PLANNING & MACROECONOMIC STABILIZATION IN IRAN

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Abstract

This paper presents an account of the main economic developments in the Iranian economy over the period of the First Five-Year Economic, Social and Cultural Development Plan (1989/90-1993/94) of the Islamic Republic, provides an overall evaluation, and examines the objectives and economic rationales behind the Second Five-Year Economic, Social and Cultural Development Plan (covering the period o 1995/96-1999/2000) which has been recently approved by the Majlis (the Consultative Assembly the Islamic Republic). The emphasis of the paper will be on government's stabilization of and liberalization programs, rather than the structural details of the plans.

ملخص

تقدم هذه الورقة تقييما للتطورات الاقتصادية الرئيسية في الاقتصاد الايراني خلال فترة الخطة الخمسية الاولى للتنمية الاقتصادية والاجتماعية والثقافية (١٩٨٩/١٩٩٠-١٩٩٣/١٩٩٤) في الجمهورية الاسلامية الايرانية وذلك بتقديم تقييم شامل واختبار للاهداف والمنطق الاقتصادي وراء اعداد الخطة الخمسية الثانية للتنمية (١٩٩٥/١٩٩٦-١٩٩٩/٢٠٠٠) والتي تم اقرارها من المجلس (مجلس الشورى في الجمهورية الاسلامية الايرانية). وسيكون تركيز الورقة على برامج التثبيت والتحرير الحكومية اكثر منه على التفاصيل الهيكلية للخطة.

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Introduction

The ending of the Iran-Iraq war in August 1988 signalled the beginning of a new phase in the development of the Iranian economy, and presented Mr. Rafsanjani's newly elected government with an important opportunity to regenerate the Iranian economy, and to reverse the deteriorating trends of the previous decade. Over the period 1978-1988, the real output and investment fell by annual average rates of 1.8 and 6.6 per cents, respectively, while the total real consumption expenditures had remained largely stagnant, with population growing at around 3.2 to 3.9 per cent per annum.[1] These adverse economic conditions were largely due to the revolutionary upheavals, the freezing of the country's foreign assets, economic sanctions, the costly and protracted eight-year war with Iraq, the influx of almost 2 million Afghan and 1 million Iraqi refugees, sharp reduction of oil production and a highly volatile international oil market. But they were further exacerbated by extensive nationalization, continued uncertainties over the role of the private sector in the economy, centralized and inward-looking government policies aimed at maintaining a highly over-valued official exchange rate through import compression, foreign exchange restrictions and generally interventionist economic policies with far reaching implications for resource allocations, particularly in the financial and industrial sectors. The result had been an economy in a state of acute disequilibrium with highly distorted price signals, and an ever widening gap between the official and the black (or "free") market exchange rates.[2] It was clear that the economic policies of the previous decade could not be continued, and a new approach to the management of the economy was needed.

The First Five Year Economic, Social and Cultural Plan, covering the period 1989/90 to 1993/94, represented the regime's manifesto for the reconstruction of the economy, and provided an important framework within which the government's reform and liberalization policies could be implemented. This paper presents an account of the main economic developments over the period of the First Plan, provides an overall evaluation, and examines the objectives and economic rationales behind the Second Five-Year Plan which has been recently approved by the Majlis (the Consultative Assembly of the Islamic Republic). The emphasis of the paper will be on government's stabilization and liberalization programs, rather than the structural details of the Plans.

The First Five-Year Plan

This Plan was formally approved by the Majlis in January 1990 and was the result of years of negotiations and compromise, which was made possible only after the cessation of hostilities with Iraq. The primary aim of the Plan was to regenerate the economy, carry out the reconstruction of the war-damaged regions, promote private investment, and initiate a reform and liberalization programme primarily aimed at foreign exchange and trade policies. The overall target of the First Plan was to achieve an annual average growth of 8.1 per cent in real GDP, 11.6 per cent in real investment, and an annual average growth of 5.7 per cent in real private consumer expenditures. Another important quantitative objective of the Plan was to stabilize the economy's rate of monetary expansion to an average annual rate of 9.4 per cent, and reduce the rate of inflation from 28.9 per cent in 1988/89 (1367) to an annual average rate of 15.7 per cent over the duration of the Plan.[3]

The breakdown of the Plan's growth objectives by the main sectors of the economy together with the associated realized growth rates are given in Table 1. Under the Plan, real output has increased by an annual average rate of around 7.1 per cent, which is only slightly below the Plan's overall target (at 8.1 per cent). The situation is different, however, when one considers the growth performance of individual sectors in particular years. For example, while actual average growth rates under the Plan for the agriculture, oil and service sectors are generally in line with those envisaged in the Plan, the same is not true of the other, mainly industrial and construction sectors. The average annual growth rates of value added in industries and mines, and construction were below their target values by 6.2 and 9.2 per cents, respectively, while the growth of value added in water, electricity and gas sector (at 12.7 per cent) exceeded the Plan's target by 3.6 per cent. These discrepancies are even more pronounced once attention is focused on particular years. There is a clear tendency for the actual growth rates to exceed the target rates over the years 1990/91 and 1991/92, and then significantly fall short of the planned rates over the last two years of the Plan. The high growth achieved during the first half of the Plan largely reflects the initial effects of the trade and foreign exchange liberalizations and the utilization of unused capacities in the economy, and was accompanied by an unprecedented surge in private consumption expenditures. With the removal of trade and foreign exchange restrictions private consumption expenditures at constant prices which had shown only a modest growth of around 2.5 per cent in 1989/90, grew by the staggering rates of 19.5 and 9.5 per cents over the years 1990/91 and 1991/92, respectively, followed by more moderate rates of 5.1 and 2.6 per cents for the last two years of the Plan. (see Table 2). A similar pattern can also be seen in investment growth. Over the years 1990/91 and 1991/92 gross fixed capital formation at constant prices rose by 13.3 and 40.9 per cents, respectively, while during the last two years of the Plan real investment grew by 7.1 per cent in 1992/93 and is estimated to have grown only by 0.6 per cent in 1993/94.[4] Over the course of the Plan real private consumption expenditures rose by an annual average rate of 7.9 per cent which is well in excess of the Plan's annual average target of 5.7 per cent. In contrast, the average growth of real investment was in line with the Plan's target, although once again there are important discrepancies between the actual and planned investment growths over the different years of the Plan. Public sector consumption expenditures at constant prices also grew very much in line with their target values, and averaged to around 4.0 per cent as compared to the planned figure of 3.8 per cent (see Table 2).

