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FOREIGN TRADE CRITERIA IN INDUSTRIAL
PROJECT EVALUATION

Prepared by: ROBERT STANIZ
Research Institute for Technological
Prague,
CZECHOSLOVAKIA

for: The Centre for Industrial Development
Department of Economic and Social Affairs
UNITED NATIONS

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I. Introduction

At present the developing countries are faced with the necessity of seeking a solution to a number of pressing problems of which the most serious are their rapidly rising population, the effort for securing food and enhancing the standard of living. Views on the ways and means of solving these complicated problems differ in many respects. It is, however, almost generally recognized that the growing requirements of the developing countries can be ensured permanently only by an essential rise of the home production. Consequently, the raising of production is the core of economic policy of the developing countries. These efforts are manifested by economic development programmes carried out in almost all developing countries.

Agricultural production is being raised not only by a steady extension of the land under cultivation but also by a more intensified utilization of the lands available. For this purpose the developing countries are importing growing quantities of fertilizers, encouraging at the same time a wider use of machines in agriculture and adopting measures for promoting investment in agriculture.

Industrialization is of utmost significance in the process of all-round economic development. The primary function of industrial production is to extend the home market, especially as regards consumer goods, and in the more advanced developing countries to supply machinery and equipment which raise the

share of industrial production in the latter's accumulation. Industrialization entails high expenditures for the developing countries. In spite of the share of investments in the gross national product averaging some 12 - 21 per cent, the home financial resources do not suffice to meet the requirements of economic development and the developing countries are compelled to seek foreign aid.

The process of industrialization, which is the main feature of current development in the developing countries, is taking place under difficult conditions. The latter's situation in the world trade is continuously deteriorating. Their share in world exports is declining annually owing to the downward trend of export prices and their prices which continue to represent 90 per cent of the value of their exports. On the other hand, the developing countries feel the adverse effect of the growing level of prices of manufactures. This leads to a deterioration of exchange relations and the developing countries are forced to offset the steady decline in prices by raising the volume of their exports.

Owing to the unfavourable trend of export prices the foreign exchange economy of the majority of developing countries is extremely strained. This, in turn, compels them to restrict their imports which brings about a slow-down in the rate of over-all economic growth.

Under the circumstances the developing countries are forced to spend most economically the funds earmarked for the development and to strive to achieve maximum effect.

The necessity to watch constantly their foreign exchange situation and to secure requisite equipment, auxiliary materials, semi-manufactures and raw materials needed for the operation of industrial plants compels the developing countries to make detailed analyses relying on many criteria among which those of foreign trade play an important part. The importance of appraising the interconnection between foreign trade and investments does not follow only from the former's role as a medium through which the developing countries obtain a major portion of their foreign exchange earnings enabling them moreover to import vital machinery, consumer goods, raw materials and foodstuffs. The importance of foreign trade in the overall national economy calls for the application of its criteria also in capital construction. Roughly 15 per cent of the national income of the developing countries are realized through exports; foreign trade operations are responsible for some 40 per cent of all state revenues which are of rising importance in the financing of economic development.

The following two aspects of the relation between foreign trade and investments are of particular interest to the developing countries, namely: what will be the effect of the introduction of their own production from the point of view of their respective foreign exchange economies and what will be the role of products of the newly constructed manufacturing industries in the pattern of export. In examining the relation between investment activities and foreign trade from this point of view, the attention of the developing countries is focused on the two following problems, i.e. on the so-called import substitution under which imported goods are replaced by those of the home industry and on the diversification of exports. Its purpose is to reduce through the exports of manufactures and semi-manufactures, the unilateral dependence of the developing countries on food and commodity exports.

II. Relation between Foreign Trade and Investments in Economic Theory

In economic literature the question of the influence of investments on foreign trade is given but passing attention. It only raises this problem or admits its existence. However, its study is growing increasingly important in view of the role of foreign trade in the overall process of development and in view of the permanently unfavourable economic situation of the majority of developing countries.

Economic theory treats this question as part and parcel of general theories of economic growth of the developing countries, particularly in connection with industrial investments. It examines, however, only the initial stages of industrialization, i.e. the questions concerning the selection of industrial sectors, their distribution, etc., whereas the actual effect of industrialization on particular branches of the national economy, especially on changes in the import-export pattern, remains outside the sphere of main interest. Although it is not the purpose of this paper to analyze and evaluate the various theories of growth, they must nevertheless be used as a starting point since they represent an attempt to form a comprehensive conception of the overall development of particular national economies of which foreign trade is an integral part. Moreover, the foreign trade capacity to influence significantly the process of industrialization, both negatively or positively, is well known.

By its overall balance of trade, foreign trade is responsible for the difference between the volume of the formed and used social product and the national income; their overall volume is the

same both at the stage of production and that of utilization only in case of favourable balance of trade. The favourable trade balance reduces the social product used and the national income as against the formed product by its assets, whereas in the case of debit balance it is the other way round. Foreign trade changes the pattern of social product so that the composition of the social product used differs from the social product formed. A special role is played by the State in the process of reproduction, performs according to some theories, the function of a multiplier.

