

## **SOME CONSIDERATIONS ON THE SIZE OF THE PUBLIC SECTOR IN ISLAMIC REPUBLIC OF IRAN**

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It has always been instructive, on efficiency and equity grounds, to ask about the size of the public sector. So much so when the growth in size is unavoidable especially when a country goes through drastic changes such as revolution and war. The new Iranian constitution, with regard to the economic activities of government, has, somehow, changed in compare with the old one. In the new constitution additional responsibilities has been assumed for the government but none of the previously assigned responsibilities has been eliminated.

This paper addresses itself to the above question and seeks answer to see whether past trend will persistently show up in the future or there are reasons to believe that past growth was temporary and transitory?

Less than two years after the Islamic revolution in Iran, my country engaged in an unwanted war with Iraq. Quite expectedly, the government, in response to the expectation of the general public to be protected against resulted shortages and rising prices, intervened in some areas of economic activities. This intervention went beyond the scope outlined in the constitution. On the basis of statistics provided in this paper, as war prolonged further, the government increased its intervention. However, sings are there to witness that after the end of the war, government has tried, in response to escalated economic problems such as unemployment and inflation and also in due course with the constitution, to shrink in size.

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This paper is composed of three parts and an introduction. In introduction, different measures, conventionally used to evaluate the size of the public sector will be discussed. In the first part, the size of the Iranian government, by using different measures introduced in introduction, will be measured. The period of analysis basically includes six years after the revolution and one year before the revolution. Bearing in mind that an Islamic state, in principle, assumes greater responsibilities than a capitalistic state, the year before the war has been chosen as the base year. In the second part, reasons for government away from perfect competition will be analytically discussed.

Finally, in the last part of the paper the Islamic duties of the Iranian government will be viewed in the light of the new constitution, hoping to be able to find a measure for the “optimal” size of the government.

### **Introduction: The Size of Government**

Although it is a common practice to measure the size of government by the size of the public expenditure and taxation, but what is needed to be answered is to see what set of transactions is to be considered as being that of the public sector.

Government might intervene, and, as the result limit the activities of the private sector by providing goods and services directly or by redistributing incomes. Both of these activities will be reflected in the budget as increases in government expenditure, but each may have different impact on economic behavior.

Public expenditure and taxation do not exhaust ways that government intervenes in economic activities; private sector activities can also be regulated with almost every law passed. In such cases, if government expenditure is used as the measure of the size of the public sector, the degree of government intervention would be underestimated since regulatory activities do not drastically increase the public expenditure except for expenditure on bureaucratic activity. Hence, there exist problems of measuring government activity. Economists, in general, have come to the conclusion that any measure of the size of the government is arbitrary.

Size of government, measured by the public expenditure is not an absolute concept but rather a relative concept. It has to be seen alongside with other magnitudes such as the size of the whole economy. When population, total output, personal incomes and prices increase so would, in response to the increasing needs of the people, the public expenditure.

The interest lies in the relative rates of increase in these magnitudes rather than their absolute increase. Such relativity is usually measured by comparing public expenditure with some national aggregates. There are a number of national aggregates that public expenditure could be compared with. In table 1 below you will find four such measures.

### **Table 1: Alternative Measures<sup>1</sup>**

- (1) The ratio of public expenditure to GDP (at factor costs)
- (2) The ratio of public expenditure to GDP (at market prices)
- (3) The ratio of public expenditure to GNP (at factor costs)
- (4) The ratio of public expenditure to national income; i.e. net national  
(at factor costs)

Each one of the above-mentioned measures has its own merits and demerits. Not all measures have same sensitivity with regard to the factors chosen. For example, the errors in estimating capital consumption, in using “national income” measure, are likely to be greater than errors in the measurement of “gross product”, so that variations in the ratio will be sensitive to the precise method used to calculate capital consumption. Same argument applies upon the choice between market price and factor cost measures.

Variations in the ratio will be sensitive to variations in the mix of direct taxes, indirect taxes and subsidies. This means that if ratio (2) is to be used to show changes in the relative size of the public sector over time to compare the sizes of the public sectors in different countries, the conclusions that could be drawn are clouded because the ratio will not only be an indicator of the relative size of the public sector, it will also reflect variations in the structure of public sector revenues. The following example illustrates the points:

*Example:* Two countries A and B each spend 100 units on public expenditure. Each of these two countries has gross domestic products, measured at factor cost, equal to 200 units.

*Country A* finances its public expenditures from the following mix of taxes:

10 units from direct taxes and 90 units from indirect taxes

*Country B* finances its public expenditure from the following mix of taxes:

90 units from direct taxes and 10 units from indirect taxes

Subsidies in country A=20 units and in country B=30 units.

*For country A:* GDP (market prices) = GDP (factor cost) + indirect taxes –

$$\text{Subsidies} = 200 + 90 - 20 = 270 \quad \text{For country B:} = 180$$

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<sup>1</sup> This table and the following example have been adopted from pp.130-131 of C.V. Brown & P.M.Jackson (1982).

In table 2 the alternative measures of the public sector in the two countries are shown. While the absolute size of the public sector in this example is identical, and while their relative sizes are identical when using the factor cost measure of GDP, their relative sizes differ when using the market price measure. The difference lies, in this instance, in variations in the tax structure and not because of variations on the public expenditure side.

**Table 2: Alternative Measures of the public expenditure**

Ratio of Tax Revenues to	Country A	Country B
(1) GDP (factor cost)	50	50
(2) GDP (market prices)	37	56

One should note that the conclusion derived from this example depends on the degree of shifting the tax incidence. In other words, the underlying assumption here is that both indirect taxes and subsidies will be %100 shifted forward; which is, of course, a strong assumption.

It would seem that GDP measured at factor cost, however arbitrary, is the most appropriate measure; although the factor cost measures of GDP will be biased and the measures of the relative size of the public sector will be subject to error. The lessons that should be drawn are that the appropriate use of any measure requires an understanding of the conceptual basis of the data as well as its sources and that there is no such thing as a “true” measure of the size of government. One of the reasons might be that the size of the public sector varies from one country to another because some include public corporations, nationalized industries and other quasi government organizations while other countries do not. That is why some organizations such as OECD use a standard set of national income definitions when making international comparisons.

In a survey of a selection of OECD countries, taxes as a proportion of GNP, for the years 1965-75, reveal useful facts<sup>2</sup>. In 1975 the percentage ranged from a high of 50 percent in Sweden to a low of 20.4 percent in Turkey, with the U.K. somewhere in the middle at the 38.2 percent<sup>3</sup>.

