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Islamic Republic of Iran: Recent Economic Developments

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ISLAMIC REPUBLIC OF IRAN

Recent Economic Developments

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Approved by the Middle Eastern Department

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I. Social and Demographic Indicators

Area (square kilometers)	1,648,000
Population (1998)	61.95 million
Urban	37.51 million
Rural	24.43 million
Population growth rate (1998)	1.66 percent
Life expectancy at birth (1998)	70.7 years
Infant mortality rate per thousand (1996)	26
Education—enrollment rates in percent of age group	
Primary (1997)	90
Of which: Female	89.2
Secondary (1997)	81.2
Of which: Female	75.8
Literacy ratio (15 years and over) (1997)	73.4 percent
Literacy ratio (6–29 years) (1997)	92.6 percent
Density: population per sq km of agricultural land (1989)	91.2
Density: population per sq km (1998)	37.6
Active population (1997/98)	21.2 million
Employed population (1997/98)	18.4 million
Per capita income (1998)	US$1,826.42
Population per physician (1996)	1,354
Per capita energy consumption (in kg of oil equivalent, 1990)	1,026
Daily calorie supply per capita (1989)	3,181

	1980–85	1986–90	1991–95	1996/97	1997/98
Additional health indicators					
Infant mortality rate 1/	91.6	59	50	26	26
Maternal mortality rate 2/	140	91	40	40	37
Access to safe water	50	71	89	90	95
Access to sanitation	60	65	82	80	
Access to health care	50	73	90	90	94
Hospital beds/100000	148	150	154	156	
Physicians/10000	3.4	3.8	...	8.2	9.0
Dentists/10000	...	0.6	...	1.5	1.7
Nurses/10000	8.5	8.7	...	23.4	
Immunization DPT	29	77	88	97	97
Immunization measles	69	80	84	95	96
Death rate, crude 3/	11	10	6	5	
Life expectancy at birth					
Male	59	65	67	68	69.8
Female	63	65	68	70	71.5

Islamic Republic of Iran: Basic Data

	1988/89–1989–93	1993/94–1994/95	1994/95–96	1996/97	1997/98
Indices of educational quality					
Student to school	169.3	182.3	182.5	178.0	173.6
Student to class	31.3	30.4	30.3	30.1	29.3 4/
Student to teacher	25.1	24.2	24.9	24.2	21.5
Class to school	5.4	5.9	5.7	5.9	...
Number of university students					
Public universities and higher education instititutes	250,709	436,564	478,455	579,070	625,380
Female	71,822	124,350	145,353	...	338,687
Male	178,887	312,214	333,102	...	286,693
Islamic Azad University	...	368,200	431,025	611,443	659,278
Number of students in schools (in thousands)					
Primary	8,262	9,863	9,746	9,238	8,938
Female	3,725	4,652	4,594	...	4,720
Male	4,537	5,211	5,152	...	4,218
Guidance	2,725	4,440	4,712	5,189	...
Female	1,086	1,943	2,090	...	...
Male	1,639	2,497	2,622	...	...
Secondary	1,363	2,343	2,781	3,401	5,283
Female	585	1,061	1,290	...	2,881
Male	778	1,282	1,491	...	2,402

1/ Per 1,000 live births
2/ Per 100,000 live births
3/ Per 1,000 population
4/ Includes number of students and classes of the new system of education since 1996/97

I. Overview

1. At the end of the war with Iraq in 1988, the Islamic Republic of Iran inherited a highly centralized economy. Most of the economic resources were administratively allocated through the vast public sector, widespread price controls, administratively mandated grid of financial rates of return and charges and credit allocations, extensive trade and exchange restrictions, heavily subsidized energy and petroleum products, multiple exchange rates, and restrictive labor and business practices. Furthermore, the state-owned enterprises had monopolies over large sectors of the economy, including the financial system. These distortions were compounded by Iran's excessive dependence on the volatile oil exports, which account for about 70 percent of export receipts and half of government revenue.