The high growth of output and the excessively high private consumption growth during the first three years of the Plan were primarily achieved through increased utilization of existing capacities and increased imports, particularly final consumer goods imports. The imports of goods and services rose from 13.5 billion dollars in 1989/90 to around 25 billion dollars in 1991/92. According to the national income statistics, over the first three years of the Plan imports of goods and services at constant prices increased by an average annual rate of around 28 per cent. Given Iran's limited capacity to export, these high levels of imports could not be sustained and led to a substantial deterioration of the country's external current account, and created important difficulties for the government in meeting the repayments of the economy's short-term debts, estimated to be around 18 to 20 billion dollars. (See below for more details). The financing difficulties and foreign exchange shortages once again presented the government with two opposing policy choices: a freely floating exchange rate accompanied with strict control of private and government credits, or a reversion to a policy of trade restrictions and foreign exchange controls. The indications are that the latter option is now being followed. It is, however, important to note that both policy options have similar short-term consequences for the real economy and lead to a curtailment of imports and a slow down in output growth. In fact imports have already begun to fall in real terms. In 1992/93 imports of goods and services at constant prices declined by 9.81 per cent as compared to a rise of 29.6 per cent in the preceding year. Over the years 1993/94-1994/95 imports have continued to decline at an even sharper rate. The GDP growth is estimated to be only around 2.5 per cent in 1993/94, and is likely to be even lower in the coming year.

Trends in Monetary Aggregates and Inflation

In addition to output, consumption and investment targets, the First Plan also stipulated upper bounds on the average rate of monetary growth and the inflation rate. The plan was to limit the rate of expansion of the total private sector liquidity (namely the M_2 measure of money supply) to an annual average rate of 9.4 per cent, and the rate of increase of the index of retail prices to an annual average rate of 15.7 per cent.[5] However, as can be seen from Table 3, money supply (the M_2 measure) grew by an annual average rate of 25.2 per cent, thus substantially exceeding the Plan's target. The M_1 measure of money supply grew slightly less at around 23.8 per cent, mainly reflecting the move from cash and non-interest paying deposits to term-investment deposits paying returns of between 7 to 15 per cent per annum.[6] The index of retail prices rose by an annual average rate of 18.8 per cent during the Plan, which was much closer to the Plan's target of 15.7 per cent. However, it is important to note that due to direct and indirect government subsidies on essential food stuffs, energy and transportation, the index of retail prices does not fully reflect the extent of inflationary pressures that have been present in the economy over the past 5 years. A more appropriate overall measure of inflation is the rate of change of the implicit deflator of the Gross Domestic Product. According to this measure the average rate of inflation over the Plan has been around 25.3 per cent, which is substantially higher the rate of increase in the retail price index.[7] This discrepancy is, however, of short-term nature and largely reflects the time delays involved in the transmission of inflationary pressures to the final goods prices, and the fact that with the substantial depreciation of the exchange rate the level of government subsidies (direct and indirect) on consumer goods have been rising; largely neutralizing the adverse effects of the devaluation on a number of essential commodities such as bread, fuel, water and electricity.[8] But one would expect that in the long-run most of the excess of the inflation in the implicit GDP price deflator over the inflation in the retail price index to show itself in a higher rate of increase in the level of consumer prices in the future.[9]

The Plan's overall monetary target of 9.4 per cent per annum, has clearly been out of line with economic realities. But more importantly, it has not even been consistent with the Plan's own inflation target of 15.7 per cent per annum. In a developing economy such as Iran, one would expect the money supply growth to exceed the inflation rate and not *vice versa*. This is confirmed by the price and money supply data given in Table 3. Over the period 1979/80-1993/1994, the average annual growth of money supply exceeded the growth of retail prices by 2.9 per cent, and that of the GDP price deflator by 2.0 per cent. A similar result also follows if attention is confined to the period after the revolution and before the start of the First Plan. Over the period 1979/80-1988/89, money supply (M_2) and the index of the retail prices grew by annual average rates of 20.1 and 19.0 per cents, respectively. The smaller rate of increase in the real money balances (the difference between the money supply growth and the inflation rate) over this period is largely explained by the negative output growth experienced during the period. It is, however, important to note that the revolution seems to have significantly affected the relationship between money supply growth, output and inflation which could have important consequences for the efficacy of monetary policy in relation to the control of inflation. The income elasticity of demand for money appears to have declined from around 1.83 before the revolution to around 0.41 after the revolution. This suggests that the same rate of expansion in private sector liquidity is likely to have more inflationary consequences after than before the revolution. The low income elasticity of demand for money after the revolution is also indicative of the serious inefficiencies that exist in the banking sector.[10]

Another important feature of the trends shown in Table 3 is the rate at which money supply growth and inflation have been accelerating over the last two years of the Plan. The growth of money supply (the M_2 measure) has increased from about 25 per cent in 1992/93 to over 34 per cent in 1993/94. Similarly, the index of the retail prices has increased from 20 per cent in 1991/92 to 22 per cent in 1992/93, and then to 26.3 per cent in 1993/94. The pattern of price changes based on GDP deflator over these three years is even more striking and shows a rise in the rate of inflation from 23.6 in 1991/2 to 37.1 per cent in 1993/94. The more recent data covering the first half of 1994/95, also suggest that these rising trends in money supply growth and inflation are continuing unabated.[11] The acceleration in the rate of inflation, not surprisingly, has been associated with acceleration in the rate of money supply growth. Figure 1 shows the close association that has existed between growth of money supply and inflation over the post-revolutionary period.

