CHAPTER III
INTERNATIONAL ASPECTS OF GROWTH AND DEBT SERVICING PROBLEM

The purpose of the foregoing discussion on the domestic aspect of growth was to illuminate the significance of strengthening of the economy with a view to enhancing the absorption of foreign capital for economic development. The improvement in the capacity to absorb foreign capital productively accelerates the growth in income and savings. If the rate of savings rises the rate of investment can also be raised. However, raising the rates of saving and investment is a necessary but not sufficient condition for a successful growth-cum-debt process. This is so because the national economic growth occurs in the framework of the world economy and the external debt has to be serviced in free foreign exchange. Therefore, the strengthening of the economy must be reflected in the increased international competitiveness of productive structure of the economy which the foreign capital inflow may help create. Thus strengthening of the economy also means making it externally viable. The external viability maybe defined as making the production structure responsive to world demand where the developing countries can transform their surpluses
into the required form of capital via foreign trade. In other words strengthening of the economy will mean making the economic structure flexible so as to be able to adjust to external pressures without jeopardizing debt servicing and growth prospects.

In the context of transformation of domestic savings into foreign exchange it may be pointed out that the developing countries find it difficult to export their goods because of international demand conditions. The difficulties in raising the level of exports cause the availability of foreign exchange to fall short of the requirements. As a result of this the foreign goods required for investment purposes cannot be imported. In the absence of the availability of complementary foreign goods the rate of investment cannot be accelerated. The maximum potential domestic savings cannot be fully used for capital formation. Therefore, unavailability of foreign exchange becomes a constraint to economic growth of developing countries.

It is obvious now that there can be two separate constraints to economic growth. In accordance with the SI gap as discussed in the previous chapter, the only constraint to growth is imposed by the maximum feasible domestic savings. The inflow of foreign capital is viewed as a supplement for domestic savings which permits
higher investment and growth. However, the unavailability of foreign exchange, as mentioned earlier, constitutes foreign exchange (FE) constraint. The role of foreign capital is to fill the FE gap so that the country concerned may be able to import the necessary investment goods which facilitate higher investment and growth.

An attempt is made in this chapter to examine the concept of FE constraint. An analysis of the ways to get rid of the FE constraint may also be found relevant in this context.

I

THE CONCEPT OF FOREIGN EXCHANGE CONSTRAINT

Some of the models relating to aid and economic growth are based on what has come to be known as 'dual gap hypothesis'. It is implicit in these models that the SI gap and the FE gap constitute two separate constraints to economic growth.

In actual situation SI and FE gaps are always equal. But the two gaps are equal in an ex-post or accounting sense only. The accounting relationships involved in the equality of SI gap and FE gap are set out in Annex I.

In an ex-ante or planned sense, however, the SI and FE gaps may differ from each other. It is this ex-ante
difference between the two gaps which may produce a foreign exchange constraint. The objective in this section is to analyse the economic theory underlying the FE constraint.

The Problem of Minimum Level of Imports

The concept of FE constraint may be discussed in terms of a minimum level of imports and a maximum level of exports. It is increasingly argued these days that the developing countries require, for technical reasons, a minimum level of imports to sustain growth; they are unable to export beyond a limit despite available domestic surplus. The rate of economic development thus encounters a balance of payments barrier notwithstanding the growing availability of domestic surpluses. The problem of the minimum level of imports is examined below while the analysis of maximum level of exports follows the discussion on the former.

Economic growth is generally understood to mean a cumulative process of economic change involving gradual development and diversification of the productive base capable of generating self-sustaining higher levels of economic activity. Transformation of the industrial base requires certain goods which cannot be produced domestically. These goods or inputs which are so specific to modern industrialization cannot be produced domestically due to low
level of economic development. These goods will, therefore, have to be imported. Thus it may be observed that there is no or a limited possibility of substitutability between domestic and imported inputs at a low level of development. The lack of any effective domestic substitute for imported inputs used in the production process constitutes structural rigidities in the pattern of production.