In practice, statistical verification of the multiplying effect of foreign trade on the growth of economics, or of capital goods imports on the process of industrialization, is confronted with considerable difficulties. Apart from this, a detailed analysis attaches undue importance to quantitative factors although the qualitative aspect is equally important. The points in question are, in the first place, changes in the size and the pattern of the home market, rise in the standards of technology of production, efficient utilization of resources and materials available.

A deliberate planned process of industrialization cannot operate without a subjective factor equipped with adequate authority and funds. This fact is recognized also by many of whom have come to the conclusion that the State is the only one capable of being such a factor since the State, unlike the private entrepreneur, can pursue all-social objectives both by its economic policy and direct participation in development projects. Moreover, only the State is likely to counterbalance satisfactorily an often notable influence of foreign capital which owing to its economic strength may interfere with the development by pursuing its narrow objectives. The function of the State is to

ensure optimal participation of foreign capital in the forms of industrialization that are deemed most advantageous for the country concerned. Thus, at present, the majority of economic theories realize that the policy "laissez faire laissez passer" is not only unsuitable but even harmful to the developing countries. In this particular respect, the theory conforms to practice for there are many countries where the State does not interpose in the development to a greater or lesser extent. This is manifested particularly by the fact that the majority of the developing countries launched development programmes many of which have already been successfully completed.

Economic theories in the field of growth offer criteria for as efficient a selection of investments as possible and are intended to assist the developing countries in the preparation of their development programmes. It should be borne in mind in this connection that at present the process of industrialization in the developing countries proceeds under conditions somewhat different from those prevailing at the time of industrialization of the now advanced countries. They were then forced to start the process of industrialization from simplest products, gradually venturing on more ambitious products demanding greater skill. Mr. A. Hirschman calls this "from the donkey to the aircraft". On the other hand, the developing countries may well adopt a dual approach, i.e. not "from the donkey to the aircraft", but adopt the approach embracing both "the donkey and the aircraft". Their development differs from the classical development of industry in the past since they are able to develop simultaneously both new industries as well as traditional branches which prevail in these countries usually in the pre-industrial form. It is, therefore, expedient to concentrate on new, economically important industries and simultaneously continue to develop traditional production already backed by experience and

a certain number of skilled workers. The standard of handicraft production should be raised by moderate investments, suitable credit policy, encouragement of the development of cooperatives together with the training of new workers.

Economists are generally in agreement as regards the necessity of controlling the process of industrialization from one centre and the already mentioned dualism of development. On the other hand, their views and recommendations on another question, namely on the determination of priorities in the process of industrialization, differ considerably. This difference in views can be on the whole understood since the situation and actual requirements of a certain group of countries which they have selected for their examination tend to influence the economists in their deliberations. Although some general principles of the process of industrialization are applicable to all countries, priorities can be determined only on the basis of a profound analysis of the natural, economic and social conditions of the country concerned. The criterion of costs and benefits cannot be applied to the determination of priorities. It is extremely difficult to express this criterion in terms of figures; other criteria must rely only on careful deliberation.

Thus the guiding criteria for the solution of the question of actual and geographical concentration of investments are the markets, the man-power requirements and the location of raw material resources. A characteristic feature of the export industry is the latter's concentration on one or a few industries combined usually with geographical concentration. On the other hand, the industry directed at meeting the requirements of the home market covers a large number of branches, its geographical concentration not being usually very high either.

It is expedient to realize industrial investments within the scope of major investment projects, i.e. within the scope of investments into the infrastructure, etc. At the initial stage, the State's participation in industrialization takes the form of investments in the field of infrastructure, as borne out by a number of development programmes already completed. Conditions for the industrialization proper are ensured by the realization of investments in the field of power engineering, transportation, etc. We are witnessing, that in some countries the State does not any longer ensure conditions for industrial investments, but is the first to give an impetus to the determination of priorities and to participate directly in the construction of industrial plants.

The actual process of industrialization of particular countries often differs in the choice of priorities. Economic theory actually only tries to generalize and appraise the practical results achieved with a view to the specific nature of conditions in different countries, or different stages of the development. The process of industrialization can be carried out either by building up industry directed primarily at exports, or by concentrating on import substitution. Within the scope of these alternatives it is possible to concentrate on the so-called start-at-the-end-industrialization, on the building of key branches, or on industries requiring great man-power or financial resources. However, the various forms of the process of industrialization exclude each other and none of them occurs in a pure form.

Many economists favour priority construction of various, including the key, industry. According to some of them it is this particular industry which launches the country on the road of economic development. In support of this view they point out to the latter's ability of being developed independently of other

economic sectors and the size of the home market. Their view is, however, often somewhat simplified in that it does not distinguish between the kinds of exported production, i.e. whether the products in question are those of the mining or the manufacturing industry.

As a rule, products of the mining industry find better outlet on foreign markets, whereas semi-manufactures and above all, manufactures are faced with severe competition particularly in the industrialized capitalist countries. When choosing this alternative it is, therefore, imperative to ensure outlet which in this particular instance is a conditio sine qua non. The presumption according to which the export industry helps raise internal purchasing power creating thereby prerequisites for the development of overall economics is substantiated but conditionally. In many cases as, for example, in some of the crude-oil producing countries, the benefits are enjoyed by a very small stratum of the population and that only in the field of luxury personal consumption since any links with other economic branches are missing. The development of export industry, often equipped with latest technology, rather tends to widen the gap between the said industry and other economic sectors so that the country concerned has two parallel economies not linked up with each other. Thus the expected multiplication results are not arrived at.