The factors contributing to the growth of the private sector liquidity are, however, highly complex and in the case of Iran involve an important political dimension. Given the rather under-developed nature of the capital and bond markets in Iran, almost all financing needs of the public and the private sectors are met through the banking system. Therefore, the expansion of credit to the private and the public sectors are among the most important driving forces behind money supply growth, and hence inflation.[12] The annual rates of change of the private and the public sector indebtedness to the banking system are given in Table 3. Over the post revolution period the indebtedness of the private and the public sectors to the banking system have increased by annual average rates of 19.7 and 24 per cents, respectively, as compared to an average annual rate of 21.8 per cent for the money supply growth. The corresponding figures over the duration of the Plan are, respectively, 32.7, 20.5, and 25.2 per cents.[13] At first it appears that advances to the private sector are largely to be blamed for the excessive expansion of the liquidity over the past five years. But a closer examination of the annual growth rates in Table 3 reveals a highly uneven expansion of credits to the private and public sectors. The rate of growth of private sector credit peaked in 1991/92, while the growth in public sector credit was successfully controlled at around 9.6 to 12.7 per cents over the first four years of the Plan, but shot up to 59.7 per cent in 1993/94. This uneven pattern is closely related to the pace and timing of government liberalization and exchange rate unification policy. The 39.1 per cent rise in private sector credit in 1991/92 was a direct consequence of the removal of the credit ceilings and the application of the floating exchange rate to a wider class of private sector imports. The effect of the exchange rate depreciation on public sector borrowing requirements did not, however, fully become transparent due to substantial increases in government's rial revenues from the sales of foreign exchange at preferential rates in the free market.[14] But such increases in government revenues are short-lived and can only be maintained by a continual process of exchange rate depreciation which is clearly undesirable, as well as being ineffective in the long-run. Therefore, the public sector indebtedness to the banking sector is likely to show considerable growth over the next few years, unless concerted efforts are made to increase tax revenues substantially. Other possibilities for reducing the growth of public sector indebtedness to the banking system, such as reductions in growth of government expenditures, and greater control of the operations of public and semi-public corporations (such as the enterprises under the auspices of the Foundations for the Oppressed) also need to be considered, although they pose difficult political choices for the government.

In the final analysis the main causes of the excessive monetary expansion has to be found in government's unwillingness to oppose credit demands of politically powerful groups (both inside and outside the government). In Iran these political considerations are more critical for the conduct of monetary and credit policies, both because of the size and political importance of the semi-public enterprises, and the relatively non-responsive nature of interest rates to changes in the economy's inflationary environment. Under the Plan, actual "profit" rates paid on bank deposits have changed little in comparison to high and rising rates of inflation. For example, the highest actual return paid on five-year investment deposits was increased from 13 per cent in 1991/92 to 15 per cent in 1992/93, while the inflation rate (measured by the retail price index which registers the lowest rate of inflation) over this period rose from 20 to 22 per cents, respectively. Therefore, yielding <u>negative</u> ex post real rate of returns of 7 per cent per annum, while in view of economy's annual average growth of 7 per cent and its long-run growth potential, one would have expected real rate of returns of around 3-4 per cent. This degree of "financial repression" inevitably have undesirable consequences for the mobilization of domestic savings, encourages capital flight, and promotes speculative activities, particularly in real estate and foreign currencies.[15] The bank's lending rates were also well below the rate of inflation and ranged from 9 to 13 per cent in 1992/93; thus increasing demand for bank credits, which coupled with the removal of credit ceilings in 1991/92, led to excess increases in private sector indebtedness discussed above. Over the past year there has been further increases in the bank's lending rates, but despite these increases bank's lending rates (even for commercial loans) are still substantially below the rate of inflation. There is an obvious tendency for increases in interest rates to systematically lag behind the rises in the inflation rate, thus maintaining high negative real interest rates, albeit at higher and higher nominal interest rates. These developments clearly highlight the dangers of piece-meal reforms of the financial sector. Abolition of credit ceilings and other restrictions on bank credits would be desirable and effective only if accompanied by (profit) rates on deposits and bank lending rates that are responsive to market forces and fully reflect the inflationary expectations that are present in the economy. An effective policy of financial liberalization also requires a competitive banking system where the lending policies of the banks are based on commercial considerations rather than on political factors.

Trade Liberalization and Exchange Rate Unification

One of the major objectives of the First Five-Year Plan was to rationalize the foreign exchange market, promote non-oil exports and achieve a more efficient allocation of foreign exchange resources. Rigid adherence to a fixed official exchange rate during most of the 1980's, where the economy had been subject to a number of large negative shocks accompanied by relatively high domestic inflationary pressures, had resulted in a highly overvalued currency. The overvaluation of the official exchange rate became particularly serious over the latter half of the 1980's, and led to substantial premiums on the black market rate. The premium rose from 200-300 per cent in the early 1980's to 500-600 per cent by mid 1980's and then reached phenomenal rates of over 2000 per cent by 1989. The existence of these enormous premiums introduced gross distortions in relative prices, encouraged rent-seeking at the expense of productive activities, and masked large government subsidies to consumers and producers with easy access to the country's foreign exchange earnings at the official rate.[16] With income from oil exports dwindling and import requirements rising, particularly during the initial years of the Plan, rationalization of the foreign exchange market became a top economic priority.

In 1988/89, Iran's total foreign exchange receipts from goods exports at current prices amounted to 10.7 billion dollars which was less than half of Iran's foreign exchange receipts before the revolution. The fall in the country's foreign exchange revenues would be even more pronounced if one allows for increases in import prices over the period and Iran's rising population. Per capita foreign exchange revenues from oil exports measured in constant 1978 dollar prices has shrunk from $500 in 1978/79 to $110 in 1988/89, namely less than a quarter of its value before the revolution. Nevertheless, exports of oil and gas still accounted for the bulk of the foreign exchange receipts, with non-oil exports amounting to around 1 billion dollars. (See Table 4). Furthermore, it was not expected that oil exports could be expanded significantly, due both to limited production capacities and the rapidly rising domestic oil consumption, largely brought about by artificially low, and in real terms declining domestic energy prices. The oil production and oil export targets envisaged in the Plan have all been met. Under the Plan oil exports were to rise from around 1.99 million barrels per day (b/d) in 1989/90 to 2.29 million b/d in 1993/94. As it turned out oil exports rose from 1.82 million b/d in 1989/90 to 2.40 million barrels in 1992/93, thus over-shooting the Plan's target. However, due to lower than expected prices of oil exports over the last three years of the Plan, foreign exchange receipts from oil and gas exports have fallen short of their targets. This short fall amounted to 25 per cent for 1993/94, though for the whole Plan period it was only 7 per cent.[17]

