INDUSTRIALISATION OF IRĀN: THE RECORDS, THE PROBLEMS AND THE PROSPECTS*

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INTRODUCTION

1. This report summarises the preliminary findings of an inquiry into the economics of Irānian industrialisation. It was prepared as a part of a broader assignment for the Industrial and Mining Development Bank of Irān: the Bank is interested in advancing further the factual and analytical bases of its project appraisals, and at a certain point this inevitably raises the general issues of industrial growth and policy. The purpose of this report is to identify such issues to the extent possible and to indicate directions of possible further evolution of policy aimed at sustained rapid industrial advance.

2. The report is preliminary, for two reasons. First, while the time available for its preparation has not been short, much of it has been spent on establishing the facts. This was not difficult - Irān is much better supplied with statistics, at least in industry, than commonly

* It would not have been possible to assemble the data and to write this analysis without the advice, wholehearted support, and assistance of the management and the staff of the Industrial and Mining Development Bank of Irān. Also, they were kind enough to comment on an earlier draft of this report. The industrial enterprises which were interviewed - borrowers from the Bank - were most generous with time and information. Finally, the senior officials of the Ministry of Economy showed active interest in the work and provided insight which was decisive in focussing the investigation on several key issues of policy. Their participation, and that of others, in the discussion of the results, kindly organised by the Faculty of Economics of the University of Tehran on July 9, 1969, not only identified the flaws in the argument and helped clarify the substance, but also indicated that most of the questions raised here are not new: the government authorities had grappled with them, in one way or another and at considerable length, in recent years. The generalisations stated in the report may be new; but they are nothing more than an attempt to set forth, in a systematic fashion, the experiences of the past and the alternatives for the future, of which the public officials and the businessmen are already aware.

believed - but it has been time-consuming; and some of the facts stated here are still open to challenge. Secondly, any generalisation in such a difficult area as industrialisation is dangerous, particularly when made without full knowledge of the many different considerations influencing the industrial structure and policy. It is for these two reasons that the content of this report is primarily in the direction of stating hypotheses and suggesting consideration of particular lines of approach rather than prescribing ready-made solutions.

3. The report is divided into three parts. The first part summarises the record of the industrial growth in the recent past and attempts to identify its major structural characteristics. The second part discusses the problems which Irān faces at the present stage of its industrialisation drive, partly as a result of its success so far in the fields of choice of industries, choice of location, industrial finance, pricing policy and the balance of payments. The third part handles the broad issues involved in the rationale and the techniques of industrial incentives and of public influence on industrial development in general. This part also makes several suggestions for further inquiry which the government authorities may wish to undertake while evolving their industrial policy.

PART I

PAST INDUSTRIAL GROWTH: DIRECTIONS, RESOURCE USE, AND ECONOMIC RETURNS

Salient Features

4. Several distinctive features have characterised Irānian industrial growth in recent years.

(i) Industrialisation has proceeded at an extremely rapid pace. It has not shown any sings of deceleration; and judging by the number and the variety of the new projects currently being considered, the rate of capital accumulation in industry and in the associated activities may even accelerate further.

(ii) Equally impressive has been the variety of the industrial complex that has cropped up. Immediately following, or even parallel with the growth of the light consumer goods manufacturing (primarily food processing, textiles, footwear and similar), considerable

investment has taken place in intermediate products industries (steel, fertilizer, other chemicals), in durable consumer goods and transport equipment, and even in capital goods (primarily in construction materials and electrical equipment). The conventionally expected time lag in moving from the light to the heavy industry has been drastically shortened, and when the projects currently being constructed are completed, in a year or two the Persian economic landscape will be substantially different from the traditional one, or even from the present one. There will be considerable production of basic materials and of investment goods, with their associated effects on the economic structure and on the balance of payments.

(iii) Almost all industrial growth has been domestic market oriented. Irān presents an almost laboratory case of import substitution - industries being started in response to already existing or anticipated demands on the internal market heretofore satisfied by imported products, such response being stimulated by generously extended incentives in the form of tariff protection or import prohibition once domestic production facilities have been established.

(iv) Both domestic and foreign private capital have participated in the industrialisation process. A domestic entrepreneurial class has sprung up, partly recruited from the ranks of the former import trade and partly from other social groups. Foreign capital has participated in many ventures started in the recent past, in association with domestic enterprise and with public and semi-public agencies. Demand for labour has increased; and while there are large masses of underemployed in the hinterland, occasional shortages of skilled and semi-skilled labour have emerged in Tehrān.

(v) Until recently, almost all industrial investment was concentrated in Tehrān, the major market. During the last few years, however, a systematic policy of geographical deconcentrations has been pursued, partly in order to alleviate urban congestion in Tehran and partly to enable the outlying areas to share in the employment and income generated by industrialisation.

(vi) While most of the industrial growth has taken place in the private sector of the economy, the government has continued to exercise a major influence on investment and output decisions. Some projects, notably in petro-chemicals, are government-owned; and the integrated steel mill, presently under construction, is also in public ownership. Perhaps more important, the government authorities to a large extent decide on

> the structure and location of output through the tariff and import policy and through licensing of new investment. An essential link in the relationships of the public and the private sectors and of the domestic economy and international capital is the rapidly_growing Industrial and Mining Development Bank of Iran. It has participated in the promotion, financing and direction of almost all new industrial projects undertaken in the last few years. The government through its industrial policy, and the IMDBI through lending and equity investments, are in a position to exercise strategic leadership in industrialisation, while continuing to rely on private sources of savings and private management of individual enterprises.

5. Despite rapid industrial growth, no major imbalances in the economy as a whole have occurred so far. Agricultural output has been expanding faster than population; and while the room for advance is enormous, the progress in recent years has been faster than the long-run average. The rapid increase in income has led to increased demand,particularly for meat and meat products and for oils and fats; the response of domestic production has not been sufficiently fast and there are now growing imports of these products. On the other hand, the production of cereals has risen substantially: this refers to both rice and wheat. Expansion in cereals has occurred although the use of new high-yielding seeds is only at the beginning; as it spreads over the country, it is quite possible that Irān will have considerable quantities available for exports.

6. As indicated further below, industrialisation has been accompanied by substantial tariff protection. Surprisingly, domestic prices of manufactures have risen only moderately. Perhaps the only explanation is that profit margins in the import trade have been extremely high, so even when domestic production has been substituted for imports, now with high profits in manufacturing and under stiff protection, this has apparently just about substituted for the former monopolistic profit margins realised by the importers.[1] In any case, the domestic price level in general has risen little in recent years; and the increase that has taken place has affected both home-produced and imported goods,and both consumer manufactures and foodstuffs.[2] If anything it was foodstuffs rather than

1. See Appendix 1 for prices of selected manufactures on the domestic market in 1959 and 1968.

manufactures whose prices rose most. In the future, as the domestic production of intermediate products and of other producers goods expands under relatively high protection, it may be expected that prices of manufactures will rise under the impact of higher input costs. This seems to have been happening recently, although the picture is clouded by the fact that over-all demand has been strong, causing an upward pressure on the price level in general.

