1973-73. The imports from Saudi Arabia further rose by 127% in 1974-75 against the previous year. It accounted for Rs.2976.5 million in 1974-75. Kuwait having the highest per capita income did not grant more discounts to India for oil imports. But despite the fact, there had been an increasing tendency in imports from Kuwait to India since 1970-71. In 1971-72, India's imports from Kuwait accounted for Rs.130.4 million. It rose by 96% in 1972-73 and accounted for Rs.255.2 million. After the oil price hike the money value of imports from Kuwait increased substantially. The increase in imports was recorded at the rate of 179% in the year 1973-74 against the previous year. In 1973-74 India imported petroleum and petroleum products from Kuwait worth Rs.711.3 million. But in 1974-75, a decline of 11% was recorded in imports from Kuwait which amounted to be Rs.637 million.

From the above analysis it is clear that during 1971-75 period the payments burden of India is continuously increasing. The money value of imports from the oil exporting countries have gone up substantially. This

sharp increase in import bill has put strain on India's balance of payments and is one of the major causes for deficit in it.

The share of the value of crude oil and product imports in total imports to India rose substantially from 8.3% in 1970 to 27.5% in 1974. Between 1972 and 1973 the quantity of import of crude oil rose by 9% as compared to an increase of about 6% between 1970 and 1972. In the year 1974, the order of the increase was relative smaller - i.e. at the rate of 4%. But in terms of value, imports of crude oil registered a phenomenal increase of 268% during the year 1974 as against an increase of 69.5% in 1973 and 41% increase between 1970 and 1972.

Further imports of petroleum products increased by 236% between 1970 and 1972, though in terms of value they rose by only 86% during the same period. Again during 1973, the quantity of product imported rose by 22%, in terms of value they increased by double. In the year 1974, product imported actually declined by 26% in quantum but the foreign exchange paid for it was increased by 120%.

The most serious adverse effect of the oil price hike can be visualised by the fact that in quantitative terms the imports of crude oil and products declined from 17.4 million tonnes in 1974, the outgo of foreign exchange was increased to Rs.1120 crores against Rs.345 crores in

TABLE IV (19) VALUE OF IMPORTS OF FOREIGN MERCHANDISE IN INDIA FROM OIL EXPORTING COUNTRIES 1971-75.

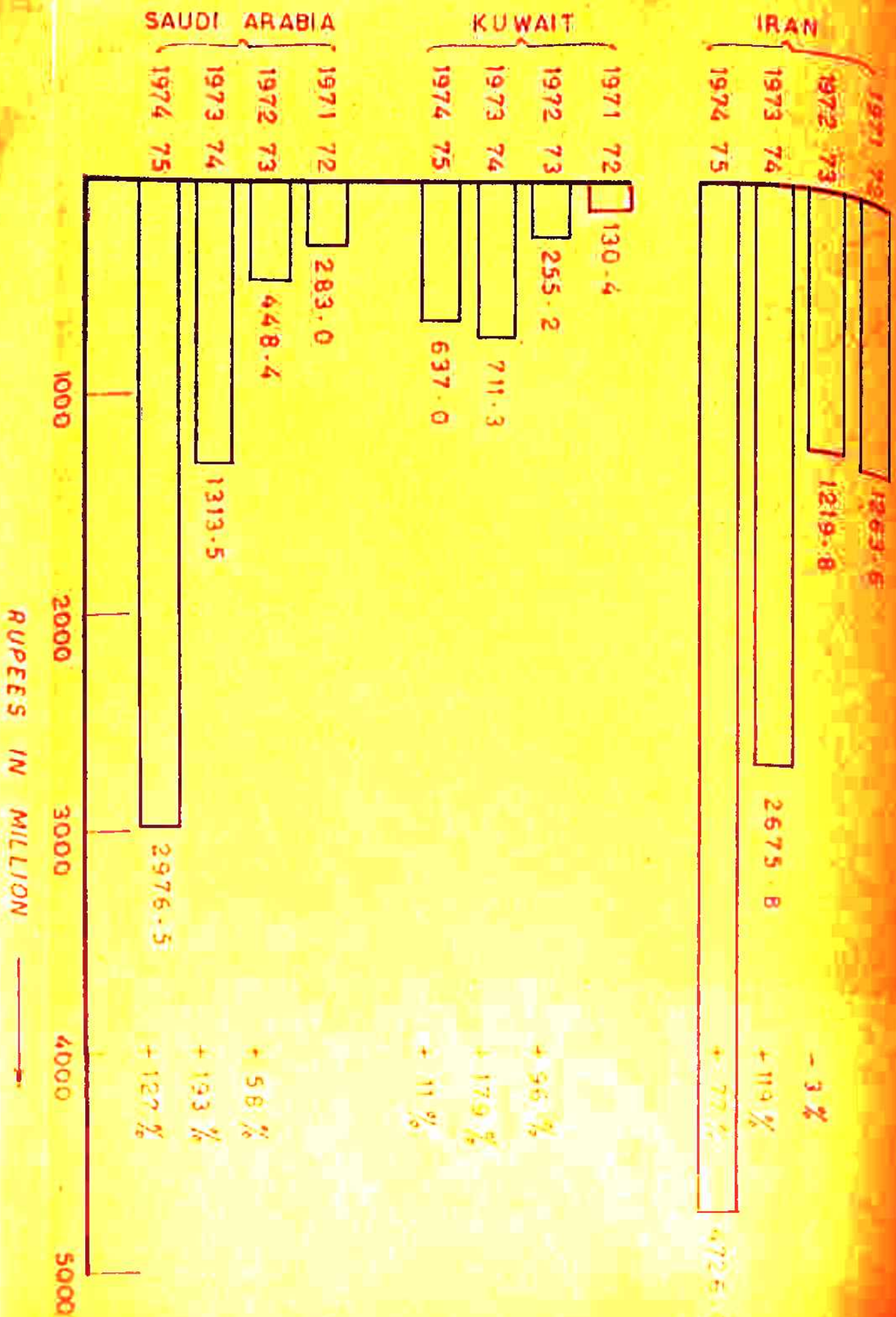


TABLE IV(12): Value of Imports of Foreign Merchandise into India by oil exporting countries during 1971-72 to 1974-75 and percentage increase (+) or decrease (-) over preceding year.

(Rupees in million)

Country	1971-72	1972-73	% Increase or decrease	1973-74	% Increase or decrease	1974-75	% Increase or decrease
	1	2	3	4	5	6	7
Iran	1263.6	1919.8	-3	2675.8	+119	4726.0	+77
Kuwait	130.4	255.2	+96	711.3	+179	637.0	-11
Saudi Arabia	283.0	448.4	+58	1313.5	+193	2976.5	+127

Source: Monthly abstracts of statistics, C.S.O., August 1976, p. 70.

1973. In another words the increased burden between 1973 and 1974 was 225%.

For the financial year 1974-75 India had to pay Rs.907 crores for the import of 13.9 million tonnes of crude oil and Rs.223 crores for the import of 2.68 million tonnes of petroleum products according to Ministry of Petroleum and Chemicals.<sup>22</sup>

The foresaid statistics clearly state that in India the quantity of crude oil and petroleum products, despite a decrease in quantum, were paid for with a very much higher amount of foreign exchange. The oil price hike worsened the payments position and resulted in deficit in overall balance of payments position during 1974 and onwards.

In 1975-76, the arrangements were made for the import of 14.5 million tonnes of crude and 2.75 million tonnes of petroleum products for 1975-76. This would involve a foreign exchange payment of Rs.1354 crores taking into account Rs.54 crores for the rest of the current financial year, being the effect of the 10% September 1975 price hike by the OPEC.

The oil price hike resulted in a huge outgo of foreign exchange. The balance of payments position of

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22. Government of India, Ministry of Petroleum and Chemicals, Performance Budget 1975-76.

many countries was adversely affected. In case of India, the value of imports rose by approximately 49% in 1974-75 against an increase of 29% in the value of exports. It is rather unfortunate, however, that the balance of payments position has consistently worsened - obviously due to certain factors - during the last three years. In the preceding period i.e. - during 1969-72, the average annual imports was of the order of Rs.1650 crores with a deficit of Rs.110 crores.<sup>23</sup>

The import value index-base 1958 - has shot up to 333 points in 1974-75 from 226 points in 1973-74. In view of the fact that the trade deficit in 1974-75 is around Rs.1100 crores, the country has to take suitable measures to visualize an improved situation for the year 1976-77 because of 10% increased petroleum price of 11.51 dollar per barrel announced by OPEC in September 1975. The increase alone would further deteriorate the deficit by Rs.108 crores per annum - i.e. Rs.56 crores for the six months during October 1975 to March 1976. The energy crises has pushed India into the 'fourth world'. This group comprises of the third world countries whom the energy crises have caused to further slip down economically, and experience great difficulty even in servicing the foreign debt.

