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in Exports

INDUSTRIAL CO-OPERATION FOR EXPORTS: BRAZIL AND DEVELOPED COUNTRIES[1]

by

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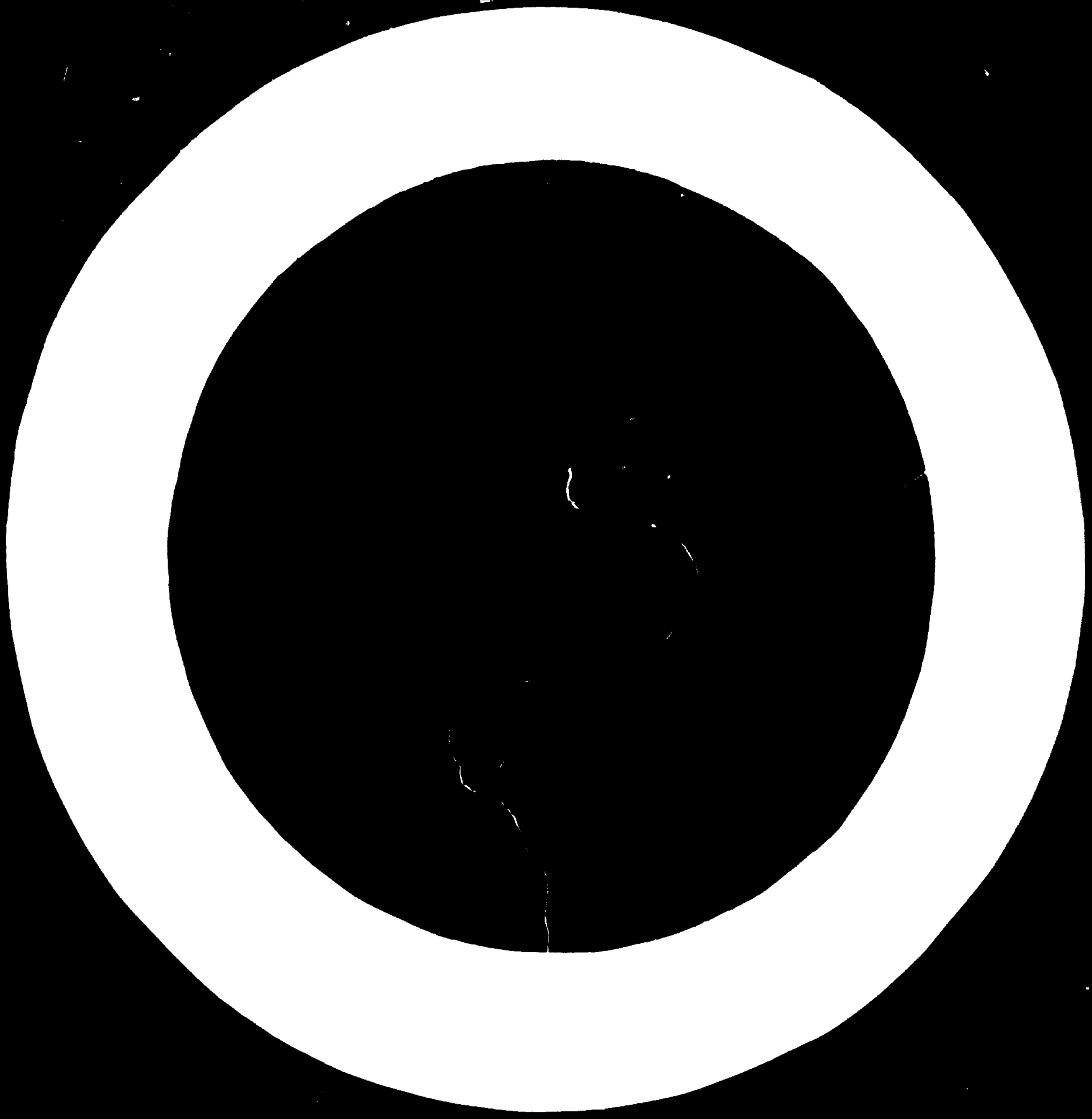