2. Over the past decade, the authorities have attempted to address these distortions and restore sustained economic growth. The First Five Year Development Plan (FFYDP), covering the period 1989/90–1993/94 (fiscal year ending March 20), initiated steps aimed at decontrolling significant part of domestic prices, raising public utility rates, removing some nontariff trade barriers, lowering income tax rates, starting to privatize public enterprises, and liberalizing the exchange system. The economy responded well and real GDP grew by an average of 7 percent during the FFYDP with significant improvements in the social indicators. However, the main emphasis of the FFYDP was on infrastructure development and reconstruction programs which were financed by expansionary policies. The impact of these policies was exacerbated by significant drop in oil prices and the weakening of Iran's external position that was financed mostly by a large buildup of short-term external debt (due in part to Iran's lack of sufficient access to medium- and short-term credit), which eventually led to a growing stock of external payment arrears.

3. The broad liberalization direction of the FFYDP was reemphasized under the Second Five Year Development Plan (SFYDP), covering the period 1994/95–1999/2000. However, opening of the economy continued to progress at a slow pace despite the recovery of the oil prices during the first three years of the Plan. The period of the SFYDP was characterized largely by macroeconomic instability and declining economic growth. As a result, the authorities' policy priorities were shifted to rectify the macroeconomic and external debt imbalances, while the much needed structural reforms were delayed. Significant success was achieved in regularizing external debt arrears, and the accumulated short-term debt arrears had been largely amortized by mid-1998/99.

4. Iran's internal and external positions deteriorated sharply in 1998/99 as a result of an unanticipated sharp drop in global oil prices (Table 1). Real GDP growth decelerated to 2.1 percent in 1998/99 from 3.1 percent in 1997/98 and the external current account shifted from a surplus of US$2.2 billion in 1997/98 to a deficit of US$2.1 billion in 1998/99 (about 2 percent of GDP). The authorities' immediate response was to draw down official foreign

Table 1. Islamic Republic of Iran: Key Economic Indicators, 1995/96–1999/2000 1/

	1995/96	1996/97	1997/98	1998/99	Prel. 1999/2000
			(In percent change)		
Real GDP at factor cost	3.2	4.7	3.1	2.1	2.4
Consumer price index					
Year-on-year	49.4	23.2	17.3	20.0	20.4
End of period	36.5	17.4	19.3	19.9	22.0
GDP deflator at factor cost	39.9	24.5	15.3	15.6	23.9
Broad money	36.8	36.8	10.1	25.8	20.2
Of which : net domestic assets 2/	43.1	46.2	20.3	30.5	16.8
			(In percent of GDP)		
Government revenue	25.2	26.4	25.4	19.3	27.0
Government expenditure	28.8	28.0	27.9	26.0	25.9
Government overall balance	-3.5	-1.6	-2.5	-6.7	1.0
Total investment	19.6	20.9	21.4	21.5	20.4
Gross national savings	23.4	26.0	23.6	19.3	25.2
Public sector savings	5.7	5.8	4.4	-1.4	7.6
Private savings	17.8	20.2	19.2	20.7	17.6
External current account	3.9	5.0	2.2	-2.2	4.7
Exports, f.o.b.	18,360	22,391	18,381	13,118	19,727
Imports, f.o.b.	12,774	14,989	14,123	14,286	13,511
Gross reserves	6,748	9,433	5,263	3,730	5,647
Gross reserves (months of imports)	6.0	1.7	4.3	3.0	4.9
External debt	21,928	16,835	14,247	13,184	10,357
Crude oil production	3,600	3,610	3,623	3,713	3,439
Crude oil exports	2,290	2,441	2,400	2,300	2,079
Average crude oil export price (in U.S. dollars/barrel)	16.80	20.01	16.39	10.50	18.55

Sources: Data provided by the Iranian authorities; and Fund staff estimates.

1/ Iranian years ending March 20.
2/ Changes in percent of initial broad money.

reserves (to about three months of imports), restrict imports, re-phase external debt service payments to major creditor countries, and allow the Iranian rial to depreciate in the Teheran Stock Exchange (TSE) market.

5. The sharp drop in oil revenue caused a significant widening of the budget deficit to 6.7 percent of GDP, despite sizable compression of capital outlays. The deficit was largely bank financed resulting in an acceleration of monetary expansion to 26 percent in 1998/99 from 16 percent in 1997/98, and inflation picked up to an estimated 20 percent from 17 percent in 1997/98. At the same time, unemployment rate remained high at about 13 percent.

