SOME OBSERVATIONS ON THE IRANIAN ECONOMY AND ITS RECENT GROWTH*

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Abstract

The Iranian economy has, in the past decade, experienced a high growth rate and a considerable advance towards economic development. This paper aims at a fairly comprehensive survey of the pattern and features of development in Iran with reference to the recent growth experience of the country. However, Iran is not only a developing economy but one which belongs to the community of the oil-exporting countries. Certain economic features largely peculiar to these economies are broadly discussed in order to provide a proper context in which to study the patterns and problems of development in Iran. It is concluded that an increase in agricultural productivity and an expansion of the non-oil export sector are of prime importance for future certainty.**

*I am grateful to Dr. R.E. Mabro and Dr. A.P.Thirlwall for their useful comments on the earlier drafts of this paper. For the remaining faults I am entirely to blame.

**The final draft of this paper was completed in April 1971 but, for various reasons, it has reached the stage of publication rather late. Since then a great deal of further information and statistical data, concerning the period up to, as well as since, 1967 has been published, particularly by the Central Bank of Iran. The author has not carried out a major revision of this paper, at this late stage of publication, for two main reasons. First, the fundamental frame work in which this study has been conducted is still relevant, and the main conclusions still valid. For example

Introduction

It is being widely recognised that patterns and problems of development cannot be uniquely formulated in a general model. To be sure, models have their uses and misuses when applied to the test of observation and experience. However, some models of development would be clearly inapplicable to a certain section of the developing world on purely *a priori* considerations. For example, whatever the merits of the "Lewis" model it is obviously not intended for a poor country with no labour surplus. In the same vein, the "dual-gap" analysis - which has been in favour in recent years - would not be so relevant to the case of a developing country with no acute shortage of saving and foreign exchange. This is true of most of the oil-exporting countries of the world.

Iran is one such economy. Here, as in many other oil-exporting countries, there is an interesting phenomenon. The oil sector, with barely any linkage with the national economy, is a major source of public revenue *paid in foreign exchange*. The literature on the role and significance of

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the agricultural scene as anticipated in this paper has, if anything, deteriorated in the more recent years. Therefore the policy conclusion that agricultural productivity must be increased quickly has, in fact, become more urgent. Indeed as these few comments are being written the government have announced a number of drastic measures for coping with this very problem. How effective these measures are going to be, is a question the answer to which is difficult without knowing the policy details. The second reason for not carrying out an extensive revision of this paper is the fact that a paper by the author has already appeared which deals, much more comprehensively than here, with the problem of Iranian agriculture (see "The Agricultural Sector of Iran: Analysis and Warning", *Tahqiqāt-e Eqtesadi* Nos: 27-28, 135; Pp 211-240). In addition, a book, entitled *A Model of the Political Economy of Development in Oil-Exporting Countries*, by the author and Dr. Robert Mabro of St. Antony's College, Oxford is about to be published, which includes a large and extensive case-study of the Iranian economy, (November 1972).

foreign exchange in the process of development is already quite extensive. Analytically, foreign exchange supplements domestic savings and - other things equal - makes it easier to meet the requirements of industry for scarce, technologically-advanced capital and intermediate products. Besides, it has been argued that a reduction of foreign exchange could lead to some depressing Keynesian effects in the domestic economy.[1] Indeed - adopting an ingenious input-output approach - Professor Kennedy has recently argued that, in the conditions of underdevelopment, a pound's worth of foreign exchange is "superior" to its domestic equivalent.[2]

These are the advantages which - almost by accident - countries like Iran enjoy over the rest of the developing world. But there are also some difficulties arising from this "privileged" position which are not, perhaps, quite apparent at first sight. These problems, no doubt, vary from one country to another but it is possible to make some observations generally relevant to all of them.

The existence of a source of large and growing revenues, outside the economy, as it were, raises expectations and may result in a diversion of resources from productive to "non-productive" activities, and - in particular - from investment to consumption expenditure. This account obviously assumes away demand deficiency of a Keynesian type. It may also affect the tax-structure and the efficiency with which taxes are collected. It could even possibly retard the development of a relatively efficient fiscal system. It could also lead to periodical *demand* inflation which, with an inelastic supply of agricultural products, would have to be remedied through imports. Sometimes, when the foreign product is not considered as a perfect substitute for the domestic good (e.g. fresh meat), not even this remedy would be quite effective. Paradoxical as it may sound however, where there is a traditional agricultural base it could suffer from lack of proper attention as it is not necessary to rely on agriculture for exports, and it is possible to import food. In addition, a transfer of rural labour into towns may take place on the false incentive of "golden pavements" in urban settlements, increasing unemployment and pressuring the already hard-pressed urban welfare services.