Advocates of the priority of industrial sectors designed primarily for import substitution represent a relatively large group. This industry's lesser vulnerability by outside influences and balance of payments difficulties and the fact that its products already have an adequate internal market, which moreover the substitutional industry helps expand, are regarded as its main advantages. Furthermore, the introduction of production of

one kind of products stimulates the construction of capacities for further kinds of products.

According to this theory, the population being accustomed to certain kinds of products hitherto imported is of considerable importance particularly at the first stage of industrialization. After its completion, home production, provided that it is sufficiently protected in the field of import, is on the whole ensured prosperity even if its price and quality do not fully match those of the formerly imported merchandise. The term substitutional industry does not imply naturally only industry manufacturing solely for the home market. In our view, its correct interpretation is that although the substitutional industry proceeds from the requirements and absorbing capacity of the home market, it seeks to export some of its output as soon as its capacity exceeds the requirements of the home market, or the merchandise achieves the standards of foreign competition. There are naturally great many variant forms within its scope. One of the criteria is whether it is an industry relying on domestic raw materials or a tertiary industry. The former's contribution to the national economy, is essentially obvious, on the other hand, the latter calls for careful consideration and examination of particular schemes, particularly as regards luxury goods production. In the case of unfavourable balance of payments it is less difficult to prohibit the import of finished luxury goods than that of semi-manufactures upon which depends production. Another disadvantage of the tertiary industry is the danger that the manufacturers who use imported material, semi-manufactures, or accessories may hinder the introduction of their production in the country for fear of inferior quality, higher costs of production due to unfavourable transport possibilities, location of raw materials, or even lower productivity of labour. On the whole, this theory is successfully applied primarily in countries suffering from shortage of skilled labour, expert knowledge and limited home market.

On the other hand, the theory stressing the advantages of building the heavy industry is applied primarily with respect to countries having already a certain industrial base which has provided market for products of the heavy industry. The construction of the heavy industry guarantees a steady supply of raw materials to manufacturing industry. If, however, the construction of the domestic heavy industry arises it can contribute to further progress of structural changes in industry without adding new burden to the balance of payments. In this respect, countries with low population are in a more difficult situation. Therefore they have been endeavouring in recent years to improve their disadvantageous position by building up plants and factories whose output would be designed for the market of more countries participating in the construction. Whereas the development of heavy industry presupposes the existence of light industry, the latter's construction is, however, not conditional on the existence of heavy industry.

A characteristic feature of the heavy industry is its high demand on financial resources, whereas that of the light industry is its high demand on labour. This criterion plays also an important role in the determination of priorities owing, on the one hand, to the lack of capital and, on the other, to the effort to provide employment for the rapidly growing population. Economic theory therefore often defends priority construction of the light industry regardless of the overall requirements of economics of the country concerned.

The consequences of industrialization for employment are undeniably a significant factor in the determination of the orientation of investments. A shortcoming of this approach is, however, a low wage level often calculated to substitute the level of productivity of labour. This approach is justified at the initial stage when the labour is acquiring the requisite skill;

it happens, however, usually that the low level of wages is preserved even after the level of the process of production has attained international standards. This may be explained by the fact that manufactures are regarded as capable of competing on foreign markets only after they have achieved equal quality and are being offered at lower prices.

A criterion of the realization of any project should be its objective necessity from the point of view of the country as a whole and the prevailing natural and economic prerequisites. As is known, however, the process of industrialization has to cope with a number of limitations following from external as well as internal factors. A significant internal prerequisite of industrialization - when skipping for the moment the question of ensuring financial and material funds - are particularly the size of the market and the standard of the skilled manpower. This implies that a limited home market, together with inadequate experiences and low vocational standards of manpower are often an obstacle to industrialization. At the same time, it is necessary, however, to bear in mind and proceed from the fundamental function of industrialization, i.e. to assist in enhancing the standard of living of the population. This, in turn, brings about a rise in requirements, i.e. gradual expansion of the home market, rise in the vocational training and skill of manpower and thereby creation of further incentives to industrialization. It is, therefore, not a question of a "vicious circle" due to internal limitations described by some authors as the "industrialization trap" - one of the problems of industrialization.

Foreign trade ranks among the first in the sphere of external factors influencing the process of industrialization. Transfers of funds from one branch of the economy to another take place particularly through foreign trade. The principal source of funds is usually the export of the agricultural sector, or of a sector of the economy characterized by a high degree of export orientation. Exports usually exceed usually their import requirements. This makes it possible

to use the difference for the development of the national economy as a whole. This fact is of particular importance to the developing countries that do not yet manufacture means of production, their process of industrialization depending, therefore, fully on imports of machinery and equipment. The process of industrialization is almost always accompanied by balance of payments difficulties. This, in turn, calls for regulation of foreign trade, in the field of both, import and export.

Pressure for higher imports is brought about not only by the growth in requirements for capital goods but also by the additional purchasing power built up in the course of the realization of investments which prior to the completion of investments must be met by imports. Relations between induced purchasing power and the potential possibilities of satisfying it are more complicated in connection with the construction of the heavy industry. Import restrictions are applied, in the first place, on consumer goods. This may, of course, encourage the rise of their production in countries having both outlet and protection against foreign competition.