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23. R.B.I. Bulletins, June 1975.



RUPEES INCRORES

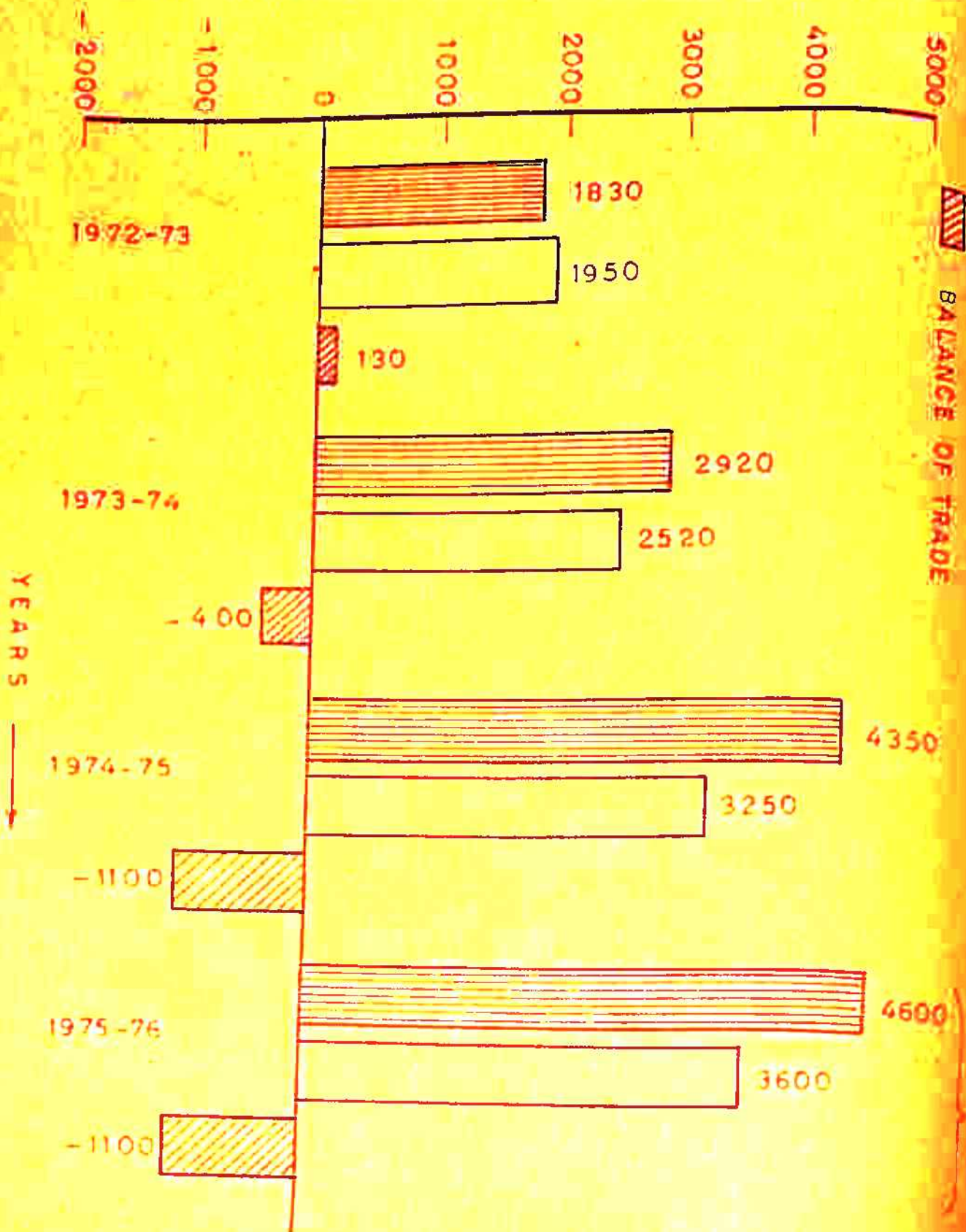


TABLE IV (13) INDIA'S BALANCE OF PAYMENTS 1972-76 (IN CRORES OF RUPEES)

Revised figures are given in the later part.

TABLE IV(13): India's Balance of payments  
1972-76.

(in crores of rupees)

Year -	1972-73	1973-74	1974-75	Estimated 1975-76
Imports	1830	2920	4350	4600
Exports	1950	2520	3250	3600
Balance of Trade	+130	-400	-1100	-1100

Estimated figures of imports in 1975-76 are of the order of Rs.4600 crores and the exports are of the order of Rs.3600 crores thereby resulting in the same deficit as witnessed during the previous year. The imports of petroleum, lubricants and minerals accounted for 205 crores in 1972-73 which increased at a level of Rs.560 crores in 1973-74 and Rs.1135 crores in 1974-75. The percentage increase of 1974-75 over 1973-74 was 103%.

Moreover it is observed that an increase of .75 per cent of imports took place in 1974-75 in comparison to previous year and is accounted by the increased imports in food grains, fertilizers and mainly petroleum products. Even if adjustments for the world wide inflationary phenomenon and price levels have been made, the volume of imports have remained constant and in some cases might have been increased. Analysis of imports region-wise indicate that during first half of 1974-75 - April to December 1975, Indian imports from all regions increased. The rise in imports from Asia and East Europe was highly

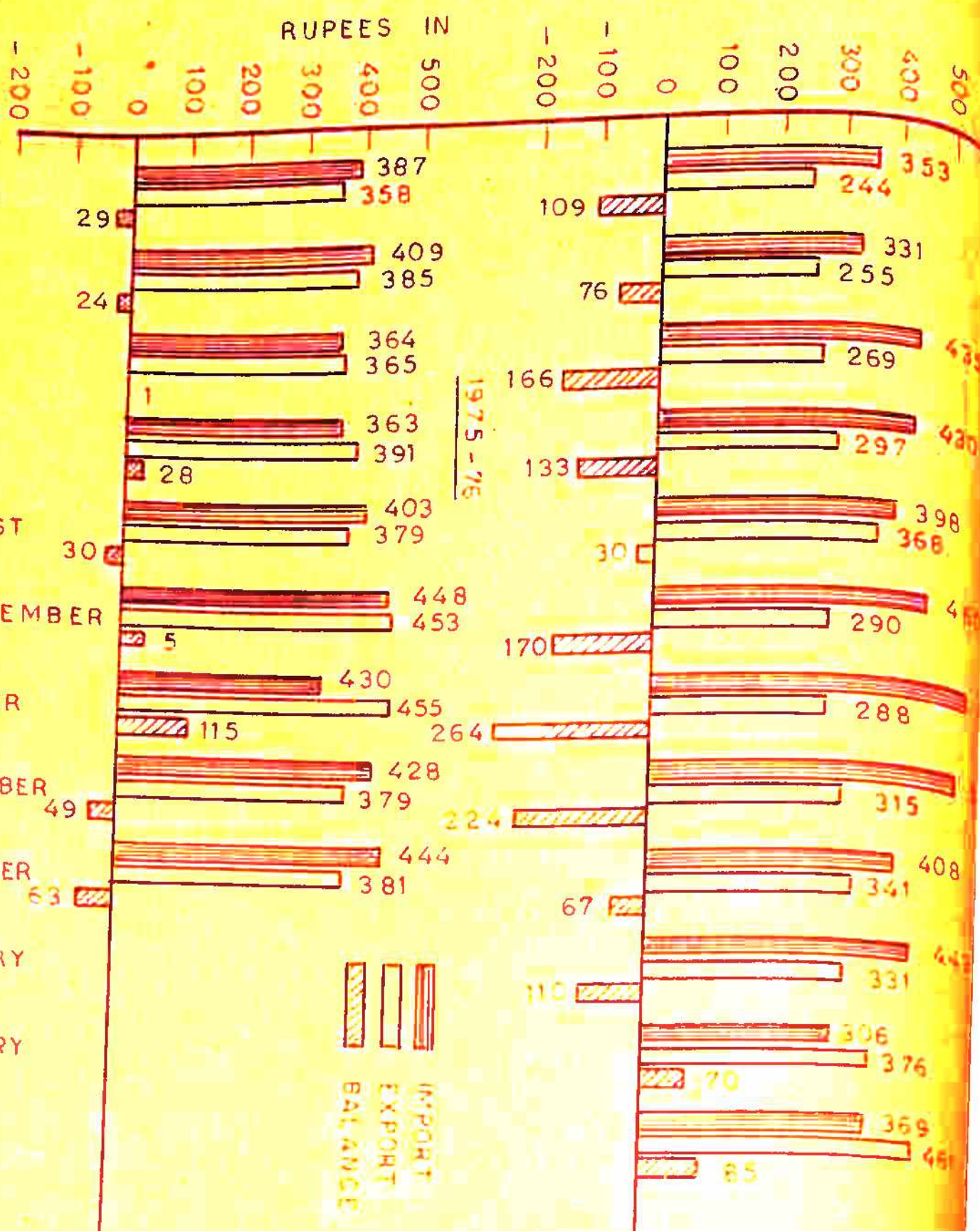
significant, with the Asian region becoming India's foremost supplier accounting for about 45 per cent of the country's import trade. Included in this region are the oil imports from Iran, Iraq and Saudi Arabia. Western Europe including EEC countries accounted for over 20% of India's total import trade. The imports from Eastern Europe and U.S.S.R. in the six months accounted for 15 per cent of India's total imports.