Furthermore, the composition of skilled labour and its

allocation to various sectors may be adversely affected.For example, where there is a prospect of high earnings and prestigous positions in government and the service industries, skilled labour may be diverted away from manufacturing industries where they are most needed. Besides,in circumstances in which it is found easier to make rather than earn money, there is not much incentive for producing real output, and there may develop a tendency among the *potential entrepreneurs* to become *actual rentiers*. Most of these considerations are difficult, if not impossible, to measure and quantify directly. In a world in which too many variables affect too many other variables, to isolate the influence of a few "imponderables" is not an easy task. Yet a patient study of the development process in these countries may yield some food for thought.[3]

In this paper it will be attempted to show that the Iranian economy incorporates many such features. It will be argued that the Iranian economy and its growth are still greatly dependent on oil revenues, with socio-economic consequences which - if taken into serious consideration - may even outweigh the increasing material benefits so obviously reaped from the oil sector. However, since this is not possible to show directly, a sectoral study of the economy and its growth will be used as a round-about way of indicating certain characteristics, the most obvious explanation for whose existence would be the influence of the oil sector. Sections I and II consist of an introductory note on the prelude to the recent growth efforts as well as a general view of the economy, while sections III-VI deal with a sectoral breakdown of the economy, the relative significance of each sector in output, employment and their growth, in addition to the comparative importance of some economic subsectors. Section VII deals with aspects of foreign trade and fiscal and monetary policies of the country which are relevant to our problem.

B. The Background

Until the end of the Second War rapid economic development - in the sense that we understand it today - was not a major objective of policy in Iran. In the inter-war

period a certain amount of constructive activity, mainly in the field of transportation, and some small scale light industries, had taken place. The period saw an expansion of the highway network and the construction of a railway system. There was, however, no conscious attempt at constructing an "infrastructure" in order to provide services complementary to the process of industrialisation. Manufacturing activity was highly localized and small in scale, and the communication network was mainly intended to facilitate travel and to realise the central grip on most regions of the country. Therefore, national output and population remained fairly static. The revenues from oil, accrued to the government, were - at least in comparison with the present time - relatively small, and were used mainly for "balancing" the budget (a simple balance-sheet of government revenues and expenditure) as well as meeting some import requirements (chiefly for consumption).

Since the war there has been a conscious effort to create a wide industrial base capable of self-sustaining expansion. In this period three phases of planning can be distinguished. Phase I saw the establishment of the Plan Organization as a temporary agency for co-ordinating, and contributing to, piecemeal development activities. In this phase, roughly covering the period between 1948 and 1960, two "plans" were constructed none of which were strictly adhered to - but particularly the first ('seven-year plan') which was frustrated mainly because of the lack of funds consequent to the nationalization of Persian Oil and the Anglo-Iranian dispute that ensued. Both plans were,however, in the nature of a statement of public expenditure projects rather than a modern comprehensive plan. The second phase was as dramatic as it was abortive. An attempt was made to construct a comprehensive plan with the advisory help of the Harvard Development Advisory Service. The Third Plan was to cover the period 1962-67. Amongst the main objectives of the plan was to achieve an average annual growth rate of 6 per cent for the national income. In addition, it was hoped that approximately 18 per cent of national expenditure would be spent on 'gross domestic fixed capital formation'.[4]

In the meantime there developed an acute balance-of -

payments crisis which was probably promoted by an indiscriminate expansionary policy resulting in a demand boom which assumed high proportions by 1961. This was followed by a rather too severe deflationary policy leading to stagnation and bankruptcy. Thus in the wake of the plan period a general mood of economic pessimism be-set the country from which it took a further two-to-three years to recover. Meanwhile, the government adopted a relatively radical policy of land distribution and tenancy reform resulting in temporary social disturbance and economic instability which arose largely from the uncertainty that the declaration of intent had added to the general socio-economic mood in the country. None of these events had, however, been fully anticipated by the planners. Therefore there is small wonder that the plan was not adopted with a kind of faith that one would have expected in happier circumstances.[5]

Phase III of 'planning' is in fact the current period in which - though the Plan Organization has been retained - it has lost some of its status and scope of activity. In a sense there has been a return to more extensive budgetary and fiscal measures using, however, a more modern approach.

II. Some General Observations

In the Third Plan period the national income of Iran grew at an average annual rate of 8.2 per cent, over 2 per cent greater than the Plan Frame had considered optimistic to expect. With a high 2.9 per cent growth rate of population the rate of growth *per capita* income averaged at about 5.3 per cent per annum. This is an impressive achievement by any standards.

Gross industrial output (consisting of manufacturing, construction and mining products) experienced a high growth rate of 13.5 per cent. This was more due to construction than to manufacturing and mining activities. The services grew at an average rate of 8.4 per cent, while gross agricultural product - the chief laggard-expanded at 4.6 per cent on the average.[6] However the biggest growth rate occurred in the oil sector where there was an annual growth

rate of 14.2 per cent.[7] Revenues from oil almost certainly grew at a faster rate than this, since the period also saw the sale of a number of concessions for prospecting and future exploitation of hitherto unexploited sources. It would be interesting to note that the Plan Frame had anticipated a mere 5.4 per cent for the annula increase of revenues from oil for the plan period [8] The difference between the expected and the actual performance of the oil sector should go a long way in explaining the overfulfillment of the Third Plan's general growth target, while the plan itself was not faithfully implemented. It also implies that the performance of the other sectors may well not have been as well as anticipated, but that this possible shortening has been more than compensated by the oil boom.

Naturally, the growth pattern was not smooth and continuous throughout the whole of the period, and - in particular - a marked slackening is observed for the year 1966. It is, once more, interesting to observe that there was also a decline in the growth rate of oil output from 16.9 per cent in 1965 to 12.9 per cent in 1966. Given that the level and the growth of oil revenues are - in a sense - 'autonomous' of the national economy, this must have had an impact on the overall performance of the economy and its other sectors.