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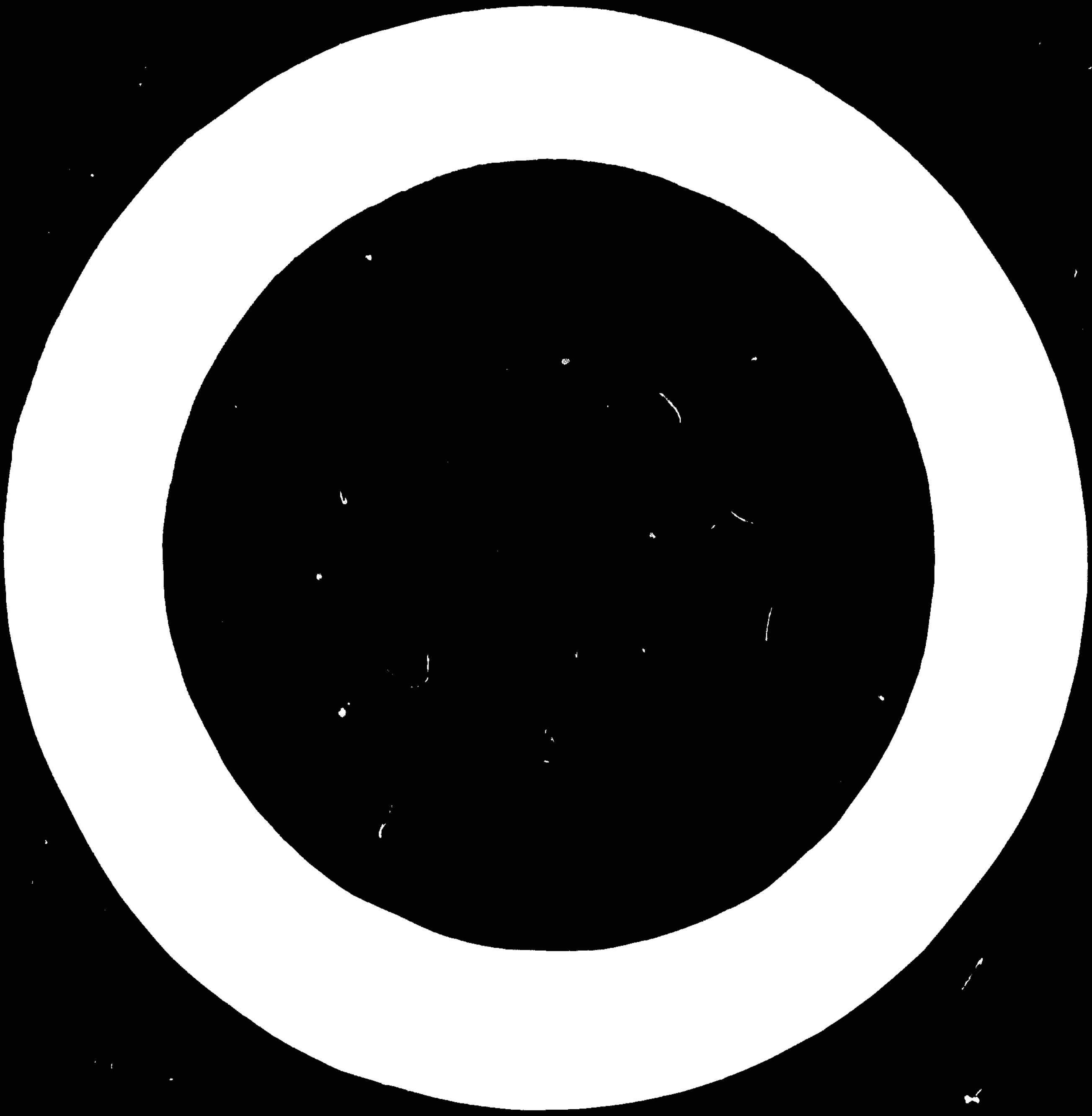

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I. Introduction

1. The following [illegible] problems [illegible] Brazil [illegible] developed countries. It [illegible] only a starting [illegible] analysis [illegible] of the subject [illegible]. [illegible] reflects some of the main features [illegible] an analysis of the available data on the problem, [illegible] of the relevant Brazilian legislation and interviews with representatives of the public and private sectors directly involved in this topic.