The share of individual import groups changes simultaneously with the rise of imports, this results in a gradual change of the whole import pattern, i.e. the pattern of imports reflects the individual stages of industrialization, its rate and orientation. In exports, the effect of the process of industrialization is much less manifest, the pattern of exports remaining virtually unchanged for a long time. We may therefore say that the pattern of imports anticipates the pattern of production which in turn is in advance of the pattern of exports. This tendency follows particularly from the fact that the domestic manufacturing industry looks for outlets abroad only when the home market is no longer able to absorb its output. Efforts for diversification of imports are thus actually one of the accompanying phenomena of the construction of the substitutional industry.

III. Relation between Foreign Trade and Investments in Economic Activities

The developing countries are compelled to examine the relation between foreign trade and investment activities by urgent requirements of their economic activities. These force them to concern themselves with the problems of economic development, the rapid growth of their population, the supply of food, and employment. They endeavour to find solution to these problems according to their capacities and with a view to their specific problems. They are aided in these efforts also by the United Nations regional commissions. Relatively most successful was the United Nations Economic Commission for Asia and the Far East, whose views and suggestions are summed up in this chapter. These monographs, similarly to other theoretical literature, do not deal separately with the relation between foreign trade and investment but examine this problem in connection with the overall policy of economic development of the developing countries.

The difficult and in recent years continuously deteriorating foreign exchange situation of the majority of developing countries, brought about by the unfavourable development of their balance of payments, forces them to study the relation between foreign trade and investment activities. This situation has been brought about, on the one hand, by the execution of economic development programmes involving high financial costs and the need to meet the growing food requirements by imports. Increased foreign exchange requirements cannot be met to a sufficient degree by earnings derived from exports by the developing countries. Their foreign exchange earnings depend on the trends of international trade and investment in the world market. These trends, in the past, have been unfavourable for the developing countries.

The developing countries, mindful of their foreign exchange situation, proceed therefore to construct primarily factories in the sphere of production where the requirements have hitherto been met by imports. This is the reason behind the rise of the import substitution industries. In many countries the process of industrialization relies on substitutional industry which, owing to its importance, was included into the overall economic development programmes.

The import-substituting industries concentrate above all on the production of articles having adequate market in the country concerned. Import substitution concerns a wide range of goods such as sugar, textile and shoes; consumer durables manufactured in the developing countries within the scope of their efforts for import substitution include electrical ventilators, bicycles, refrigerators, air-handling equipment, chemicals acids, artificial fertilizers, crude-oil products, dyes, rubber hose and tyres, building materials, particularly cement, sheet glass and plywood. Industrially more advanced countries such as, e.g., India, the United Arab Republic, Brazil, Mexico and Argentina manufacture primary metals, above all steel and aluminium, and are already developing engineering production.

The overall industrial policy of the developing countries influences to a considerable degree the orientation of the substitutional industry. In the countries of South-East Asia,

many national economies have a powerful state sector the State acts not only as organizer but also as direct entrepreneur. Hence a marked feature of the industrialization designed to substitute import is the growing importance of the construction of heavy industry plants and the production of durable goods. However, in some countries of that area, namely in Hong Kong and the Federation of Malaya, the State permits private capital to

... fast backflow of moneyed fund, i.e. into the consumer goods production.

The construction of substitutional industry presupposes a certain protection of the home market which the respective branches receive in the form of customs tariffs. The system of various controls adopted by almost all developing countries has a similar function.

The introduction of production in substitutional sectors has a favourable effect not only in the field of foreign exchange ... The newly ... plants participate in the market economy by creating prerequisites for the foundation of new manufacturing branches and plants by their demand for raw and auxiliary materials. The favourable influence of substitutional industry is manifest both in the field of industrial and agricultural production. The purchasing power, growing in consequence to the rising employment, turns to the food and consumer goods market, thus becoming a significant source of accumulation. The funds thus obtained and mopped up in the form of taxes and levies may be used in future for the financing of further investment projects. The fact that substitutional industry provides opportunities for the training of technicians is also appreciated. The construction of substitutional ... calls for considerable financial funds and, ... the fact that foreign aid covers a notable portion, internal resources are of major importance. Substitutional ... formation mainly by their form of self-financing. Many developing countries are adopting effective measures designed to encourage domestic capital to concentrate on substitutional ... considers the concentration of domestic capital on substitutional industries as a ... fears the risk of this capital being expended on undesirable luxury consumption.

Foreign exchange savings achieved in substitutional industries may be used for purchases of capital goods and equipment which cannot be manufactured domestically.

For the purpose of appraising industrial investment projects the respective United Nations authorities recommend a state-wise approach, stressing at the same time the constant need of comprehensive evaluation. They do not isolate the evaluation of an individual project from the all-round orientation of the process of industrialization. After evaluating the overall prospects of development of the national economy, analysis is made by sectors according to which individual projects are arranged in the order of suitability.

From the point of view of import substitution it is useful to collect data on production, imports, exports and domestic demand both for the starting as well as the target year. The size of demand for individual kinds of goods is estimated by using the intensity of demand. This can be applied mostly with respect to major categories of consumer goods such as foodstuffs; if necessary, an analogy from other countries can also be used. Essential factors taken into consideration include such as the growth of population, the share of rural and urban families, etc. Minimal consumption standards for the staple kinds of consumer goods (above-mentioned) may serve as targets.