Faced with realities of capacity constraints on oil production and the vagaries of the international oil market, a large and increasing part of Plan's foreign exchange requirements had to be met from other sources, such as further increases in non-oil exports, a more efficient use of oil and gas revenues, and foreign borrowing. Reform of the foreign trade and exchange system was therefore essential for a successful implementation of the Plan. As the first step towards meeting this goal, in 1989/90 surrender requirements applicable to several non-oil exports were significantly reduced or eliminated, and a special "service" exchange rate of Rls 845 = US$1 was introduced for certain payments by qualified individuals. The multitude of exchange rates in effect were replaced by three main rates: the "official" rate (Rls 70 = US$1), primarily applicable to foreign exchange transactions of the public sector, a "competitive" rate for certain essential private sector imports, and a "floating" rate for other approved private sector imports.[18] The proceeds from non-oil exports were allowed to be converted into rials at the preferential floating rate, an Export Development Bank for promotion of non-oil exports was founded in 1991/92, barter agreements were cancelled with a number of countries in the old Soviet Block, obligation on incoming passengers to declare the importation of foreign exchange for the equivalent of $5,000 was removed, and out-going passengers were permitted to export foreign currency up to the equivalent of $10,000 per person, lists of goods to be imported at the "competitive" and at the "floating" rates were gradually extended.[19] Largely as a result of these policies, and the substantial increases in private and public sector credits, imports of goods and services more than doubled between 1988/89 and 1991/92, rising from $13.0 billion to $31.0 billion. (See Table 4). Non-oil exports also responded vigorously to the favourable new economic climate and rose steadily from $1 billion in 1988/89 to $3.7 billion in 1993/94.[20] Despite these substantial increases in non-oil exports, because of stagnant oil and gas revenues, and in particular due to much higher than expected imports of goods and services, the current account of the balance of payments showed a deficit of $9.4 billion dollars in 1991/92, followed by a further current account deficit of $6.5 billion in 1992/93, and $4.2 billion in 1993/94.

In spite of these large and continued balance of payments deficits, and the emerging evidence of government's difficulties with external debt repayments, the Central Bank of the Islamic Republic decided to go ahead with the next stage of its exchange rate unification policy and in April 1993 announced that from then on all private and public foreign exchange transactions (except for about $4 billion of government imports of essential commodities) would be conducted at a new "floating" rate, to be determined daily on the basis of the balance of supply and demand for foreign currency. Initially, the policy proved to be quite effective and the gap between the new "floating" rate used in bank transactions and the "free" market rate used for transactions outside the banking system virtually disappeared. From April to September

1993 the two rates differed by less than 0.5 per cent. But with deficits on balance of payments continuing, and evidence on the government's inability to meet its external debt mounting throughout the year, coupled with high and rising domestic inflation, the gap between the two rates started to widen in late October 1993; a trend which has continued ever since. In December 1994, the free market rate for one US dollar stood at 2,680 rials and was some 50 per cent higher than the so-called "floating" rate, which has been kept unchanged at its level of 1,750 rials per US dollar since December 1993.[21] In recent months another market ("black") has developed for foreign exchange, where one US dollar is being transacted at about 3,240 rials in mid January 1995.[22] Clearly, this constitutes an important reversal in the government's exchange rate unification policy, and if allowed to continue could jeopardise most of the reform policies that have so far been put into effect, and is likely to result in the repetition of the economic policy mistakes of the past 15 years. Any significant policy reversal at this stage is likely to lead to further political and economic uncertainties, with undesirable consequences for growth and inflation. It would also cast doubt on the feasibility of achieving the growth and inflation objectives of the Second Five-Year Economic Plan which has been recently approved by the Majlis.[23]

The Second Five-Year Plan

The Second Plan covers the period 1994/95-1998/99, but because of delays in its approval by the Majlis and the financial difficulties of the government its implementation has been delayed by one year and is to begin in March 1995. This Plan very much represents a continuation of the economic and social policies of the First Plan, and places considerable emphasis on macroeconomic stabilization programmes, and unification of exchange rate as important pre-requisites for attainment of the Plan's quantitative objectives.[24] Two different scenarios concerning the foreign exchange revenues from exports of oil and gas were considered in the Plan documents submitted by the government to the Majlis. Under the first scenario it was assumed that total foreign exchange revenues from oil and gas exports amounted to $69.3 billion, while under the second "high" income scenario, the total foreign exchange revenues from oil and gas exports were assumed to be $73.6, or higher by only 6 per cent over five-years. The GDP growth targets under these two scenarios were set at 5.4 and 5.9 per cents per annum. It was further assumed that the government budget would be balanced throughout the course of the Plan, a unified exchange rate policy would be in effect and the exchange rate would be determined according to a system of managed float, the country's foreign liabilities would be reduced, and as compared to the First Plan, a larger share of the government budget would be allocated to development expenditures.

Despite the prolonged period that the proposed plan has been under review, and the often heated debates that have surrounded its objectives and projections, what has now been finally approved by the Majlis differs only marginally from what had been originally submitted by the government. The GDP growth target is now set at 5.1 per cent per annum over the Plan's duration, and is only slightly below the output growth targets envisaged in the proposed plan.[25] The approved Plan, however, places relatively greater emphasis on the development of the agricultural sector, largely at the expense of construction and service sectors. The sectoral average annual growth rates under the Plan are: 4.3 per cent for agriculture, 1.6 per cent for oil, 5.9 per cent for industries and mines, 8.0 per cent for water, electricity and gas, 4.0 per cent for construction, 4.7 per cent for transportation, 6.8 per cent for communications, and 2.6 per cent for other services. These are much lower than the growth targets in the First Plan (given in Table 1), and largely reflect the realities of Iran's limited capacity to produce oil for exports, expected weak international oil prices, and the government's aim of reducing the economy's dependence on external financing. Under the Plan foreign exchange revenues from oil and non-oil exports is projected to be $100,185 million ($72,658 million from oil exports and $27,527 million from non-oil exports), while the total imports of goods and services are projected to amount to $91,979 million; thus leaving $8,206 million for the repayments of principle and interests on foreign loans. The Plan also stipulates that the country's total foreign indebtedness (whether short-term or long-term) should not exceed $25 billion in the final year of the Plan.

2. In line with the reduced output growth, the Plan envisages real private consumption expenditures at constant 1982/1983 (1361) prices to grow at an annual average rate of 4.0 per cent, while reducing public consumption expenditures by an annual average rate of 0.9 per cent, in real terms. In contrast, the Plan's target for growth of investment expenditures at constant prices is set at 6.2 per cent per annum. These growth rates clearly show the high priority given by the government to private consumption over government consumption, and to investment over consumption, and are in line with government objectives as manifested in the First Plan. (see Table 2). On a sectoral basis transportation, communication, oil and gas, and agricultural sectors have given the highest investment priorities. The average annual growth of investment expenditures at constant prices in these sectors are projected to be 10.5, 9.4, 7.5 and 7.2 per cents, respectively. The projected investment growths in other sectors range between 4.3 to 6.9 per cents, per annum.