2. In this paper "Industrial Co-operation between Brazil and the developed countries" will be expressed by "Industrial co-operation for exports". This comprises the four categories of agreement referred to in the UNIDO questionnaire:

a) technological arrangements ranging from an exchange of know-how (including some technical co-operation and exchange of personnel) to joint research and development projects in specific fields;

b) specialization arrangements which may be subdivided into two groups:

   i) arrangements [illegible] deliveries of specified inputs calling for flows in one or several directions;

   ii) arrangements for [illegible] production of one [illegible] items of [illegible];

c) deliveries of machinery and equipment [illegible] with the [illegible] or [illegible];

d) marketing arrangements providing for [illegible] of the sales and [illegible] of [illegible], or for the establishment of a joint [illegible].

II. The Relationship between Industrial Cooperation and Brazilian Exports of Manufactured Goods and Internal Industrial Efficiency

3. Basic to a country's success in export of manufactured products is the existence of an efficient industrial operation at maximum efficiency. Only in this manner can the country enjoy a comparative advantage in terms of production costs.

4. Brazilian industry developed through a policy of import substitution. Initially it began producing a series of products previously supplied from overseas. Production was encouraged by import restrictions resulting from reduced and/or fluctuating foreign exchange availability. As the industry's output was for local consumption it suffered from the relatively small size of the Brazilian market compared with those of developed countries. Therefore initially many of these industries suffered from a scale disadvantage.

5. A further disadvantage resulted from a number of industries established during a period of strong protection with almost indiscriminate import substitution. For this reason many plants were built with a scale of optimum productive efficiency far beyond the demand level of the internal market.

6. This last problem is connected with the "nationalization indexes" through which the government demanded that products sold internally should have, let us say, 90% local components. Experience has shown that in those sectors of industry where economies of scale are most important, the requirements relating to local components result in a more than proportional increase, sometimes excessive, in the cost of the final product.

7. In addition problems have arisen as the technology used in the production processes is largely imported. In certain cases this has meant an increase in costs due to the failure to intensively utilize resources which are readily available within the country.

8. Considering these problems of efficiency of the Brazilian industry in relation to that in developed countries, the success of Brazilian manufactured products on international markets is uncertain. However, no definite conclusion on this aspect can be arrived at owing to lack of specific data on this subject and it should be noted that in certain cases Brazilian industry has achieved a level of efficiency to enable it to successfully compete in exports. One fact is clear, an increase in exports of manufactured goods would enlarge the market for local manufacturers and in itself act as an important factor for improving the efficiency of industry as a whole. There are several reasons for this. For example it would:

i) encourage economies of scale and the adjustment of plant sizes to those nearer the level of optimum efficiency;

ii) stimulate the introduction of more advanced technologies;

iii) increase employment levels (in so doing enlarge the internal market itself);

iv) increase the capacity to import mainly those items which cannot be produced efficiently internally.

9. With this in mind the Brazilian Government adopted a policy of promoting exports of manufactured products. The main characteristics of this programme are the elimination of bureaucratic difficulties, the introduction of fiscal incentives and the adoption of a highly flexible exchange rate which has been adjusted frequently to diminish the impact of inflation on the export sector. More recently the financing of export production was introduced beginning with the purchase of the raw material up to the delivery of the final product at the port of exit.

10. As a result of this policy the value of exports of manufactured goods grew from 86 million dollars in 1964 to 162 million dollars in 1968. However, this represents less than 10% of the total value of Brazilian exports which this year should reach the record level of 2.2 billion dollars. This estimate is based on data from CACEX, the Government Authority controlling operations with external markets.

11. It is apparent that the elimination of bureaucratic problems and exchange difficulties together with the financing of the production process played an important role in enlarging Brazilian exports of manufactured goods. However, it appears that the fundamental role was played by fiscal incentives which, in part, bypassed the efficiency problems of local manufacturers. In fact, the fiscal incentives available are so extensive that a manufactured product priced at 100 on the internal market can be sold in the international market for a price sometimes lower than 70.

12. When considering industrial co-operation for export it is worth stressing at the outset the variety of conditions necessary for successful export. In a country such as Brazil technology is a scarce factor, domestic production of capital goods on an economical feasible scale is restricted, no international commercial tradition exists nor associated sales and service structure, all of which contribute to the importance of industrial co-operation for penetrating external markets.