The following data must be ascertained as a further step in the choice of goods to be manufactured under the contemplated investment programme:

- gross estimate of the aggregate demand for the whole sector bases on sectoral analysis;
- estimate of the demand for more essential kinds of goods within the sector;

- requirements of manpower, financial funds, some essential commodity inputs, raw materials, auxiliary materials, etc.;
- determination of the suitable range of development of a given sector within the framework of the overall economic policy.

The main purpose of the "preproject" stage of analysis is to narrow down the possibilities to such as merit a more thorough study and preparation of detailed projects.

Countries that have just launched their industrial development programmes have often limited resources to support manufactures. If such possibilities exist, they should be included in the estimates of overall demand. Comparison between the costs of domestic production and those of imports form the main basis for the preproject production analysis of individual kinds of goods. This stage of analysis relies, however, more on a general knowledge of imported products and a characteristic of the process of production rather than on a detailed analysis of the costs of production. Knowledge of the products and the respective markets can be obtained from importers, businessmen and direct consumers.

In choosing a project careful attention should be paid to all alternatives of enhancing home production either by more efficient utilization of an already existing plant, or by expansion of existing plants, or construction of new ones. Any of these instances call for the preparation of several alternative projects so as to make it possible to examine all aspects of the decision made.

During the preparation of a project many other questions should also be studied, particularly as regards the range of

products to be manufactured, the technology of production to be used, whether the plant should be conceived so as to meet the current level of demand only, or possibly higher future demand. All these questions are largely interrelated and cannot be solved regardless of each other.

A number of factors of supply and demand common to this or that kind of goods and the production techniques under consideration should be taken into account in the project analysis.

The choice of industrial projects can be made by selection between projects in an industrial branch, or by comparison of various industries. Although analogous general principles are used in both cases, it is better to start with the election within the framework of one industrial sector. Social efficiency of the capital invested into each of the alternative projects is the principal criterion for the selection of industries made by comparison of the projects concerned. In the case of production of one homogenous kind of goods, which do not differ in quality it is easier to calculate the efficiency for each particular project. The starting point are costs of raw materials and manpower, on the one hand, and fixed capital, on the other. Manpower, imported raw materials or import substitutes are as a rule appraised in accounting prices. The remaining items are appraised in market prices, with the exception of a few essential working costs such as electricity and transportation.

As regards the sectors included in the programme of import substitution, it is recommended that attention be given to a project likely to ensure highest foreign exchange savings.

One of the main factors limiting the development of industry in the majority of ECAFE countries is the small size of home

markets which prevents an efficient utilization of plant capacities. In view of the fact that in many industries the production costs decline after a certain volume of production has been attained, it is desirable to select such technology and range of production that would ensure after a certain period as economic a production as possible. Economy of large-scale production is stressed in the majority of works of the metallurgical and chemical industries where the savings in capital, manpower and fuel per unit of production. A typical example is the steel industry. However, the savings resulting from the optimal size of a plant are smaller in the case of such branches as are, e.g. the textile and tobacco industries whose capacities rise by the expansion of the plant. In determining the optimal size of a plant it is necessary to take into account the diversity of the factors of growth of demand as well as its foreseen size at the end of the planning term.

Advantages of large-scale production can be largely reduced by higher costs of inputs or social disadvantages caused by excessive concentration of production. Concentration of industry and construction of major plants in the developing countries may lead to serious difficulties in the supply of raw materials, water, fuels, electricity, housing, etc. Since the location of key industries, such as the steel and chemical industries, usually influences the location of industries which supply inputs to the former or use their outputs, the determination of the size of one of these key plants may have a far reaching effect on the regional development of the country. Hence all important decisions concerning the range of production must be made in agreement with the regional development programmes which take into account the supply of more important inputs and future factors of the growing demand.

Production techniques differ according to fixed capital, manpower and other inputs they require and according to the range and quality of goods employed in their manufacture. Every country will choose different production techniques according to the costs of raw materials, manpower and the source of capital. All this will be reflected in the calculation of the costs in accounting prices. According to the ECAFE, it would be erroneous to presume that the latest technology is necessarily the best for every country.

After coming to agreement on raising the production of a certain kind of goods it is necessary, in the first place, to examine the prospects of development in the industry either by extending, or making better use of the capacities already available. It is often found that the existing facilities are not adequately used, or that it is economically more advantageous to extend production capacities rather than to build new ones.

Even if existing facilities are fully used it may still be advantageous to raise the capacity of an already existing plant for many of the general services, such as transportation, supply of water, steam and electricity, require substantially lower investments than in the case of a new factory.

Many factors may operate against the advantages of extension. It may be indispensable to build new plants in the event that the development policy encourages decentralization of industry for the purpose of furthering economic growth of new areas and preventing excessive concentration. For example, a better location of industry was an essential factor for the location of the Bhilai Steel Works in India.