Table 1 refers to the shares of the various economic sectors in Gross National product. An examination of the last column reveals a rather unexpected pattern of sectoral shares. Where one would normally expect a large share of agricultural output, the services by far predominate.

Table 1. Percentage distribution of GNP by industrial origin (constant prices*)

	1962	1963	1964	1965	1966	1967	Average 1962-67
Agriculture and mining	29.4	28.5	27.1	26.2	25.8	25.0	27.0
Manufacturing & Construction	13.9	14.5	14.9	15.3	15.7	16.5	15.1
Services	41.8	42.6	43.4	43.4	44.7	43.5	43.2
Oil	13.0	13.5	14.1	14.8	15.9	17.0	14.7

Source, N.I.I., Table 19 p.45
*The columns do not necessarily add up to 100 because - for clarity's sake the 'miscellaneous' items have been omitted.

Even if the shares of agriculture mining and oil were added together in order to arrive at the figure for the 'primary' sector - a procedure that is not, strictly, warranted in this case - it would be less than the share of the service sector. The share of the 'industrial' sector is expectedly - rather small, of which about a third is due to construction.

Table 2 shows the sectoral shares in total labour force. It can be observed that the share of agriculture has absolutely declined, but not so rapidly. This is hardly surprising in view of the land-reform policy of the government in this period. However, agriculture is still the major source of employment in the country. The share of services in labour force is not so large - a fact that has to be contrasted to the predominant share of this sector in GNP. The reverse is true of the industrial sector.

Table 2. Percentage distribution and annual growth rates of the labour force by main groups

	1962	1963	1964	1965	1966	1967	Average 1962-67	Average annual growth rate
Agriculture	47.1	45.8	44.6	43.3	42.0	40.7	43.9	0.8
Industry	22.0	22.5	23.10	23.5	24.0	24.5	23.3	4.5
Services	21.6	21.9	22.1	22.3	22.6	22.9	22.2	3.3
Oil	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.9
Unemployment	8.7	9.2	9.7	10.3	10.8	11.3	10.0	7.8
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	2.2

Source, N.I.I., Tables 36 and 37, pp.58-59.

Industry has experienced the biggest growth rate of labour force, but the fact that the share and the growth rate of urban unemployment is so high must be particularly worrying.[9] However the share of unemployment was quite high already in 1962. By 1967, a further 2.6 per cent had joined the ranks of the jobless, while there was a decline of 3.2 per cent in the share of agriculture (see Table 2). Hence - to put matters very simply - it appears that industry has been absorbing only 0.6 per cent of the total labour force released by agriculture, the rest joining the already idle in the towns. Therefore contrary to expectations based on the 'Lewis' model it seems that agriculture might do well by retaining its labour force over a relatively short period.

Finally, the negligible share of the oil sector in total labour force (and its growth rate which is not a significantly greater than zero) is worthy of note. It brings in to light one of the important socio-economic characteristics of an oil-exporting country. In the case of Iran it shows that only 0.6 per cent of the labour force is 'responsible' for nearly 15 per cent of GNP and over 90 per cent of the foreign exchange earnings of the country on the current account.

Let us now take a closer look at the sectoral pattern and growth of the economy in more detail.

III. The Oil Sector

As it has been indicated above despite the relatively small share of this sector in GNP, it is, in many ways, probably the most important sector of the economy. It greatly supplements the investment and consumption opportunities of the country and - in comparison to most other developing countries - it reduces the foreign exchange constraint.

But that is not all. Oil output and its changes appear to be the *truly independent variable of the system*. Since, on the one hand, changes in output, prices, composition of oil products etc., usually take place through administrative, decisions based on an international negotiating machinery such changes should normally have some effect on the determination of the short run fate of the economy in general, and, perhaps the industrial sector in particular. It is realistic to expect that, for example, a slackening in the growth of oil revenues may have similar consequences for the industrial sector when foreign exchange would be scarcer than anticipated and, in addition, some public development projects may be frustrated for a lack of adequate funds.[10] Given the erratic nature of the geo-politics of oil, the exhaustibility of the oil supplies in any given country, the increasing elasticity of supplies due to new discoveries and explorations....the country clearly needs to reduce its dependence on the oil sector, as early as possible, without forfeiting or neglecting the benefits that this sector can

and does bring in the meantime.

The growth of the oil output was quite considerable in this period reaching a record rate of 17.1 per cent in 1967, but - significantly - dropping to 11.5 per cent in 1968.[11] However there has not been a dramatic decline since, and the recent increase in posted prices must bring even further benefits than a simple growth of output at the old prices. But the very small share of this sector in total labour force, and its constancy, is worth emphasising. Oil production is, on the whole, a capital-intensive activity, but, at the same time, there has been a continuous decline of the output of refined product in favour of crude oil, the former now forming a negligible share of total output. For the production of crude oil, however, once the original fixed investment in machinery has been made there should not be a considerable amount of net capital formation. Therefore the growth of the labour force would be limited mainly by the extent of the exploitation of new deposits, rather than the expansion of output from the deposits already in use. All this is independent of the degree of factor intensity. While, if a substantial share of the output was refined indigenously - as it used to - the net capital formation and the growth of labour force would have been directly lined to the rate of growth of output.