In the year 1975, the oil consumption in India was 23 million tonnes against the total world's oil consumption of 2700 million tonnes. Although our per capita consumption of oil is practically the lowest, we are still dependent for two-thirds of our crude oil requirements on import. The import of oil is creating a heavy burden on the country's resources. In the year 1975, India had to pay Rs.1147 crores for the import of the crude oil and petroleum products. In 1976, the total import bill amounted to over Rs.1200 crores. The OPEC has decided to push up the prices further from beginning of 1977, and this will result in an addition of anywhere between 100 crores to 120 crores to our import bill for the same value of imports.<sup>24</sup>

According to the estimates of the petroleum ministry, the estimated demand of petroleum products in the year 1977 would be 24.5 million tonnes. The increase

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24. Economic Times, March 30, 1977.



 BALANCE  
 EXPORT  
 IMPORT

TABLE IV(14): India's Foreign Trade - 1975-77

(in crores of rupees)

Month	1975-76			1976-77		
	Imports	Exports	Balance	Imports	Exports	Balance
April	353	244	-109	387	358	-29
May	331	255	-76	409	385	-24
June	435	269	-166	364	365	+1
July	430	297	-133	363	391	+28
August	398	368	-30	409	379	-30
September	460	290	-170	448	453	+5
October	552	288	-264	340	455	+115
November	531	315	-224	428	379	-49
December	408	341	-67	444	381	-63
January	443	331	-110			
February	306	376	+70			
March	369	461	+95			
April-March	5024 (5185)	3840 (3942)	-1184 (-1216)			
April-December	3906 (3916)	2667 (2708)	-1239 (-1208)	3592	3546	-46

Bracketed figures are revised figures.

Note:1 The export figures are based on the finally passed copy of the shipping bill.

2. The import figures for September 1976 is subject to revision since the customs data for food grains on government account and for petroleum and petroleum products both government and private account may be deficient and would be therefore be later substituted by more accurate data obtained directly from the concerned administration authority. It is not comparable with the import figures for September 1975, which is revised figure after adjustment for the deficiency referred to above.

Source: Economic Times, Feb. 27, 1977.

in the indigenous production of crude is expected to come primarily from the Bombay High. As against the five lakhs tonnes of crude in 1976 Bombay High would yield about two million tonnes in 1977. On the basis of the progress made in the production wells in Bombay, experts believe that production from this area may not exceed two million tonnes as anticipated in certain quarters.<sup>25</sup>

The demand estimates for petroleum products are evidently based on the assumption that there will not be any shrinkage or spurt in demand owing to exterior factors such as acute shortage of power or failure of rains. During the last two quarters of 1976 the demand for products, particularly, H.S.D. and Kerosene has gone up by 7 to 8 per cent. Similarly for naphtha the spurt in demand is to the tune of 25 per cent. To meet the growing demand, the government had imported two lakh tonnes of furnace oil and one million tonnes of kerosene oil and four lakh tonnes of diesel from the Soviet Union. The reasons for the sharp increase in petroleum products demand during the recent months (last quarter of 1976) include power shortage in a number of states like Maharashtra, Karnataka and Tamil Nadu, and the absence of winter rain.

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25. Economic Times, 22nd December 1976.

For 1977, the government has decided to import around 13.5 million tonnes of crude. Although availability of crude from indigenous sources will improve about two million tonnes, the import of 13.5 million tonnes is considered as minimum to meet the growing demand of petroleum products. According to Petroleum Ministry, 9.1 million tonnes of crude imports have been tied up with various countries. Apart from it, India would be able to get its usual share of Rostum crude estimated at five lakh tonnes. This brings the total assured supplies to 9.6 million tonnes. Thus there still remains a short fall of 3.9 million tonnes. But this should not pose any serious problem. Egypt which supplied five lakh tonnes crude in 1976, has agreed to shipment of this crude during the first quarter of 1977. Apart from that Exxon will supply 1.72 million tonnes of crude for the Hindustan Petroleum Corporation's refinery under the agreement signed at the time of take over.

For the first four years after the government take over the Exxon had agreed to supply 2.75 million tonnes of crude per year, but thereafter the agreement provides that the supply of crude by the U.S. Company would be halved.

This would bring the uncovered gap to 2.13 million tonnes. It is expected on the basis of negotiations with the 'Soviet Trade Delegation' that U.S.S.R. , apart from customary exports of kerosene and diesel to

India would also give one million tonnes of crude in 1977.

In February the contract was signed between India and U.S.S.R. for the year 1977, the Soviet Trade team had offered to supply 5.5 million tonnes of crude on rupee payments, for the first time, spread over a period of four years, commencing with one million tonnes in 1977 and the remaining quantity of 4.5 million tonnes equally distributed over the next three years. The Indian team had offered to supply four lakh tonnes of pig iron annually, apart from steel products.<sup>26</sup>

Finalisation of this deal involving import of one million tonnes of crude in 1977 and matching exports by the country would result in raising the total trade turn over between the two countries to about Rs.1,050 crores in 1977. The 1976 trade plan has envisaged a level of Rs.827 crores compared with Rs.755 crores in the previous year. This one million export of crude from U.S.S.R. will not impose foreign exchange burden but would promote Indian exports simultaneously.

Saudi Arabia which supplied one million tonnes of crude in 1976, is expected to be approached shortly for crude supplies during 1977. Saudi Arabia is having

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26. Economic Times, 16th February 1977.



favourable attitude for India, hence it is expected that in 1977, Saudi Arabia would provide oil to India.

India has already signed a contract with Iran and Iraq for import of crude in 1977. Iran will import 3.5 million tonnes of crude to India and Iraq will import 2 million tonnes in 1977. U.A.E. has agreed to supply one million tonnes. Besides under the agreement with National Indian Oil Company the Madras refinery will get 2.6 million tonnes of crude from Iran.

Although a larger quantity, roughly 9.5 to 10 million tonnes of crude will be available from indigenous sources in 1977, the country would have to maintain the current level of imports to meet the demand for petroleum products.

In spite of the fact that planners had envisaged a growth rate of 4% in the demand for petroleum products, the latest consumption figures have revealed that during the year 1976 the cumulative growth is not less than 5 per cent. We have stepped up our search for oil, taken measures to optimise the use of available energy and finally recognised the fact that we would have to turn to coal as a major source of energy.

To meet the challenges in this crises, the country has embarked upon a comprehensive plan to maximise the production of indigenous crude from all known sedimentary basins, both off-shore and on-shore. This has brought

about excellent results and in fact, 1976 was a year of great performance by this industry. Two highly promising off-shore oil fields were discovered in Bombay High in February 1974. Equally impressive has been the commencement of commercial production at Bombay High on 21st May 1975, hardly two years later the oil was struck in the region, a performance which is concerned to be a major achievement anywhere in the world.

The total production of indigenous crude oil during 1978-79, is expected to be of the order of about 12 million tonnes as against the estimated demand of 32 to 35 million tonnes.

Indian government has also firmly decided to develop oil industry in the country and it should not suffer because of financial constraints. ONGC total investment on off-shore and on-shore drilling operations was about Rs.500 crores in 1975-76 which is expected to rise to Rs.600 crores during 1977-78. The ONGC also propose to invest an amount of over Rs.1700 crores during the fifth plan period for achieving targets.

By the end of the Fifth Plan, the total domestic demand for crude oil is expected to reach a level of 32 to 34 million tonnes per year even assuming maximum utilization of alternative sources of energy. If India intends to achieve self-sufficiency by that time, the rate of indigenous production should be enhanced to that level.