Capitalism has long and diversified experiences behind it; therefore, having properly defined and established one single measure, however arbitrary, for one capitalistic state, it can be properly used for another capitalistic state. But in the case of

<sup>2</sup> Op.cit.pp.145-6.

<sup>3</sup> On the criteria of tax as a proportion of GNP the U.K. is not therefore, a relatively heavy-taxed country.

an Islamic state the problem is that no such measure has ever been introduced. This paper does not claim to have established a unique measure (or measures) to be suitably used by all Islamic states. It is the task of all Muslim economists on the basis of additional functions and responsibilities of an Islamic state in comparison with a capitalistic state, to establish appropriate measure(s).

**Part One: The Size of the Iranian Government before and after Revolution**

In this part of the paper, different measures as outlined above have been used to measure the size of the Iranian government at two different time periods, i.e. before and after the revolution; each of which resembling its own ideology.

In table 3 below, you will find alternative criterion used to measure the size of the government of the Islamic Republic of Iran (for brevity, hereafter, I.R.I. will be used wherever appropriate).

With respect to the years selected and the time period chosen in this paper some caveats are in order: (1) the year 1977 (corresponding to 1356 of the Iranian calendar) has been used as the base year with which other ratios for the corresponding year can be compared.

**Table 3: Alternative Measure of the Size of the Government of the I.R.I**

Ratio of government expenditure to:	1977	1981	1982	1983	1984	1985	1986
(1) GDP (factor cost)	26	32	29	26	23	21	20
(2) GDP (market prices)	25	31	29	25	22	20	20
(3) GNP (factor cost)	24	32	29	26	23	21	20
(4) NNP (factor cost)	28	34	31	29	25	22	22

Source: Calculated on the basis of the data provided by Department of National Income Accounting; Central Bank of Iran and Ministry of Economic Affairs and Finance.

The reason 1977 has been selected as the base year is that during that year three major economic activities (namely, agriculture ministries and mines, and services) had

been in use at almost full capacity<sup>4</sup>. (2) Although the revolution happened on Feb.11, 1979 but the data for the two preceding years have not been, due to unrest state of affairs in the economy, reliable. (3) Unavailability of a uniform data to make comparisons easy did not allow me to present them here.

The numbers in this table reveal the following results:

(1) The range of numbers starts from 20 percent and goes to the highest value of 32 in all years covered, which is a mild increase in the size of government. However, the highest ratio happens in 1981 which not only does not keep its time trend in the following years but also declines to its minimum value in the last year of coverage, 1986.

(2) The maximum and the minimum values of all four ratios occur, without exception, in 1981, respectively. Emphatically, all four ratios in 1986 are below the corresponding ratios in the base year. Having accepted the four measures as being appropriate and sound measures, this result might be used as an evidence of a relative decline in the size of the government of the I.R.I. during the ten years under consideration.

Granted that government expenditures, by and large, increase the welfare of the community, the decline in the ratios means decline in welfare resulted from the war; obviously, those who hurt the most would be the low income receivers. The picture gets worse especially when one notes that 35 millions inhabitants in the I.R.I. had increased to almost 50 (actually, 49.5) millions. In other words, per capita government expenditures, at current prices, had, during the said period, drastically declined. The picture would look even worse if per capita real expenditure is chosen.

(3) Heavy dependency of the economy of the I.R.I. on oil revenues shows itself in 1983 and 1986. Full fluctuations in oil revenues are reflected in the size of government expenditure in these two years. In 1983 the economy enjoyed the highest oil revenue ever since the revolution. In this year, the first two values remain constant, relative to those in the base year, but the last two measures show slight increase in comparison with the corresponding figures in 1977.

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<sup>4</sup> Following dates might be of some assistance if there should arise confusion: revolution happened on Feb.11/1979; war began on Sept. 21/1980; the Iranian fiscal year starts on March 21.

A sharp decline in oil revenues in 1986 causes a corresponding decline in government expenditure to such an extent that almost all figures reach their minimum values in this year. During 1980-85 inclusive, oil revenues account for over 50 percent of the total revenues (see Table 4).

This fact made the country quite vulnerable and as the result severe actions had to be taken to decrease the degree of dependency. The degree of dependency will increase if government should decide to devalue the local currency. More will be said in this regard in the following parts.

(4) None of the four measures show any significant difference in one specific year. The range of values of the table for seven years of coverage can be summarized respectively as follows: (24, 28); (31, 34); (29, 31); (25, 29); (22, 25); (20, 22); and (20, 22).

The narrow range of these values show, as if, an organization had been responsible to have close eye on these numbers not to allow them to go beyond a narrow limit. Comparing the second and the last ratios<sup>5</sup> in one specific year shows that the highest increase happens in 1986; an increase of 10 percent. The corresponding values for a country like England<sup>6</sup>, in 1980, are, respectively, 50 and 62 percent; an increase of 25 percent. More will be said on this point when the procedure of budgeting is briefly mentioned.

### **Composition of Public Revenues and Expenditures:**

#### **(a) Public Revenues**

In this section four other tables have been provided. The first two tables show the sources of government revenues and the remaining two exhibit the government expenditures. Table 4 shows four different sources of revenues from 1980 thru 1990, inclusive. Although a mild decline in total revenues had been witnessed in 1984 and 1985 relative to those in the preceding years but in 1986 the decline was quite sharp; over 30 percent.

Revenues received from the export of oil and gas show a relatively small decline in 1984 and 1985 compared to those in the preceding years. But a drastic decline of 65

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<sup>5</sup> Fourth measure will be that chosen by those who wish to argue that the public sector is too large.

<sup>6</sup> See C.V.Brown and P.M.Jackson (1982); p.130.

percent occurred in 1986. As noted earlier, the evidence for heavy dependency on one revenue source is that in the first six years covered in this table, oil and gas revenues accounted for 54 percent of the total revenues. It should be noted that the formal exchange rate is 1= Rials 70; i.e. all revenues earned from the export of oil and gas are multiplied by 70. But inflation has ceased to allow the formal exchange rate to play its role.