3. Expansion of non-oil exports has also been given a high priority in the plan, and it is assumed that under the Plan foreign exchange earnings from non-oil exports rise by an average annual rate of 8.4 per cent, as compared to an average annual growth of 3.4 per cent in foreign exchange revenues from oil exports.

4. On the nominal side of the economy, the plan aims to bring down the annual growth of private sector liquidity and the rate of inflation to 12.5 and 12.4 per cents, respectively.

It is also projected that with the tight control of government consumption expenditures it will be possible to limit the average annual growth of public sector indebtedness to the banking system to 3.8 per cent. The Plan also stipulates that 55 per cent of the total increase in bank credits should go to the private and the cooperative sectors of the economy.

5. The level of subsidies paid for the consumption of essential commodities, comprising medicine, dried milk, wheat, rice, cooking oil, sugar and cheese, are to be kept at their 1993/94 (1372) levels in US dollars. This will in effect prevent the prices of essential food items and medicine to rise with inflation, and will result in further distortions in relative prices. The Plan also addresses the problem of large implicit subsidies on domestic energy consumption, and sanctions limited increases in domestic prices of energy products, which is a welcome first step in the right direction, although it may be too little, too late![26]

In addition to these quantitative targets, the Plan pays special attention to the development of product and capital markets, reform of the country's administrative system, improvements in income and wealth distributions, strengthening of the social security system by providing free medical and health insurance for the "vulnerable" groups in society, redirection of the government subsidy programme towards families with low incomes, and elimination of regional imbalances. The Plan also places important emphasis on a number of social and cultural objectives that lie outside the scope of the present paper.

The output and investment growth targets seem plausible, and in the absence of major political upheavals, wars or other unpredictable crises seem quite feasible. The assumptions concerning oil production and oil prices are also plausible and if anything err on the side of caution and may turn out to be too pessimistic. The nominal targets set for the growth of the private sector liquidity and inflation seem much less plausible and are less likely to be achieved. As noted above, historically the growth of private sector liquidity has been higher than the rate of inflation. Therefore, as with the First Plan, the money supply growth and inflation targets envisaged in the Second Plan do not seem to be consistent with historical realities. In this connection the planned change in the composition of the Money and Credit Council towards more political appointees is likely to make the task of controlling the private and public sector credits and inflation much more difficult.[27] Similar qualifications also apply to the possibility of achieving targets set for government finances (namely balanced budgets), and the level of foreign indebtedness.

Concluding Remarks

After many years of revolutionary upheavals and wars, the First Five-Year Plan provided Mr. Rafsanjani's government with an important opportunity for regeneration of Iran's war-damaged and ailing economy. It also provided the government with a reasonably cohesive framework for the formulation and implementation of badly needed reforms of the trade and foreign exchange systems. The Plan's growth objectives were, however, rather ambitious and attempts at achieving them have led to substantial balance of payments deficits and, given Iran's unfavourable international position, have created serious external financing difficulties for the government. These developments have been further exacerbated by hasty and badly-timed moves towards unification of the exchange rate. In consequence, the pace of economic growth has slowed down considerably, inflation has reached new heights and is still rising, and the country is facing the daunting task of servicing and repaying large foreign debts. Faced with these difficulties, over the past year important steps have been taken by the government to stabilize the economy and alleviate the country's external financing difficulties. Foreign debts are being extended and in some cases even repaid. Foreign exchange expenditures are being reduced, foreign exchange receipts are increasing, and public expenditures are being moderated.

It is, however, important to note that these policies while essential for the stabilization of the economy, are likely to be at the expense of the real economy, and could lead to substantial loss of production and increased unemployment without necessarily resulting in a reduction of the inflation. It is therefore important that such stabilization policies are also accompanied by strict control of private and public sector credits. The control of the foreign exchange transactions, without an effective control of government expenditures and private sector credits are also likely to lead to a further widening of the gaps that exist among the various exchange rates that are currently in effect in Iran. Unless further steps are taken by the government to stabilize the money and foreign exchange markets, there is a real possibility that the structural reforms and liberalization policies of the past six years may come to a halt or even be reversed. But it seems highly unlikely that a return to the centralized and inward-looking economic policies of the 1980's will provide the answer to Iran's mounting economic problems.

TABLES AND FIGURES

Table 1

Planned and Actual Sectoral Output Growths During the First Five-Year Plan

(in percent)

Sectors	1368 1989/90		1369 1990/91		1370 1991/92		1371 1992/93		1372 1993/94		Average Growth 1989/90-1993/94	
	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual
Agriculture	4.2	3.7	4.6	8.1	6.1	5.1	7.1	7.4	8.5	3.5	6.1	5.6
Oil	21.4	7.7	9.6	19.9	3.4	11.12	11.3	2.1	3.0	5.5	9.5	9.3
Industries and Mines	14.8	6.6	15.2	13.4	14.6	17.2	16.4	4.7	13.8	2.1	15.0	8.8
Water, Electricity and Gas	6.5	11.0	7.0	19.4	11.7	15.5	5.3	8.5	47.8	9.4	9.1	12.7
Construction	29.0	-1.7	15.7	2.9	12.4	16.0	10.0	7.9	6.5	2.4	14.7	5.5
Services	5.1	1.8	7.1	9.7	7.2	9.9	7.0	8.0	7.1	2.9	6.7	6.5
Gross Domestic Product	7.9	4.2	9.2	11.5	6.8	10.12	8.5	6.0	8.4	3.3	8.1	7.1

Source: Central Bank of the Islamic Republic. Actual figures are based on gross domestic product at factor cost in constant 1982/83 (1361) prices. The figures for 1993/94 are preliminary. The planned growth rates are from Iran Centre for Statistics, Plan and Budget Organization, The First Five-Year Plan.

Table 2

Planned and Actual Growths of Real Investment and Consumption Expenditures During the First Five-Year Plan

(in percent)

Years	Gross Fixed Capital Formation		Private Consumption		Public Consumption	
	Plan	Actual	Plan	Actual	Plan	Actual
1989/90 (1368)	26.4	6.4	2.6	2.5	-4.1	-14.8
1990/91 (1369)	31.9	13.3	4.7	19.5	9.0	12.4
1991/92 (1370)	2.9	40.9	6.7	9.5	2.8	8.5
1992/93 (1371)	-0.2	7.1	7.3	5.1	5.2	11.3
1993/94 (1372)	1.2	0.6	7.6	2.5	6.7	2.4
Average Growth (1989/90-1993/94)	11.6	13.7	5.7	7.9	3.8	4.0

Sources: Actual growth rates are from the Bank Markazi Jomhouri Islami Iran, and are computed from the national income statistics at constant 1982/1983 (1361) prices. The figures for 1993/94 are preliminary. The planned growth rates are from Iran Centre for Statistics, Plan and Budget Organization, The First Five-Year Plan.