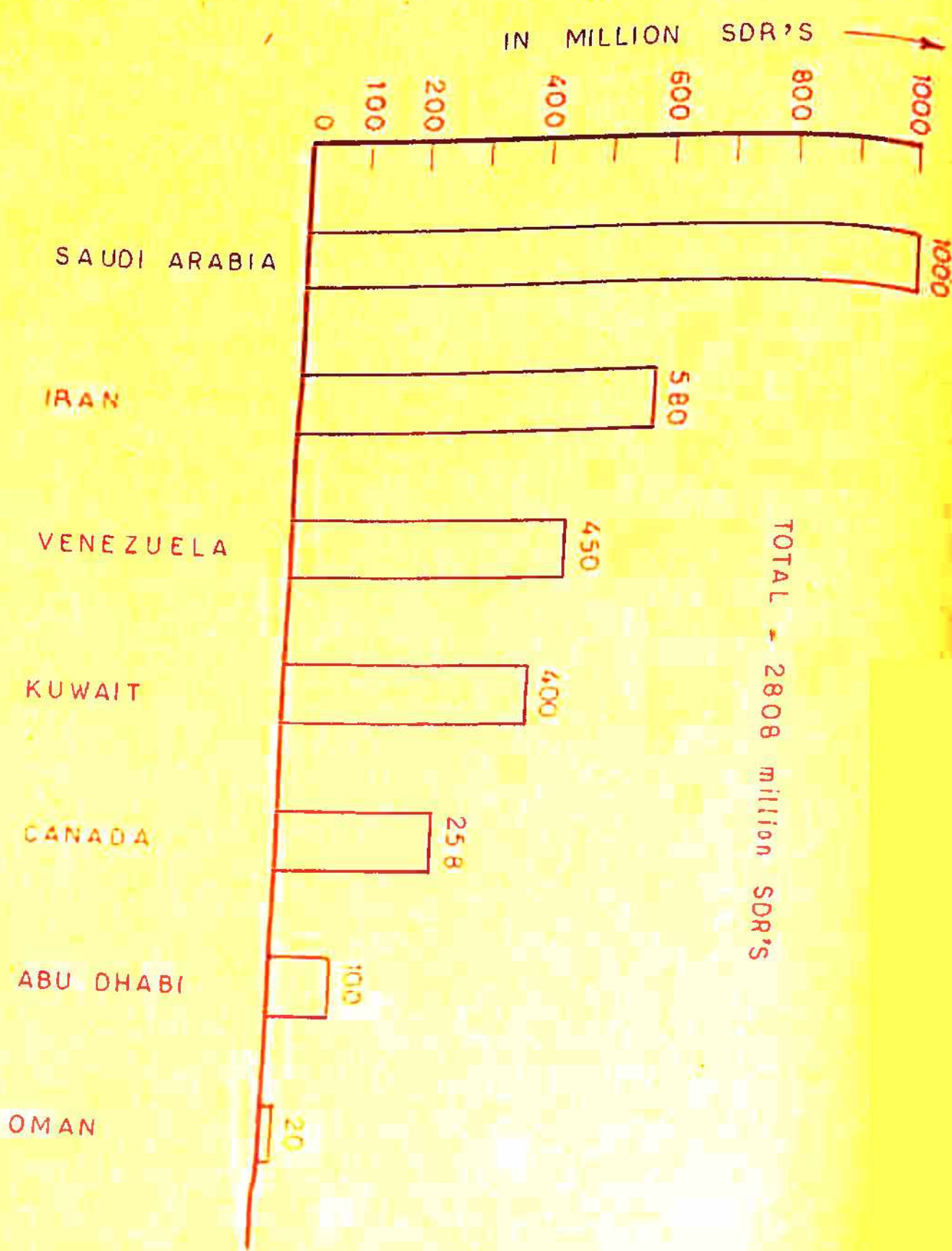
In 1973-74, the trade deficit was Rs.400 crores. This deficit increased in 1974-75 to a level of Rs.1100 crores. It is quite obvious that this sharp increase in deficit caused heavy strains on India's balance of payments. India's external payments position was so heavily strained that she had to borrow from International Monetary Fund to meet this deficit of 1974-75. The following table depicts the India's borrowings from IMF in 1974.

TABLE IV(15): India's borrowings from IMF in 1974 to meet immediate deficit of Balance of Payments

Month and year	Borrowings	Remarks
February 1974	SDRs 62 million	Export of compensating drawings.
April and May 1974	SDRs 311.2 million	First credit tranches drawn against gold.
October 1974	SDRs 200.0 million	Drawn under IMF oil facility.
Total IMF drawings in 1974	SDRs 573.2 million.	Highest borrowings by India from IMF in a single year.

In 1974, for the first time India's highest borrowings from IMF were recorded. The oil price hike and its impact of foreign exchange burden forced India to borrow heavily from IMF to meet the deficit.

TABLE. IV (16a) CONTRIBUTION OF SEVEN OIL PRODUCING COUNTRIES IN IMF'S 'OIL FACILITY FUND' (IN MILLION SDR'S)-AUG. 1974



In 1975, India again had to draw 201.3 million SDRs under the 1975 oil facility of IMF. Apart from these heavy borrowings from IMF India has also entered into bilateral agreements with OPEC members like Iran and Iraq for the import of oil on concessional basis.

The basic objective of IMF oil facility is to help the countries over the balance of payments problems arising out of oil crisis. This idea was introduced for the first time in January 1974 but took the final shape in August 1974.

The seven oil producing countries entered into an agreement with IMF (August 1974) to contribute SDR 2.8 billion in the following proportion:

TABLE IV(16): The contribution of seven oil producing countries in IMF's 'Oil Facility Fund'

Country	Contribution in Million SDRs
1. Saudi Arabia	1,000
2. Iran	580
3. Venezuela	450
4. Kuwait	400
5. Canada	258
6. Abu Dhabi	100
7. Oman	20
Total	2,808

In December 1974, Netherlands and Nigeria also contributed SDR 150 million and SDR 100 million respectively for 'Oil Facility Fund' of IMF. The assistance of oil facility is a supplementary facility in addition to IMF assistance of the normal circumstances. Access to the facility was limited to 75% of a member's quota or to the increase in the cost of the member's net imports of petroleum and petroleum products over the cost of its imports of these commodities in 1972, minus an amount equivalent to 10% of the member's reserve at the end of 1973 adjusted for variability of exports, whichever of these limits was lower. The International Monetary Fund will give an interest of 7% to the contributors and the loan is repaid in eight semi-equal annual instalments, to commence after three years and to be completed not later than seven years after the transfer of the currency to IMF.

The borrowing members who are taking advantage of oil facility would have to repay the loans of the fund in 16 quarterly instalments, to be completed not later than seven years after the purchase. The rate of interest on IMF oil facility borrowing varies from 6.87% to 7.12% depending upon the duration of the loan. In 1974, under this oil facility, purchases were made by 40 members in 78 transaction for a total of SDR 2583 million. In context of the borrowings in 1974, Italy accounted for highest amount i.e. 675 million SDRs or 27% and seven

other developed countries for 32%. India was the highest level borrower among the developing countries which borrowed SDR 200 million. Second to India stands Pakistan in borrowing from IMF under oil facility. The borrowings of Pakistan accounted for 125 million SDRs, Chile for 118 million SDRs and Korea for 100 million SDRs.

The purchases of the developing countries covered 40% of the calculated increase in their oil imports cost in 1974. In April 1975, IMF took a decision to continue the oil facility with a fresh borrowings not in excess of 5 billion SDRs in addition to 450 million SDRs committed during 1974 and were still unused. The oil facility of 1975 had certain changes in comparison to 1974 oil facility. The formula for calculating member countries' access to the facility, the conditionality governing access to the Facility and in terms of interest rates. According to 1975 Oil Facility, the greater weightage is given to the quota of the member; maximum access to the facility should not exceed 125% of the member's quota in the Fund or 85% of the calculated increase in its oil import cost, whichever of these limits is lower.

The country wishing to enjoy the Oil Facility of the Fund will have to explain to the Fund its policies to achieve medium term solution to its balance of payments problems. And the member country seeking Oil Facility will have to abide by the "Committee of Twenty's" Roma Communique issued in January 1974. According to this

agreement the member country should avoid introduction or intensification of restrictions on trade and payments. The IMF would examine the policy of member country to meet its deficits in the balance of payments before granting the Oil Facility. Charges on a member's drawings from the 1975 Oil Facility varies from 6.72 per cent to 7.87 per cent, depending upon the duration of the loan. The Fund would pay an interest of 7.25 per cent on its borrowings. For 1975, oil facility, the IMF concluded borrowing agreements with 12 lenders for a total amount of equivalent to SDR 2.9 billion. The lenders are Saudi Arabia (1000 million SDRs), Iran (410 million SDRs), West Germany (300 million SDR), Nigeria (200 million SDR), Kuwait (200 million SDR), Netherlands (200 million SDR), Venezuela (200 million SDR), Switzerland (150 million SDR), Belgium (100 million SDR), Austria and Norway (each with 50 million SDR) and Trinidad and Tobago (10 million SDR).

For the developing countries the interest rates are rather stiff. To get rid of the problem IMF decided to establish in August 1975, a 'Subsidy Account' to assist the MSA countries to meet the cost of using resources made available through the Fund's 1975 oil Facility. 18 countries have informed the Fund of their willingness to contribute to the Account in an aggregate amount equivalent to SDR 149 million. 22 countries have so far used the 1975 oil facility for a total of 1821 million SDRs; of these, 19 countries are those which had availed themselves



of 1974 Facility. Italy had drawn maximum SDRs of the order of 780 million, followed by India with 201 million SDRs.