6. In response to the worsening economic conditions in 1998/99, the authorities formulated a broad program of economic adjustment and reform as part of a National Rehabilitation Plan issued in August 1998, which underpinned the Third FiveYear Development Plan (TFYDP, 2000/01–2004/05 (Appendix I)). The official program involved restoring market-based prices, reducing the size of the public sector and encouraging private sector investment. As a result, in 1999/2000 domestic petroleum prices were raised by 70 percent, a more market-based TSE exchange rate was introduced, and steps toward financial sector reforms were initiated. The backlog of queued foreign exchange demand was cleared in early 1999/2000 through a combination of significant additional foreign exchange sales in the TSE market and allowing a substantial further depreciation of the TSE exchange rate. By end of 1999/2000 the differential with the parallel market shrank to less than 2 percent from 40 percent at the end of 1998/99 and the "export rate" was abolished. These reforms were supported by monetary tightening and opening up of a new facility at the Bank Markazi Iran (BMI) to manage banks' excess liquidity. Progress on other structural reform front was slow including on trade liberalization.

7. The recovery of oil prices during 1999/2000 significantly strengthened Iran's external and fiscal positions. Nevertheless, the supply response remained weak and the growth of real GDP increased marginally to about 2.4 percent. The average inflation rate remained broadly unchanged at 20 percent, reflecting in part, the large liquidity overhang at the end of 1998/99. However, inflation started to decelerate toward the end of 1999/2000. The strengthening of the external position was reflected by a large current account surplus of about US$4.7 billion with gross official reserves rising to US$5.6 billion or the equivalent of about five months of imports. External debt service payments were accelerated in order to regularize the re-phased debt obligations, resulting in a drop in the outstanding external debt to about 10 percent of GDP. The sharp increase in oil revenue and continued tight expenditure policy have resulted in fiscal surplus of about 1 percent of GDP in 1999/2000.

8. The TFYDP aims at accelerating growth to an average of 6 percent per year in order to create sufficient employment opportunities for a rapidly expanding labor force (at an estimated 5 percent annually during the next five years). For this purpose, the TFYDP calls for a balanced transition to a market economy as a means for accelerating growth while

according strong emphasis to social justice. It calls for structural reforms and privatization, de-monopolizing the economy, promoting private investment (both domestic and foreign), liberalizing trade and establishing a fully market based exchange system, strengthening and developing the financial system, and improving the fiscal and monetary policy settings.

II. The Domestic Economy

A. Economic Performance During 1995/96–1999/2000

Overall trends in production and expenditure

9. Real GDP growth (at factor cost) remained weak in 1999/2000 for a second year rising only marginally to 2.4 percent from 2.1 percent in 1998/99, compared to 3.7 percent average growth rate during the period 1995/96–1997/98 (Chart 1 and Table 2).[1] The decline in oil output has contributed to the weak real GDP growth in 1998/99 and 1999/2000. In particular, real oil and gas sector GDP fell by about 1 percent in 1999/2000 as a result of the OPEC agreement to restrain output in March 1999. Non-oil sector growth also slowed to 2.6 percent and 3 percent in 1998/99 and 1999/2000, respectively, from an average of 4.5 percent over the period 1995/96–1997/98. While agriculture was the main source of growth in 1998/99, its growth declined sharply in 1999/2000 due to severe drought (Chart 2). Industry and services, on the other hand, recovered and led growth in 1999/2000 as the supply constraints were eased with rising oil prices and the availability of foreign exchange.

10. Consumption expenditure displayed a moderate growth in 1999/2000, while investment expenditure fell. Total consumption expenditure is estimated to have risen by 3.7 percent in real terms in 1999/2000 compared with 2.8 percent 1997/98 and 2.4 percent in 1998/99. The private sector consumption grew by 3.1 percent, and public consumption by 6.8 percent. As a ratio to GDP, consumption expenditure is estimated to have reached 74.8 percent in 1999/2000, with a contribution of 61.2 percent from private consumption. Gross domestic investment decreased by 6.4 percent in 1999/2000 against a 22 percent increase in 1997/98 and 12 percent in 1998/99, despite an 8 percent increase in gross capital formation as stocks fell. Over the period 1995/96–1999/2000, the ratio of gross national savings to GDP exhibited sharp annual fluctuations, ranging from 21.8 percent in 1998/99 to 32.6 percent in 1995/96, it stood at an estimated 25.3 percent during 1999/2000. These variations partly reflect exchange rate movements, import controls and changes in real rates of return.

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[1] The major factors behind the reduction in the growth rate of the Iranian economy is the focus of the note on "Determinants of Economic Growth in the Islamic Republic of Iran—The Long View" Appendix I. This note indicates that growth is significantly influenced by the rate of investment and macroeconomic instability.