The linkage of the oil sector with the rest of the economy is thus very limited in spite of the fact that oil revenues exercise a considerable influence in determining the course of economic events. Recently an attempt has been made to improve on this situation by the establishment of a petro-chemical industry. It is too soon to measure the degree of success achieved by this venture. There are rumours in official circles that the performance of this industry in the export market has not been as good as it was anticipated. Be that as it may, it would be more interesting to see how well it integrates with the oil sector and the rest of industrial activities including the traditional textile and carpet industries.

IV. The Industrial Sector

This sector includes manufacturing, 'non-oil' mining

and construction. Mining is, in terms of the percentage share of GNP, still a negligible item though this picture will undoubtedly change with the exploitation of the rich copper deposits recently discovered in the province of Kerman. However, construction creates its own methodological problems. Naturally, construction activities are bound to boom in conditions of rapid economic advance. There is a general need for an adequate 'infrastructure', and there is a specific need for certain construction activities as vital links to the expansion of manufacturing. The thing to know is the extent to which construction is industry-based, and the extent to which it is related to 'purely' service activities. Constructive activities in expanding the networks of transportation between key cities and industrial centres, education and health clearly belong to the first group. 'Luxury' house-building,on the other hand,belongs to the second group. In the case of Iran it is difficult to know the significance of each of these groups in total construction. Judgement, however, clearly hinges upon this knowledge.

Manufacturing may be broadly divided into two sections: Traditional and Modern. The traditional manufacturing products include such items as tobacco, textile and carpet. Textile and tobacco industries are 'traditional' only in so far as they date back to earlier periods. They have, however, been modernised in recent decades and - with a large degree of protection from foreign competition - they enjoy a rapidly increasing demand for their products. The carpet industry is booming. This is an industry whose product is strictly inelastic in supply but highly income-elastic in demand, and it has no perfect substitute in the internal market. Besides, carpets are part of the Iranian export sector. Given that the use of child labour in the industry has been effectively banned in recent years, there is no wonder that prices have been galloping upwards in the past decade.

The modern section of manufacturing may be further divided into the oil-dependent and the import-substitution activities. The former consists mainly of petro-chemicals to which reference has already been made. The latter are dominated by the production of consumer durables such as motor vehicles and cookers. These are still in the assembly-plant

stage. They tend to reduce the government revenue from customs but save foreign exchange.[12] As it is to be expected the income-elasticity of demand for such products is quite high and they enjoy an expanding market. However, as long as they stay heavily import-dependent their linkage with the rest of industrial activities must remain very small. The one major exception to these categories is the steel plant constructed by the Soviet Union in exchange for natural gas. The period of construction has just been concluded and the firm is about to assume its productive activities. The benefits it could bring the Iranian economy remain to be seen.

Table 3 shows the average growth rates and the percentage share of the industrial sub-sectors both in the sector's total and in GNP. It can be observed that - apart from water and power whose share of GNP is still very small, and whose inclusion in this sector is, in any case, doubtful - the average growth rate of construction has been greater than the other two sub-sectors. In fact a closer examination of the data (not produced here) reveals that while the share of construction in the industrial sector has been constant, the shares of manufacturing and mining have been falling, and only the share of water and power has increased. The importance of construction will come further into light with reference to Table 4, which shows the distribution and the growth of gross domestic fixed capital formation during the period.

Table 3. Growth rates and percentage distribution of the industrial sub-sectors in GNP and in the sector's total (constant prices)1962-67

	Annual verage ate	Share in GNP	Share in the Sector
Manufacturing	11.3	10.2	60.4
Construction	13.3	4.9	29.1
Mining	10.9	0.3	1.8
Water and Power	33.9	1.5	8.7
Total	13.5	16.9	100.0

Source; N.I.I., Tables 11, 18, 19 and 29.

Gross Domestic Fixed Capital Formation (GDFCF) grew at an average rate of 17.1 per cent between 1962 and 1967. This growth rate is quite considerable for a developing country. None-the-less the *share* of GDFCF in total output averaged at about 16.1 per cent over the period, compared to the

figure of 18 per cent envisaged by the Third Plan Frame.[13] This observation is quite relevant to our story considering the fact that the rate of growth of income and revenues from oil was much greater than had been anticipated, and that - apprently - fixed investment in Iran is taken in a very gross sense of the word, including the replacement of worn-out facilities as well as the repair and maintenance of the existing stock of capital...[14]

From Table 4 it can be observed that the share of construction in GDFCF is by far the greater though - as we have seen - it constitutes only one-third of the entire sector. It may also be noted that the participation of public authorities in this sub-sector is much greater than in 'machinery and equipment'. The latter obviously refers not only to fixed investment in manufacturing but also in agriculture and services, though this cannot be great.

Table 4. Percentage distribution and growth rate of GDFCF by main groups (constant prices)

	Average share 1962-67	Annual average growth rate
Machinery & equipment	33.0	18.1
(private sector)	(25.1)	(13.7)
(public sector)	(7.9)	(32.1)
Construction	67.0	16.5
(private sector)	(37.0)	(8.8)
(public sector)	(30.0)	(25.9)
Total	100.0	17.1

Source: M.I.I. Tables 63 and 64, pp.79-80.