The development and the share of home production in the overall consumption in individual countries show how far the efforts for import substitution have been successful. Data on the development and successful efforts for import substitution contained in the ECAFE documents reveal that this share is steadily rising. For example, over the years 1955 - 1962 the share of sugar produced in India rose from 79 to 100 per cent, caustic soda from 48 to 59 per cent, rayon from 39 to 83 per cent, sheet glass from 83 to 102 per cent. Towards the end of this period Burma was able to meet some 72 per cent compared with only 47 per cent in 1955 of its sugar consumption from domestic production and 27 per cent compared with 29 per cent of cotton yarn. Ceylon, which has been building up crude-rubber processing industry in recent years, was able to satisfy 95 and 94 per cent, respectively, of its consumption of bicycle air tubes and tyres, although the share of the latter's home production in overall consumption was only 56 per cent in 1955.

India, which has a wider industrial base, is making good progress in import substitution also in the field of engineering production. This development is best borne out by the results attained in recent years in the manufacture of equipment for the sugar industry. In 1962, the home production met 100 per cent of its demand, although the share of home production in the overall consumption represented but 5 per cent in 1955.

Successful import substitution is faced with many difficulties. An overwhelming majority of the developing countries is still lacking adequately trained technicians. The quality of products of substitutional industries sometimes also fails to meet international standards. Developing countries are making great efforts for removing these defects. Regional Com-

mission for Asia and the Far East recommends the countries concerned to continue to import certain quantities of the goods manufactured under their substitutional programmes, in the interest of better quality and influence on price trends.

From the economical point of view, high production costs are the most serious factor exerting an untoward influence on a successful progress of the efforts for import substitution. One of the main causes of this unfavourable phenomenon is the narrow home market in some countries. Therefore the respective United Nations bodies and commissions recommend that countries confronting such difficulties pay due attention to exports from the very start of their preparations of industrial projects so as to ensure higher volume of production, thus providing prerequisites for gradual reduction of production costs.

We are now coming to another criterion according to which we can examine the efficiency of investment from the point of view of foreign trade, namely to diversification of exports which, however, as has been pointed out, is closely linked up with the efforts for import substitution. This, compared with latter, is, however, less important.

Diversification of exports, whose purpose is to expand the exports of semi manufactures and manufactures and to raise their share in overall exports, helps to reduce the dependence on primary commodity and food exports from the developing countries which makes them dependent on the trends of the world market. The developing countries have possibilities to participate, to some extent at least, in the generally upward trend of prices of manufactures. Diversification efforts are, however, confronted with

problems very similar to those arising with respect to import substitution.

In spite of the difficulties confronting some countries in connection with their conduct of the policy of export diversification, the share of semi-manufactures and manufactures in overall exports of the industrially more advanced developing countries is rising. The share of manufactures produced in the newly completed substitutional industries in the Indian exports increased in 1951-1952 from 3 to 7 per cent and in the Pakistan exports from 9 to over 11 per cent, while the share of countries of the South-East Asian region in the exports of these goods from India rose from 9 to 15 per cent.

The process of import substitution and export diversification, the two principal factors of the current economic policy of developing countries, is faced with various difficulties many of which can be solved by effective forms of cooperation.

IV. Some Aspects of Evaluation of Investments from the Point of View of Foreign Trade

The ideas referred to in chapter II and III on the relation between foreign trade and investments both in economic theory and activities contain many remarkable and rational ideas although they leave some questions unanswered.

Economic literature of both the western and socialist countries is devoting now more attention to the questions of mutual relation between foreign trade and investments as shown by a number of studies dealing with this complicated problem published in recent years.

Czechoslovak economists, too, seek a solution to the mutual relation between investment policy and foreign trade and to a proper approach to the evaluation of the efficiency of investments. They pay primary attention to the evaluation within the scope of socialist economics. They share the view that foreign trade represents but one of more criteria, however, an extremely important one, for the evaluation of investments in the conception of overall development of the economics of a country. They stress that the aim of the evaluation of investments and their economic efficiency should be such a capital construction that would ensure as optimal a development as pos-

sible of the national economy with the funds available for this purpose. Foreign trade as a manifestation of the international division of labour is one of the essential factors of this growth.

A comprehensive evaluation of investments, i.e. due consideration of all possibilities and conditions for the materialization of a certain investment scheme as well as all its effects, is a means and a vital condition for the most optimal development of the national economy. This evaluation should proceed from a careful scrutiny of all national economic aspects, an analysis of the country's natural, economic and social conditions, namely from certain actual conditions under which the investments should be realized. On the other hand, it should take into account all economic and other social effects of the investments (such as e.g., demographic, etc.).

However, an evaluation, no matter how thorough it may be would serve no useful purpose in the absence of an authority that would be guided by it and translate the investment policy into practice according to the analyses and the conclusions made.

In this respect Czechoslovak economists have in mind the determinative role of the State which is given by the social system. In conducting its investment policy and direct participation in the development projects, the State pursues all-social objectives, supervises the process of reproduction in the national economy and exerts its influence also on perspective conditions of the country's participation in the international division of labour. The State is best equipped to appraise the ultimate general effect of expended investment funds, their effect on the planned economic development of the country, whereas, for example, individual industrial enterprises can appraise only some aspects of this effect according to their sphere of interest. Hence an investment, which according to the criterion of one enterprise appears most efficient and furthers its development, may appear according to national economic criteria inefficient and even impede the country's all-round economic growth.