Key Indicators

7. Table I sets forth one of the key indicators of the industrial structure: the percentage share of imported inputs in the value of output. The lower the number shown, the greater the proportion of total output that is attributable to domestic factors of production, i.e., the larger the value added (the inverse of the import dependence percentage is the domestic dependence). This will happen when either the industy is labour intensive, so that a large part of the total cost (and of the sales price) is accounted for by the wage bill (e.g. telephone equipment); or when the inputs of raw materials and components are primarily of domestic origin (e.g. cement) or both (e.g. textiles).

8. The industries selected are those which have been established in the recent past; in some cases, projects under construction with their planned cost composition are shown. (Such cases are identified in the Table). The list of products is fairly representative of both the present industrial structure of Irān and of its recent growth: capital accumulation in industry has proceeded so rapidly in recent years that the additions to the capital stock have probably equalled the depreciated value of the stock existing as of the early 1960's.

9. It would have been desirable to list in Table 1, in addition to the value-added indicator, another indicator by product: that is the percentage excess of the domestic price (or cost) over the CIF long-run import price. This would have shown the inter-product differences in resource use, and also, when averaged out, the extent to which the prices

+10.2 per cent and the cost of living by 18.9 per cent. In the wholesale index, prices of home-produced and consumed goods rose by 11.6 per cent imported goods by 13.4 per cent, exported goods by 2.7 per cent, and foods by 15.9 per cent (International Monetary Fund, *Consultations Report on Irān*, January 1969).

Table 1

Irānian Industry: Import Dependence

	Share of imported inputs in sales value[a]
Light consumer goods	
Sugar	2 per cent
Meat Packing	10
Cotton Textiles	10
Footwear	10-20
Canned Fruits and Vegetables	10-20
Woollen Textiles	40
Vegetable Oils	50
Pharmaceuticals	60
Durable consumer goods	
Electric Fans[b]	26
Radios	37-50
Space Heaters	40
Refrigerators	40 (understated?)
Air Coolers	60
TV Sets	60
Transport equipment	
Diesel Engines[b]	33-43
Trucks	48
Buses	n.a.(probably as trucks)
Passenger Cars	50
Tires	50
Intermediate products	
DDB (Dodecil Benzane)[b]	10
PVC[b]	10
Caustic Soda	10
Glass (Sheet)[b]	10
Paper[b]	25
Paints	45
Synthetic Fibres	n.a. (above 50?)
Rolled Steel	60
Capital Goods	
Cement	20
Carbon Steel and Stainless Blades	20
Telephone Receivers	20
Electric Metres[b]	20
Telephone Exchanges[b]	20
Steel Wire, Nails and Screws	30 (?)
Pumps	40
Transformers	45
Cables	65-90
Electric Switchgear	80

Table I (continued)

a. Imported components include raw materials, semi-finished products and spare parts. Both direct and indirect import content are included. (The indirect content being defined as imported materials bought on the home market rather than directly imported by the user).
b. Project under construction; planned values.

Notes:

(1) Question mark indicates that there are other conflicting estimates; or the data are a guess; or the data are unreliable; or the data do not seem plausible.

(2) In some cases only one plant producing a particular product was interviewed; as a result, the data may not be representative of the situation of the industry. This qualification does not hold when the product is produced by one plant only: there are a number of such cases. Furthermore, where more than one plant was interviewed, the cost composition and the cost levels appeared remarkably similar.

(3) There is a methodological point relating to the proportion of imported inputs. Since they are valued at domestic prices, i.e. they include the customs duty, an upward bias in the proportion is introduced. On the other hand, the sales price itself is a result in part of the customs duty applicable to the final product, and the duty rate here is normally higher than that on imported inputs. This introduces a downward bias in the import coefficient. The net effect could be determined only if both the inputs and the outputs were valued at CIF imports prices and the proportions so derived were compared with the proportions set forth in Table 1. These proportions are likely to differ in particular cases; but it is doubtful if the over-all picture would be significantly different.

Source: Interviews with the industrial plants and the material in the IMDBI files.

(or costs) of domestic production are higher, over-all, than foreign prices and costs. The available data were collected, but their imperfection limits their explicit use, product by product, at the present time. In some cases, the domestic price data conflict; in some the import prices differ greatly, depending on the origin; and generally there is uncertainty as to what is the long-run import price with respect to the latter point, in many cases it was found out that the import price net of freight, etc. (i.e., the export price in the exporting country) was considerably lower than the price in the domestic market of the same exporting country, mostly about 25 per cent, but in some cases up to 50 per cent indicating a fairly widespread use of marginal cost pricing by the exporters. This, of course, is difficult to take as the long-run import price. Some broad generalisations concerning price and cost relations can still be made, however, as indicated below.

Price Relations

10. Domestic industry charges higher prices, at the prevailing exchange rate, than the CIF cost of imported products (i.e. import price without duty), in the large majority of cases. The significant industries where domestic prices are equal to import prices or lower, are footwear, cement, and some processed foodstuffs. Some of these products are exported on a significant scale (e.g., shoes). There are also other industries whose prices are low in relation to import prices, e.g., pharmaceuticals, switchgear, cables), but these essentially consist of simple operations - packaging, assembly and simple processing of imported inputs - with little value added.

11. The higher prices of domestically produced goods in relation to import prices for comparable products can be a result of three factors: first, domestic costs of production are higher, (e.g., synthetic fibres, glass) due to temporary or longer-lasting causes; second, the remuneration required to attract capital to industrial production may be higher than in the developed countries where risks are lower; and third, domestic products are taxed much more than the same products moving in international trade, by sales taxes, excises and similar, either directly (e.g., sugar) or indirectly - through customs duties payable on imported components (e.g., automobiles, refrigerators) and through sales taxes payable on domestic components. In most cases, it is not one, but two or more factors at

work.

12. A simple ranking of the industries according to the level of the excess of domestic prices over CIF import prices yields a median value of 25-33 per cent.[3] This average is influenced by the fact that some of the old established industries are below the 33 per cent mark (food canning,cotton textiles). At the margin, i.e., for the industries recently established or currently being considered, the excess domestic "cost" is unlikely to be below 33-40 per cent. Some industry executives seem to feel that an across-the board tariff protection of 33 per cent would be sufficient and appropriate, and also, that a similar order of magnitude of export subsidies would result in a major expansion of non-traditional exports. But these hypotheses (rather guesses) would have to be seriously verified before any particular benchmark number is used for measuring "efficiency".