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V. The Service Sector

We have already seen that this indeed is - in terms of its share of GNP - the dominating sector of the Iranian economy. On the whole this is not surprising, since contrary to the Fisher-Clark "stage-theory" of development the share of this sector is found to be large in many developing economies. It has been argued elsewhere that this phenomenon may be due to a number of factors such as the extent of the state bureaucracy, the relative buoyancy of purely commercial activities and the monopolistic position of many service workers with important qualifications.[15] In the case of Iran (and similar countries) this general proposition gains particular significance when we consider that - at the same time - there is an external source of

revenue and foreign exchange. It makes the participation of the state in the provision of services easier, payment of relatively large salaries possible, and the import trade more flourishing than it would have been otherwise.

The fact that the service sector has the biggest share in the national output must be seen in the light of its relatively small share in the total labour force (see Table 2 above). The reader's attention is drawn to Table 5, which shows that, with or without oil, the relative product per worker in the services is far greater than in the other two sectors. Services cannot be significantly more 'mechanised' than agriculture and industry - certainly not more than industry. The argument that readily suggests itself is that the service workers receive, in general, more than their contribution to output.

Table 5. Product per worker by industrial origin 1967 (based on market prices) (entries are relative of country-wide per worker and include the unemployed labour force)

	Total	Excluding the oil sector
Agriculture	0.56	0.66
Industries and mines	0.73	0.86
Services	1.68	2.00

Source: M.I.I., Tables 9 and 35.

Now the labour force engaged in service activities ranges from the lolly-pop and newspaper sellers to ministers and economic advisers. It is quite possible that there is a certain amount of 'disguised unemployment' in this sector, and that it has been increasing as a result of a transfer of labour from the village into the town. This is difficult to quantity but it remains a distinct possibility for anyone who has walked in the streets of the big Iranian cities. In this case the relative per capita share of services in income would in fact be even greater than observed from the Table. The intriguing paradox suggested here is that,in the case of a "rentier" economy, an economic sector which is responsible for a considerable portion of the national income but a negligible part of the labour force, may contribute both to an abnormally high share of the services in the natioanl income, and a certain degree of disguised unemployment in this sector. Table 6 shows the breakdown of the service sector into its component elements. Wholesale and retail trade have the highest share of total services.

But 'trade' is an all-inclusive term. It includes not only such traditional activities as shop-keeping and small crafts, but also the more modern type of activities like the 'production' of restaurant and cinema services. The former expand and transform into a more efficient link between the producers and consumers as the country grow rapidly. The latter boom where incomes are rising fast as the income-elasticity of demand for such 'new' services is bound to be high even in the conditions of underdevelopment.[16] In addition, there is a long tradition of merchant trade and predominance of commercial capital in the country, and - as we have seen - a relative abundance of foreign exchange makes entry into foreign trade comparatively easy.

Table 6. Average percentage distribution and growth rates of services by main groups 1962-67 (constant prices)

	Share in GNP	Share in total services	Average annual growth rate
Transport and Communications	7.0	17.1	3.6
Banking, insurance and real estate	2.7	6.4	13.2
Wholesale and retail trade	10.9	26.3	6.7
Ownership of dwellings	6.3	15.0	6.5
Public administration and defence	9.9	23.6	14.8
Private services	4.9	11.6	7.0
Total	41.7	100.0	8.4

Source: N.I.I., Tables 11, 18, 19 and 29.

The share of the state is the next highest item, with a high growth rate, far greater than the total and also greater than the rate of growth of all other services. In fact, an examination of Table 6 shows that - except in the case of banking whose *share* in total services is very small the growth rate of the government sector is the only one greater than the growth rate of total services. Indeed it has been galloping. It was said in the introduction to this paper that an external source of revenue tends to expand the activities of the state and make high remunerations possible.[17] Of course this is not the only consideration, but where other conditions favourable to a large share of government are present, the relative absence of a financial constraint would tend to realise it more easily. It was also indicated that this situation may tend to deprive industry from an adequate supply of skill, and, in any case make it expensive to come by; in addition, it could affect incentives and divert unplanned man-power training towards

service activities.[18] In the case of Iran casual observation seems to support this, although it would be difficult to quantify with any degree of accuracy.

Commercial banking still occupies a small share of GNP and total services. The rate of return is high but it is still a hazardous occupation. Nonetheless the high growth rate of banking and insurance is an encouraging sign. It shows clearly that the money market is responding to the needs of growing economic activities. But the share and growth performance of transport and communications is on the whole disappointing, especially in view of the fact that this period has seen a great expansion in the television and aviation networks of the country, constituting mainly passenger transport.

The services are the predominant sector of the economy. Is it therefore possible for the country to grow mainly through the expansion of services into a 'service economy'. The answer is negative. The service sector has the biggest share of *output* but a relatively small share of *employment*. The service linkages are weak and limited and, in addition, the service activities are virtually wholly dependent on home demand. The latter in turn is affected by changes in the revenues from oil.

VI. The Agricultural Sector

In terms of its share of total output and employment this indeed is the declining sector of the Iranian economy. In the period 1962-67 agricultural output - by growing at an annual average of 4.6 per cent - lagged considerably behind the rest of the economy; but, compared with the performance of the agricultural sector of some other developing countries this is not a bad achievement. Indeed a quick look at Table 7 reveals that, had it not been for the slow growth of livestock breeding, the expansion of output in this sector would have been quite considerable.