The limited substitutability between domestic inputs and imported inputs gives rise to what may be termed as the problem of factor proportions. According to the problem of factor proportions the foreign inputs become complementary to the domestic inputs. In the absence of imported inputs even the domestic inputs may remain unemployed or underutilized.

In view of the factor proportions problem economic growth requires availability of certain amount of imported inputs. The exact amount of imported inputs required would be determined by the pattern of investment and the target rate of growth. The volume of imported inputs so determined may be termed as the minimum level of imports consistent with a given growth target.

The Problem of Maximum Level of Exports.

A high level of minimum required imported inputs does not present any problem if domestic surpluses can be created
and transformed into foreign exchange to pay for the imported inputs. The developing countries, however, may find it hard to export their surpluses to industrialized countries which happen to be the main suppliers of capital equipment needed for the economic development of a country. The reason is that the developing countries are generally exporters of primary goods for which demand does not increase with the growth in incomes in industrialized countries. In this context it may be pointed out that the factors like technical advancement, use of waste products, substitution of synthetics for natural materials have brought about a long-term reduction in the proportion of raw materials to total production. For example, in the U.S.A. allowing for changes in the general price level, a dollar's worth of raw materials in the year 1900 supported $4.20 worth of finished products and services but that in the year 1950 a dollar's worth of raw materials supported $7.80 worth of finished goods and services. These developments in fact explain the low income elasticity of demand for the primary products. Thus it has been estimated that for every one per cent of per capita increase of income in the U.S.A. imports of primary goods tend to increase by 0.6 per cent only. It is obvious that under these circumstances any attempt by the developing countries to expand the volume of their exports would result into a loss of foreign exchange earnings.
In the absence of elastic demand for the exports of primary products, the developing countries will have to initiate and expand the production of those goods whose income elasticity of demand is high. The goods whose demand rises with increase in incomes are generally manufactured goods. But the developing countries are not familiar with the production of such internationally demanded goods. For, at low levels of development there is no demand for such goods in the developing countries. Therefore, the existing productive apparatus in the developing countries is not capable of producing the internationally demanded goods. As such, the developing countries are required to adapt the pattern of production to changes in external demand, which is a gradual process.

In conclusion, therefore, it must be recognized that the developing countries, in general, suffer from the problem of a low export maximum. The exports of primary products cannot be augmented beyond a limit because of low income elasticity of demand for such products. In case of manufactures, the existing productive base of the developing countries is incapable of producing the internationally demanded goods. The transformation of the industrial base to be able to meet the external demand is a process which takes time.
The Foreign Exchange Gap.

It can be gathered from the foregoing discussion that certain rigidities in the system of production of developing countries prevent them from domestically producing substitutes for the imported inputs and transforming domestic surpluses into foreign exchange. Given the target rate of growth, the rigidities in the productive apparatus would, therefore, engender a gap between the minimum required imports and the maximum possible exports. Since the former in case of developing countries may be greater than the latter, the resulting gap may be termed as the foreign exchange gap. This gap becomes the constraint to economic growth of developing countries.

The FE constraint implies that domestic savings can still be extracted but cannot be converted into foreign exchange due to absence of transformation possibilities. Thus a FE constraint can arise which is independent of the savings constraint.

A savings constraint can arise if transformation possibilities exist but cannot be utilized due to lack of savings which cannot be extracted as the domestic consumption has reached its minimum feasible level.

The role of foreign capital in the context of the FE constraint is to enable a country to import the required
inputs so that she may be able to bring about a change in the structure of output. The inflow of foreign capital thus contributes to the structural flexibility of a developing country.

II

EVALUATION OF THE DUAL GAP HYPOTHESIS

The dual gap hypothesis has sparked off considerable debate in the academic circles. An attempt is made below to examine the controversy on the two gap approach to aid and development.

The Traditional View.