If government should decide to devalue the local currency, as the result of economic forces the degree of reliance on one revenue source would increase. For example in 1987 oil and gas revenues amounted to over 10 billion U.S. dollars. If effective exchange rate should be \$1=Rials 500 (in current year the black market rate has been over Rials 1300) then, cet. par., total revenues would increase to 2719 billion Rials. Consequently, the ratio of oil and gas revenues calculated at the new exchange rate (which would amount to 5471. billion Rials) to total revenue of 7219 billion Rials would go up to 75 percent compared to the actual rate of 30 percent.

Tax revenues exhibit an increase in all years covered except for two years of 1986 and 1988. Tax collections have almost doubled in size compared to that in 1981. There are three reasons for such a rise. Firstly, considerable war expenditures forced the government to put strict controls over the foreign exchange revenues and hence investment expenditures declined drastically. Therefore, capital stocks had been allowed to depreciate to their minimum level. The book values of the already existed stocks had been quite low; consequently depreciation expenses were minimal. However, due to high inflation rates, the replacement costs of capital stocks, compared to their book values had been quite high. Secondly, inflation caused revenues to increase.

Given that, during inflation, the rate of increase in other expenses such as wages and salaries, customarily, lag behind the rate of inflation, the two factors had partially been responsible for the rise in profits and hence an increase in tax revenues collected from corporate profits. Thirdly, on equity grounds, government tried to collect more taxes from occupational incomes on the belief that they enjoyed windfall profits during the inflationary period.

**Table 4: Government Revenues (Unit: Billion Rials)**

Source of revenue	1980	81	82	83	84	85	86	87	88	89	1990*
(1)Export of oil and gas	889	1056	1690	1779	1373	1189	417	766	668	763	1090
(2)Other than oil and gas	543	868	1012	1217	1620	1780	1599	1748	1832	2619	3427
(3)Taxes	340	554	614	797	899	1034	1025	1030	986	1031	1930
(4)Non taxes	202	314	398	420	721	846	575	718	846	1588	1797
Total	1431	1924	2701	2996	2993	2969	2016	2514	2500	3382	4517

\* Figures are forecasts not actual.

Source: calculated from the data provided by the Ministry of Economic Affairs and Finance; Deputy Ministries of Expenditure and tax revenues.

Table 4 reflects other faces, as follows: tax revenues did not exceed more than 50 percent of the government's revenues during the period of coverage. The highest ratio occurred in 1986 which accounted for 50 percent and the lowest ratio happened in 1982. Although, as mentioned earlier, we had the greatest fall in oil and gas revenues in 1986 ever since the revolution to the present time, but tax revenues partially compensated the fall. Repeatedly, the I.R.I. had the highest revenues, during the period under consideration, from the export of oil and gas, in 1983. This reached the highest ratio of 59 percent relative to the total government revenues. But in this year, the ratio of income taxes to total government revenues was the lowest of 27 percent relative to total revenues, afterward. Putting these facts together we reach to the point to conclude that: tax revenues are, relatively speaking, the most reliable source that the I.R.I. can confidently depend upon; whereas revenues received from the export of oil and gas are apt to external shocks and drastic fluctuations and hence an unreliable source of revenue.

To embark upon the policy implication of the point made above, we need further information. Table 5 has been provided to furnish us with the necessary information about direct and indirect taxes for a period of 1977-88 inclusive. The time path of indirect taxes move, quite expectedly, parallel to oil and gals revenues via higher incentive to import more.

As the result one can see the maximum value of oil and gas revenues in 1983 (table 4) to coincide with the highest ratio of indirect taxes to total tax revenues of 58 percent.

Speaking of reliable source of government income, after a peak in oil and gas revenues that had been realized in 1983, (Table 5), the government of the I.R.I. put more emphasis on collecting (direct) taxes to finance her expenditures. This amounts to saying that after 1983 the revenue from oil and gas lost its importance. This tendency is still in full force. In other words, the lesson from the past experience, namely unpredictable oil revenues, has changed the attitudes of government authorities towards heavy reliance on the sole and relatively important external source. However, the economy has been run on the basis of natural wealth, namely oil and gas, for quite a long time. It naturally takes time to accommodate the economy towards diversified external revenues.

**Table 5: Direct and indirect tax Revenues (Unit: Billion Rials)**

Sources and Ratios	1977	78	79	80	81	82	83	84	85	86	87	1988
Direct taxes	231	270	229	129	327	296	331	405	528	579	612	646
Indirect taxes*	213	197	140	211	227	318	464	503	505	446	418	340
Total taxes	444	467	369	340	554	614	795	908	1033	1025	1030	969
Ratio of Direct to total taxes	52	58	62	38	58	48	42	45	51	56	59	65
Ratio of Indirect to total taxes	48	42	38	62	42	52	58	55	49	44	41	35

Source: High Council of Taxation; Ministry of Economic Affairs and Finance (1989).

\* Close to 100 percent of indirect taxes is composed of import taxes. Other indirect taxes are negligible.

### **(b)Government Expenditures**

The ratio of government expenditure to some national aggregate show one thing but absolute magnitudes of government expenditures show something else. Table 6 below shows the composition of government expenditures for a period of 11 years. The four ratios to measure the size of government, discussed earlier did not show any significant increase in the size of the government of I.R.I. Nevertheless, using absolute figures of total government expenditures, however unrealistic but instructive, represented in table 6

below show a relatively important role played by the government during the period of analysis. But the catch lies in the population explosion during the war.

Rising trend of government expenditures is due to both ever increasing war expenditures and a steady rise in the population. Population growth rate of close to 4 percent forces the government to increase her expenditures on naturally greater needs on health, education, and if possible, welfare. As mentioned earlier the overall welfare of an average Iranian citizen has considerably declined.

Furthermore, the importance of the public expenditures, relative to current expenditures, has slightly increased during 1980-88 inclusive; but the pattern of trend completely changes afterwards up until 1988. In 1988 the relative importance of this item decline to its minimum of 17 percent.

The real picture in table 6 has been clouded by choosing figures at current prices. But if one chooses constant prices, the clouds would be removed and the true pictures show it; i.e., all capital stocks had been forced to depreciate. This was not true only for the public sector but also for the private sector as well.

If we go little further into depth of the argument, the outcome becomes obvious. That is, allowing capital stocks to depreciate, due to foreign exchange controls, would result in negligible depreciation expenses which used to account for a high percentage relative to total expenses. During inflationary periods, revenues will increase so would profits and corporate profits taxes.