(b) Value Added Proportions

13. The domestic industrial sturcture clearly splits up into resource-based activities and the activities based on imported materials.In the first group are food processing, cotton textiles, some chemicals, construction materials, telecommunications equipment and some electrical goods. The second group consists of all appliances, automotive equipment, steel products and capital goods which are material-intensive,and synthetic fibres. At the present moment, of the 37 product lines, in less than half (16 products) is the share of imported inputs less than 33 per cent i.e., only in these cases the domestic value added exceeds two-thirds of the total value of output. As the domestic industry producing intermediate goods expands, the proportion of industries using domestic materials will also increase, and so will the domestic value added. This refers specifically to the industries which make a heavy use of steel, copper,vegetable oilseeds and wool.

National Economic Profitability

14. From the national economic view point, those industries are most profitable which yield highest value added at lowest resource cost.

3. The range is between 0 and 200 per cent.

In terms of the indicators discussed earlier, this means industries in which the share of imported inputs is lowest and whose prices are least above the world market prices. The complication here is that domestic prices reflect not only production (resource) costs, but also differential custom duty rates of a revenue nature: such indirect fiscal changes are transfer costs, which just happen to be collected, for reasons of fiscal convenience, by charging the consumption of particular products.This complication prevents us from drawing too hard conclusions from the data. On the other hand, however, high duties are charged mostly on the imports of appliances and transport equipment and their components; given the economies of scale which have to be satisfied in this sub-sector for low-cost production, and given the low prices of these products in international trade due to severe competition of the major suppliers, it is likely that even in the absence of heavy fiscal charges, Irānian production would remain high-cost for some time, unless a large volume of these goods can be produced, i.e., both for the export and the home markets.

15. An attempt is made in Table II to cross-classify the industries using both the criterion of value added and the criterion of relative costs. The industries in the top quarter of the Table are the "best". The contribution of particular industries to national economic growth, per unit of scarce resources used, diminishes as we move down the Table.

16. It is not the purpose of Table 2 to serve as any definitive guide to the economics of Irānian industry - for this, more work is needed on the basic information, and also, the subjective judgments used in putting border-line cases into particular boxes would have to be refined. The primary purpose of the table is to suggest that,from a methodological viewpoint, this is presumably the way in which the decisions to lend, or to grant tariff protection, or to stimulate a particular industry in other ways, may usefully be considered. Namely, resources ought to be concentrated in those sectors and sub-sectors of the economy where the national economic returns will be highest; and they will be highest if the employment generated in the industry itself and in the activities supplying the materials to it (Hirschman's "backward linkages"[4]) and using the product ("forward linkages"), is large, i.e., if value added is large; and if costs of production are low in relation to costs of producing alternative

4. A.O. Hirschman, *The Strategy of Economic Development*. (New Haven: Yale University Press, 1958).

Table 2

Iranian Industry: National Economic Profitability Rating

A. High Value Added and Relatively Low Prices

Cotton Textiles
Footwear
Canned Fruits and Vegetables
Meat Packing
DDB (?)
Cement
Other Construction Materials
Electric Metres
Paper (?)
Telephone Receivers

B. Low Value Added and Relatively Low Prices

Woollen Textiles (?)
Vegetable Oils
Pharmaceuticals
Diesel Engines (?)
Buses (?)
Tires
Pumps
Transformers
Cables
Electric Switchgear
Rolled Steel (?)
Paints

C. High Value Added and Relatively High Prices

Sugar[a]
PVC[b]
Caustic Soda[b]
Glass[c]
Telephone Exchanges
Steel Wire, Nails&Screws (?)
Radios (?)
Space Heaters (?)
Electric Fans

D. Low Value Added and Relatively High Prices

Synthetic Fibres
Refrigerators
Air Coolers
TV Sets
Trucks (?)
Passenger Cars
Radios (?)
Space Heaters (?)
Rolled Steel (?)

a. High price due to the high price paid for agricultural inputs and to high sales tax.
b. High price partly due to offset the low price charged for DDB; also, caustic soda partly sold at the world market price to the Oil Consortium, which would reduce the average price charged and perhaps change the classification.
c. Considered to be a special temporary situation.

Notes:

(1) The question marks indicate difficulty of classification to some doubt concerning the accuracy of basic data.

(2) Classification of prices is in relation to import pricea CIF, net of duty. "Relatively Low" prices are generally those where the excess of the domestic price over the import CIF price is below 33 per cent. "Relatively High" prices, where the excess

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products with the same resources, all measured in terms of international prices. This is because, within limits, the country always has a choice of producing a good X or importing it in exchange for a good Y, if the domestic costs of production of Y are lower than those of X.

17. Any classification of the industries and of the other activities according to the criteria set forth above, or according to similar criteria, should be read in the dynamic context and interpreted accordingly, (see para.13 above). If woollen textiles are now classified in Group B -- low value added and low resource cost -- they presumably should not remain there, but move into Group A -- high value added and low resource cost. One of the purposes of national policy could be to introduce new varieties of raw wool and to carry out a radical modernisation of the collection and preparation of domestically produced wool, so that the present heavy imports of raw wool can be reduced and eventually eliminated, if this can be done economically. The same argument holds with respect to vegetable oils production: it is presumably possible to produce at low cost all oilseeds that are needed for domestic vegetable oil consumption and for the domestic use of oilcake as an input into the domestic meat industry. (At the present time cotton-seed cake is exported while growing quantities of meat are imported; and domestic vegetable oil refiners import crude vegetable oil instead of importing oilseeds or even better, using domestically produced oilseeds). Also, in view of the available resource there is no reason why products such as PVC, synthetic fibres, and glass should not be low cost. In steel products, which are now also classified in the low value added group, the situation will change as the projects presently under way or considered are completed; the key question here will be the price charged to the users in view of the possibility that high internal transport costs may offset the advantages of high-volume production.

18. In short, one of the major purposes of a systematic and

→ is above 33 per cent.

(3) Classification of value added is in relation to dependence on imported inputs. "High Value Added" are generally those industries where the dependence on imported inputs is below 33 per cent of the value of output (sales price); "Low Value Added", where the dependence is above 33 per cent.

comparative analysis of the industry according to the value added and the resource cost criteria, would be to provide a quantitative basis for a strategy of growth - industrial growth and integrated commodity growth - industry, agriculture, and mining. These criteria are already used by the authorities in formulating industrial policy and in decision-making on the new industries. A possible evolution of this approach is in the direction of making the analysis systematic, comparative, explicit and long-range.

PART II
FUTURE INDUSTRIAL GROWTH: PROBLEMS AND CHOICES

19. Five main problem areas can be identified at the present time: the choice of industries to promote, the choice of industrial location, the provision of industrial finance, co-operative arrangements with foreign capital, and the balance of payments effect of industrial growth. Specific issues have already arisen in each of these problem areas; and they will multiply during the 1970's.

Which Industries?

20. In its industrial policy, Irān will be facing the following choice with increasing frequency:promoting industries catering primarily to the domestic market, irrespective of whether the inputs can be supplied domestically at a reasonable cost or have to be imported and/or produced domestically at high cost; or promoting industries which are based on the utilisation of domestic resources and are low cost, irrespective, in this case, of whether the final product is sold on the domestic market or predominantly exported.