According to the traditional view pursuance of sub-optimal expenditure policies may produce a gap by raising the imports and diverting the exportable goods from foreign market to the domestic market. Besides this, the existing productive base which is not capable of producing the goods for the international market may be the result of mis-allocation of the resources in the past.

The supply of exportable goods may be reduced if domestic demand for such goods is rising. This may be an outcome of sub-optimal expenditure policies. Exports may also be inhibited due to a high rate of protection to
domestic manufacturing sector. The protection may encourage so much inefficiency in the domestic industries that at a given international price the exports of manufactures may become uneconomical. In this situation the apparent FE constraint will be ascribed to the unwillingness to pursue a policy that eliminates the distinction between the two gaps.

The imports of developing countries may be inflated if appropriate policies are not pursued. The sub-optimal expenditure policies by causing the general prices to rise would make the imports cheaper. Similarly the developing countries may, at least unconsciously encourage the consumption of import intensive goods and services. Thus the requirements of raw materials and intermediate goods to feed the existing capacity may rise. But this high level of import requirements will be attributable to failure to pursue appropriate economic policies.

The existing productive base of the developing countries which is incapable of producing goods for the international market may be the outcome of misconceived investment allocations in the past. Generally industrialization begins with import substitution in consumer goods the imports of which are either banned or subject to high rates of protection. The inefficiency is therefore built into the domestic
industries. Because of high cost of production the domestic goods become uncompetitive in the world market. Therefore, the capacity to import capital goods declines. Hence the problem of limited trade transformation could be avoided if resources were allocated to the production of capital goods.  

Thus according to the traditional view the two gaps can arise due to sub-optimal expenditure policies and misconceived resource allocation in the past.

The Modern View

It is the modern view which stresses certain rigidities in the system of production. How these rigidities engender two gaps has already been explained in the previous section. It is now attempted to examine as to how the dual gap hypothesis is sought to be defended by its proponents.

It has been observed that the volume of exports of primary goods has risen faster than the value of the same. This being true it is difficult to accept that the sub-optimal expenditure policies have caused any significant diversion of the exportable goods to the domestic market.

As far as manufactured goods are concerned it may be pointed out that the manufacturing sector at a low level of income caters to the domestic requirements. Its productive
apparatus is not such that it can produce goods for international market. Therefore, the question of sub-optimal policies reducing the supply of exportable goods does not arise.

As regards sub-optimal expenditure policies causing over importation of goods it may be argued that there exists severe restrictions on the imports of inessential goods. Moreover, any attempt to reduce the imports of consumer goods from the existing level may prove counterproductive. For, the imports of consumer goods are useful for controlling inflation. Inflationary pressures are generated in developing countries when the individual income increase and supply of consumption goods falls short of demand. Thus the import of consumption goods serves the very purpose what optimum expenditure policies may strive for. It may safely be said that the balance of payments pressures from import side cannot be fully ascribed to sub-optimal expenditure policies causing over importation of nonessential goods.

Besides this many developing countries have been forced to curtail their imports of raw material and intermediate goods causing underutilization of capacity. In fact underutilization of capacity has generally synchronized with external deficits. This being true it cannot be categorically stated that the imports of
developing countries have been inflated by sub-optimal expenditure policies only.

The argument that the existing distorted structural of production is an outcome of the misallocation of resources in the past is to accept the fact that it requires a reallocation of investment and other changes extending beyond the short-run. Therefore, the problem becomes structural notwithstanding its origin. The gap analysis is not concerned with what happened in the past. The problem is how to deal with a given situation. This in case of developing countries requires structural changes in the pattern of production. As a matter of fact, many estimates of the foreign capital requirements for the developing countries have been based on the concept of PE constraint. This itself is a recognition of the existence of PE constraint in developing countries.