Iranian farm products are dominated by wheat, rice, cash crops (mainly cotton, tobacco and sugar-beet) and barley -

Table 7. Percentage distribution and growth rates of the agricultural sector by main groups 1962-67 (constant prices)

	Shares	Average Annual Growth Rates
Farming	58.2	6.5
Livestock breeding	40.7	2.2
Forestry	0.8	2.5
Fishing	0.3	1.8
Total	100.0	4.6

Source: N.I.I., Tables 22 and 23, p.48.

in that order. Of these, cash crops have increased their share more than the rest, the shares of wheat and barley remaining constant, while the share of rice has, by 1967, actually declined.[19] Iranian rice is expensive, high- quality and probably quite income-elastic. But the expansion of supply is physically limited by the relatively small stretch of land in which it is climatically possible to grow rice. Outside a certain limit further growth of demand for rice is bound to inflate the prices even, perhaps, if rice imports are allowed as there is no perfect substitute for high quality Iranian rice from outside sources.

Although the performance of both forestry and fishing has been poor, what matters is the relatively poor showing of livestock products which account for over 40 per cent of the agricultural output. An examination of the primary sources reveal that this has been mainly due to a lack of response from red meat products which in fact dominate this group of agricultural activities.[20] We call it a 'lack of response' because there is no doubt that the income-elasticity of demand for these products are very high. The result has been a demand inflation and a resort to importing meat and some dairy products. But, once again, Iranians do not seem to consider frozen meat from foreign sources as a good substitute for the fresh domestic product, so that the inflation has - at least partially - persisted. Even the growth of battery-hen factories which has greatly expanded the supply of poultry - another income-elastic product - has not been sufficient for remedying the overall meat 'shortage'.

In all this the role of land reform is as yet difficult to determine. We noted earlier that this consisted of

distribution of land as well as some tenancy reform.The decline of the share of agriculture in total labour force must have been primarily due to this factor. But it is doubtful if the short-term incentives of the Reform were,on the whole, very considerable. Since, on the one hand, the socio-economic environment created by such a relatively major step is bound to have a certain amount of disruptive effects - regardless of where it takes place. While the landlords are leaving the scene rather quickly, it takes time for independent farmers and institutions to fulfill their role as fast as it is necessary for a return to 'normality'. For example, it is quite possible that the relative lack of response from the livestock breeding section of agriculture in this period - and beyond it - has been mainly due to this factor. Traditionally, livestock breeding for the market - where working capital is relatively a large item - has, on the whole, been concentrated in the hands of the landlords and larger land-holders. It would take time for the new holders of land to fulfill this task adequately for a growing market.

In the very short run land reform is not always a great incentive for harder work and smaller consumption expenditure by the new owners. Sometimes it leads to a completely different psychological reaction. For example, certain observers of the Iranian scene claim that an immediate reaction of some new holders was to marry again and go on pilgrimage at the first opportunity. In the absence of data it is difficult to know whether and by how much per capita consumption of the rural population increased in the period. But, even if there was a significant increase it is difficult to know if it fell on agricultural products to any noticeable extent. Since agricultural prices remained fairly stable in this period,[21] except in the case of livestock, fruit and vegetable products which can be chiefly attributable to high income elasticities of demand and low-price elasticities of supply. The latter are the best examples of the claim made in the introduction that rapid increases in per capita incomes are bound to be inflationary precisely in the goods that - for perishability or other reasons - have no perfect substitute from abroad.

On the whole the agricultural sector in Iran has still

a good deal of potential to be exploited for development purposes. A greater increase in agricultural productivity is - at least compared to some other developing economies - not very difficult to achieve. It could contribute to development efforts by becoming an important source of domestic savings. In addition,a high growth rate of agricultural productivity would reduce the burden of foreign payments and prevent partial inflation at home. While the 'manna from heaven' coupled with the development drive are increasing demand at a rapid rate one might as well try to keep the supply in balance. Theoretically the situation is ideal.The market is there and is growing for reasons that are largely exogenous to the agricultural sector. The demand on the agricultural sector for contribution to economic development is negligible in comparison to India, for example.An attempt simply to actualise its potential is all that is needed for a relatively smooth transformation of the economy, and a prosperous rural sector. In the interim period this sector still holds the main key to success despite the fact that the oil-sector theoretically perform most of the tasks that in Japan, for example, were wholly performed by agriculture.

VI. Foreign Trade and Economic Policy

As a developing country Iran is a net importer of capital, now partly as a result of foreign private investment and partly through foreign public credit. It is the current account that in fact determines the short term solvency and long-term possibilities in this case.

Between the years 1962 and 1967 the total value of Iranian imports grew at the average rate of 14.9 per cent while the rate of increase of the value of exports averaged at about 16.2 per cent. But this account conceals the fact that the greatest growth rate experienced in exports was that of the oil products.

Table 8 reveals that, of the agricultural products,the import of livestock has been growing fast although it still takes a small share of total imports, while, on the other hand, its share of total exports has fallen. The reverse is

true of 'farm products' which has drastically reduced its share of imports while its share of exports has not - relatively speaking - drastically fallen. However. on the whole, it may be observed that the total share of agriculture in foreign trade is not substantial, and there is room for improvement in this area. On the other hand, the lion's share of import goes to 'other goods' while that of exports is taken by oil. The rates of growth of the export of oil products and the import of 'other goods' have been high,affecting the overall growth rates of exports and imports respectively. There is clearly a causal relation between the two.