Chart 1. Islamic Republic of Iran: GDP Growth and Inflation, 1995/96–1999/2000

(In percent)

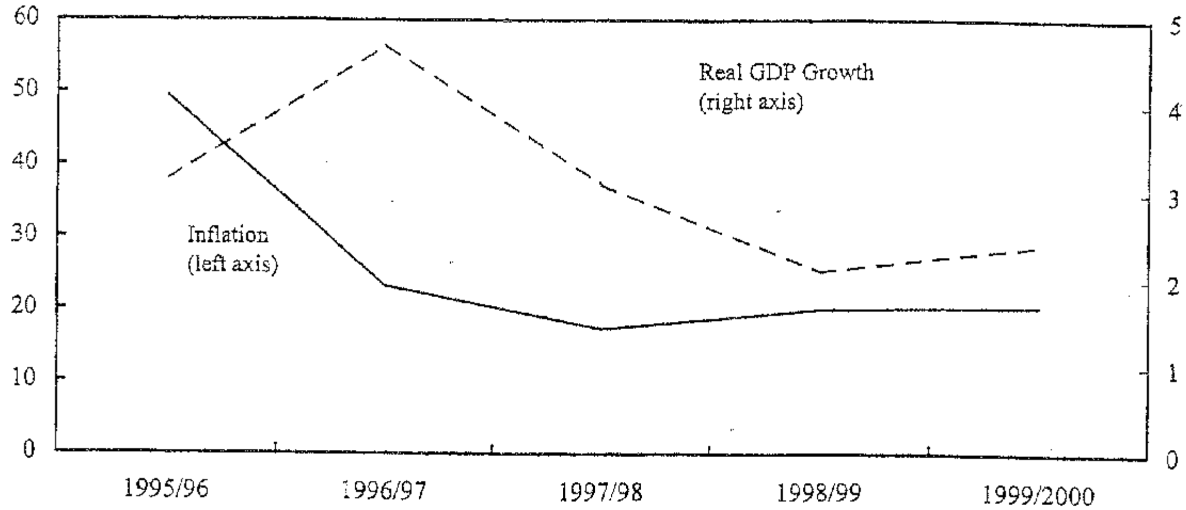


Chart 2. Islamic Republic of Iran: Sectoral Distribution of Annual GDP Growth, 1995/96–1999/2000