21. In actual practice, the choices never appear so sharp when decisions on particular projects are made: both the investment lender and the tariff commission will always try to promote industries which have some resource base. The problem, however, is that these specific decisions have to be made within the over-all framework of prices and costs, as determined by the general policies on tariffs, subsidies, taxes and other government measures affecting industry; and it is this framework that primarily determines whether, over-all, industrial investment and

growth are primarily directed to meeting the demands of the domestic market even if this implies high real costs, or whether they are primarily based on the availability of resources and of factors of production which can be used efficiently and at low cost.

22. The choice between these two strategies does not arise in the first phase of industrialisation - the phase which Irān has just about completed. In this phase, import substitution is the rule, covering light consumer goods industries - food processing, textiles,footwear,simple capital goods,and construction materials.In most of these cases, the economies of scale are not very significant, so that the costs can be kept relatively low even at the low output volumes demanded by the home market. Also, in most cases, the raw materials are available domestically, at least in part; therefore, these industries, while catering to the home market, are also to a considerable extent resource-based. The choice between the two strategies arises as the next phase of industrialisation starts and proceeds: in this phase, it is the rising demand for intermediate products, appliances, transport equipment and capital goods, which has to be met. Hence, it is in this phase that the decisions have to be made whether and which goods to produce at home, and which ones to import in exchange for exports, and for which exports.

23. The dilemma is not easy. Most intermediate products, appliances and transport equipment, and some capital goods, call for large output volumes if the costs are to be kept relatively low; while the development of industries for exports represents a new venture, where high standards of quality, delivery schedules, finance and cost competitiveness have to be met. The risks of failure are substantial in either case.

(a) Experience of Other Developing Countries

24. Most developing countries during the last two decades have selected the first strategy - a continuing import substitution based on domestic demand. Some have done so because their resources have been poor; but in most cases, a number of complex factors have been at work.

25. There is nothing wrong with a continuing emphasis on industrial growth based on meeting domestic demand, provided:

(a) The efficiency criteria as dictated by the minimum-size plant requirements are reasonably satisfied;

(b) the employment effects, direct and indirect, are substantial

and in line with the over-all needs of the country;

(c) there exist in the country export oriented low-cost primary product activities which, despite the resource concentration on industry, continuously yield a sufficiently rapid growth of earnings of foreign exchange which can be used to meet an import bill which increases rapidly under the impact of rising industrial demand for intermediate products, components and capital goods.

26. The fact is that in most developing countries these conditions have not been met, basically for three reasons.[5] First, as import substitution has moved forward from light consumer goods to intermediate products, appliances, transport equipment and capital goods, the efficiency has fallen off and costs have risen, partly because of the greater technical complexity and intra-plant scheduling requirements of these branches, and partly because of low-volume output. Secondly, the employment effects of this pattern of growth have been weak. Modern industrial plants in intermediate products and in some capital goods employ little direct labour, while the employment generation in the supplying and the using industries has also been relatively moderate, due to the insufficiency of resources for their development, resources which have been locked up in a limited number of large capital-intensive plants. Thirdly, and most important, the industrialisation process has come up against the balance of payments constraint. A heavy emphasis on import substitution based on high tariff protection, combined with other factors has made it difficult to develop competitive exports of industrial goods to any substantial extent; while at the same time, the continuing industrial growth and the associated rapid urbanisation have given rise to virtually insatiable import demand. Since most traditional export products and some key light industry goods (textiles, many of food processed products) have encountered serious marketing problems, either because of inherent limitations on world demand for primary goods or because of trade obstacles, the net effect has been that the rising demand for imported industrial inputs

3. See the study recently prepared by the OECD Development Centre, *Industry and Trade in Seven Developing Countries*, under the direction of I.M.D. Little, Oxford University and T. Scitovsky, University of California (now in print). The study is supported by specific country analyses (Brazil, Mexico, Argentina, Philippines, Taiwan, India and Pakistan) and by specific analyses of particular enterprises in selected fields. One outcome of this effort is the recently published *Manual of Industrial Project Analysis*, Volumes I and II, OECD, 1969.

could not be met. As a consequence, a part of the already installed industrial capacity could not be used; and under-utilisation of capacity, in turn, has led to a reduction in new investment, both in the private and the public sectors. The problem of insufficient capacity utilisation and how the situation can be improved has by now become one of the central problems in the economic policy of developing countries.[6]

(b) The Situation and Prospects of Irān

27. Irān is better placed than most other developing countries to avoid this chain of events. It has an extraordinary range of natural resources which make it independent of foreign supplies of critical materials. The largest single drain on foreign exchange in developing countries has normally been the imports of petroleum and petroleum products. The next largest drain has been imports of non-ferrous metals, followed by the imports of chemicals. As a major producer of petroleum and as a potential producer of petroleum-based chemicals, Irān could cut substantially on imports demand; and as a potential producer of copper, it could meet its domestic demand and still add to its exports. Finally, the variety of climate and of soils makes Irān virtually self-sufficient in food- stuffs and agricultural raw materials. Cereals, temperate zone fruits and vegetables, and some tropical foods and cotton are already produced on a significant scale, mainly for the home market, but also for exports; while the possibilities of expanding the domestic production of meat, wool and vegetable oilseeds should be substantial.

28. One way to realise this potential is for Irān to consider, in her co-operative arrangements with foreign partners, requesting the inclusion of new Irānian products in their international sales network. Also, in her trade agreements with countries from which Irān imports heavily, she may insist that these countries accept growing quantities of the new Irānian exports,a practice which has already been started.

29. The availability of natural resources is no guarantee that they will be exploited: they are a necessary but not a sufficient condition for growth. Whether they will be exploited or not, at what speed and with what efficiency, depends on the priority they are accorded in government policy, and perhaps above all, on their profitability as determined by

6. See UNCTAD, *Country Studies on Insufficient Capacity Utilization*, Geneva, 1968; and UNIDO, *Conference on Capacity Utilization*, Rio De Janeiro, 1969.

the prices they command and by the costs of exploitation as influenced by the organisation of production.

30. The need to develop resource-based industries does not mean that further import substitution should be stopped. The only thing it means is that resource-based industries ought perhaps to be given the same chance to develop as the import-substitution activities. At the present time, the chances are not equal. Import substitution enjoys high protection; the duties are particularly high on finished goods, higher than on raw materials and on intermediate products, although a series of changes in the tariff structure in favour of this latter group of products is now under way. As costs of supplies, now domestically produced, will be higher than the imports, the competitive position of the activities utilising such supplies is weakened. For example, the production of footwear now has to stand a higher cost of thread and chemicals since they are domestically produced under protection, and its export competitiveness is reduced since there is no possibility of obtaining a drawback of the higher charges. (When these products were imported, under duty, the industry could obtain a drawback in proportion to exports). The production of canned fruit cannot be fully competitive despite excellent quality and ample supplies of the basic raw material, because the price paid for sugar is twice to three times higher than the price paid by foreign competitors. The net effect is that the industries which have a comparative advantage cannot realise it because the incentive system operates in one direction only: it raises the prices and profitability of import substitutes, without a similar incentive, or at least a corresponding offset, in favour of other industries.