**Table 6: Composition of Government Expenditures**  
(Unit: Billion Rials)

Title	1980	81	82	83	84	85	86	87	88	89	1990*
Total Expenditures	2404	2861	3895	3895	3632	3616	3466	3983	4625	4528	1602
(1)Current Expenditures	1730	2032	2253	2524	2476	2584	2410	2911	3394	3203	3965
(2)Capital Expenditures	568 (24)	675 (23)	915 (27)	1149 (29)	878 (24)	765 (21)	746 (21)	729 (18)	816 (17)	900 (20)	1631 (26)
(3)Other Expenditures	105	154	199	223	278	309	309	415	451	725	507

Source: National Income Accounting Department; Central Bank of Iran- and Ministry of Economic Affairs and Finance various publications.

\* All figures are forecasts not actual.

Note: All figures are at current prices. Figures in parentheses are ratios of the respective figure to total.

For further information please note that budget deficits have traditionally been financed through borrowing from the Central Bank.

Having purchased capital goods at cheapest rate before the revolution, at \$1 =Rials 75, the profit rate (the ratio of total profits to the registered capital) give unreal high rates. One solution to this problem is to allow: (1) replacement costs, instead of historical costs, tax be used by corporations and a corresponding figure to be added to the registered capital; and (2) newly appreciated capital stocks to depreciate again, despite the fact that their book values have declined close to zero. This would make it attractive to offer the stocks of corporations in stock-ex-change market. Some steps are being taken in this regard.

To complete the picture, we need to briefly discuss about negative income taxes (subsidies) indirectly paid by government. In order to protect the poor and the fixed income earners against shortages and inflation during war period, the government of the I.R.I has paid the following amounts:

**Table 7: Amount of Subsidies (Unit: Billion Rials)**

1977	81	82	83	84	85	86	87	88	89
65.8	81.3	109.7	106.1	120.2	207.1	127.3	104.6	155	206

Source: The Organization for protection of Consumer and Producers (various pamphlets).

\* Receipts not payments.

Subsidies being mainly financed through overcharges on imported goods, it is seen from the table that in 1986 during which we experienced the highest decline in oil and gas revenues, we witnessed a somewhat corresponding decline of 60 percent in subsidies. However, when the country had the highest oil and gas revenues in 1983 the amount of subsidies not only did not increase but decreased slightly relative to that in 1982.

### **(b) The Process of Budgeting**

The economy is an organic phenomenon whose affairs can not be stopped; therefore, decisions, either good or bad, have to be made. These decisions are made by bureaucrats and politicians who may neither be an economist nor even know about economics. In fact, they do not need be economists to decide economically. As long as they are properly advised by experienced and professional economists one can be confident that their decisions shall increase the efficiency and equity of the country.

To make sure, not all decisions are necessarily based upon the principles of economics. Hence, the question is this: in the context of budgeting, is there an appropriate model to explain the behavior of bureaucrats and politicians?

A behavioral analysis of the process of budgeting has been advanced by Aaron Wildavsky, a political scientist<sup>7</sup>. According to Wildavsky, the largest determining factor of the size and content of this year's budget is last year's budget;(see his book; 1964;p.13). To be brief, the model of decision making that Wildavsky has in mind is one made up of sequential or iterative procedures. The result of a sequential decision making model depends upon the order in which events are decided upon.

The outcome of earlier decisions may enter as binding constraints on current decisions placing this model in context of budget decision making implies that a decision made about this year's budget must take into account the decisions made about last year's budget and the one the year before that, and so on. A decision to build a highway or a public health care center is not a commitment to allocate resources to these activities for the next year only. Instead, these resources are committed until a decision is taken to change the level of quality of service provision. Thus, last year's budget determines this year's budget because of the large commitment of resources that is carried forward into the present from the past. The second feature of Wildavsky's model of budget decision making is that the amount of resources upon which current decisions are made is a relatively small percentage of the total. The reason for this is that the decision maker does not start from a clear sheet but instead carries forward a commitment of resources from previous decisions. Wildavsky refers to this as incrementalism; therefore current decisions are limited to accepting previous decisions.

The third feature of Wildavsky's model is that incrementalism also describes the way in which decision-makers deal with the complexities and the cost of decision-making in practice. Decision-makers have limited amount of time to prepare their budgets, although it is repeated every year.

To start each budget cycle and consider a balance of resources between sub-programs and the interrelationships between different parts of the implicit production function and study of the spill-over effects of each program would be an immense task

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<sup>7</sup> Adopted from C.V.Brown and P.M.Jackson (1982); pp.157-160.

requiring large volume of computational resources. Not only such practices would be expensive but also decision makers have limited personal computational facilities. According to Wildavsky, incrementalism is cheaper on decision making resources. Moreover, if the demander of a new program did not proceed via a piecemeal incrementahlists approach, there is always a possibility that the program would run the risk of being completely rejected.

The process of request and appropriation in the context of incrementalism can be modeled by the following simple statistical decision rules:

(1) *Agency decision rule:*

$X_{it} = b_i y_{it-1} + c_{it}$ , where:  $X_{it}$  = the requested budget by ith agency in period t,  
 $Y_{it-1}$  = the actual budget granted to ith agency in the previous year,  
 $b_i$  = a parameter  $> 1$ , and  $e_{it}$  = a randomly distributed variable with mean equal to zero.

An agency requesting a budget in this year adds a mark-up on its previous budget. If, for example,  $b_i = 1.12$  then this year's budget is 12 percent greater than that granted last year.

(2) *Committees decision rule:*

$Y_{it} = a_i X_{it} + E_{it}$ , where:  $a_i$  = a parameter  $< 1$ , and  $E_{it}$  = a randomly distributed variable with a mean equal to zero.

This rule shows that the actual budget granted by the committee is equal to some proportion (less than one) of the actual amount requested. The model, as it stands, needs a bit of refinement. That is, after this process has been continuously in use, then both the agency and the committee would know the rule of the game. Then each side would predict what the other side of the game shall play; therefore, from the one side, the requested budget will always be overstated on the belief that the committee will cut it short. From the other side, since the committee has learned from past experience that the agency has overestimated the needed budget it has the reason to cut it. In other words, over-statement of budgets and decreasing it becomes an established rule.

My past experience as a deputy minister, in the past, and as an adviser, at present, allows me to claim that this has been the rule practiced for long time in the I.R.I.; (for further detail see below).

Substituting the Agency decision rule into that of Committee's, we get the following simple rule:

$$Y_{it} = a_i b_i Y_{it-1} + (E_{it} + e_{it})$$

It means that this year's budget is a function of last year's budget. This is, actually the decision rule of incrementalism mentioned above. The error terms in each decision rule reminds us that these are statistical decision rules. In other words, the actual outcome is dependent upon the actual amount granted plus random events that occur during the year such as unforeseen flood, earthquake and the like for which budget were not granted.