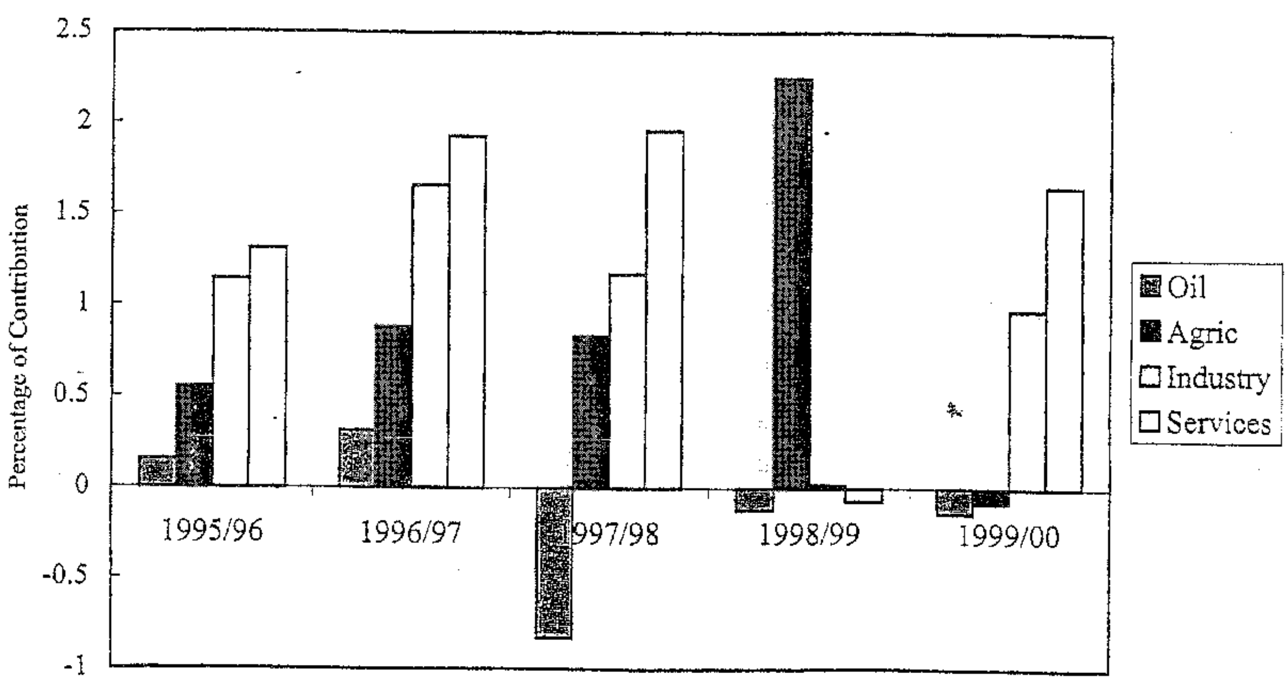


Table 2. Islamic Republic of Iran: Aggregate Output and Expenditure Trends, 1995/96–1999/2000 1/

	1995/96	1996/97	1997/98	1998/99	Est. 1999/2000
	(Annual percentage changes at 1982/83 prices)				
Oil GDP 2/	0.9	1.9	-5.3	-0.8	-1.0
Non-oil GDP	3.6	5.3	4.7	2.6	3.0
Agriculture	2.3	3.7	3.5	9.5	-0.3
Industry	5.5	7.8	5.4	0.1	4.4
Services	3.4	5.0	5.1	-0.2	4.3
GDP at factor cost	3.2	4.7	3.1	2.1	2.4
Gross domestic expenditure	10.7	1.1	5.9	4.2	1.7
Consumption expenditure	-3.4	10.1	2.8	2.4	3.7
Gross domestic investment	115.6	-28.9	22.0	11.9	-6.4
	(In percent of GDP)				
Oil GDP 2/ 3/	16.1	15.2	10.8	6.5	8.4
Non-oil GDP 3/	83.9	84.8	89.2	93.5	91.6
Agriculture	22.2	20.3	20.1	22.1	20.9
Industry	19.7	21.0	22.3	23.3	22.8
Services	42.1	43.5	46.8	48.1	47.9
Gross domestic expenditure 4/	96.9	94.8	97.9	102.2	93
Consumption expenditure	66.7	73.9	76.1	78.2	74.8
Gross domestic investment	30.2	20.9	21.8	24.0	18.2

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.
2/ Includes oil and gas production, refining, and distribution.
3/ In percent of GDP at factor cost, current prices.
4/ In percent of GDP at current market prices.

The oil and gas sector

11. Crude oil production was 3.4 million barrels per day (mbpd) in 1999/2000, in line with the quota set by OPEC in March 1999. Reflecting lower output, export of crude oil fell by 10 percent from 2.3 mbpd in 1998/99 to 2.1 mbpd in 1999/2000. The average price for crude oil exports was approximately US$19 per barrel, which is equivalent to a gain of US$8 per barrel over the previous year, and led to an increase in oil export earnings by 64 percent to US$16.3 billion. The net exports of refined product increased from 113,000 barrels per day (bpd) in 1998/99 to 197,000 bpd in 1999/2000, representing over 74 percent increase despite a small decline in total crude oil deliveries to domestic refineries from 1.39 mbpd in 1998/99 to 1.37 mbpd in 1999/00. Domestic consumption fell from 1.25 mbpd in 1998/99 to 1.13 mbpd in 1999/00, a 9.6 percent decline, reflecting, in part, the continued shift towards gas for domestic energy consumption as well as increases in domestic fuel prices in 1999/2000 (Appendix II, Table 13). In addition, efforts have been geared towards expanding domestic refining capacity so as to supply domestic market with refined products, reduce overreliance on crude oil exports and expand export of products with higher value added.

12. The government has placed emphasis on expanding the petrochemical industry to generate products with higher value added and higher export earnings. Iranian petrochemical production has more than doubled in the last five years, making Iran the second largest producer in the region (after Saudi Arabia). Total petrochemical output was estimated at about 12 million tons in 1998 compared with 2.4 million tons in 1989. The country has the plan to triple annual output of petrochemical products to 30 million tons within 20 years. The National Petrochemical Company (NPC) has embarked on initiatives for ensuring continued future growth of the sector through a dominant role for private investment. To achieve this goal, the NPC has processed the necessary decisions and legislation for the establishment of a Special Petrochemical Economic Zone at Bandar Imam which is intended to promote investment in the petrochemical industry by attracting foreign capital.