A fundamental and determinative criterion which guides an industrial enterprise in its appraisal of an investment is customarily the criterion in terms of value. The latter, although it is an important criterion in the State's appraisal of an

investment, is not always the determinative one, especially if starting from calculations based on contemporary conditions and not on their perspective development. It is necessary, particularly at the initial stage of development, to rely of certain financial support on the budgets of new capacities. This is so mainly in the case of construction of some sectors where investment involves high financial costs which are, however, an essential part of the desired rational structure of national economy, an essential part of a specific production complex, and which produce the expected positive effect only after some time. From the national economic point of view it would be unwise to be guided solely by the criterion of current costs and profits when determining the priorities of capital construction and making decisions on investment in general. On the other hand, it would be equally unwise to consider these questions without due attention being paid to the calculations of efficiency in terms of their value. So-called world prices are used as a criterion for appraising the efficiency of investment from the point of view of foreign trade based on relations in terms of value. In spite of the fact that owing to the uneven distribution of economic resources of individual countries and regions the latter are not an impeccable interpretation of the international value of a commodity and the socially necessary expenditures of labour, they must be taken into account for they are used, after all, on the world market.

Some criteria, whose use must consider specific qualities of the investment question and allow comparison with other investment variants, can also be employed in making a comprehensive evaluation of the efficiency of investments linked up with foreign trade.

These relations are rendered complicated by the fact that the investment may be a substitution investment, or a partial import-substituting one, or even one whose whole or part of the production is intended for export. Furthermore, it is necessary to keep in mind investments which fall under none of the two categories whose realization will require, however, import of raw materials and materials, or domestic raw materials and materials which were exported previously, or can be exported in future.

Thus far, main attention has been devoted to the method of evaluating investments whose production is intended for export, or to substitution investment.

If evaluating the efficiency of investments whose production is intended for export it is advisable to analyze first the effect of export in relation to the national economy. The author has in mind particularly the effect of the anticipated exports derived from a new investment on the production, its development, productivity of labour, growth of social production, employment, etc. In addition, it is necessary to take into consideration the effect of the anticipated exports on the available raw material and power resources, above all on the available deficient raw materials and materials. This effect can be measured by the expected scope of consumption. These criteria will allow to compare the variants of production excluding or including export with the latter's different volume.

It is also necessary to examine the value effect of the export under study in the foreign trade itself, especially its effect on the trade and payments balance, to ascertain how the exported product as part of the export goods will contribute to foreign exchange earnings and thereby to ensuring imports.

Another already mentioned criterion for evaluating the investment efficiency whose production is designed for export is the latter's effect in terms of value. In studying this effect we can examine the relation of foreign exchange earnings to standard costs of production and circulation with a view to the stage of the production process, investment efficiency as a relation of foreign exchange earnings to the volume of investment and finally the synthetic relation of foreign exchange earnings to the standard investment costs modified by the investment efficiency coefficient; the latter's application is necessary particularly when one alternative is more advantageous from the point of view of the relation of the relation of foreign exchange earnings to standard costs and the second from that of the relation of foreign exchange earnings to investment costs.

A synthetic indicator is the indicator of the amount of the expended investment funds. This can be used as another criterion for evaluating investment efficiency in general and hence

also investments linked up with foreign trade. According to this principle, the price is so calculated that such a profit and depreciation ensure the return of investment funds at a predetermined time. The period of the investment may be longer than the life span, or the two periods can be at the most of equal length.

The expected position of exported products on the world market is another important criterion for evaluating investment efficiency of the products designed for export. This position is determined by conditions prevailing both in the field of production and circulation. These include perspective maintenance or surpassing the world standard of the product as regards its technical and economic parameters, quality, terms of delivery, packing, etc., trends on foreign markets, market outlet and price trends, etc.

Many criteria for the evaluation of export production are simultaneously criteria for import-substituting investments. It will, therefore, be useful to concern ourselves with those criteria which are specific for the evaluation of the latter investments.

When and how these criteria for the evaluation of investment can be used depends on the level of development of each particular country. Thus, for example, countries where industrialization of their national economies has only just started, should, when deciding between domestic production and import, be guided to a limited degree only by the results of comparisons of current and import-substituting investment costs with current and investment costs required for the production of the so-called export equivalent represented by the value of the exported goods requisite for obtaining foreign exchange needed in order to secure import of the product under study. In weighing the pros and cons of investment costs it is expedient to use the investment efficiency coefficient so as to ascertain that the allocation of funds earmarked for an investment under consideration would not lead to higher savings in another manufacturing sector. The possibility (in fact, one, or more) of another combination, for example, investment into domestic production of an interchangeable product, should also be kept in mind.

This does not necessarily imply that an import-substituting investment is disadvantageous if investment in domestic import-substituting production involves higher costs than the produc-

tion of export equivalent. It may well be that the equivalent exported in order to enable the import of a certain product is in demand in a currency area from which the products may be imported whose import would result in a net loss, the loss being set off by introducing its domestic production.

Import-substituting investments in domestic production involving costs surpassing those of the production of the equivalent may be advantageous if the use of the efficient exported equivalent product brings such a gain as to outweigh the loss caused by the introduction of domestic production. Finally, import-substituting investments in domestic production, more expensive than the production of the export equivalent, might be advantageous provided that it would render possible a more favorable relation between accumulation and consumption, or that it improved markedly the pattern of personal or production consumption.