The actual process of budgeting in my country is a proof that incrementalism is a reasonable description of the decision-making process. In other words, in the I.R.I., presumably like any other countries, all three features of Wildavsky's model work at full force.

The narrow range of the four ratios calculated to measure the size of the government of the I.R.I., in Table 3, gives an overall average of 25.5 percent. This ratio shows that both the numerator of the measure (i.e., government expenditures) and the denominator (i.e. GDP or GNP either at market prices or factor costs) had been controlled to change almost at the same rate.

Plan and Budget Organization being responsible for annual budget making and planning the five-year economic development programs, alongside with the legislative branch of government have performed their tasks according to the prediction of the model developed by Wildavsky as the controlling agent in the I.R.I.

Furthermore, since the share of the private sector accounts for almost three times as much as that of the public sector in GDP or GNP, it also has performed its own task in harmony with the public sector. Hence, it can be concluded that the private sector is a reliable one that government of the I.R.I. can depend upon. However, it has to be under the direct control and supervision of the respective public agents.

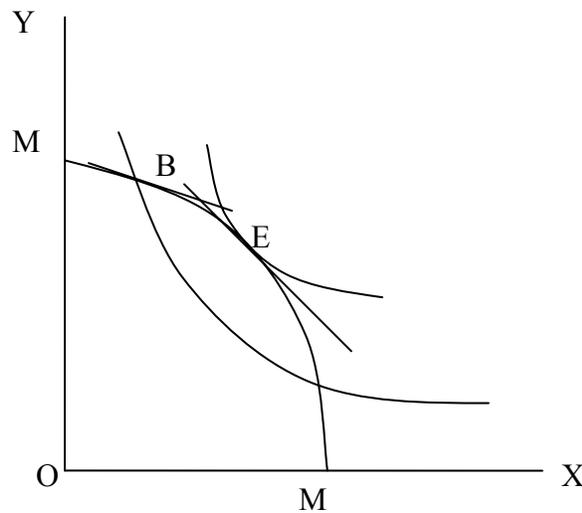
### **Part Two: Reasons for Government Intervention**

Real world markets are far away from being perfectly competitive. There are some impediments that may prevent free markets to generate allocative efficiency. Hence, government finds it to the benefit of the public to intervene. The number of the impediments to perfect competition is practically infinite. These, can, however, be

classified into three categories that include most of the cases in the real world. They are: imperfect competition, externalities, and public goods. In order to be able to carry forward the results of this part of the paper to the next, I will try to discuss each one these categories very briefly.

**(a) Imperfect Competition**

Imperfect competition includes all those situations, in which economic agents exert some market power in determining price. In such cases, a profit-maximizing firm will not produce where price is equal to marginal cost. As an example consider the case depicted in the following figure. If good X is produced in a monopoly market the profit-maximizing firm will choose that output combination which the rate of product transformation  $\frac{MC_x}{MC_y}$  is equal to  $\frac{MR_x}{P_y}$ .



This level of output corresponds to point B where the rate of product transformation is less than individuals' rate of substitution. This is obviously less than the rate of these goods market prices,  $(\frac{P_x}{P_y})$  hence, too little X will be produced as a result of monopolization of its market and optimal allocation of resources can not be achieved. This may give a reason for government to intervene into the market and, say, regulate the monopoly. However, the regulated monopolist may be forced to produce where demand cuts average cost curve. Average costs, in such cases, shall include some

mark-up. In this case, the price will be lower and output higher than that exhibited by point B in above figure.

**(b) Externality**

A perfectly competitive model is a world of an absolute absence of externalities. This market structure is a space-and-timeless economy; i.e., market distances shrink to zero and information is costlessly obtained. Furthermore, individual utilities are independent of each other. In brief, there are assumed to be neither positive nor negative externality. But realities are too complex to allow us to use such a simple hypothetical, however useful, model in practice. Societies, by and large, provide ample evidences on the presence of externalities, both positive and negative, via interactions among individuals and firms.

Probably the best institutional expression used to show the reason of externality is that of Professor G.Becker who says: externality results from improper ownership of property. We need further elaboration on this view point. Costs imposed by firms and utilities derived from consumption are hardly internal; rather they go beyond the original producer and the consumer (so much with respect to utility externalities in an Islamic economy). Therefore, there is always divergence between private and social cost (utility). In case where production of a commodity entails pollution, the social rate of product transformation will exceed the private rate of product transformation of the same commodity with no pollution. Since the price system reflects only the private costs, therefore, the social and private rates of transformation differ. The result would be that the private market will tend to produce too much of the commodity where production entails pollution, relative to other commodity.

In Islamic jurisprudence there is the principle of لا ضرر و لا ضرار which allows an Islamic government, both in production and in consumption matters, to intervene. To make sure, when negative consumption externalities occur, individual Muslims are responsible as well.

In an Islamic economy, according to my views reflected in my forth-coming book entitled: “Towards a Theory of Muslim Consumer Behavior”, due to the presence of positive utility externalities (via interdependent utility functions among Muslims) the consumption bundle as well as the pattern is somewhat different from that advocated by

western economists. The price system, again because it reflects only private utilities will not adequately register the real behavior. Therefore, it is the responsibility of Muslim economists to furnish the world with a new set of rules on Islamic welfare economics.

### **(c) Public Goods**

A third possible failure of the market system to yield an optimal allocation of resources stems from the existence of public goods for which non-exclusion principle applies. This principle makes it possible for all individuals to make use of the benefits derived from public good. The pervasive nature of this incentive will ensure that resources are under-allocated to such goods. To avoid this under allocation, people may decide to have the government produce non-exclusive goods.

I believe that the scope of public goods goes beyond the examples conventionally given such as national defense, inoculations against infectious diseases, criminal justice, and pest control and the like. Another important public good, whose importance can not be exaggerated, is “money” with all externalities attached to it. In my paper entitled: “Money in al Islamic Economy” I have prescribed that, due to peculiar characteristics of money such as not being allowed to hoard, speculate or used on interest based contracts, the government, not the private sector, shall manage it.