31. In a policy aimed at a maximum utilisation of the domestic resource base, special attention should be paid to the domestic processing of the available raw materials. For example, if the copper deposits are exploited, the promotion of the domestic copper using industries would command priority. One of the most encouraging features of the recent industrial advance has been the establishment of several modern plants in the electrical and telecommunications field, which appear efficient and ready for further expansion. If the development of copper production is linked with a programme of growth in the domestic copper-using industries, producing both for the home market and for exports, and benefiting from steady and relatively favourably priced raw material, the benefits to the

economy would be maximised through the generation of additional employment, the associated value added, and the higher-valued exports and technical specialisation in finished products commanding scarcity prices in the world market.

32. Perhaps the basic advantage of a policy in which resource-based industries enjoy the same priority as industries oriented exclusively to meeting the demand of the domestic market, is that it would probably provide productive and rising employment opportunities not only to the urban but also to the rural areas of Irān. It is in the rural hinterland where the heart of the development problem lies,where most of the population is concentrated,and where incomes are lowest. The accelerated growth of resource-based industries would call for increasing supplies of basic agricultural raw materials and food stuffs at a faster rate and over a wider range than would be the case with the other industries, with their heavier inputs of imported materials and of urban labour engaged in assembly operations.

33. Three additional points should be made on this subject. First, the emphasis already given in recent years to the development of petrochemicals as a resource-based industry should result in an improvement of the export position. Secondly, the promotion of resource-based industries by itself is not sufficient: if the projects are poor in technical design, or if their planned output volume is too small, or if capital cost overruns are very heavy, the results will be adverse irrespective of how much the industry concerned has comparative advantage in principle. Thirdly, whether in any particular period the emphasis will be placed on import substituting projects or on those producing for exports, and how much special incentive will be needed in either case (in the form of protection or export subsidy), depends critically on the availability of alternative projects which are ready for execution and which offer better returns. It is of limited usefulness to argue that a certain group of projects should not be undertaken because their costs of production are high in relation to CIF import prices, if at the same time an alternative set of projects is not offered where costs are low in relation to import prices.

What Location?

34. In their recent development policy, the government authorities

have emphasised three major points:

(i) the need to halt, for the time being, further industrial concentration in Tehrān;

(ii) the need to spread industrial investment all over the country;

(iii) the need to improve and expand further surface transport (rail and railroad).

35. There cannot be a serious dispute about the desirability of deconcentration away from Tehrān. Also, there cannot be a serious argument about the need to improve the transport facilities. The open questions concern the choice of location in the hinterland, and the choice of the modes of trsnsport to emphasise.

36. There are three major aspects to these issues. The first concerns the structure of future growth as discussed in the preceding section. If the emphasis on industrialisation and on an over-all growth policy is partly shifted in the direction of resource-based and export industries, certain locational decisions inevitably follow. Non-petroleum exports have shown a significant upward trend in recent years (about 10 per cent), although they still account for a relatively small proportion of the total (15 per cent of the value of imports). Within this, the most remarkable has been the expansion of non-oil exports to the other countries in the Persian Gulf: they have risen from $5 million to $30 million in five years. It is in this area that Irān has the potential trade advantage, compared to other suppliers: in transport costs where they are significant in relation to FOB values, and in the closeness of cultural and other relations; and the Persian Gulf is an uniquely attractive trading area, with enormous and rapidly rising purchasing power, most of which has to be spent on imports. If Irān adopts as one of its major economic policy objectives the expansion of exports, which would logically imply exports to the Persian Gulf, this would have definitive locational implications, for agricultural activities,food processing industries,construction materials industries, for production of durable consumer goods and of capital goods, as well as for the associated transport needs, surface, sea, and air.

37. Similarly, Irān will sooner or later have to decide on the specific nature of its trade relations with the U.S.S.R. The obvious region which has a transport cost advantage is the Caspian littoral. In view of

the climate, subtropical and tropical crops can presumably be grown, and processing plants established. The products would have an excellent market in the U.S.S.R. and if shipped through the Caspian Sea, they could reach the industrial heartland of Central and Northern Russia at an extremely low transport cost compared to that of all other suppliers. Any such export atrategy would call for locational decisions, both with respect to agriculture and to industry. The precondition, of course, is the stability of the trade relations.

38. The second aspect concerns the location of industries operating primarily for the home market. At the present time, there are reportedly cases where instead of one plant of economic size, several smaller plants, each undersized, have been considered for the same product in different parts of the country in order to assure an equitable regional distribution of investment. The same objective could be attained if, instead of splitting up one investment, a systematic policy of concentrating specific industries in the different parts of the country were pursued, taking into account the comparative advantages of each particular regional location and of the differential transport costs. The advantage of concentrating particular industrial branches in predetermined carefully selected locations are obvious: the use of common research and development facilities, the benefits of a trained labour force, the development of apecialised schools, the ease of communications within the industrial complex, the adaptation and the development of the supplier's industries, etc.

39. The possible pursuit of a systematic locational policy is facilitated by the fact that a certain locational pattern is already emerging, with the different major cities of Irān becoming centres of specific lines of activity (textiles in Tehrān, engineering products in Tabriz, chemicals and steel products in Ābādān-Ahwāz). A study of an optimal locational pattern could provide a basis for a long-range policy by the government in issuing licenses and by the development banks in granting investment loans.

40. The third aspect concerns the choice of the modes of transport. As one travels through the vast expanses of Irān, one is reminded of the sea and its islands: economic activity is concentrated in what amounts to oases separated by vast distances, each one almost aelf-sufficient in food supply. At least some of the roads seem quite lightly used.

41. The existing roads will have to be maintained and improved aa

the traffic justifies, and new roads will also have to be built as the needs develop. The question does arise, however, as to whether or not internal air traffic should not play a substantially larger role than at present in meeting traffic needs. Already, an industrial plant located deeply in the interior prefers the supply of spare parts and even some components to be delivered by air: it is much faster and on balance cheaper. In any study of future transport investment needs and of transport policy, the competitive position of the air transport in relation to the other modes would have to be closely examined. If a significant expansion of air transport is justified, this may have further implications for the establishment of repair and maintenance fscilities in Irān, which may, in turn, serve not only its needs but also the needs of the other countries in the Persian Gulf which are also likely to be increasingly dependent on air traffic in view of the distances to be covered. The repair and maintenance facilities, of course, could be the nucleus of the production of components in the long-run future.

Industrial Finance

42. So far, it does not appear that the availability of finance has been a serious constraint on industrial growth. The funds needed for fixed capital formation have come from oil-revenues, external loans and self-generation of profits. The funds needed for working capital appear to have come mostly from commercial banks.