The 'Third Window' facility is intended to be an intermediate lending facility between the commercial loans of the World Bank and the soft loans of the IDA. Hence, Third Window, with a subsidised lending rates, would serve as a supplementary source of finance to the World Bank and IDA loans. The borrowers have to pay only 4.75% interest on Third Window loans. Canada, Denmark, Kuwait, Netherlands, Norway, Qatar, Saudi Arabia, the U.K. and Venezuela (in all nine countries) has expressed their willingness to contribute \$ 117 million. This amount would be sufficient to subsidize approximately \$ 500 million of Third World loans. The poor countries with per capita annual income of upto \$ 375 are to be the principal beneficiaries of this loan, though the Bank has retained its discretion to provide loans to countries with higher levels of income.

The efforts made by the international financial institutions to meet the special problems of financing the deficits of the developing countries are highly appreciable. The oil crises has not only brought into lime light the close knit nature of the international financial mechanism, but has widened the scope of international monetary cooperation.

CHAPTER V

SUMMARY AND CONCLUSIONS

The balance of payments policy is merely a sub-set of national economic policy in general, and therefore shares most of the same means and end. The term balance of payments is an ambiguous one. It is usually used loosely without any precise definition of what it is intended to describe. As a result, debates on balance of payments policy are often unnecessarily confused. Hence it becomes essential to discuss various possible meanings of the term.

Three fundamentally different ideas are continually called by the same name. What is indiscriminately called the balance of payments may be - an accounting balance i.e. a balance of credits and debits; or a programme balance - i.e. a balance of needs and desires; or a market balance, i.e. balance of supply and demand - given by Fritz Machlup in 1950. All the three concepts are closely related, and they all figure directly in making of balance of payments policy.

In accounting sense balance of payments can never be out of equilibrium. Like other accounts, the total receipts of a country are bound to be equal to the total payments of that country, if one includes all the receipts and all the payments of the country in the account. In a country's receipts not only the value of the goods which it exports but also the value of the gold

or other monetary reserves which it exports in order to obtain purchasing power over that part of its imports which is not covered by its normal commercial exports. Hence, in accounting sense the two sides of the accounts i.e. the payments and receipts are bound to be equal. The receipts of external purchasing power may come from the sale of country's exports to foreign country's, from the sale of services such as financial and shipping services to foreign countries, from the unrequited transfers like gifts, indemnities etc. received from foreigners, from the borrowing of money from foreigners or from the repayments by the foreigners of loans previously made to them or from the sale of part of the country's monetary reserves or other assets to foreigners. The right hand side of account shows, how, in the same period, the total external purchasing power was used. In the account, left hand side shows the receipts and right hand side shows the payments - they are merely different ways of enumerating the same thing. In neat concept of Prof. J.E. Meade the balance of payments have been divided into two parts i.e. trade items and transfer items. The credit and debit entries are made in both accounts for each transaction while tabulating an account of international receipts and payments.

Further Prof. Meade has taken the help of 'accommodating' and 'autonomous' transactions in defining 'deficit' or 'surplus' of balance of payments. The

distinguishing feature of autonomous transaction is that they have taken place regardless of the size of the other items in the balance. While the accommodating transactions take place only because the other items in the balance of payments are such as to leave a gap of the size to be filled or in other words the accommodating transactions take place with an express of meeting the existing gap in the balance of payments. While talking of an actual surplus or deficit in the balance of payments we have to take into consideration the balance of autonomous trade and transfers. It is this sum which *must be* matched by what we have called accommodating finance.

The three categories of balance of payments given by Fritz Machlup are accounting balance, programming balance and the market balance.

The 'accounting balance' is a systematic record of a country's economic transactions between the residents of a country and non-residents. For one year of time, the statistical record shows the character and dimensions of the country's international economic relationships with the rest of the world. It shows the country's trading position, changes in its net position as foreign lender or borrower, and changes in its official reserves holdings. The systematic record of this kind is very useful to the financial authorities of the country in connection with policy formulation.

The balance of payments is not only divided vertically into credits and debits according to the principles of double entry book-keeping but it is also divided horizontally into two major categories according to the broad nature of the transactions concerned and their relationship to the national economy. These broad categories are known as current account and the capital account.

As far as the current account is concerned it consists of all transactions relating to the reporting country's current national income and current expenditures. It includes all exports and imports of goods and services along with unilateral transfers such as gift, indemnities etc. The 'current' transactions give rise to or are a use of current national income. The current transactions are distinguished from transactions in financial assets. The capital transactions which directly affect wealth and debt, hence they affect the national income in the future period.

A country's Gross National Product is closely related to its Balance of Payments. The first includes on the product side the current production of goods and services. Net foreign sales i.e. exports minus imports are one of the components of Gross National Product, which show that part of Gross National Product which is to be exported less the contribution to the Gross National Product which resulted from the efforts of the foreigners.

This portion of the balance of payments is appropriately called the balance of payments on current account.

In the current account, the important item is merchandise or visible trade. For any country, the difference between merchandise exports and imports (credits and debits) is called the balance of trade, and therefore it is usually watched by the financial authorities almost as closely as balance of payments as a whole. Most people regard the balance of trade as 'favourable' when exports are greater than imports, and as 'unfavourable' when imports are greater than exports. This evidence is in the support of the mercantilist thinking and Adam Smith's opinion who gave much importance to foreign trade earnings as the most direct means of national wealth. The financial and shipping services along with unilateral transfers (credits and debits) are included in current account.

In capital account we find all changes in claims on or of the reporting country owned or owed by other countries. The three major categories of capital account are: the investments by residents abroad (such as private investment, portfolio investments - mainly long term or short term bank loans, or purchase of new foreign securities etc.), The government's investment abroad consists mainly of loans to foreign official agencies for military purposes or for economic assistance. The second category of the capital account consists of all investments

in the reporting country by foreign residents.

Transactions in official reserve assets refer to changes in the monetary gold stock of the financial authority, in official holdings of convertible foreign currency, and in the country's net position in the IMF.

Each transaction is theoretically recorded twice, the sum totals of debits and credits should in theory always be equal. The current account and the capital account should always be equal with reversed signs.

But practically it is very difficult to get the accurate data on both sides of every transaction. The various entries - exports and imports, transfers, capital and reserve transactions - can only be tabulated singly, by methods of varying degrees of accuracy, and then summed. In some cases coverage of the data tends to be inadequate, in some cases errors are committed in the process of estimation, such inaccuracies are virtually impossible to avoid. Hence we introduce an adjustment or balancing item for "errors and omissions".

After defining autonomous and accommodating transactions we may conclude that a deficit appears in the balance of payments when autonomous transactions requiring money payments exceed autonomous transactions involving money receipts. The deficit means that the country is losing liquidity to others: it is running down its liquid foreign assets (including official reserve assets) and/or



accumulating liquid foreign liabilities. Conversely, a surplus exists when autonomous money receipts exceed autonomous payments.

But practically it is very difficult to define the 'autonomous' or 'accommodating' transaction. Hence the definition of surplus or deficit is an analytical problem, but the accounting framework of measurement is essentially classificatory and there are limitless ways of arranging the data to make it more informative.

Most of the countries prefer a simple, straightforward and clear definition - a single summary measure of surplus or deficit. The broad categories are 'basic' balance and the 'official settlements' balance. To identify underlying trends in the balance of payments, the basic-balance concept is useful one, and it forms in fact the basis for several national measures of balance. But in context of analytical distinction between autonomous and accommodating transactions this concept of 'basic balance' is defective, as it only distinguishes between types of transactions, specially between long term and short term capital. But in reality, these types of transactions are in many ways not so similar. All short term capital flows are not responsive to monetary policy. However, many transactions are not accommodating in any sense. In the same way, certain so-called basic items, particularly in the portfolio-investment and merchandise - trade accounts, do appear to be responsive to monetary

policy. Private financial transactions just cannot be divided satisfactorily along this dimension.

Hence, these shortcomings of the basic balance concept gave rise to an alternative concept which is used by a number of countries - and urged for all countries by the IMF. This is "official-settlement balance" which distinguishes not between types of transactions but rather between types of transactions. Hence all the private short term capital movements are placed above the line, as also is the errors and omissions items. Only official reserve transactions are included below the line, because these alone reflect official intervention in the foreign exchange market, truly representing accommodating flows. These transactions are performed by only those transactors whose function is truly accommodating in the present international monetary system. The gains and losses of reserve assets of the financial authorities provide the best index of surplus or deficit. Hence it constitutes the most accurate measure of balance. However, some objections can be raised against this concept also. For instance, bank loans to finance trade, commercial credits are truly accommodating. Apart from it, certain official transactions which have nothing to do with financing gaps in the balance of payments in the current period do usually take place. Hence again controversy arises about the accommodating nature of 'official transactions' and about those transactions which are accommodating by nature but

considered as autonomous in this 'official-settlements balance'. Most countries employ some 'hybrid' of the two main concepts as their national measure of balance. Nearly all countries apply a single summary concept of deficit or surplus to these balance of payments, despite the common knowledge that there is no one 'right' measure of balance.