An important caveat is in order at this point. Due to mere existence of externalities both in consumption and production, a freely operation price system will be incapable of generating a true Pareto optimal allocation. (According to Professor S.K. Nath: a Paretian optimum is not necessarily superior to any non optimum: see p.22 of his book). Therefore, it is tempting to reason that a competitive price system could still be advocated for those sectors of the economy in which these impediments are important; hence the Pareto rules of efficiency would be satisfied there. Unfortunately, this intuitive answer to the problem of finding a second-best solution is not correct.

According to Professor R.G.Lipsey and Professor K.Lancaster (see their paper pp.11-32): it is not true that having more (but not all) of the optimum conditions hold is necessarily superior to having fewer hold. As the result, one must analyze each individual situation rather than attempt to draw such broad, all inclusive policy recommendations. This seems to me, will allow the government to exert more controls and close supervision, if not absolute intervention, on the activities of an Islamic economy.

### **Part three: The Government of the I.R.I. in the Light of the Constitution**

#### **(a) Economic Duties of the Public Sector in the Constitution**

The constitution, adopted by referendum on December 2-3, 1979, contains twelve chapters with the general principles covered in Chapter 1. Article 4 of this chapter declares that “all civil, penal, financial, economic, administrative, cultural, military, political, and other laws and regulations must be based on Islamic criteria, “As another general principle, Clause 1 of Article 3 of chapter I, states that “ the planning of a correct and just economic system in accordance with Islamic criteria is to be one of the “goals” of the Government of the Islamic Republic”.

Chapter IV of the Constitution deals exclusively with “Economy and Financial Affairs”. This chapter specifies the general form and objectives of the economic system to be adopted by the Islamic Republic of Iran. The economic system is to consist of three sectors: public, cooperative, and private. The first sector “is to include all large scale and major industries, foreign trade, major mineral resources, banking, insurance, energy, dams and large-scale irrigation networks, radio and television, post, telegraphic and telephone services, aviation, shipping, roads, railroads, and the like; all these will be publicly owned and administered by the State”. The second sector is to include cooperative companies and institutions concerned with production and distribution, established in both cities and the countryside, in accordance with Islamic criteria. “The private sector is to consist of “those activities concerned with agriculture, animal husbandry, industry, trade and services that supplement the economic activities of the State and cooperative sectors. “The precise activities of each sector are to be specified by the Consultative Assembly (the parliament)”.

At first glance, it seems that the private sector has been assigned a residual and relatively minor role in the economy. However, the above description of the cooperative sector does not assume, implicitly or explicitly, that this sector is to be totally within the public sector domain. Rather, the provision for the establishment of the cooperative sector indicates an attempt to implement and foster the spirit of the principle of cooperation in economic activities observed by the Quran and Sunnah. This sector can be wholly within the private sector domain, that is, the firms and units comprising this sector can be privately but ”cooperatively” owned just like a corporation whose shares

are owned by a large number of stock holders, as opposed to single proprietorship or (small) partnerships. This idea is reinforced by Clause b of Article 43 which designates cooperatives as means by which “conditions and possibilities of employment” can be “assured for everyone, with view toward attaining full employment” by” placing the means of production at the disposal of anyone who is able to work but lacks the means“. The same clause specifies the granting of interest-free loans as a vehicle for securing the “means of production” for those who are able to engage in productive activities but lack the financial resources to do so. Clearly, the constitutional intent is to prevent concentration of economic power in the hands of the few.

The remaining provisions of Article 43 endorse the right of everyone to choose their own line of work; prohibit the formation of monopolies, hoarding, usury, “extravagance and wastefulness in all matters related to the economy, including consumption, investment, production, distribution, and services,” and concentration of wealth; call for “planning of the national economy at each stage of its growth; “and, most important of all, require the “provision of basic necessities to all citizens. Basic necessities are defined to include “accommodation, food, clothing, healthcare, medicine, education, and the necessary facilities for the establishment of a family”.

Articles 22, 44, 46, and 47 of the constitution affirm private property rights by declaring that everyone” is the owner of the fruits of his legitimate business and labor “ (Article 46), and that private property “ legitimately obtained is to be respected” (Article 47), held” protected by the laws of the Islamic Republic” (Article 44).

The private property that is to be “protected” must meet three conditions: (1) the ownership of such property must” not go beyond the bounds of Islamic law,” (2) the property itself “contributes to the economic growth and progress of the country;” and (3) that the property “does not harm society” (Article 44).

Article 49 makes it a responsibility of the Government to “confiscate all wealth resulting from usury, usurpation, bribery, embezzlement, theft, gambling, misuse of endowments, misuse of Government contracts and transactions, the sale of uncultivated lands and other categories of land inherently subject to public ownership, the operation of houses of ill-repute, and other illicit sources. “Before confiscation can take place, however, the Government is required to carry out” due investigation and verification in

accordance with the law of Islam. “The confiscated property is to” be restored to its legitimate owner, and if no such owner can be identified, it must be placed in the public treasure.

“Economic activities declared as illegitimate sources of property rights are precisely those listed in traditional Islamic sources”. However, Article 50 of the constitution expands the traditional list to include those economic activities “that tend consistently to pollute the environment or inflict irreparable damage on it. The right to work is endorsed for everyone, and the Government has been made responsible for providing “every citizen with the opportunity to work”, as well as with the duty of creating “equal conditions for obtaining it” (article 28). In carrying out these duties, however, the Government itself must not become” a major or dominant employer” (Article 43).

Regarding distributive justice, in addition to the provisions concerning the basic necessities, the Constitution gives recognition to the right of everyone “ to benefit from social security with respect to retirement, unemployment, old age, disability, and destitution benefits, as well as benefits relating to emergencies, health services, medicine and medical care, provided through insurance and other means. “These rights are to be” assured “ by drawing down on the national income, in accordance with the law, and income derived from the participation of the people” (Article 29). Moreover, the Constitution declares that “owning a dwelling commensurate with one’s needs is the right of every individual and family in Iran”.

The Government is asked” to pave the way for implementation of this principle” (Article 31). The Government is further required to “provide all citizens with free education to the end of the middle school, and must expand higher education to the level set forth by the country for self-sufficiency “(Article 30).