Table 3

Trends in Monetary Aggregates and Inflation in Iran

(Rate of change, Per cent)

Year	Money (M_1)	Money and Quasi-Money (M_2)	Private Sector Credit[1]	Public Sector Credit[2]	Retail Price Index	GDP Price Deflator
1979/80 (1358)	34.7	37.7	17.2	44.2	11.4	27.0
1980/81 (1359)	32.3	27.0	18.8	60.3	23.5	23.4
1981/82 (1360)	22.9	16.2	5.2	26.6	22.8	24.5
1982/83 (1361)	28.7	22.8	8.2	23.9	20.3	14.6
1983/84 (1362)	11.1	16.9	22.1	18.0	14.8	12.3
1984/85 (1363)	17.8	6.0	5.7	14.9	10.4	10.1
1985/86 (1364)	8.1	13.0	12.9	8.3	6.9	4.7
1986/87 (1365)	18.1	19.1	9.8	23.6	23.7	13.2
1987/88 (1366)	16.6	18.1	13.8	16.7	27.7	22.9
1988/89 (1367)	14.5	23.8	17.8	20.2	28.9	17.0
1989/90 (1368)	15.8	19.5	29.7	10.8	17.4	19.3
1990/91 (1369)	24.6	22.5	35.7	9.6	9.0	18.6
1991/92 (1370)	21.8	24.6	39.1	9.7	19.6	23.6
1992/93 (1371)	20.0	25.3	28.9	12.8	21.6	27.9
1993/94 (1372)	36.9	34.2	29.9	59.7	26.3	37.1

Sources: Bank Markazi Jomhouri Islami Iran, various publications.

1. Private sector debt to the banking system.
2. Public sector debt to the banking system.
3. Implicit price deflator of Gross Domestic product at market prices, base year 1982/83 (1361).

Table 4

Balance of Payments

(Million US dollars)

	1988/89 (1367)	1989/89 (1368)	1990/91 (1369)	1991/92 (1370)	1992/93 (1371)	1993/94 (1372)
Trade Balance	101	-367	975	-6,529	-3,406	-1,207
Exports	10,709	13,081	19,305	18,661	19,868	18,080
Oil and Gas	(9,673)	(12,037)	(17,993)	(16,012)	(16,880)	(14,333)
Others	(1,036)	(1,044)	(1,312)	(2,649)	(2,988)	(3,747)
Imports (FOB)	-10,608	-13,448	-18.330	-25,190	-23,274	-19,287
Services	-1,970	-2,324	-3,148	-4,919	-5,094	-4,486
Receipts	467	798	892	881	846	1,257
Payments	-2,437	-3,122	-4,040	-5,800	-5,940	-5,743
Transfers	-	2,500	2,500	2,000	1,996	1,500
Current Balance	-1,869	-191	327	-9,448	-6,504	-4,193

Sources: Annual Reviews, 1991/92 (1370) and 1992/93 (1371), Bank Markazi Jomhouri Islami Iran. Figures for the years 1992/93 and 1993/94 take account of the most recent revisions made by the Bank Markazi, but should still be viewed as preliminary.

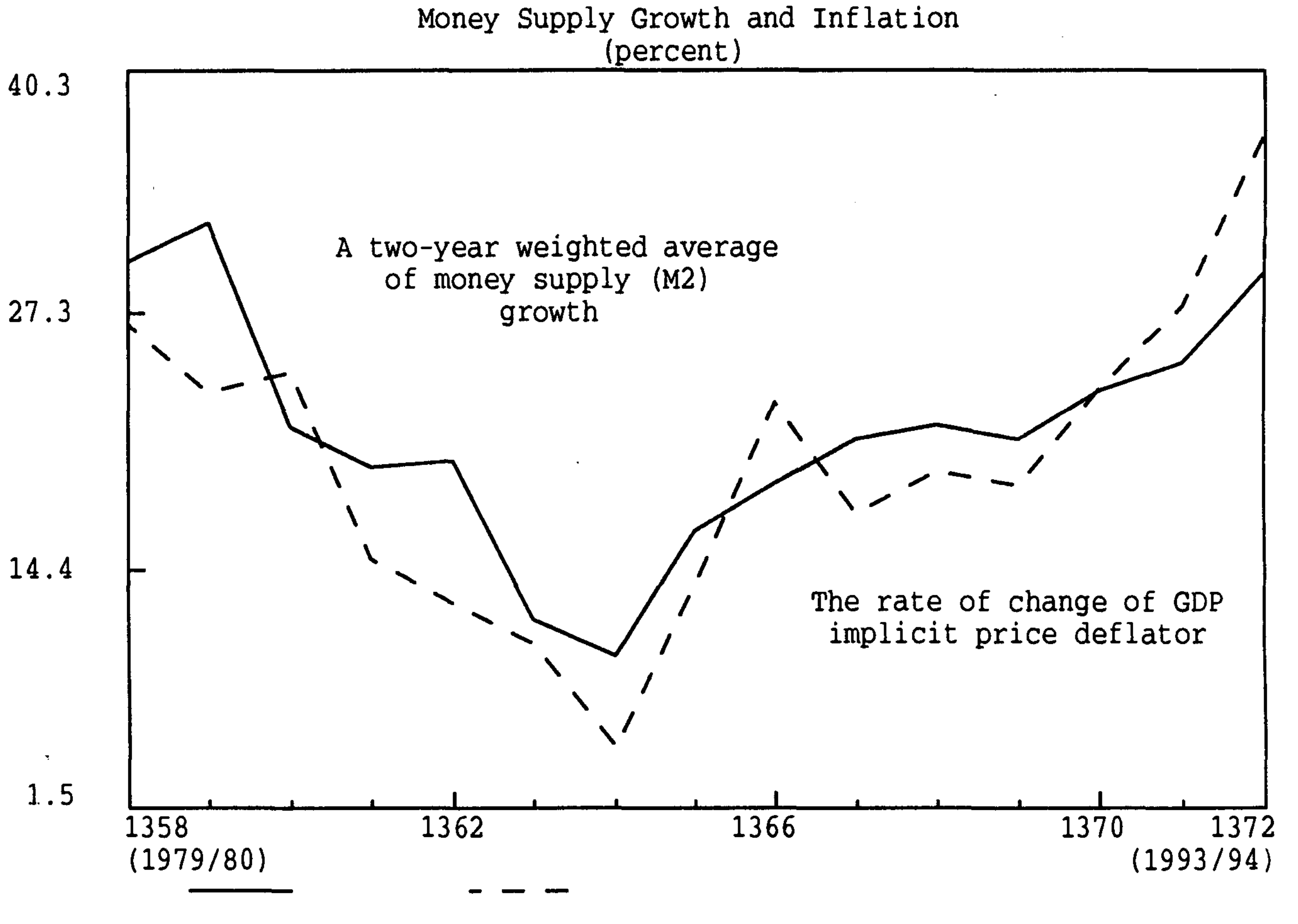
Money Supply Growth and Inflation
(percent)
40.3
27.3
14.4
1.5
A two-year weighted average
of money supply (M2)
growth
The rate of change of GDP
implicit price deflator
1358
(1979/80)
1362
1366
1370
1372
(1993/94)