13. Iran has the second largest gas reserves in the world. The production of gas increased from 72.5 billion cubic meters in 1998/99 to 80 billion cubic meters in 1999/2000 (Appendix II, Table 14), representing a 10 percent increase. At the same time, the consumption of gas moved from 51.5 billion cubic meters in 1998/99 to 58.7 billion cubic meters. The increase in domestic gas consumption is in line with the authorities' objective of reducing domestic demand for petroleum products and thereby free more crude oil for exports. The completion of additional gas pipelines is expected to allow greater use of gas products in lieu of petroleum products. A 36-inch wide pipeline which came on stream in August 1999, can carry 220 million cubic feet to 270 million cubic feet of gas a day from the Pazanan gas fields in Gach. Another gas pipeline linking Iran and Armenia, and also the Trans-Caspian pipeline linking Iran and Turkmenistan, is under construction.

Agriculture

14. Real growth in agriculture declined to 0.3 percent in 1999/2000, after a sharp growth of 9.5 percent in 1998/99. The rapid growth observed in 1998/99 reflected the good performance of the farming sector arising from a rise in rainfall in the agricultural year 1997/98 by 52 percent over the previous year and improved availability of inputs. However, during 1999/2000, a major drought resulted in lower output. Cotton production fell by 9 percent with other important crops such as wheat and barley also declining by 27 percent and 39 percent, respectively (Appendix II, Table 16). Despite various attempts by the government to reduce dependence of this sector's performance on changes in rainfall through the construction of dams, irrigation and drainage networks, agriculture remains highly sensitive to climate developments.

15. Government continues to gear efforts toward reducing its role in agriculture and encouraging private sector activities and the growth of cooperatives, while limiting its role to the provision of infrastructure. The amount of subsidies to agricultural inputs has been reduced over the last few years including pesticides and fertilizers, which have been reduced in real terms. However, there are still subsidies to some basic agricultural products, in particular wheat, which accounts for approximately 80 percent of the total explicit subsidies. The government sets its procurement prices for agricultural products using a cost-based approach which allows for a gross profit margin of 20–25 percent and also takes into consideration international prices. These prices serve as a guaranteed benchmark, which usually fall below market prices.

Industry and construction

16. The industrial sector has continued to be dominated by relatively few but large public enterprises accounting for approximately 70 percent of value added in manufacturing. Real growth in the industrial sector in 1999/2000 is estimated to have fallen slightly to 4.4 percent from 5.0 percent for the period 1994/95–1998/99 and reports a number of structural factors, including technical and managerial weaknesses, delayed privatization and restructuring, and low productivity. Growth in the construction remained broadly unchanged at 5 percent in 1999/2000, and was facilitated by an increase in private sector investment in housing and construction, and by expanded credit allocation to this sector and the initiation of several housing projects.

Services

17. Services are the largest sector in the economy, contributing approximately 40 percent to GDP for the year 1999/2000. After marginal contraction in 1998/99, this sector grew by 4.3 percent in 1999/2000. However, the growth performance of the various service subsectors was mixed in 1999/2000, with trade, banking and insurance showing modest growths of 1.9 percent and 2 percent, respectively. On the other hand, dwellings, transportation and

communication, and public services showed higher growth rates of 4.4 percent, 5.0 percent, and 6.5 percent, respectively.

B. Prices, Employment, and Wages

Prices and subsidies

18. Inflation in Iran has varied significantly over the past decade and has reflected variations in macroeconomic politics in response to fluctuations in oil export receipts and external imbalances. These issues are further elaborated in Appendix I. The economy witnessed a 17 percent increase in the 12-month rate of change in the consumer price index (CPI), with the year-on-year inflation remaining unchanged at 20 percent. Part of the increase in the general price level could be attributed to monetary overhang toward the end of 1998/99 and larger increases in administration prices in 1999/2000. In the latter year, the ratio of increases in price of food, beverages, and tobacco group of goods (accounting for approximately 37 percent of the CPI basket), housing and health care moderated to 22 percent, 16.2 percent, and 23 percent, respectively. On the other hand, other components of the CPI witnessed an increase in their rate of inflation: clothing, 8.1 percent; household, 15.5 percent; transport and communication, 26 percent; water, fuel and power, 47.8; health and medical care, 23 percent; recreation, 18.6 percent; and other goods and services experienced an inflation rate of 26.7 percent.