To provided financial resources for the Government, the Constitution, (Article 45), places at the disposal of the Islamic Government all public wealth and property, such as uncultivated or abandoned land, minerals, seas, lakes, rivers and other public bodies of water, mountains, valleys, forests marshlands, natural forests, unenclosed pastures land, legacies without heirs, property of undetermined ownership and public property recovered from usurpers. “Additionally, the National Consultative Assembly (the

parliament) is empowered to impose taxes, in accordance with the law “(Article 51). The Government is to prepare annual budgets, “in a manner specified by law and submit them”to the national consultative assembly for discussion and approval” (Article 52). Government revenues are to be placed “in accounts at the central treasury, and all disbursements shall be within the allocations approved in accordance with law” (Article 54). An audition agency, under the supervision of the parliament, is provided for in the Constitution as a check on fiscal operations of the Government, its agencies, and its contractors (Article 54 and 55).

To ensure that all laws passed by the parliament are compatible with the Shariah, the Constitution stipulates for a Council of Guardians composed of twelve members, six Islamic scholars and “six jurists; specializing in different areas of law. ”A majority vote of the Council membership is required to declare legislation passed by the national Consultative Assembly as compatible with the Shariah, as well as the Constitution.

### **(b) Institutional Changes after the Revolution<sup>8</sup>**

The fundamental changes that took place in the I.R.I. after the revolution led to the creation of many organizations and foundations. The most important of these organizations are: (1) the Foundation for the Oppressed ; (2) the Reconstruction Crusade ; (3) the Islamic Revolution Housing Foundation; (4) the Foundation for the Affairs of the Refugees of the Imposed War; (5) the Foundation for the Martyr of the Islamic Revolution (the Martyr Foundation); and (6 National Iranian Industrial Organization).

#### **1-The Foundation for the Oppressed**

This foundation was created on March 5,1979 in order to consolidate and manage “the wealth of the Pahlavi [old regime] family as well as the wealth of those who, through their connections to the Pahlavi family, have obtained illegitimate wealth”. The foundation is also authorized to receive private contributions. The resources of the foundation are to be used to improve “the living conditions, particularly the housing needs of the oppressed”. The foundation is a non-profit organization whose resources are chiefly revenues from its holdings and whose financial operations are exempted from the laws and regulations of the General Accounting law to which every public organization is

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<sup>8</sup> Bank Markazi Jomhuri Islami Iran, Post-Revolution Economic Changes. 1983/84, pp.165-66, and 268-78.

subjected. The holdings of the foundation by March 1982 included 786 parcels of land, 412 orchards, 235 trading firms, 146 industries, 101 buildings, and 64 mines.

## **2-The reconstruction Crusade**

This organization was founded on June 16, 1976 with the aim of improving living conditions for the rural population residing in much neglected 60,000 or more villages and tribal centers in the country. Its responsibilities include: (a) activities related to improvement in production of farming and animal husbandry; (b) construction and maintenance of public buildings, servicing villages and tribal centers; (c) construction and maintenance of roads in rural and tribal areas; (d) provision and maintenance of water resources in rural areas; (e) health service assistance, provision of cultural services and activities in rural areas. The Reconstruction Crusade has been very effective in providing the above services to rural and tribal areas and was formally brought into the governmental structure as a full-fledged ministry in 1986. Before that time its financial resources were supplied through: (1) special line-item in the government budget; (2) surplus budgets of provincial governments; (3) revenues from its own projects; and (4) financial contributions from urban and rural.

## **3-The Housing Foundation**

The housing foundation began its operations on June 26, 1979 as a nonprofit organization to assist in provision of housing for the poor, especially in the rural areas. It is headquartered in Tehran and has more than 200 branches in other provinces.

Its duties include: (a) construction and repair of low-income housing units; (b) provision of Qarz ul-Hassanah loans to the poor for the purpose of construction of housing, particularly in the economically deprived and depressed areas of the country; (d) help distribute construction materials provided by government agencies as well as loans provided by the Housing Bank for construction of low-income housing in rural and tribal areas; (e) construction of government housing in rural areas; (f) planning and implementation of projects aimed at improving the living environment of the rural people; and (g) cooperation and coordination with the Government and revolutionary and legal organizations in affairs relating to planning, research, and studies in housing (particularly rural housing), construction materials, and housing education.

Financial resources needed to carry out these functions are provided through: (1) a special account set aside for this purpose called “the Imam’s Account 100”, [after Imam Khomeini’s name] established in the Bank Melli which contains private contributions designated for the Housing Foundation; (2) cash and in-kind contributions from the foundation for the oppressed; (3) cash and in-kind contributions from the development budget set aside for “rural housing”; (4) use of credit allocated by the banking system for housing; (5) income from production and distribution of construction.

#### **4. Foundation for the Affairs of the Refugees of the Imposed War**

This organization was established by a special provision of an act of the Majlis, the Parliament, on June 4, 1981 as an agency of the Ministry of Interior in order to : (a) centralize the affairs of war-damaged areas; (b) assist refugees in problems related to resettlement; (c) deal with economic, social, political, cultural and health problems of the war-torn areas and its people; and (d) help for reconstruction of the war-spoiled areas after the war and the return of the refugees to their homes. Financial resources for the foundation are provided by: (1) a government budgets; (2) gifts and other cash and in-kind contribution from the people as well as agencies; and (3) income received from the foundation’s investment in various projects.

#### **5. The Martyr Foundation**

The Martyr Foundation was organized on March 25, 1980 in order to manage the affairs and provide for the needs of the family of the martyrs as well as the disabled veterans. The financial needs of this foundation are provided through: (1) special allocation provided through the budget of the executive branch; (2) private and public contributions; and (3) sale and utilization of expropriated wealth designated for the specific use of this foundation.

The Martyr Foundation has more the 180 offices in provinces throughout the country managing a vast organization that deals with all aspects of the lives of the families of the martyrs and disabled war veterans.

#### **6. National Iranian Industrial Organization**

This organization was established in July 1979 when the Provisional Revolutionary Government announced a set of regulations called “The Law for the Protection and Development of Iranian Industries.” The aim of this organization is to

promote the industrial sector which was most severely impacted at the time of the revolution due to many factors including the flight of entrepreneurs and owners of many factories, labor problems, uncertainties regarding ownership rights, and lack of clear mandates on the rights and responsibilities of the private sector. According to this law, the existing industries were divided into four categories based on the conditions of ownership and financial status of each:

- A. In addition to oil, gas, railroads, utilities, and fisheries which had already been nationalized, certain other industries such as automobile manufacturing, metal production, shipbuilding, and airplane industries were also declared nationalized. The private shareholders and owners of these industries were compensated the net worth of their shares.
- B. Large industries and mines, the owners of which had accumulated great fortunes via their illegal relationship with the previous regime, and many of whom had already abandoned their shares, came under the possession of the Government. The claims of these owners were to be settled through legal channels.
- C. The Government also took possession of industrial units for which the liabilities to the Government and to the banking system exceeded their assets.
- D. All other industries which did not fall into categories B and C remained in the private sector.