Figure 1

Notes:

1. The real output is measured by the Gross Domestic Product at market prices, the real investment is measured by the Gross Fixed Capital Formation. All figures are in 1982/1982 (1361) constant prices, and are obtained from the Bank Markazi Jomhouri Islami Iran.

2. For a more detailed account of the economic conditions during this period see, for example, Pesaran, M.H., "The System of Dependent Capitalism in Pre- and Post-Revolutionary Iran", International Journal of Middle East Studies, 1982, 14, pp. 501-22; Pesaran, M.H., "Economic Development and Revolutionary Upheavals in Iran", in H. Afshar (ed.), Iran: A Revolution in Turmoil, London, Macmillan 1985; Behdad, S., "Foreign Exchange Gap, Structural Constraints, and the Political Economy of Exchange Rate determination in Iran", International Journal of Middle East Studies, 1988; Amirahmadi, Revolution and Economic transition: The Iranian Experience, Albany State University of New York Press, 1990; Amuzegar, J. Iran's Economy under the Islamic Republic, London, I.B. Tauris, 1993; Mazarei, Jr., A., "The Iranian Economy Under the Islamic Republic: Institutional Change and Macroeconomic Performance, 1979-1990", Cambridge Journal of Economics, 1995 (forthcoming).

3. Also see "An Evaluation of the Performance of the Country's Real Economy in 1992/93" (Arzyabi amalkard bakhshe vaghaie eghtesadi keshvar dar sal 1371), Department of Economic Accounts, Bank Markazi Jomhouri Islami Iran, Mordad, 1372. Note that the target and realized growth rates given in this publication refer to the first four years of the Plan. Also the GDP figures at constant prices published by the Bank Markazi include an adjustment for the changes in the terms of trade, while our figures do not.

4. The differences in year-to-year movements of planned and actual growth rates also demonstrate the difficulties surrounding planning/forecasting of annual changes in sectoral output in an economy such as Iran where it is still highly dependent on the developments in volatile international oil markets, and raises serious doubts about the utility of detailed sectoral planning in Iran.

5. The M_2 measure is defined as the sum of money (the M_1 measure) and quasi-money. The M_1 measure is defined as notes and coins in circulation plus sight deposits of the private sector with the banking system. Quasi-money is defined as the sum of time and saving deposits of the private sector with the banking system.

6. Under the arrangement of Islamic banking, interest paying deposits with the banking system are viewed as participation in the investment activities of the banking system. Such deposits are subject to two (profit) rates. An initial rate, known as the "provisional" (al-al-hessab) rate which is announced at the time deposits are placed with the banks; and a final or actual rate which is computed on the basis of the bank's operations at the end of the year. However, in practice the provisional and actual returns are very close. For example, the provisional and actual "profit rates" on investment deposits of different durations in 1992/93 (1371) were as follows:

Deposits	Provisional	Actual
Short-term	7.0	7.5
One-year	9.5	10.0
Two-year	11.0	11.5
Three-year	11.25	13.0
Five-year	14.5	15.0

Source: Annual Review, 1992/93 (1371), Bank Markazi Jomhouri Islami Iran.

7. A similar discrepancy also exists between the rate of change of the wholesale and the retail price indices. Under the Plan the wholesale price index rose by an annual average rate of 25.5 percent, as compared to the average annual rate of change of the retail prices of 18.8 per cent. Also note that the rate of increase of the wholesale prices almost exactly match the rate of change of the GDP deflator over the Plan.

8.For a discussion of the extent of government subsidies on bread and energy see M. Karshenas and M. Hashem Pesaran, "Economic Reform and the Reconstruction of the Iranian Economy", The Middle East Journal, 1995 (forthcoming).

9. Historically, the average rate of increase of the three main general price indices, namely the retail price index, the wholesale price index and the implicit price deflator of GDP, have all been of the same order of magnitudes. For example, the averages of these indices (per cent per annum) over the pre- and post-revolution periods have been as follows:

	Different Sub-periods		
	1959/60-1978/79	1979/80-1993/94	1959/60-1993/94
Retail prices	6.72	18.93	11.95
Wholesale prices	5.34	20.69	11.92
GDP Implicit Deflator (at market prices)	7.49	19.74	12.89

10. Using annual observations on real money balances, output and inflation we obtained the following estimates:

Pre-Revolution: 1960-1978

$$\log(M_2/P)_t = \underset{(-3.98)}{-2.29} + \underset{(7.85)}{0.715} \log(M_2/P)_{t-1} + \underset{(3.75)}{0.521} \, logY_t - \underset{(-6.10)}{0.710} \Delta \, LogP_t$$

$$\bar{R}^2 = 0.997, \quad \hat{\sigma} = 0.044, \quad \chi^2_{SC}(1) = 0.16,$$

where figures in brackets are t-ratios, $\bar{R}^2$ is adjusted squared multiple correlation coefficient, $\hat{\sigma}$ is the standard error of the regression, $\chi^2_{SC}(1)$ is the chi-squared statistic with one degree of freedom for tests of the residual serial correlation,

M_2 = The broad definition of money supply
P = Implicit price deflator of GDP at market prices
Y = GDP at constant 1982/83 (1351) prices
$\Delta \log P$ = Inflation rate used as a proxy for the nominal interest rate

This regression implies a long-run income elasticity of demand for money of around 1.83 [0.134]. The figure in square brackets is the standard error of the estimate. This estimate is robust to the possibility of unit roots in real money balances, output and inflation. See, Shin and Pesaran, New Estimation and Asymptotic Results for Autoregressive Distributed Lag Models with Stochastic and/or Deterministic Trends, 1995, Unpublished manuscript, Cambridge University.