III

IMPORT SUBSTITUTION AND EXPORT EXPANSION

There may be two alternatives to deal with the PE constraint and accelerate the growth of the developing countries. They may follow the comparative cost principle and expand the production and exports of primary products.
The contemporary developing countries have, however, refused to follow the mercant doctrine of export led growth. Instead they follow the policy of industrialization through import substitution for long run economic growth. It is attempted here to examine the developing countries preference for import substitution as a strategy of economic growth. The process and problems of import substitution are also analysed.

**The Case for Import Substitution**

The case for growth through import substitution is based on disenchantment with the classical theory of international trade and its variant 'vent for surplus' theory. It has been observed that the developing countries, whose exports consist mainly of primary products, have suffered from secular deterioration in terms of trade through unequal distribution of gains from trade. In their capacity as consumers foreign investors enjoyed fruits of technical progress in primary production. But as producer and exporters of manufactured goods they again benefitted from the technical progress. For, it reduced the amount of raw materials used per unit of output. These two factors in the traditional system of investment and trade caused terms of trade to move against the developing countries. The low income elasticity of demand for the exports of
primary goods is implied in the above argument. Thus if a developing country depends on the enhanced exports of its primary produce the terms of trade would go against her. This may prove an 'immiserizing' experience.\textsuperscript{21}

Over and above, the exports of primary products did not have any impact on the development activities of the exporting countries. The production for exports did not involve high level of education and skills. The primary sector could not create new demand so that one thing may lead to another. As a matter of fact linkage effects in primary production are very low.\textsuperscript{22}

Due to low income elasticity of demand for primary products and the failure of primary sector to stimulate economic growth have led the present day developing countries to develop the manufacturing sector. The linkage effect in manufacturing is very high.\textsuperscript{23} The development of manufacturing would also eliminate adverse effects of instability in export earning on economic growth.

It may be pertinent to point out at this stage that certain studies have tried to refute the arguments regarding secular deterioration in the terms of trade of primary producing countries.\textsuperscript{24} But there are studies which have been able to reiterate the deterioration in the terms of trade. In general weight of the evidence favours those who
believe that the developing countries do face a problem of deteriorating terms of trade. Some of the recent statistical studies have brought it out clearly that exports of primary products do not stimulate economic growth in developing countries.

The case for growth through import substitution gains further support from certain empirical observations. It has been observed that the trade of industrial countries has grown much faster than that of developing countries since 1957. Besides this, the trade of industrial countries with each other has risen much faster than their trade with developing countries. Among the developing countries whose growth rates have been above 5 per cent, GDP has been observed to be growing faster than imports. In point of fact the raison d'être of industrialization through import substitution even before the growth problems of the developing countries attracted worldwide attention.

The existing international agencies concerned with the growth problems of the developing countries have also accepted industrialization through import substitution as a strategy of growth.

The Process of Import Substitution.

In many developing countries especially in Latin America and Asia, the dominant strategy of industrialization
has been the production of consumer goods in substitution for imports. Given an existing demand for imported consumer goods, it was simple to base the post-war rationale for industrialization on the home replacement of these finished goods. This process was facilitated by importing the components and engaging in the final assembling process, in the hope to industrialize from the top downwards through the ultimate production of the intermediate and capital goods.

The main reason for the choice of consumer goods may be that in the early phases of industrial growth, available level of skills and organization are typical of consumer goods. The size of the market is also given and known for consumer goods industries as evident from the level of imports. With the progress of industrialization, new skills and organizational abilities emerge, while the expanding market allows new industries like chemicals and capital goods, to be profitably established. The establishment of industries to produce relatively simple manufactures is, therefore, generally recognised as the first stop in industrial development. The plants manufacturing such simple manufactures have been trend as "vanguards".
Establishment of related ancillary industries around the "vanguards" will result into closer interindustrial relations leading to horizontal and vertical deepening of the industrial complex. It is inherent in the logic of import substitution in particular and industrialization in general that one industrial activity gives rise to other in fields related to it, so that new avenues of exports are generally developed. The foreign exchange difficulties have however hindered the establishment of such an industrial complex and many developing countries have hurried to higher stages of import substitution in order to save foreign exchange. Even those producer goods industries which have been established in order to replace imports are not necessarily on the optimum scale, nor do they attain the modern level of efficiency in terms of maintenance.33

The second step of industrialization begins with the changing demand pattern of imports in favour of capital goods, materials and parts required to produce consumer goods. Therefore the production is extended backward to intermediate goods and capital goods. This is nothing but the familiar operation of backward linkage effect in import substitution.
Import Substitution at the Base Level.