13. For example one Brazilian company has successfully sold a portion of its output of motor parts on the international market. However, this was achieved where one production patent was foreign and utilized under a technological agreement. Another successful Brazilian exporting company specialized in the production of wood laminates; in this case the main equipment of the company is an imported press supplied together with the technological know-how.

14. Industrial co-operation for export may affect the export of manufactured goods and the efficiency of domestic industries both directly and indirectly. Directly it may create conditions for selling overseas when such sales are dependent on overcoming external obstacles that is those obstacles not related to production functions and the internal cost structure. This is the case where for example exports depend on a marketing agreement. Indirectly industrial co-operation may affect the efficiency of the economy creating the conditions for securing overseas markets. It may have an impact on the production function

for example through the introduction of more advanced technology under a technological agreement, or it may affect the cost structure as is the case of a cost reduction through a specialization agreement. At the same time, there are some effects on the average efficiency of the economy as a whole if external economies are generated.

15. For these reasons there is no doubt in government circles or in the business community that industrial co-operation for export is advantageous not only from the point of view of exports of manufactured goods but also from that of the efficiency of domestic industry as a whole. The discussion does not center around the need for industrial co-operation but rather the possibility of implementing it under the most favourable conditions and the measures necessary to achieve this implementation. As mentioned above the Brazilian industrial structure has resulted from policies of import substitution to meet the needs of internal consumption.Within this policy there are several aspects of industrial co-operation:

i) A Brazilian company investing in the production of a product previously imported tended to ignore production technology or was concerned with products under the protection of foreign patents. In any case technological agreements were common.

ii) Many investments took the form of joint enterprises between Brazilian and foreign interests. The capital of the latter frequently being represented by technical know-how, administrative capacity and equipment.

iii) Specialization difficulties meant that the internal production of some products was not feasible.

iv) Certain foreign investments involved no local participation, the equipment technology and personnel all being imported.

v) Even where investors were local it was common to import the machinery and equipment,in some cases entire plants with the supply of know-how coming from the selling enterprise.

Consequently the Brazilian industrial structure formulated under a policy of import substitution has strong ties with the developed countries. But whereas industrial co-operation has been forthcoming to supply the needs of the Brazilian internal market it does not imply that the same co-operation will be forthcoming in the case of production for external markets. Industrial co-operation to substitute imports was in many cases the only method by which overseas companies could maintain their share of the Brazilian market as restrictions were enforced. However, if industrial co-operation is for the production of export goods there may be less interest or even none at all on the part of the overseas company as the exported product may compete on international markets with that of the country participating in the co-operation.

In fact there are frequent cases where industrial co-operation is supplied with the restriction that the output will not be exported. This is mainly in the case of technological agreements between local and foreign enterprises. It also occurs where co-operation is in the form of a joint venture or where the capital is supplied entirely from overseas. Although there is no specific data compiled on this aspect in a number of cases agreements for the utilization of patents, supplying of technical assistance and administrative assistance and other forms of technological agreements signed by local and foreign enterprises have a common clause which limit sales to the internal market only.

For this reason the Central Bank of Brazil, which controls the register of such agreements no longer accepts contracts which contain this clause. However, the procedure adopted by the Central Bank is not entirely successful in solving this problem as this form of restriction may be established informally, particularly when the industrial co-operation is associated with the investment of foreign capital.

19. In a large number of cases industrial co-operation is linked to overseas investment. This is readily apparent if one compares a survey "Know-how Contribution" -Banas Editors - 1961, where there is a list of licences and products being produced under licence between local and foreign enterprises with their respective participation and a second survey "The Foreign Capital in Brazil" - Banas Editors - 1961, where there is a list of foreign firms established in Brazil and the respective participation of foreign capital. A typical example of the link between technology and capital.

Enterprise in the country: COFAP - Companhia Fabricadora de Peças.

Shareholders:	Perfect Circle Corp. (USA)	31,4 %
	Monroe Auto Equip. (USA)	30,2 %
	Três Leoes S/A	20,4 %
	Michigan S/A	9,0 %
	Auto Excelsior S/A/	5,0 %
	Sama S/A/	4,0 %

Licensers: Perfect Circle Corp. (USA) for piston rings "Perfect Circle"
Monroe Auto Equip. (USA) for "Monroe" shock-absorbers.