Estimating the same equation over the period after the revolution (namely 1979-1993) yielded:

$$\underset{}{\log(M_2/P)_t} = \underset{(1.35)}{1.481} + \underset{(4.49)}{0.715}\log(M_2/P)_{t-1} + \underset{(1.08)}{0.116}\, logY_t - \underset{(-1.18)}{0.208}\Delta LogP_t$$

$$\bar{R}^2 = 0.755, \quad \hat{\sigma} = 0.042, \quad \chi^2_{SC}(1) = 0.32,$$

The long-run income elasticity of demand for money implied by this regression is only 0.408 (0.296), and is much less precisely estimated than the one obtained for the period before the revolution. Notice that in both regressions the inflation variable has the correct sign; indicating that a rise in inflation has the desired dampening effect on the demand for real money balances. But once again the quantitative effect of inflation on demand for real money balances seems to have declined substantially after the revolution.

11. During the first six months of 1994/95 (1373), the average monthly index of retail prices has risen by 30.9 per cent as compared to the average value of the index over the first six months of 1993/94 (1372). Source: Price Index of Consumer Goods and Services in Urban Areas, Shahrivar, 1373. Bank Markazi Jomhouri Islami Iran.

12. Another important of source money supply growth is the non-neutralized part of increases in the country's foreign exchange reserves. This factor has not, however, been very important over the period under consideration.

13. A simple regression of money supply growth on the growth of the public and private sector indebtedness to the banking system estimated over the period 1979/80 - 1993/94 yields

$$Y = \underset{(3.390)}{7.066} + \underset{(0.122)}{0.311}\, X_1 + \underset{(0.077)}{0.369}\, X_2,$$

$$\bar{R}^2 = 0.6636, \quad DW = 1.95, \quad \hat{\sigma} = 4.93$$

where Y denotes the percentage growth in money supply (the M_2 measure), and X_1 and X_2 are, respectively, the percentage growth of the private and public sector indebtedness to the banking system. The figures in brackets are standard errors of the estimates, $\bar{R}^2$ is the adjusted squared multiple correlation coefficient, DW is the Durbin-Watson statistics, and $\hat{\sigma}$ is the standard error of the regression.

14. For instance, 41 per cent of total government revenues in 1992/93 originated from the sale of foreign exchange at preferential rates. See Annual Review, Bank Markazi Jomhouri Islami Iran, 1992/93.

15. See Annual Reviews for the years 1991/92 and 1992/93, and Table 3.

16. See, Lautenschlager, W., "The Effects of an Overvalued Exchange Rate on the Iranian Economy, 1979-1989", International Journal of Middle East Studies, 1986, 18, pp. 31-52; Behdad, S., "Foreign Exchange Gap Structural Constraints and the Political Economy of Exchange Rate Determination in Iran", International Journal of Middle East Studies, 1988, 20, pp. 1-21; and Pesaran, M.H. "The Iranian Foreign Exchange Rate Policy and the Black Market for Dollars", International Journal of Middle East Studies, 1992, 24, pp. 101-25.

17. The Planned target for foreign exchange receipts from the oil and gas sector was \$19.2 billion for the year 1993/94, and \$83.1 billion for the whole five-year period.

18. In 1992/93, out of the total foreign exchange allocation of $23.2 billion, $12.1 billion was done at the official rate, $4.2 billion at the competitive rate, and $6.9 billion at the floating rate. This allocation brought the share of foreign exchange allocated at the official rate to 52 per cent, down from 71 per cent in 1991/92. (see Annual Review, 1992/93).

19. See Annual Report and Balance Sheet, Bank Markazi Jomhouri Islami Iran, 1991/92 (1370), Chapter 9.

20. Notice, however, that foreign exchange revenues from non-oil exports still fell about 34 percent below the planned target of $17.8 for the whole Plan period.

21. See Table 2 in M. Karshenas and M. Hashem Pesaran, "Economic Reform and the Reconstruction of the Iranian Economy", The Middle East Journal, 1995 (forthcoming).

22. Currently there are in fact four different exchange rates in Iran. The "floating" rate which is applicable to the transactions through the banking system, a special export rate applicable to non-oil export proceeds, the "free" market rate for transactions through the recognized foreign exchange dealers outside the banking system, and the "black" market rate primarily used in capital transactions. In mid January 1995 (28, Bahman, 1373) these rates were respectively equal to 1,750 , 2,345, 2,680 and 3,240 rials per one US dollar. Source: International Institute for Trade Relation Promotion, Tehran.

23.The Second Five-Year Plan was approved by the Majlis and ratified by the Council of Guardians in December 1994 (on 20th of Aban 1373 in the Iranian calender).

24. See the documentations of the Second Plan for Economic, Social and Cultural Development of the Islamic Republic of Iran, Volumes 1-5, Plan and Budget Organization, Islamic Republic of Iran, Azar 1372 (1993/94). In particular, see the annex to the plan documents submitted by the government to the Majlis. (Peyvast Layeh Barnameh Duvom).

25. See the Law of the Second Five-Year Economic, Social and Cultural Plan of the Islamic Republic of Iran, The Official Newspaper of the Islamic Republic of Iran, Volume 50, Number 14515,(8/10/1373).

26. For a discussion of the food and energy subsidies in Iran see M. Karshenas and M. Hashem Pesaran, "Economic Reform and the Reconstruction of the Iranian Economy", The Middle East Journal, 1995 (forthcoming).

27. The membership of the Money and Credit Council that overseas the conduct of monetary policy in Iran is amended and now includes the Minister of Economic Affairs and Finance, The Head of the Plan and Budget Organization, the Governor of the Central Bank, and two other ministers. Out of the remaining 4 members only one is to be an expert in money and banking matters. This new membership of the Council represents an important move towards further politicization of the lending activities of the Central Bank, with undesirable consequences for the Bank's ability to control total private sector liquidity and inflation.

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