The strengthening of the economy is being interpreted, in the present work, to mean the transformation of the industrial base. This cannot be achieved unless import substitution starts at the base level. In point of fact the development of an economy is constituted by its growth in terms of its changing structure. It may be recalled here that the FE constraint arises because the structure of production requires a complete change. If the productive base is not transformed the FE constraint cannot be alleviated. It is for this reason that the process of creating backward linkage effect is, sometimes, cut short in the actual planning process. Instead of working as spontaneously, linkage effects are rather planned to operate. This is illustrated by the Second Five Year Plan of India. It aimed at developing basic industries and industries which make machines to make the machines needed for further development.

This seems to be justified in countries like India which have extensive natural resources and large domestic market. It would be seen later on that India has a much better industrial base than a decade ago, and a number of engineering products and certain types of machinery have not only succeeded in replacing imports but they are also being exported.
Import Substitution and Import Saving.

Import substitution in the early stages of industrial development does not necessarily imply a reduction in the level of imports. For, industrialization requires capital goods and intermediate and raw materials which cannot be produced in the developing countries. In fact imports of these goods tend to rise and make the economy more dependent on imports. As a matter of fact factors such as population growth and movement towards higher living standards generally tend to raise import requirements. These general observations are supported by the Indian case. Therefore, the main objective of import substitution in the early stage of industrialization is to save foreign exchange the shadow price of which may be higher than the official exchange rate. This saving in foreign exchange is utilised to import such capital goods and materials which cannot be adequately produced at home in the near future.

Implications of Import Substitution

Import substitution is neither a goal in itself nor an independent investment criterion. At best, a country may consider import substitution as a means of avoiding potential resource shortages.
Import substitution has not generated linkage effects of the type to which Hirschman directed so much attention. As discussed earlier the industries established are not necessarily on optimum economic scale. The import substitution has been accompanied by the establishment of loosely interrelated producers' goods. Inefficiency in import substituting industries has tended to raise the costs of inputs to potentially forward linked industries. This can produce a tendency among those first into the industrial sector to oppose the development of backward linked industrial supplier due to the fear that they would be less efficient and reliable suppliers than the existing world market sources.

The most disheartening experience of import substitution has been in the form of distortions in investment pattern i.e. allocative efficiency. Opportunity cost of using capital must be evaluated. But this aspect seems to have been ignored by the commercial policy in its bid to protect the domestic industries. Over emphasis on protecting the domestic industries has led to negative value added at international prices. This then has defeated in many countries the objective of exchange saving through import substitution. Countries using import substitution with protection have thus became a high cost economy.
The strategy of import substitution has been facilitated by the inflow of foreign capital. Without this large scale investment programmes of the developing countries would not have become a reality. Foreign capital inflow in turn has turned the developing countries into big debtors. Since the debt has to be repaid in foreign exchange, the agent to save foreign exchange initially should after a time span be turned into an agent to earn exchange through exports.

Apart from repayment of debt an export structure consisting of fluctuating exports will hold back the rate of growth of income. For it will limit the capacity to import investment goods and materials needed to expand the capacity to produce. This can also result into capacity utilization problems thus depressing the rate of return and the rate of ploughing back of savings for a self-sustained growth process.