Table 8. Percentage distribution and growth rates of imports and exports by main groups

	Imports		Annual average growth rate	Exports		Annual average growth rate
	1962	1967		1962	1967	
Livestock	1.9	1.7	12.2	1.2	0.7	4.4
Farm products	4.7	1.4	-10.2	5.9	4.0	7.6
Other goods	93.4	96.9	-	4.0	3.4	12.0
Oil	-	-	-	88.9	91.9	17.0
Total	100.0	100.0	14.9	100.0	100.0	16.2

Source: N.I.I., Table 47, p.66.

An alternative breakdown of imports can be studied in Table 9, which reveals the relative importance of various economic sectors in the total value of imports. The total dominance of the industrial sector (particularly if added to construction) can be clearly observed. The share of agriculture is, as we saw, on the whole, insignificant although its share in the imports of capital goods is encouraging. The share of services is a little puzzling at first sight. Part of it is, no doubt, due to the government defence expenditure on arms. Another part must be accounted for by 'invisible' imports of various kinds. But this sector has also the highest share of capital goods imports after industry. Speaking methodologically imports for the expansion of communications network cannot come under this heading as these are mainly intermediate products, and comprise part of the share of services in that category of imports.

Table 9. Average percentage distribution of imports by main groups (current prices) 1962-67

	Share in total imports	Share in capital goods imports	Share in intermediate goods imports	Share in total capital and intermediate goods imports
Industries and mines	60.0	61.1	77.6	72.8
Construction	8.7	0.0	14.7	10.2
Services	9.5	23.9	6.0	11.3
Agriculture	4.8	15.0	11.7	5.7
Consumer goods	17.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0

Source: N.I.I., Table 43, p.62.

Turning to some observations on the terms-of-trade movement in the period, Table 10-referring to the 'net-barter' terms of trade - shows that while they have on the whole turned slightly in Iran's favour once the value of oil exports has been excluded, they clearly turned against her when the total value of exports are taken into account. This is a familiar picture with many primary-exporting developing economies. In any case, the oil market is an oligopolistic market,and it is difficult to know which way prices would tend to move under more competitive and less 'administered' conditions.[22]

Table 10. Terms of trade of Iran (1962-67) (1962 = 100.0)

	1962	1963	1964	1965	1966	1967
Including oil	100.0	85.8	88.0	93.6	98.4	85.6
Excluding oil	100.0	86.7	94.8	101.1	106.5	100.9

Source: N.I.I. Appendix Table.8, p.143.

In order to improve her foreign trade position Iran is in need of an adequate industrial base in order to reduce the great import-dependency of the industrial sector.At the same time an attempt at realising the export potential of the agricultural sector which in addition to certain light industrial products could take advantage of a growing market in the Middle East would be necessary. What further gains can be made in the oil sector would be naturally *exogenous* to the economic system.

On the subject of fiscal and monetary policy there is,

on the whole, little to say. It is only very recently that fiscal policy is gaining the upper hand from development planning, and the budget is assuming its old predominant role. From what figures there are one can only infer that, not surprisingly, taxation has not been a main area of Iranian success in this period. The figures in Table 11 tend to lend credit to this suggestion.

Table 11. Tax Revenues (millions of dollars)

	(1) Actual 1967	(2) Third Plan Target for 1967	(3) As percentages as GNP	(4) As percentage of oil (value added in domestic product of oil sector
Direct taxes	134.0	163.0	2	9.9
Indirect taxes	372.5	349.0	5.4	23
(i) (customs)	(230.0)	(184.0)	-	-
(ii) (other)	(142.5)	(165.0)	-	-
Total	506.5	512.0	7.4	34

Source: Column (1): *Annual Report*, Table 39, p.86.
Column (2): *Olsen* and Rasmussen, *op.cit.* Table 8-7, p.241.
Columns (3) & (4): Column (1) above and *N.I.I.* Table 13.

It can be observed that the total revenue collected through direct taxation in 1967 fell short of the Plan target by about 30 million dollars. This is a little disappointing since the plan had assumed *unchanged* tax rates while in a country like Iran there is a good deal of potential to be exploited by adjusting and modernising tax rates. Besides the plan had envisaged a growth rate of 6 per cent per annum which was over 2 per cent less than the actual rate.

The total figure for indirect taxes has in fact been a little more than anticipated, but this time the details (rows (i) and (ii)) are illuminating. Row (ii) which refers to taxes on consumption expenditure shows that, once more, there has been a short-fall from the target. Again, this is disappointing given that consumption expenditure must have increased beyond the planner's expectations. It seems that the only channel through which greater increases in income has made an impact on the government is customs. This is hardly surprising in view of the ease with which customs revenues can be collected relative to other taxes. Clearly there remains a potential pool of revenue to be realised from internal sources.