The second category is market balance - which can be explained as a model of a given situation in the foreign exchange market, characterized by the effective demand and supply of foreign exchange at the current exchange rate and at alternative, hypothetical rates. This is an ex ante concept comparing autonomous spending and receipts given present and expected future incomes, prices, and interest rates. The market balance of payments describes currently while the accounting balance of payments describes historically, the balance of autonomous international transactions. It is said, that the market balance of payments is less comprehensive than the accounting balance of payments. The financial authorities does not need only the primary information in formulation of the policy, but the most important is the balance or imbalance of country's autonomous, intended transactions - and this information is supplied by market balance. It provides an accurate index of current international payments 'equilibrium' or 'disequilibrium'. For financial authorities the 'market balance' is the basic issue as their main task is to identify pressures on the exchange rate

and intervene to eliminate them directly or indirectly.

The third category is programme balance of payments which can be defined as a systematic statement of sources and uses of foreign funds, expected or planned, over a future period of one or more years. It is a forecast of the country's foreign exchange needs and desires. Deficits and surpluses are defined in terms of the gaps between these needs and desires on one hand, and the amounts of foreign exchange expected to become available from all regular sources as exports etc., on the other hand. It is a supplement of the planning of the domestic economy. For developing countries this concept is very important as they depend on foreign assistance for various purposes. It indicates the amount of financing that will be required and for how long. It helps the financial authorities for analysing the current policies and plans affecting the country's international economic position.

I.M.F. has also come up with a very systematic definition and standard presentation of balance of payments. According to IMF definition, the balance of payments is a system of accounts covering a given period that is intended to record systematically flow of real resources, including the services of the original factor of production, between the domestic economy of a country and the rest of the world; changes in the country's foreign assets and liabilities, and unrequited transfers, which are the

counterparts of real resources of financial claims provided to, or received from, the rest of the world without requital.

Now, after analysing the various concepts of balance of payments, it would be essential to go into the main causes which give rise to external payments disequilibrium. And further to study the various measures which induce the improvements in the balance of payments. There may be two factors which are responsible for this disequilibrium in the external payment viz. internal and external factors. Among the internal factor the important are changes in price level, increase in population and sectoral imbalances. On the other hand among the external factor the most important are unfavourable terms of trade and cyclical changes in the level of income in a developing country like India. In my study, I have tried to analyse the impact of these factors on our balance of payments to the best of my ability.

In the modern times all the governments are trying their level best to bring improvement in their balance of payments. Imbalances in balance of payments are corrected by the state intervention. The financial authorities may choose to reinforce the automatic market response by ~~at their~~ keeping exchange rate stable and encouraging the necessary price and income changes by means of deflationary monetary or fiscal policies or varying the exchange rate by devaluing the domestic currency.

If the government prefer to choose the former opinion it may impose restrictions like tarrifs, quotas etc. on imports and at the same time they can induce export promotion policies like subsidies etc. The effect of such governmental action would be reduction of gap between the demand and supply schedules of foreign exchange by shifting the two curves until they intersect at the prevailing parity. The government may introduce exchange controls also. The financial authorities can also finance the imbalance, either directly by selling spot exchange or indirectly by intervening in the financial and exchange market to induce inward movements of short-term capital. Again the existing schedules and prevailing parity remain, but under this option the payment gap is closed by accommodating flows of public and private funds.

The second chapter deals with the impact of devaluation on Indian balance of payments. Devaluation is considered to be a compromise between stable exchange rates and freely fluctuating exchange rates. The impact of devaluation can turn out to be useful in eliminating the balance of payments deficit, the exports are boosted up with a check on imports. It avoids the deflationary contraction of income typical of adjustment when exchange rates are fixed. Devaluation as a measure for correction of external payments difficulties is not frequently used by the government but it is considered to be surgery which is not required in the minor cases. The effectiveness of

devaluation depends much upon the elasticities of demand and supply of foreign exchange. If the elasticity of demand and supply are very low, devaluation would not either restore equilibrium at all, or would have to be excessive.

In Indian context, Economists have different opinions about the effectiveness of Rupee devaluation. Some economists are of the opinion that the devaluation of rupee in June 1966 was ill-timed. In 1965, India had to face severe drought conditions. And as the Indian exports were the agriculture oriented the devaluation could not work much effectively. Apart from it, the foreign demand for our traditional exports is inelastic, hence the devaluation could not alter much changes in external payments position. The actual export earnings declined in the post-devaluation era. The roots of Indian trade in the world market were not so deep. In the developmental phase, the country used 'deficit-financing' which in the later stage resulted into inflation. India faced two wars i.e. 1963's China's aggression and 1965's Pakistan's aggression. The foreign exchange position of the country was fast deteriorating. Hence, in such circumstances when the imports were exceeding exports, the economy was at a stagnant stage. Some stimulus was required to boost the exports. In the post-devaluation span, the export promotion policy of the government resulted in favourable export boost. The non-traditional exports increase.

substantially and import substitution of consumer goods by home produced goods was the best part of the Indian trade.

In my analysis I have tried to analyse the effects of devaluation on output and balance of trade. It is done so by extending aggregate supply and demand analysis to the open economy. This general framework is useful for the study of wide variety of questions arising in international trade, particularly because it stresses the endogeneity of domestic price level, a dominant variable in determining trade balance.

The relationship between terms of trade and the level of output which is invariant to the rate of exchange, is also important. When the supply of labour is positively related to the real wage and the labour market, there exist a unique relation between the terms of trade and level of output which is invariant to rate of exchange. This is due to asymmetric effect which foreign prices have on the demand for and supply of labour. As a result of successful devaluation reduces the terms of trade, output and employment. The year 1967-68 witnessed the most favourable terms of trade when the index stood at the level of 124 (1958 = 100). Between 1960-61 and 1966-67, the terms of trade index numbers have fluctuated between 108 and 115. It is also significant that the favourable terms of trade movement can be attributed to rising export prices accompanied by declining import prices.



The higher export prices of India are the result of high domestic cost brought about by the high domestic inflationary pressure. This belief is strengthened by the experience of many industrialized countries where export prices reflect their domestic cost of production. In Indian context it is true that there has been a continuous inflationary pressure on the economy wherein the domestic wholesale price index numbers have been higher and steadily increasing compared to the wholesale price index numbers of various countries. But it is doubtful whether the rise also determined the course and magnitude of India's export prices. For a number of export commodities the international price is given and cannot be altered in response to rising cost of production, because of very small magnitude (less than 1%) of India's share in the total world export trade.

The number of commodities in which India has to adhere to international prices include some important products as coffee, cotton textiles and engineering goods. The introduction of various export incentives designed to assist the exporter to enable him to overcome the inhibiting effect of higher domestic costs also provides evidence to the limited effect of higher cost of production on export prices of a number of exports.

In case of tea India's share in world export is around 40%. To some extent, the higher cost of production has influenced the export prices of these commodities.

Yet the extent to which the high cost can be transferred to foreign buyers is limited by the oligopolistic character of the world market in these products. Moreover, the competition from close substitutes to these products also have limited India's ability to transfer the higher cost to foreign buyers.

The effectiveness of devaluation and its importance as a policy instrument rests on its unique ability to reduce the relative price of domestic goods and improve trade balance at the same time. For improvement in balance of trade the stability of Indian exports commodity market is also essential. In the post-devaluation era the stability in the Indian export market abroad is not witnessed. A further improvement in the marketing techniques was also required. As a consequence of devaluation the imports declined at a faster rate in comparison to exports increase. The importance of import substitution was much stressed. The output also increased. The post-devaluation span witnessed a considerable increase in import of food grains due to poor harvest in the country (1965-66). The self-reliance has been attained in agriculture sector.

The liberal credit policy of the government resulted into cost push inflation. As a measure of devaluation, the price-line should be kept in control otherwise devaluation will not generate desired improvements in the trade balance.

In the post-devaluation era government did not adopt strict measures to control the prices which resulted in higher cost of production. The temporary 'export incentives' gives rise to increase in exports. In case of India the cost of production is higher due to lower productivity of the factor of production. So the management's efficiency should be improved to stimulate the productivity.

The non-traditional exports should be encouraged. The government should supply the basic raw materials at international prices to the export industries. The financial burden is not likely to be too much and will be well within means of the country. For certain commodities, government should adopt dual pricing policy. In case of steel it would result in substantial export promotion. The 'quality control' must be introduced in the exportables so that they may stand in the competitive world market.