43. As the industrial structure changes in the direction of intermediate products and capital goods, the requirements both for fixed capital and for working capital finance are likely to increase. The new demands on resources, in the form of needs for medium-term working capital (sales) finance have already emerged, both in consumer durables (e.g.,automobiles) and in capital goods (e.g., cables, transformers).

44. The growing sales of consumer durables require installment credit finance, spread over a few years; and the sale of capital goods requires sales finance spread even over a longer period.Unless the domestic financial system is given the means to provide such facilities from the domestically generated and from the externaly borrowed funds, domestic industry will experience difficulties in competition with foreign suppliers in offering financial terms. This industry, being still infant,

already operates at certain inevitable disadvantages; it would be awkward if, in addition, there occured difficulties due to the lack of sound sales finance. Such finance should be available for both domestic and export trade.

45. In considering the establishment of a special facility for medium term sales finance, two things should be born in mind. First, in the absence of such a facility, domestic producers will either lose sales to foreign suppliers although they may be competitive in price and in quality, or they would have to resort to borrowing abroad, at terms more disadvantageous than the terms at which a central facility would normally be able to borrow. This is a strong argument in favour of its establishment. A strong argument against it is that it may be misused to make possible sales, on easy credit, of domestically produced durable goods which otherwise could not be sold, because of price or quality, in competition with foreign goods. It is the unfortunate experience of some developing countries, in the field of passenger automobiles, refrigerators, air conditioners, etc., that inefficient domestic industry has been kept alive through installment credit extension, at the expense of these countries' higher priority needs. Irān may wish to benefit from their experience. It should extend to domestic manufacturers sales finance on the same terms extended by foreign agencies to their domestic producers for exports: but it should extend it only to industries and firms which can compete, price-wise and quality-wise, with foreign suppliers,within a clearly defined and stable protection limit.

Monopolistic Pricing

46. From the multiplicity of close relations which Irān has with foreign private capital, there is one aspect which should be singled out for the purposes of the present analysis: the licensing policy.The government authorities appear concerned that individual firms, after obtaining protection or after the import ban has been introduced, might exploit the situation of being a *de facto* monopolistic seller. In order to avoid this possibility, the practice seemed to have been to issue licenses to several firms for almost every product. The number of licenses issued can in some cases become very large (e.g., TV sets).

47. This policy does not have any adverse effects if the market is

sufficiently large, so that the unit costs of production do not rise. If these conditions do not hold - and they do not in most products which are now considered for domestic production - the effect is a proliferation of production lines, and aggravation of the problems of scale and low-volume output at relatively high cost. High prices would then prevail, this time as a result of high cost, i.e., of excess resource use, rather than of monopolistic practices.

48. An alternative to this situation would be to give an exclusive license for a certain period to a single firm or to two firms, after competitive bidding. Imports would continue to be permitted to enter freely, after paying a pre-determined duty. In this way the market would not be split up among several production units and production costs could therefore be lower; while the monopolistic situation would be mitigated through imports which would set an effective ceiling on the price which the producers could charge.

49. In considering this issue it should be born in mind that the existence of several firms protected by import prohibition is no guarantee that *de facto* monopolistic selling practices would be avoided. This applies equally to both domestically owned and foreign owned firms. There is probably no effective way of preventing undue price increases except by letting imports come in after duty; and if this is correct, it may be best to combine it with a licensing system which promises to lead to low costs per unit of output.

Balance of Payments Effects

50. It was stated in Part I that much of the newly established industrial plant is heavily dependent on imported materials and components. The aggregate effect of this import dependence has been that in the five years 1342-1346 (1964-1968), imports have risen at almost 17 per cent per annum; and within this, the imports of intermediate products have increased at close to 19 per cent per annum. This rate of expansion has been faster than the rate of industrial growth and faster than the past and the likely future growth of petroleum exports and of other traditional exports. Should these trends continue, Irān would inevitably encounter external financial difficulties which would tend to slow down the rates both of industrial growth and overall growth.

51. In Part II it was mentioned that non-petroleum exports have shown a significant increase in recent years, almost 10 per cent per annum mainly due to the new export production. As additional products enter the production spectrum, exports will tend to expand further;and the existing export items will also tend to expand as surplus capacity occasionally appears. But it is highly unlikely that the rate of expansion will be anywhere near the growth in demand for imports under the present system of prices and costs. The costs in domestic manufacturing will inevitably creep up under the impact of protection which will now increasingly cover raw materials and intermediate products.Moreover there is no way in which the production for exports can offset these cost increases, as the system of incentives now operates (see page 18, para. 32). It will not be easy for domestic producers to penetrate the highly competitive export market in any case and this job will become doubly difficult with the prices of their inputs on the rise.

52. It was also mentioned in Chapter II that the natural market where Irānians exports, agricultural and industrial,command transport and other advantages, is the area of the Persian Gulf. The exact structure of this market and its changes over time are not precisely known but the Irānian authorities have made several surveys of the import demand of particular territories in the area. At present a comprehensive statistical study of this entire market based on the exporting countries data is under way. This should provide information not only about the present import demand and the demand trends for different products of interest to Irān, but will also show whose competition will have to be met. Such a survey should help in the planning of an export strategy for Irān; and it may also help a joint co-operative strategy for Irān,Pakistan and Western India, if it were to be formulated.

53. An export expansion in the direction of the Persian Gulf would be facilitated by investments jointly owned by Irānian nationals and nationals of the Gulf countries concerned. It could even be envisaged that certain facilities, e.g., packaging, assembly, etc., be located in the prospective importing countries, while basic facilities would be mostly in Irān. It is also possible to contemplate the possibility of attracting some of the major international companies to participate in such an expansion.

54. The question does arise, however, as to whether the potential exports will materialise on a large scale without sufficient export incentives. This subject is a part of the over-all consideration of cost-price relationships in the Irānian industry and economy in general. The concluding part of his paper discusses this problem.

PART III
PRICES, COSTS AND RESOURCE ALLOCATION

A Digression: Employment, Efficiency and Trade

55. One of the major problems facing Irān today concerns prices, costs and their relationship. The way in which this problem is resolved will to a large extent determine the direction of growth, the external financial position of the country and ultimately the rate of growth itself.

56. It was stated in Chapter I that most of the recent industrial advance has taken place under relatively high protection. The experience of Irān in this respect is not unique: most developing countries undergoing industrialisation during the last two decades have resorted to high protection.

57. There is no satisfactory theory at the present time to explain the basic reasons for this phenomenon. A hypothesis can be put forward, however, dealing with the employment, resource allocation and trade effects of a system without protection; and then, working back,another hypothesis can be formulated concerning the rationale of protection as an incentive device

58. Take the case of a developing country heavily dependent on a primary product for exports, without any industry. It imports all the industrial goods it consumes and operates its economy under a completely free trade regime. Under these conditions, it is logical to suppose that the production of the primary product for exports is the most efficient of all its potential lines of production: this is the activity which has developed "naturally", without any intervention, because the country was cheaper in this activity than in any other; and it was also competitive in the world market.