The above-mentioned examples are acceptable provided only that there is no way of meeting the requirements by raising the production of a given equivalent; that would obviously be always more advantageous. Such a situation is possible provided that the production of the latter cannot be raised for lack of capacities, raw materials, etc., or in the event that the country where the import originates requires only a certain quantity of the given equivalent.

Conditions influencing the efficiency of import-substituting investments must also be carefully watched. This applies especially to long-term prospects in the world market and purchasing possibilities connected therewith, probable price trends, etc.

On the basis of this brief and far from exhaustive review of the criteria for evaluation of investments connected with foreign trade, the author has arrived at the following conclusion, i.e. that

- the State deliberately managing economic development by its rational investment policy has a vital function, particularly in countries in process of building up their national economies;
- national economic approach to evaluation calls for a profound comprehensive analysis paying due attention to a number of economic and other than economic criteria of perspective character economic growth under

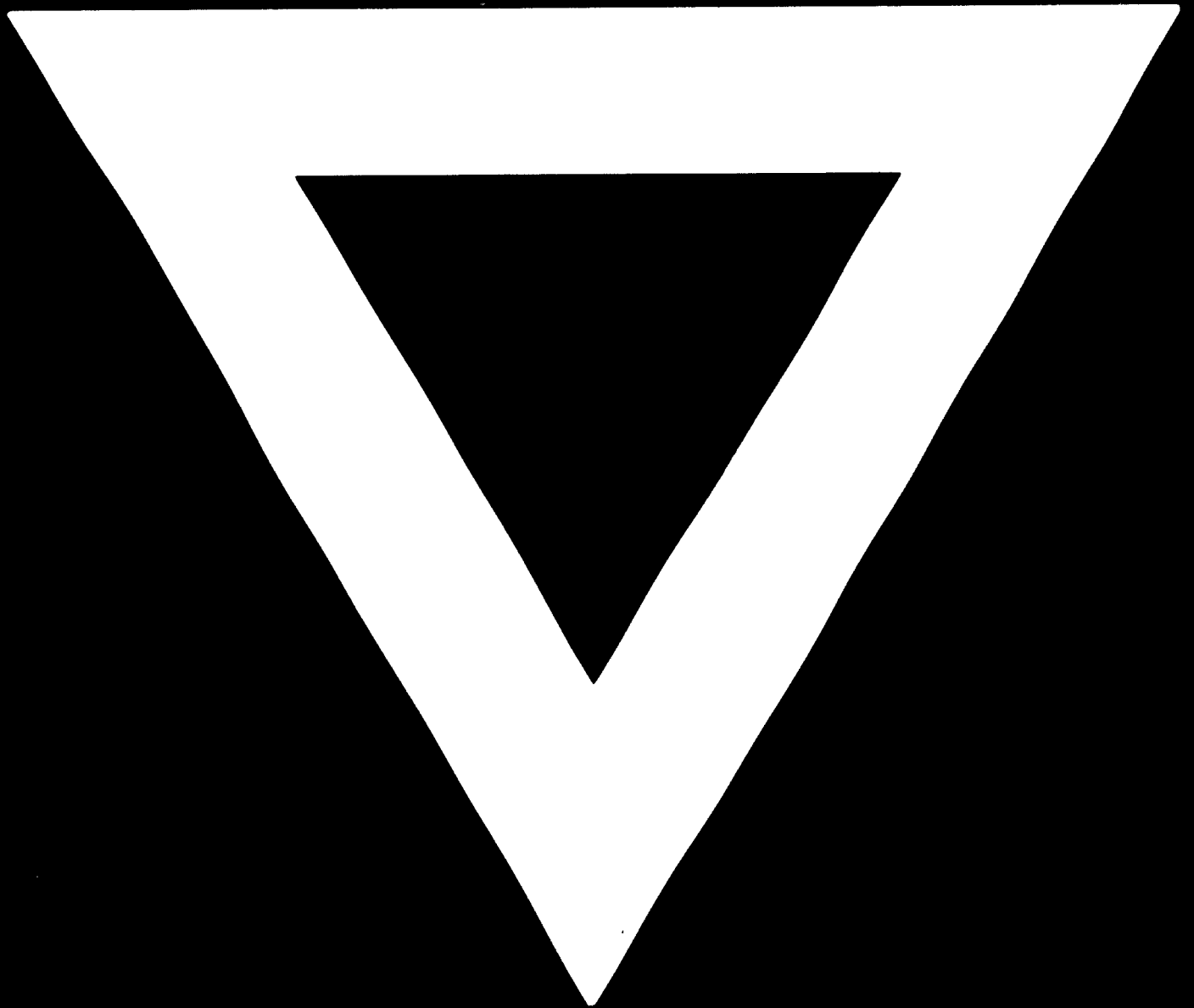
actual conditions of a given country), the utilization of statical calculations in terms of value having, however, a limited function;

- in view of these constantly developing relations it is difficult to conceive a comprehensive conception for the solution of these problems, it is, however, the view of the author that investment schemes must be under all circumstances appraised against the background of the all-round reproduction process where the international division of labour and foreign trade play a significant role as vital factors of economic growth.

The author is hopeful that discussions at the forthcoming United Nations Symposium concerned with the evaluation of industrial projects will contribute towards a more profound knowledge of this problem and thus also to its solution.



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