By the end of March 1983 some 580 industrial units were nationalized in accordance with the provisions of the above-mentioned law of which about 130 were turned over to the three ministries of “Industry”, “mines and Metals”, and “Heavy Industries”. About 450 industrial units employing more than 170,000 workers were placed under the control of the newly organized “National Iranian Industrial Organization.” These units had total assets of Rls. 774 billion and total liabilities of Rls. 890 billion of which Rls. 404 billion (or 45 percent) were owed to the banking system.

In order to evaluate the degree of burden on the Iranian annual budget of the abovementioned organization attention has yet to be drawn to some facts as follows:

The Foundation for the Oppressed has its own revenues and budgets independent of the annual budget. The budget and the annual report, in fact, are approved by the

Muslim leader. The Foundation's budget is not only a burden to the Government budget but also due to its surplus generating feature it does indirectly contribute to the well-being of some economic classes of the country.

The Reconstruction Crusade of the early years after the revolution has been transformed, as noted earlier, to a full-fledged ministry. Therefore, its expenditures show up in the annual budget which, due to common low efficiency of the public sector is a great burden. However, it was quite successful in some aspects of its responsibilities.

The Housing Foundation generally has deficits with regard to its heavy duties in the depressed areas. The Foundation for the Affairs of the Refugees of the Imposed War and also the Martyr Foundation have become great burdens, however useful and musts to the country, on the annual budget.

The National Iranian Industrial Organization, which once was said that it composed, on the basis of registered capital, of almost 70 percent of the country's industrial units. In order to avoid any further unrest during the then going war, the government appointed his own managers to these some 580 industrial units. From the one side, the managers were not qualified ones, and from the other side, government, due to then existing rules of governing the public sector, did not, indirectly, allow them to manage the unit the same manner as a manager in the private sector wishes to. Furthermore, shortages of foreign exchanges, due to severe government controls, forced them to operate the unit under some 50 percent of the nominal capacity. Putting all these factors together accounted for great losses in many units, whose burden naturally was on the budget. The burden was even larger through the creation of three ministries called: "Industry", "Mines and Metals", and "Heavy Industries". Their duties had previously been assumed by one ministry called: "Industrial and Mines".

On efficiency grounds, there is not any legitimate reason for a country whose highest value of non-oil and gas exports amounted to less than one billion American Dollars to have three different industries each of which having its own budget and bureaucracy.

Last, but not the least, factor contributing to the growth of the size of the government, was that Majlis decided, for some years, to approve the foreign exchange budget, in the same way as the regular [Rial budget. In order to properly use the

controlled foreign exchange revenues, it was claimed that the benefit of the public can best be served through establishment of centers to supply and distribute commodities. To this end 10 different large centers had been created in the Ministry of Commerce in order to import and distribute various groups of commodities. Not only these centers controlled the importation of great many items but also any other items intended to be imported to the country required the appropriate center's approval. Obviously, each center had its own personnel and budget included in the said ministry's budget.

### **(c) Recent Developments and Outlook**

In the last 12 years the Iranian economy has experienced a Revolution, leading to a protracted and costly war with Iraq, various trades and financial sanction, and the turbulence of the world oil market. These developments brought profound institutional and structural changes to the economy.

With the migration of many owners of businesses and property as well as skilled workers, combined with a decision to bring strategic industries and activities under the state control, the government took over the bulk of the countries manufacturing and service sectors. The exigencies of war promoted the government to extend its regulation of the economy into such areas as prices, distribution, and external trade, with the result that the scope and activities of the private sector circumscribed. The war also entailed the diversion of human and material resources to military purposes as well as marked changes in the composition of government expenditures and in the composition and direction of foreign trade.

The ended war and removal of the internal as well as external pressures from the economy has given chance to top authorities to give some thought into the problems created during the war period.

In order to locate the economy where it should stand, studies have been undertaken in various areas, all of which are in the process of compilation; therefore specific decisions have rarely been announced. However, information released through newspapers and magazines and also official interviews are evidences of such developments. The most important of them crudely include the following; irrespective of priorities:

(a) To bring about one single rate for foreign exchange in order to eliminate great many distortions in different markets. Presently, there are four major rates for foreign exchange, namely: official, preferential, competitive, and black market rate of exchange; it should be mentioned that black market rate is over 20 times as much as the official rate.

(b) Deregulation of the private sector: There has been considerable movement to make it easy and pave the way for the private sector perform its duties especially with regard to paper works, import regulations, foreign exchange demands and like.

(c) Limiting the Subsidy Bases: Some subsidies generated distortions in different markets. Government has already decided to largely eliminate the subsidy on some items like milk. Probably the most important subsidy has been the under-valued foreign currencies given to nationalized industries. Recent elimination of such subsidies has already developed new problems. For example, one of the locally built automobiles called Paykan has been announced to be sold as much as over 36 months of a recently adjusted university professor's monthly salary. More thought has to be given to such problems.

Subsidy on bread is still in force. This subsidy has a two-fold character: one is about over-valued local currency, and the next is on the supply of bread at a cost lower than that dictated by the official exchange rate. These two factors combined together bring about the purchasing power of an American dollar priced at black-market to over 100 loaves of bread. Bread being the Iranian staple food can no longer be a substitute for expensive rice; therefore it does not seem to have this subsidy eliminated in a near future. Other subsidies on necessities have also been kept intact.

(d) Reappraisal of the assets of publicly owned corporations: Government has come to the conclusion that it is no longer necessary, on efficiency grounds, to keep ownership of these industrial units any further. Many researches have been undertaken to study the financial state of such units which are under the control of National Iranian Industrial Organization, as discussed earlier. Evidences show that if assets of these industrial units are duly reappraised, the current value of such assets makes it quite profitable to have the shares sold in stock exchange

market. Before a conclusive result has been reached from the studies, it is said that government has already decided to turn over about one third of the shares to the respective laborers and the rest to the general public.

In summary, a lot has to be done in order to be able to disentangle the economy from what had been, intentionally or unintentionally, developed over the past 12 years. By and large, economic outlook seems rather clear, but years have to come to see how much the government has succeeded in performance in conformity with the constitution of the Islamic Republic of Iran.

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