20. When this form of joint ownership occurs it is difficult to clarify whether a restriction of export sales exists or not. However, there is strong evidence that these export restrictions are widely enforced in Brazil. One indication is the poor export performance of companies with technological agreements or capital ties with overseas companies. In these cases output is almost entirely directed towards the internal market and the contribution of such companies to export is relatively small. In industrial sectors where foreign capital participation is heavy as in the case of the automobile, medical, tires, electrical materials, exports of manufactured products are practically non-existent.

21. If industrial co-operation is to assist substantially increasing export levels this co-operation has to be supplied without the conditions that the resulting production must exclusively be sold on the internal market.

22. At the same time, the remuneration of industrial co-operation, that is profits and other remittances must not increase beyond the level where production costs and consequently the product's price hamper its competitiveness on international markets. In balance of payments terms industrial co-operation can only be regarded as favourable when the income from exports attributed to the industrial co-operation exceeds these remittances and the increase in imports resulting from the industrial co-operation.

[illegible]. Looking at the problem from the viewpoint of comparative advantage and its importance to successful export marketing, problems of efficiency arise in part due to the fact that industrial co-operation has aimed to supply the needs of the internal market and did not take into consideration the local availability of resources. Often the imported technology is not oriented towards utilization of raw materials which are readily available in the country and consequently these are under-utilized. In this respect it is note-worthy that the two products in which Brazil has achieved success in the international market are instant coffee and wood pulp pressed sheets. These are produced with raw materials which are manufactured in Brazil at relatively low costs, coffee and eucalyptus respectively. Another obstacle to industrial co-operation for exports stems from the size of Brazilian firms, that is the problems of small and medium sized companies. As mentioned earlier Brazil lacks an exporting tradition and therefore it is difficult for the Brazilian entrepreneur to fully understand the possibilities associated with international marketing. Moreover, in this situation the entrepreneur is unlikely to take the initiative to look for industrial co-operation in the developed countries to solve problems of technology, marketing, etc. In part this is a question of mentality but also the size of the enterprise renders any initiative of this kind not feasible since the technological arrangements, specialization agreements and marketing arrangements are only possible beyond a certain scale of company.

III. Measures to overcome these difficulties

[illegible]. From the analysis to date three important aspects with regard to industrial co-operation for export have emerged. The first being that such co-operation should be without restrictions from the market point of view and secondly should be economically feasible from the point of view of costs and finally the co-operation should adapt to the availability of internal resources. In the case of Brazil as mentioned earlier industrial co-operation has up to now been oriented towards supplying the internal market, the exports of manufactured goods being severely restricted. At the same time, the efficiency level of Brazilian industries suffers from the problems of scale disadvantages arising from the protectionism of the period of import substitution and the inadaptability of imported technology to internal resources, all of which have placed Brazilian manufacturers at a comparative disadvantage on international markets. However, it should be stressed that this paper represents only an outline under which these aspects should be investigated in detail to gain a full insight into the subject. However, on the available information it would appear that they are at least in part valid and serve as a useful point for discussion.

25. Having identified certain of the obstacles to industrial co-operation for export it is now possible to consider possible measures which might overcome these obstacles. Looking first at the problem of export franchise restrictions and that of the efficiency of industry financed by overseas capital or utilizing overseas technology it would appear that the developing countries would benefit from adopting a selective policy with regard to overseas investment and technology. Such a policy would be based on the question of efficiency, availability of resources and would pay particular attention to export potential.

26. The policies of various countries with regard to imported technology and capital, are basically divided into three groups. The first group, which includes Brazil and Colombia, endeavours to establish limits to the remittances associated with imported capital and technology. A second group, including such countries as Italy, Germany and Venezuela, does not restrict capital entry or remittances. The third group, mainly Japan and Israel, controls the entry of capital and technology but does not restrict remittances.

27. It is useful to examine some of the characteristics of the policy adopted by countries in this last group. In Japan licence agreements and the entry of capital must be approved by the government and approval is only granted if no adverse effects are anticipated to the overall development of the Japanese economy, particularly in regard to the balance of payments and the development of important industries. Another requirement is that the level of royalties must be in accordance with the value of the licensed technology. If approval is given there are no restrictions on remittances of profits.