59. Now, if our imaginary country could employ all its available

labour in producing the primary product for exports; if it could continuously raise productivity per man hour; and if it could sell the additional production without a reduction in the selling price - the country would enjoy full employment at steadily rising real wages. In short, it would specialise in producing a product in which it is most efficient. There would be no need for either industrialisation or protection: the country would get rich just by modernising its primary export activity.

60. It is these conditions which seem to have been met in the "countries of recent settlement" of Folke Hilgerdt in the nineteenth century in Canada, Australia, New Zealand, Argentina, U.S.[7] These countries produced with high efficiency growing quantities of agricultural products for the rapidly rising market in Europe which at that time was not protecting its agriculture; and for some time, they could employ all their labour at rising real wages in these export-based activities. Today, these conditions are met in the case of small countries producing petroleum: world petroleum demand rises relatively rapidly; their share in the total market is not very large so that even if their production expands at a faster rate than world consumption, the prices will not fall; and their population is small, so that all their labour can be employed in oil production and in oil-connected activities at rising real wages. Kuwait and other countries with a small population in the Persian Gulf are in this situation. For the time being, they need neither industrialisation nor protection, except as an insurance against possible disturbances in the petroleum market or against technological change which could cause the demise of oil as the most sought-after commodity.

61. The problem begins when the conditions stated in paras. 60 and 61 are not met. If a country produces a product which is not in strong demand in the world market; if its share of the market is already so large that any further expansion would reduce the sales revenue due to declining prices; or if there are restrictions on export expansion due to trade and other obstacles abroad; if the country has large population; and if, as a result, only a fraction of the labour force can be employed in the primary product export activity - an entirely new situation is faced. Under these conditions, the economy may face a prolonged, perhaps even indefinite, period of under-employment and economic stagnation. The only way

7. League of Nations, *Industrialization and Foreign Trade*, (Geneva, 1945.)

in which this circle can be broken is to start new activities, in addition to the traditional primary export production, to absorb under-employed labour at remunerative wages.

62. If the efficiency of resource use in non-traditional fields were as high as in the primary export product, full productive employment would be achieved.But the efficiency is not the same: had it been so,such new activities would have already developed. For as long as the basic framework of price relations with the outside world is determined by the efficiency level (i.e. the cost level) in the most efficient activity,all other activities are stunted, since they are not competitive with imports. And the larger the difference between the efficiency level in the primary export activity and the efficiency level in other activities, the more protracted and severe the underemployment in the rest of the economy.From a national economic viewpoint, it would pay to employ all the labour for as long as the goods produced cover costs - the going wage rate and the going rate of return on capital; but this cannot be achieved under a regime of free imports which are priced on the basis of the ratio of foreign costs to domestic costs in the most efficient industry.

63. Whatever may be the specific factors which in any particular case lead to a decision to grant high protection, it seems that the fundamental common cause, in Irān and elsewhere, should be sought in the difference in the efficiency levels between the highly developed,experienced and resource-based primary export activity which however cannot employ all labour, and the other activities which are inferior, new and untried but have a great employment potential. The larger the difference in efficiency, the greater the incentives needed to achieve full employment.

The Present System

64. The present system of high protection granted to import substitutes is in effect a device t get around the problem of the difference in efficiency, bv setting the price relations between the new domestically produced goods and the foreign-produced goods at a substantially different level than the one resulting from the efficiency of the basic primary export industry. It is also a device to divert capital from the import trade and real estate into new activities, by offering substantial profit margins.

65. If the analysis in the preceeding section is correct, however, it follows that the present system is only a partial answer to the problem; and being partial, it is a one-sided and therefore incorrect answer. If the key problem is to get around the basic price relations as determined by the most efficient export industry and thus to remove the straight-jacket they impose, this is needed throughout the economy and not only with respect to the import substituting activities catering to the domestic market; it equally applies to all potential new activities, including those that produce for the export markets; and it also applies as much to agriculture as it does to industry. In short, from a theoretical point of view, it would appear that incentives, in terms of favourable price-cost relations, should apply fairly equally to both the new import-substitution and the new export-oriented industries; and, more important, from the practical point of view, unless the incentives are applied fairly equally, the chances are that industrial growth will be arrested due to insufficient capacity to import caused by lagging exports (see part II, pp. 13-15).

66. If protection were only moderate, say 10-15 per cent, the dice would still be loaded against the export industries since their input costs would rise, but the effect would be at least kept within reasonable bounds. With protection rates of 30 per cent, 40 per cent, and 50 per cent, the dice are loaded too much.

67. This is not the only adverse feature of the present incentive systems. Import duties were originally introduced in developing countries as a revenue source: they were a near perfect substitute for sales taxes on manufactures, since virtually all manufactures consumed were imported. Now, sales taxes are generally imposed on goods for final consumption and not on raw materials; and among the consumer goods, they bear particularly heavily on those whose consumption is not very responsive to price (i.e. where the price elasticity of demand is low). These are mostly goods which are considered "luxury" goods - appliances, finer textiles, tobacco and alcohol, sugar. The rates of duty inevitably differ from product to product, depending on the price elasticity and on the political and fiscal considerations when they were introduced or subsequently changed. The revenue objectives of the tariffs are responsible for the extreme complexity of the tariff structures. On the other hand, in order to make the complex system administratively manageable, specific rates per unit of

weight are frequently in use instead of *ad valorem* duties.

68. As industrialisation begins and proceeds, it is the protective features of tariffs which have to be super-imposed on a most complex and special structure of revenue tariffs. The result is a mixture of the different elements, with different objectives and different techniques to achieve the various objectives.

69. The economic effects are far-reaching and frequently unknown until after the event. The greater incidence of duties on final goods than on semi-finished products and raw materials stimulates production of final goods on the basis of imported inputs and the manufacturers cash in on the difference. The greater incidence of duties on "luxury" goods stimulates their domestic production at the expense of the more needed products, until equivalent sales taxes on domestic production are introduced. The specific duties per kilogram on an industrial input which is produced and sold in several qualities, cheaper and more expensive, stimulates the consumption of the more expensive varieties, since the effective duty rate in this case works out lower.[8]

The Implications

70. Three conclusions follow from the analysis in paras.55-69.First, incentives are needed wherever the efficiency level in the traditional primary export industry differs substantially from the efficiency level in the rest of the economy; and these incentives may have to be quite high if the economy is to develop. Secondly, the system of industrial protection as an incentive device, which is a logical first step in industrialisation policy, has to be followed as soon as possible by incentives to resource-based activities, including export incentives,particularly in cases in which the rate of protection is high; otherwise, the economic system will become unbalanced, followed by external financial difficulties and then a check on growth. Thirdly, the present protective systems in

8. In Iran, for example, the duty on imported material for production of paints is charged per kilogram. Since there are many qualities of paints, the importer or user will minimise the duty incidence by importing the highest quality. The duty on sheet glass is also per kilogram. Since the value of glass varies depending on thickness in much greater proportion than in relation to weight, sheet glass bears widely different *ad valorem* duties.

the developing countries cannot perform the function expected of them:they have their origin in an underdeveloped non-industrial economy and their initial purpose has been exclusively fiscal. If protection is to serve developmental objectives, its present structure has to undergo a substantial modernisation and reliance for fiscal revenue has to be placed elsewhere.