In third chapter of my thesis I have tried to relate foreign assistance to economic growth. The capital is regarded not only as central but also as strategic to the process of development. The process of capital formation is interacting and cumulative. Capital formation increases income which makes possible more capital formation. Thus, once the process is started, it feeds on itself. But unfortunately, capital formation is a sphere where the first few stages are most difficult. It is very difficult for developing nation like India, to save

a large part of its income because even the belt-tightening cannot be stretched beyond the limit of human tolerance. Even if there is little increase in income, the whole amount would be spent on consumption as a bulk of masses are living below the poverty line in developing countries. This clearly emphasize the necessity of foreign capital to the resource gap. In a developing country it would be difficult to support its capital programmes exclusively from domestic savings, even if it wanted to, since developmental programmes usually involve large imports of capital goods from abroad.

Once the necessary adjustments have been made a country can maintain a given level of capital formation without foreign aid. But the effect of the big resource mobilization needed to 'spark' the rate of capital formation in an otherwise recalcitrant economy is most certainly to cause a shortage of foreign exchange which has to be met by controls running down foreign assets, if any, as well as by foreign exchange and by foreign assistance.

There is scarcely any example of a capitalist economy which could develop at a rapid speed with the amount of capital accumulated within it and that a good deal of the earlier industrial development, practically in all of them, has been due to influx of foreign capital. Conversely, the economies stagnated because of their reluctance to avail of foreign resources. Hence, the

national effort may not be an ideal substitute for foreign resources in a developing economy geared to the object of bringing about a faster economic growth.

Apart from it the GNP is highly correlated to the gross aid utilization. Nevertheless the debt servicing imposes certain strains on the economy, but despite the fact, the external assistance is great advantage in fostering the economic growth. India had to take foreign aid for its developmental projects. As a consequence of it the debt-servicing of India's external obligations increased in past few years. In 1973-74, India had to pay Rs.512 crores for the servicing of its debts. Out of it gross aid utilization of Rs.700 crores against the debt servicing of the order of Rs.143 crores in 1961-62. In 1967-68 India had to pay for its debt servicing Rs.333 crores which further rose to Rs.450 crores in 1970-71 and Rs.477 crores in 1971-72. This resulted into decline of net aid to the country i.e. from Rs.862 crores in 1967-68 to Rs.150 crores in 1972-73. In the year 1974-75 India had to pay Rs.510 crores due to hard terms of aid previously taken. The aid on hard terms, undoubtedly caused a heavy burden on Indian economy. The aid from western countries specially from U.S.A. was on hard terms and was source tied. The debt servicing did not result in a quantitative reduction in external resources but had drastically diminished the quality of free foreign exchange for financing imports which were not financed by aid.

The World Bank recommended the grant of debt relief to India of \$ 200 million for each of the year 1972-73 and 1973-74. India was seeking rescheduling of the annual payment on her enormous international debt which ran into some \$ 500 million for 1974-75. India agreed to pay one-fourth of the scheduled payments as oil price hike severely affected India's external payments position.

The United States of America was the biggest creditor and for outstanding liability to the former stood Rs.2561.95 crores in April 1, 1974 against a total foreign debt of Rs.6,974.24 crores.

The inflow of foreign aid resources from U.S.A. to India made a very substantial contribution to Indian economic growth and industrialization, mainly by relieving the foreign exchange constraints and permitting higher investment and better utilization of capacity than would otherwise had been possible. It gave a boost to the growth in power production, communications, transportation, port capacity, industrial projects (specially intermediate industries). U.S.A. also assisted in building up of infrastructure and industry and very much affected development strategy. The U.S. loan was life saving in nature as it provided food grains to India at the time of poor harvest when country was facing draughts and floods conditions. The availability of seeds and fertilizers could improve the productivity of food grains in India

with U.S. assistance.

The shortage of foreign exchange and the low level of India's reserves made it almost impossible for India to consider import liberalization or devaluation of Indian rupee without significant foreign aid. Since 1964, India stressed the importance of non-project aid for development in sophisticated sectors. Industrialization reached the point where India no longer needed to import large amounts of machinery or equipment or consultancy for most infrastructure projects or even for an increasing number of industrial projects. With more importance laid down on utilisation of existing capacity, imports of raw materials, spares and minor equipment increased greatly priority sectors. Since 1960's, the 'community aid', 'non-project aid' and 'programme aid' had increased rapidly from U.S.A. and U.K. This kind of aid went some way, to mitigate the worst problem of trying of project aid. While total aid did not increase much between 1960 and 1970, technical assistance grew at the rate of only 10% per year at the beginning of the 1960's and in 1968 reached more than 20% of the total aid flow to the developing countries.

It would be essential to mention here that despite aforesaid merits of the U.S. aid it was a loan on hard terms excepting PL 480 loan. Moreover, the U.S. loan was source tied, and the price level of equipment and plant in U.S.A. companies were comparatively higher

than other European countries and Japan. The risk of dictation of collusive monopolistic prices under such tying cannot be ruled out. For PL 480 assistance the U.S. shipping companies charged higher freights in comparison to other shipping companies of Europe. The PL 480 blocked about 20% foreign exchange resources which would have otherwise become available on account of U.S. government expenditure in India. The U.S. loan was not given to India for the establishment of capital goods industry. The structure and direction of U.S. aid tend to maintain status quo rather than foster the rapid industrialization of India.

The U.S. foreign aid is also not without political strings. President Johnson's administration suspended U.S. aid to India during Indo-Pak aggression of 1965 and 1971.

In concluding analysis I found that the U.S. aid has a deep and profound impact on Indian planned development effort. The credit of initiation of granting aid for the first time goes to U.S.A. only in 1951. Moreover, U.S. aid had been in large doses upto 1971-72. India could overcome serious balance of payments and foreign exchange crises - with the help of U.S. assistance. This aid development the intermediate industries in the country which provided a platform for heavy industries. The generous magnitude of U.S. economic aid made a very sizeable contribution to the development of irrigation,



agriculture production capacity, power projects, transport and communication development and intermediate industries promotion. The break-through in agriculture has imparted the impetus of self-reliance to the economy.

U.S.S.R. also played a significant role in fostering the economic growth in India. The biggest credit of U.S.S.R's assistance is for the establishment of indigenous steel plants. U.S.S.R., for the first time provided financial and technical assistance to Bhilai Steel Plant. It is important to mention here that in spite of the late commencement and comparatively low magnitude of Soviet assistance (technical and economic both), it has a unique distinction of making extremely favourable impact on India's economy due to its character and dimension. The Soviet assistance was granted to India on soft terms. Apart from convenient financial conditions, the Soviet loans are repayable in rupees through export of Indian goods and thus these loans not only do not strain India's foreign exchange position but also stimulate our exports. This assistance helped India in launching a big programme of the construction of heavy and core industries which would generate multiplier effects in the economy. Apart from it, this assistance has strengthened India's bargaining power with west and subsequently improving the lending terms with West Germany and U.K. The development of public sector in India worked as a countervailing force against the internal dominant private monopolies.

The United Kingdom and West Germany also provided loans to India on soft terms. Britain has been one of the first consortium countries to appreciate the importance of non-project tied loan. The non-tying helped India to use these loans for various crucial purposes, particularly for balance of payments and debt relief assistance. Apart from it the British lending terms have progressively softened.

The West German loans have been substantially softened over recent years. The West Germany has provided India debt-relief by lowering the interest rates on earlier loans and refinancing the debt repayments. West Germany provided technical assistance to India for the agricultural development through fertilizers and machinery etc.

Canada's economic assistance to India mainly constitutes of grant. She has provided 62% of the total assistance in the form of grant. Such generous grants have been very useful to India in her periods of foreign exchange crises. Canada has provided 50% of the total loan for developmental projects and non-project use at a low interest.

Japan's economic assistance to India was used to finance fertilizer and chemical projects, to import non-project items like transmission equipment, electrical goods, trucks and tractor components. Nevertheless, the technical assistance of Japan and import credit

tremendously helped India in developmental effort.

So far we have talked of bilateral aid channel. India could get substantial aid from various international agencies like U.N.O., IBRD, I.D.A., IFC and IMF etc. The World Bank's contention is that the interest of developing countries can be best served by its long term commitment to a particular set of priorities. The World Bank has provided long term lendings to India for the economic development. The World Bank and IDA have provided loans to India for the development of railways, transportation and communication, thermal power plant, airways, ports, highways etc. This assistance was granted to India for agricultural development also.

The International Monetary Fund also provided India with short term lendings to meet the balance of payments deficit at various occasions. The IMF oil facility was also utilized by India to meet excess deficit caused by oil price hike.

Apart from it if the foreign aid is taken into consideration in coherence with five year plans, the first five year plan was largely oriented towards agriculture, massive imports of capital equipment were not involved. The second plan entailed nearly a doubling of the total outlay. This sharp rise was mainly due to the catering of large size producer's goods industries in this plan which happened to be highly capital and foreign resources-

intensive. The external assistance further rose in third plan. The rise having been precipitated to set off adverse balance of payments and stave off starvation through increasing food imports due to repeated crop failures and outbreak of hostilities during this period. In the fourth plan the ratio of external assistance has been considerably reduced.