28. In the case of Israel it is illegal to formulate a licence agreement without the approval of the government and this approval is only given after a thorough examination of the need for the contract as well as its terms. Only rarely does the Israeli government question the level of royalties, and remittances are without restrictions. An interesting characteristic of this policy is that when a contract is not considered of benefit to the overall Israeli economy, the royalties are limited and must be credited to a special bank account or ploughed back into the Israeli economy. However, the remittance of royalties is permitted without restriction if the resultant product is exported. The remittance of profits from overseas investments is not restricted if the investment is approved. Approval is granted if: a) the investment is directed to the production sectors considered strategical; b) if at least 50% of the output of the enterprise is to be exported; c) if it covers a certain level of import substitution; d) if it creates employment in development areas.

29. This type of policy concentrating more on controlling the entry of capital and technology than on limiting the remittances, seems more suited to the needs of developing countries. A serious drawback to any scheme controlling remittances is that it discourages the entry of know-how and capital which are essential for industrial development in the country. By controlling the entry of capital it is possible to:

(a) relate the remittance of profits to export performance;

(b) evaluate the level of capital remuneration;

(c) examine the suitability of imported technology in relation to internal resources with the possibility of adjusting the technology to those resources;

(d) direct investment into strategic industrial sectors.

30. It is evident that such a policy would solve, in part, the problems associated with the imposition of [illegible]. There are, however, several other problems in regulating policies to encourage the elimination of export restrictions, one of which relates to the fiscal incentives which the Brazilian government offers for the export of manufactured products. For companies with foreign capital participation these incentives are to a certain extent ineffective. As the size of the investment is increased the taxation in the foreign country would also increase. The position would improve if the capital exporting countries recognized the exemption granted to capital in developing countries. However, it is appreciated that such a measure would be difficult to apply.

31. In order to obtain imported technology without market restrictions one possible measure would be to give preference to purchasing from companies concerned solely with the sale of the equipment. Such companies are only concerned with the sale and development of the new equipment and processes and are not concerned with the production aspects and therefore do not establish market restrictions on the sales of the resultant production. In this case one is confronted by the difficulties of the initial investment cost which can be high and must be met from local sources. Nevertheless it is a measure which should be considered, particularly as the experience demonstrates that an important factor in the export success of Brazilian enterprises has been the absence of market restrictions and the non payment for additional technical know-how (see answers to the questionnaire).

32. The problem of market restrictions [illegible] [illegible] [illegible] [illegible] during [illegible] [illegible] [illegible]. [illegible] its solution will [illegible] [illegible] [illegible] [illegible] of the [illegible] of the development [illegible].

33. [illegible]

[illegible]

34. [illegible] [illegible] [illegible] "[illegible]" [illegible] the main [illegible]. [illegible] does not [illegible] [illegible] [illegible] [illegible] [illegible].