The logic of import substitution is so appealing that it can clearly contribute to the successful servicing of external debt over the long-run. However, the time lag involved before a programme of import substitution begins to pay off by reducing imports renders it ineffective as a short run policy tool. For, the derived demand for intermediate and capital goods may be too high leading to, in
the absence of enough exchange earnings, periodic liquidity crisis. This exchange crisis may force the country to borrow at extremely unfavourable terms. The alternative may be to apply cuts in imports and investment which India had to do during Second Five Year Plan. A recurrent liquidity crisis may even undermine the confidence of potential lenders in the capacity of the borrowing country to effectively use all her resources. Increase in agricultural production is a must for a successful import substitution policy if exchange is to be released for capital goods import. Besides, agriculture also produces food and raw materials for food processing and non-durable and durable goods e.g. tea, sugar, textiles etc. which can be developed into export goods in the initial stages of industrialization. This represents a diversification of the primary sector which opens new prospects for exports and raises the importing capacity. In this context it may be observed that growth can take place only if manufacturing sector is built up as a spillover from the income increase generated by an efficient agricultural sector. Import substitution as observed historically is no warrant for applied policies of import substitution, which may end up producing the wrong things at too high a cost.\(^4\) A coordinated expansion of industrial and agricultural production has also how stressed by certain BCAFE studies.\(^5\)
In view of these problems a well thought out export policy has to be built into the strategy of economic development from the very beginning.

It can be inferred from the foregone discussion that there is nothing wrong with the policy of import substitution as such. Care be taken to select the industries for the purpose. The selection procedure should involve the considerations such as exchange saving, relationship with other industries to establish complementarity. Import substitution should however not be taken to mean exact opposite of export promotion. In fact, a successful import substitution, as it is noted above, should be accompanied by simultaneous drive for export promotion. This is necessary to keep the cost of growth low and time period for being independent from net foreign capital inflow short.
NOTES AND REFERENCES


2. These aspects will be discussed later on.

3. Generally, SI gap and PE gap are considered as the two main constraints to economic growth of a developing country. The lack of various types of skills, however, can become an obstacle to growth. Therefore, skill constraint can be regarded as a third constraint to economic growth.

4. Some of these models are as follows.


6. Lack of capital and low levels of skills make it difficult to manufacture the sophisticated capital equipment for investment. Similar view is expressed by Linder, Op.Cit.


9. If the pattern of investment has taken into consideration the domestic availability of the required inputs, the minimum level of imports would be relatively lower. However, the developing countries in their desire to transform the industrial base may formulate such bold plans which may ignore the domestic availability of the required inputs. The minimum level of imports, in such cases, would be very high. The Second Five Year Plan of India is a case in point.


14. This is implied in Bruton's argument. He has defined the capital goods sector rather broadly. In his definition of capital goods sector he includes all activities which augment the productive capacity. Thus creation of skills is included in the capital goods sector. If foreign demand curve is inelastic the resources should be allocated to domestic capacity creating activities like health, education, research etc. cf. Bruton, Op.Cit., p.442.

15. The famous Drebisch-Singer thesis regarding manufacturing based growth is based on this historical fact.


18. The gap analysis does not deny the importance of the sub-optimal expenditure policies. Once the efforts to bring about structural changes in the system of production are under way the sub-optimal expenditure policies can create the type of the problems referred to in the text.


33. Ibid., p. 91.


35. Raj and Sen have shown that if foreign exchange is allocated to develop a sector which produces raw materials and investment goods for the production of consumer goods a situation will arise when all the foreign exchange earnings will have to be allocated to the import of machines so that more of raw materials may be produced. Therefore the capacity creation in investment goods to produce consumer goods will decline gradually. Alternatively the whole of foreign exchange may be used to import machines to develop a heavy machine building sector in the economy. Once this is done the capacity to make machines to produce the required machinery for investment goods sector and raw materials sector will increase. If this process is followed economic growth will not be constrained by the availabilities of foreign exchange. cf. K.N. Raj and A.K. Sen, "Alternative Patterns of Growth under Conditions of Stagnant Export Earnings", OCP, February, 1961, pp. 43-52.


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