The external assistance from various countries could help India in launching developmental projects. It enabled India in getting advanced technology and know-how from the advanced countries. After the independence agriculture sector has also shown tremendous improvements in yield and productivity with the help of advanced equipment and machines. The external assistance could generate multiplier effect in the economy which further resulted in higher standard of living of masses.

The development of public sector and heavy industries in India was also initiated by external assistance. Irrigation and power facilities were also geared up by external assistance.

As a matter of fact, in the beginning of the remittance of economic aid to India, the western block assisted us with hard lending terms. But subsequently, India witnessed an improvement in lending terms. In a short period, India could develop its heavy and intermediate industries with the help of external assistance.

I have also shown a relationship of GNP and gross aid utilisation in context of India.

The conclusion at which I finally arrived was "With increase in gross aid utilisation of foreign aid there is an increase in G.N.P. (in normal circumstances) in India during the period of study and with decrease in gross aid utilisation of foreign aid there tends to occur a decrease in G.N.P.". Hence external assistance worked as a powerful agent of economic growth in India.

In fourth chapter of my thesis I have studied the impact of oil price hike on various economies with special reference to India. The study also reveals the highlights of Indian petroleum industry and the effective operations of Oil National Gas Commission.

The tremendous oil price hike by OPEC members after Yom Kippur war of October 1973 resulted into heavy strains not only on developing countries but also on advanced economies. The balance of payments surpluses and the growth of reserves of the oil exporting countries are now of phenomenal magnitude. In 1974, the balance of payments on current account of the oil exporting countries aggregated to \$ 70 billion and their reserves increased by \$ 32 billion. The financing and investment of surpluses of this large magnitude posed numerous problems, but the manner in which things have been worked out in a fairly orderly manner is appreciable.

In the first place, the oil exporting countries have tried to enlarge their imports substantially, though the capacity to import more has varied from country to country. Iran has done very well in this context because they have fairly well-developed economic plans. The Middle Eastern countries have begun acquiring shares and properties in the advanced countries and started re-equipping in a big way their defence equipment, going in for all the sophisticated arms that they could buy from deficit countries, many of whom have been most eager to sell them for financing their oil purchases. A lot of money has been invested in the Euro-currency markets, these funds being lent to other governments, quasi-governmental agencies and large business corporations. OPEC countries have been also providing assistance to deficit countries on a bilateral basis, mostly in the form of credits and to some extent in the form of grant. OPEC members have also participated in multilateral programmes through IMF, IBRD, UNO. They have contributed to IMF "Oil Facility" in 1974 and 1975.

It is important to mention that OPEC members lending terms to deficit countries were rigid, the interest rate was higher. The burden of paying interest and repayment of principal is quite heavy for developing countries.. In this context long term solutions have to be found out to meet the mounting oil and also finance other imports vital to their economic development. A country like India is very well-placed to improve very

markedly her earnings from the exports of goods and services. Geographical contiguity with the Middle Eastern countries is a favourable factor in the situation.

The oil crisis of 1973, and the subsequent sharp rise in the prices, introduced a new element of vast dimensions into the process of international monetary reform. The decisions have been taken regarding a further increase in the quotas of member countries in the IMF, with a more than proportionate increase for oil exporting countries. It has been decided to eliminate gold from IMF. SDR's are defined in terms of gold (35 SDRs = 1 ounce of gold) and since gold prices have shot up by about thrice of the official price of \$ 42.22 per ounce, some new arrangements have had to be put into effect to fix exchange rates of various countries vis-a-vis the SDRs. For this purpose, decision was taken in July 1974, to define SDR, as an interim measure, in terms of a basket of 16 leading currencies.

The oil price hike resulted into 'surplus' of the external payments of the oil exporting countries while the non-oil producing countries had to face serious payments problems. The industrial countries moved over from a current account surplus position of \$ 10.2 billion in 1973 to a deficit of \$ 11.5 billion in 1974. The primary producing countries excluding major oil exporters absorbed more than half of the adverse shift in the aggregate balance.

41 countries were declared M.S.A. countries (most seriously affected countries) by U.N.O. on account of oil price hike requiring emergency assistance. Only countries with per capita income below \$ 400 and a projected balance of payments deficit for 1974 and 1975 of not smaller than 5 per cent of imports on average were termed as MSA. India was also declared MSA country. The current account deficit of the non-oil less developed countries increased from \$ 9 billion in 1973 to \$ 28 billion in 1974. Additional import costs on account of oil in 1974 varied from \$ 5.6 billion in case of Italy and U.K., \$ 16 billion in case of U.S.A. The trade balances of the major industrial countries (other than Germany and Japan) were in deficit in 1974. The industrial countries moved from a trade surplus of \$ 11 billion in each year of 1972 and 1973 to a deficit of \$ 10 billion in 1974. The countries like West Germany and Japan substantially increased their exports to oil producing countries.

In case of India, the increased burden on payments between 1973 and 1974 was 225% higher on account of the oil price hike. The balance of trade moved from a surplus of Rs.130 crores in 1972-73 to a deficit of Rs.400 crores in 1973-74 and a deficit of Rs.1100 crores in 1974-75. The energy crises has pushed India into fourth world. This group comprises of world countries whom the energy crises has caused to further slip down



economically, and experience great difficulty even in servicing the foreign debts.

In 1975, India's oil consumption was 23 million tonnes against the world's oil consumption of 2700 million tonnes. Although our per capita consumption of oil is practically the lowest, we are still dependent for two thirds of our crude oil requirements on imports. The import of crude oil is creating a heavy burden on the country's resources. The arguments are supported by the facts that in 1975, India had to pay Rs.1147 crores on import of crude oil and products which further rose to Rs.1200 crores in 1976. The OPEC decision of further price hike of oil from the beginning of 1977 would result in an additional burden of Rs.100 to Rs.120 crores for the same value of crude oil imports.

The recent two-tier increase in oil prices by OPEC and the prospect of further rise in July 1977 would mean a heavy drain of foreign exchange reserves unless we are able to cut down the quantum of imports by stepping up domestic production. The urgency of the problem has been realised by the ONGC, which has finalised the plan to launch the third phase of oil exploration and crude production programme in the continental shelf area. The success of plan is not in doubt since several new promising structures in the area have already been identified. Plenty of oil reserves have been located in Bassein fields. New oil structure off the Konkan Coast,

180 miles south of Bombay High, is among the promising structures identified so far. The studies show that this would be as big and prospective as Bombay High. The encouraging progress of the second phase also lends hope for the success of the third phase. Production from Bombay High is now 37,000 barrels a day, representing an annual production at the rate of two million tonnes. When the second phase of the development of Bombay High is completed by the end of 1977, production is expected to reach 80,000 barrels a day. The third phase would include a production potential of 1,70,000 barrels a day from Bombay High and 15,000 barrels from Bassein fields.

The ONGC's operations comprise the intensification of exploration activities and raising the rate of production from areas where oil reserves have already been located. The launching of the third phase of exploration and production even before the second phase is completed, thus telescoping the two phases, would provide continuity in operations and would ensure that there are no slippages after having built up a great deal of expertise. The ONGC has already decided to go ahead with on-shore operations with the help of helirigs because the on-shore produced oil would cost substantially less than off-shore oil even after taking into account the heavy investment involved in providing infrastructure, since the unit cost of heli-drilling is expected to be lower than off-shore drilling. The allocation of Rs.500 crore for the third

phase of oil exploration and production in the continental *shelf area suggests* that the ONGC is concerned *more with* attaining the goal of self-sufficiency in oil *than with* the relative merits or financial viability of off-shore and on-shore production.

It is anticipated that the reserves from the proven areas of on-shore viz. Assam and Gujarat and the off-shore fields of Bombay High will be able to sustain an annual production of nearly 20 MTPA. One of the areas where this awarded production sharing contracts to be directed is Bengal-Orissa coast.

Although India has made headway in the on-shore exploration technology and is in the process of mastering off-shore technology, she has yet to go a long way in developing self-reliance in oil field equipment, particularly sophisticated hardware. India has been importing almost two-thirds of the total stores, spares and capital equipment required for *installation and development* activities. The main source of supply have been U.S.S.R., Roumania, Czechoslovakia, U.S.A., France, Japan, Canada and West Germany.

Although ONGC has been making consistent efforts to develop and establish indigenous sources of *supply*, but the effort needs to be further intensified.

For immediate intensification of off-shore drive *operations*, a lot of equipments requires to be imported,

but from the long term point of view, more serious and intensive efforts should be made for import substitution, as the material and equipment required for the development of off-shore oil fields are staggering in the diversity and magnitude. The development of indigenous facilities would not only boost the indigenous engineering industry, but would also save substantial foreign exchange.

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