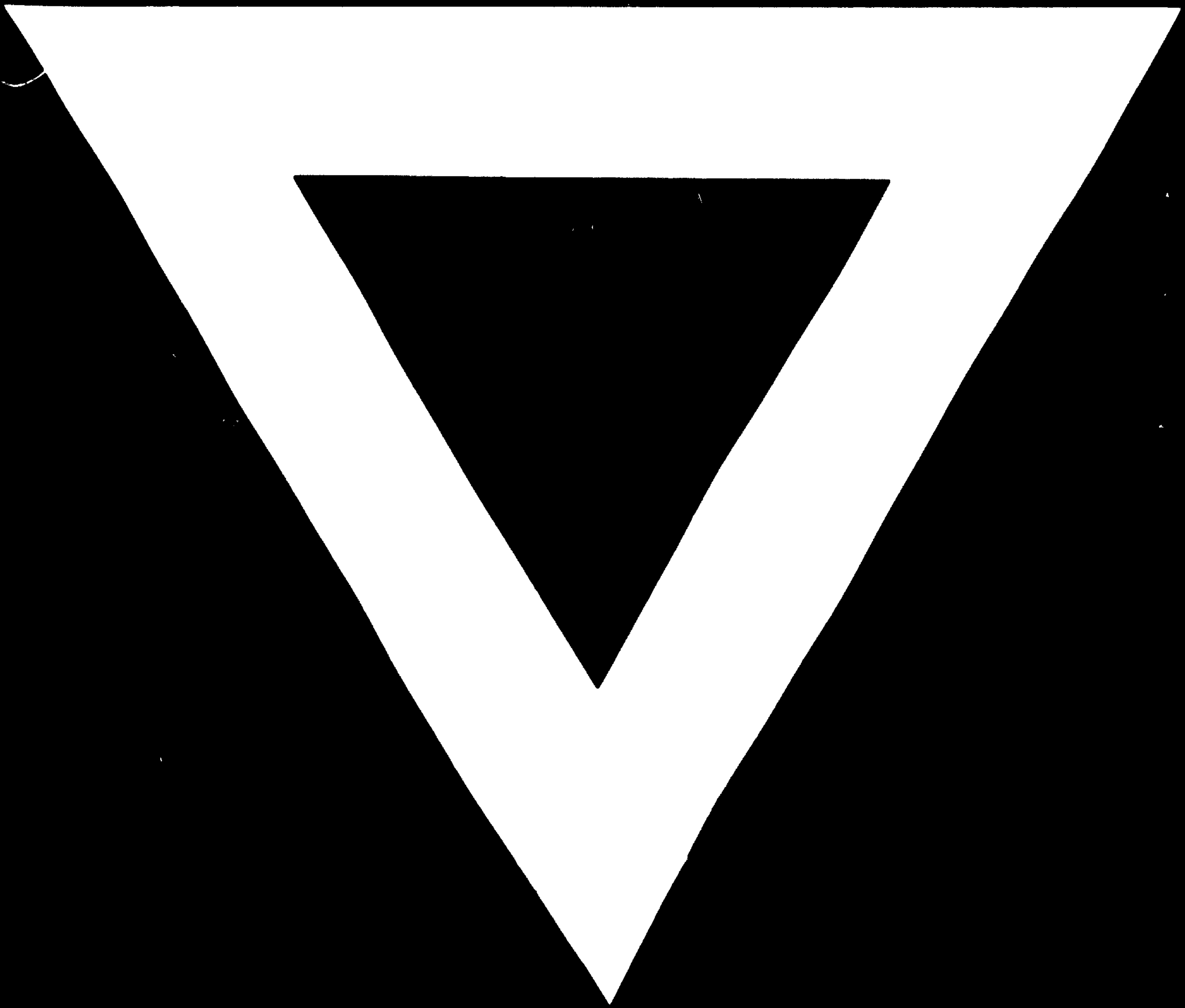
35. [illegible] of the inefficiency of [illegible] industrial [illegible] resulting from the import substitution policy. The Government plans to revise the tariff policy to introduce a more selective system of protectionism while the problem of rationalization [illegible] is also being investigated. The aspect of this policy which requires particular attention is the establishment of specialization agreements but this demands a very specific study which is yet to be carried out.

36. One solution worth considering to overcome the problem of small scale of the Brazilian enterprises is the pooling of resources for export. [illegible] a few cases, exporting activity is not economically [illegible] for small scale industries. The export marketing process involves a series of steps: market research, overseas contacts, export documentation, shipping, etc. These require expenditures beyond the reach of the small company and experience in export marketing which is not readily available in developing countries such as Brazil particularly in small scale companies.

37. An exporters pool would be made up of a specialized body of technicians who would be experts in the products of the participating companies. The technicians would also have experience in the marketing of these products overseas and would be responsible for studying and promoting sales abroad. Brazil has already some experience in this field; a pool for exporting shoes from Rio Grande do Sul it appears [illegible] achieving effective results. The Industrial Federation of

the State of Sao Paulo also intends to establish this type of pool. The formation of such pools of exporters is an activity which could benefit from the direct participation of an international organization such as UNIDO. These organizations could supply specialized personnel in international market operations.

22. In order to gain a clearer view of problems involved with industrial co-operation for exports it is necessary to undertake studies in greater detail than has been done for this outline. The deeper the studies the greater the understanding of the variety of difficulties involved. The need exists for further data collection on this topic which is hindered by the lack of traditional sources of information on this topic and the reluctance of companies to supply data regarded as confidential but essential to the studies.



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