In the absence of a fully organized money market, and a total lack of an organized market for second-hand stocks and shares in the period one cannot attach too much importance to the tools of monetary policy and their use. Nonetheless there has been some notable advances in this field. The wise move to separate the central banking functions of the main government bank from its commercial activities - thus creating the Central Bank of Iran - has been helpful. In addition, as we saw in Section III above, there has been a large increase in banking activities in this period.There are already signs that the market is becoming far more responsive to some simple Central Banking decisions (such as changes in the re-discount rate) than it was before.[23]

Concluding Remarks

This was, in a sense, a multi-purpose paper. The aim was to record a fairly comprehensive survey of the main features of the Iranian economy in the light of its growth with particular reference to the period 1962-67. It was also intended to provide a tentative case study for the features and problems of the developing oil-economies. In this connection the 'autonomy' of the oil sector and its total dominance of the export scene, the large share of the service sector in total output and its relatively small share in labour force, the *comparatively* poor performance of agriculture and the price-inflation of some of its products, the import-dependency of industry, the relative lack of success in increasing inland revenue adequately ..... are the kind of things that may be found to be of more than speculative significance in more detailed and more extensive studies. These are the very broad areas that Iranians may have to watch carefully for increased prosperity and *sustained* growth.

Notes

1. Charles Kennedy, "Keynesian Theory in an Open Economy", *Social and Economic Studies*, 1966, particularly Section

VII. See also "Domar-Type Theory in an Open Economy", *Ibid*, particularly section X.

2. "Domestic saving and the Development process", *Oxford Economic Papers*, March, 1971.
3. The special features of development in an oil exporting country have been discussed at length in a book by Robert E. Mabro and M.A. Katouzian (forthcoming). Some of the points mentioned above in the text are also raised in H. Mahdavi, "The Rentier States" in M. Cook, ed., *Studies in the Economic History of the Middle East*, 1970.
4. See P. Bjorn Olsen and P. Norregaard Rasmussen, "An Attempt at Planning in a Traditional State: Iran", in Everett E. Hagen, ed., *Planning Economic Development*, Richard D. Inwin Inc., Illinois, 1963.
5. "The Third Plan Law established the legal basis of the Third Plan on the same limited basis as the Second Plan: The Law says nothing about economic objectives for the country, makes no mention of economic policies, and does not refer to the 1500 pages of documents called the 'Plan Frame', and regarded by the planners as the Third Plan: there is only a fifteen page law." Cf. George B. Baldwin, *Planning and Development in Iran*, the John Hopkins Press, Baltimore, 1967. Chapter III, p.48 (n).
6. *Note added to the proof*. This figure fell in subsequent years to around 3 per cent.
7. *National Income of Iran 1962-67* (hereinafter N.I.I.), Economic Research Department, Central Bank of Iran, Sept. 1969. Table 11 p.37.
8. From 312 million dollars in 1962 to 397 in 1967; see Olsen and Rasmussen, *op.cit.* Table 8 - 7, p.241.
   A regression analysis for a period as limited as the one under review is of doubtful value and, in any case, difficult to interpret in any *causal* sense. Therefore, the following regression equations are recorded here without comment:
   The regression of annual changes in the Gross National Product on the annual changes in oil output ('income accrued to Iranian factors of production') and industrial output yielded the equation $y=800+3.0x_2+0.79x_3$, where y = annual changes in GNP, x_2 (0.39) and x_3 (0.48) respectively refer to changes in oil and

industrial output.
$r^2 = 0.813$. Omitting x_3 from the equation, it becomes
$Y = 2324_{(240.0)} + 3.64x2_{(0.96)}$

9. Although in the source these figures have been quoted under the heading of 'unemployment', some of them certainly refer to jobs that are not 'adequately described.' Besides, the census must have taken place at a season when rural employment is higher than the yearly average. As a result the share of agriculture in total labour force has been under estimated and the share of 'unemployment' over estimated.

10. Once again the following regression equations may be instructive to note:
$Y_1 = 2374 + 0.75x$, where Y_1, is the annual change in industrial output and X is the annual change in the output of oil. $r^2 = 0.90$.
$Y^2 = 66.5 + 0.77X$, where Y_2 refers to the annual change in services and X is the same as before. $r^2 = 0.52$.
$Y3 = 7.44 + 0.71X$, where Y3 is the annual change in the agricultural output. $r^2 = 0.87$.

11. Cf. N.I.I. Table 11, p.37 and Central Bank of Iran, *Annual Report and Balance Sheet as at March 20, 1969* (hereinafter *Annual Report*), Table 22.

12. There may be more to say for the assembly-plant in developing countries than the usual impression of absolute protection they give. cf. W. M. Gorden, The Structure of a Tariff System and the Effective Protective Rate", in Jagdish Ghagwati, ed., *International Trade*, 1969, Chapter 12, Section II.

13. The actual share has been calculated from N.I.I., Table 49, p.68. For the expected share see Olsen and Rasmussen, *op.cit.* p.243.

14. Olsen and Rasmussen, *op.cit.*, p.239.

15. Cf. M.A. Katouzian, "The Development of the Service Sector: A New Approach", *Oxford Economic papers*, Nov. 1970, Section II.

16. Katouzian, *op.cit.* Section I.

17. It would have been interesting to compare the average earnings of all government employees in general and those of the administrative members of the civil service in particular with earnings in other groups of

services. Unfortunately it was not possible to acquire the necessary data (especially in the case of the Government employees) for such a comparison.

18. It is interesting to note that the Government themselves believe 25% of the public employees to be redunant. See Olsen and Rasmussen, *op.cit.*
19. N.I.I., Table 26, p.50.
20. N.I.I., Table 28, p.51.
21. Cf. *Annual Report* pp.131-143; but in the more recent years price fluctuation has also spread to most other agricultural products.
22. The recent price rise will obviously modify this picture.