71. These conclusions are applicable to Irān, in different degrees. The experience has shown that relatively high protection was needed to initiate industrial growth on a significant scale. Adverse effects of high protection on the rest of the economy have so far been kept within bounds, for several reasons. It is for the future that the above conclusions are particularly relevant. Unless sufficient incentives are given to the expansion of non-petroleum exports and unless the protection structure is modernised and rationalised, so that the resource-based activities can develop unhampered, it is likely that either external financial difficulties will ensue, or the rate of growth will slow down, or both.

Possible Evolution of the System

72. Views will differ on what should be the long-run objectives of the system of incentives. According to one view, the objectives should be a uniform rate of protection for all non-traditional activities, accompanied by an equivalent uniform rate of export subsidy for all exports except those whose production should not be expanded since foreign demand for the country's exports is inelastic. A possible variation of such a system would be a moderate extra protection, up to say, 10 per cent or so to be applied rigorously to products where a very convincing case of need and priority can be made. A contrary view would be that such a system would still leave too much leeway to forces currently operating in international trade with all its distortions, and that the ultimate outcome for growth would be uncertain; consequently, a varied pattern of protection and export subsidy would be necessary. How much a difference there would be in practical application of the two views in the case of a particular country is an issue which can be clarified only if an attempt at reform is carried out: it may turn out that the difference is not substantial, provided the fundamental points are agreed upon - the need for modernisation of the tariff structure and the need for reasonably equal

chances to the import substitution and to the resource-based activities.

73. Whatever the differences of view concerning long-run objectives, it is the immediate issues which have to be resolved first. With respect to protection: the present wide discrepancies in the tariff rates on different products, the accidental effects of the different rates, the unresolved issues of how much protection there should be on basic materials and on capital goods and what will be the effects on prices and on costs of final goods - are questions which have to be considered most seriously and then a rational protective system has to be developed with clear objectives and simplified techniques. Similarly, the issue of introducing export incentives in the form of export subsidies has to be equally seriously considered, in the light of the already acquired experience concerning the competitive position of the industry and of other activities and in view of the emerging problems in the balance of payments.

74. In the consideration of these two immediate objectives, the problems they are likely to give rise to must also be analyzed. The two major problems are the effects on domestic prices and the effects on government revenue. Higher protection for intermediate products and export subsidies will tend to raise domestic prices. Against this, there is the price- reducing effect of possible lowering of tariffs where they are excessive. Also, transitory messures to subsidise the domestic consumption of basic consumer goods whose prices would rise, are to be explored, as well as the effect on domestic prices of larger imports which would be possible due to improved export position. Introduction of export subsidies would have an immediate adverse effect on government budget: one would have to look at possible offsets, in the form of taxes or sales and elsewhere in the tax structure. A special point to be explored in the case of export subsidies is the magnitude of the risk of the importing countries introducing countervailing duties; this may call for consideration of the different techniques of export incentives.

Further Studies

75. The problem of prices, i.e. the possible reform of the system of incentives and the simplification of the tariff structure, commands priority among the subjects on which further work is needed. Other subjects, already discussed earlier in this report, include: location of

industrial and agricultural activities; the optimum size of individual projects that are undertaken; the problem of industrial finance; the export expansion to the Persian-Gulf; and the transport problem.

76. This does not exhaust the areas in which further analysis is necessary.One concern is the pricing of products for the home market, which Irān can produce in abundance at low cost, but cannot sell abroad beyond a certain quantity(e.g.petroleum).If such products were priced at a marginal cost for domestic uses, this would represent a powerful, and economically logical, stimulus for development of industries which use domestic materials on a substantial scale, i.e. industries in which Irān has comparative advantage. More generally, it is this principle of stimulating industries with high value added and low unit costs, now or potentially, which may serve as a guideline as to where resources should be concentrated to best advantage. It was mentioned before that the whole vegetable oilseeds - vegetable oils - meat production complex could be usefully re-examined to find out where the bottlenecks to rapid growth are and what measures are needed to remove them. The same applies to the cotton and wool economy, including forward linkages to ready-made clothing and the establishment of cashmere industries; the possibility of expanding on a large scale fresh and processed food industries, including freezing facilities and adequate transport network for the export markets;and the possible development of large-scale modern copper-using industries, in addition to petro-chemicals whose development is already in process. Another problem area which should be examined is the possibility of expanding the export market for Persian rugs on a large scale, by developing a medium-priced variety for the middle-income groups in Europe and America, while still retaining the monopoly in the luxury-priced product for the high-income market. In the absence of such development it is other countries which may take over the medium-priced market. In short, the whole complex of commodity output,industrial output as well as agricultural output would have to be looked into parallel with any re-examination of incentive policies.

77. In order to explore the urgent issues listed in paras.75-76, it would be necessary to establish a special working group consisting of experts of the Plan Organisation, Ministry of Economy, Ministry of Agriculture, Ministry of Finance, the Industrial and Mining Development Bank and

where relevant the Central Bank. Such a working group may be asked to submit its preliminary report on the most urgent issues by the end of the year.

APPENDIX I

SELECTED MANUFACTURED GOODS: PRICE CHANGES BETWEEN 1959 and 1968

Product	Price in 1968 as per cent of price in 1959	Product	Price in 1968 as per cent of price in 1959
Veil Cloth	174.2	Sewing Machines	98.9
Carpets	145.1	Brick	98.1
Tea Glass	135.3	Metallic Chairs	96.8
Bicycles	131.7	Light Bulbs	96.6
Enamelled Plate	124.1	Bath Soap	96.5
Rubber Shoes	120.2	Radios	95.9
Towels	117.3	Vitamin "C" Tablets	91.7
Sheet Glass	116.5	Slippers	91.5
Sugar and Sugar Cubes	116.2	Penicillin Ampules	88.8
Non-alcoholic Beverages	115.6	Plastic Sacks	88.6
Matches	112.8	Sulphatiazol Tablets	87.0
Woollen Suits	108.3	Woollen Blankets	82.1
Thread	109.3	Cement	80.2
Bicycle Tires	108.4	Soap	80.2
Chintz	107.5	Aluminum Ware	80.1
Undershirts	106.3	Vegetable Oil	72.4
Space Heaters (port)	105.3	Plastic Shoes	69.5
Cooking Stoves	104.5	Detergents	57.8
Ichtiol Ointment	104.3		
Samovars	104.2		
Aspirin	103.0		

Source: Central Bank of Iran.