19. A number of goods and services are subject to price controls and subsidies (Appendix II, Tables 31, 32, and 33), which have mainly been administered by the Organization for the Protection of Consumers and Producers (CPPO). During 1995/96–1999/2000, CPPO continued to perform its three main functions: (a) determination of administered prices; (b) payment of subsidies for basic goods (through 1995/96); and (c) collection of the difference between some officially determined prices (which are, however, not administrated) and market prices. The price-setting role of the CPPO covers goods that are subsidized and made available through the coupon system (sugar, wheat, edible oil, milk, cheese, red meat, rice); related goods and services (flour, labor used to produce sugar cubes, sugar beet waste to feed animals, etc); goods produced by monopolies (e.g., paper, agricultural machinery, petrochemicals, and automobile batteries); other goods imported at the appreciated floating exchange rate of Rls 1,750 per US$1 (e.g., detergents, medicine); and selected other goods (e.g., syringes)[2]. For the price-controlled goods, prices

[2] Vegetable oil is priced and offered in the following categories: regular, adjusted, guild and industrial. The regular price is subsidized but adjusted; guild and industrial prices are higher than the cost price of the producers. Basic goods including wheat, vegetable oil, rice, sugar (cane and granulated), cheese, pharmaceutical drugs, dried milk and their related services, and fertilizers are subject to subsidies on the basis of the respective note in the annual Budget

(continued…)

are determined at all levels (producer, wholesale, and retail). Price determination is based on cost calculations allowing for a certain markup; these calculations are made at all stages of the production and distribution chain, i.e., from the producer all the way to the retail level. While most of the officially determined prices are not administered prices, nonobservance of CPPO price guidelines is subject to payment of a fine. For certain goods, the companies selling them for more than the official price pay some of the difference between the official price and the actual price to the Ministry of Finance (prior to 1997/98 the payments were made through the CPPO). Specifically, 30 percent of this difference can be used for approved investments.

20. Budgetary subsidies in 1999/2000 were in the magnitude of Rls 6,881 billion, with wheat subsidies accounting for approximately 80 percent of the total. A coupon system is in place for all subsidized goods with the exception of wheat. The Ministry of Commerce issues coupons through the banking system. Currently, imports of subsidized goods are made mainly by the government trading corporations at the floating exchange rate.

21. Large implicit subsidies emanate from underpricing domestic consumption of petroleum products in relation to the international price levels of these products. Despite a large 70 percent increase in prices of such products, this category of implicit subsidy is estimated by the staff to have risen from 7 percent of GDP in 1998/99 to 17 percent of GDP in 1999/2000, as world prices rose sharply. The largest implicit subsidy is on the consumption of gas oil and it also constitutes the largest share of domestically consumed petroleum products.

Employment and Wages

22. There has been a relative decline in the importance of agricultural sector in terms of its share in overall employment. As of 1986, the agricultural sector's employment share was 29 percent. However, recent estimate suggests this has declined to about 23 percent. On the other hand, share of industry has shown upward movement. It increased from about 25 percent in 1986 to 31 percent in 1999/2000. The share of the service sector has remained broadly unchanged at 46 percent. The share of the public sector, including state enterprises, in overall employment is estimated at about 70 percent of total employment in 1996, and the official unemployment rate is estimated at about 13 percent in 1999/2000.

23. The only available data on wages in the private sector is on compensation to private sector construction workers, who experienced an increase of nominal wages of 13 percent from January 1998/99 to January 1999/2000, implying that real wages in private construction decreased by about 6 percent.

Law. Wheat in the form of flour with the approved prices is being delivered to the bakeries. Rice, sugar, and cheese are distributed by coupons to each individual.

C. Foreign Direct Investment

24. Foreign direct investment (FDI) has remained at a low level, with flows estimated at US$400 million in 1999/2000, mostly in the oil sector. FDI is governed by the Law of Attraction and Protection of Foreign Investment, which requires, inter alia, that the investment be in industry, mining, agriculture or transportation; and that it be at least self-sufficient with respect to foreign exchange. A draft for encouraging private investment and more FDI inflow has been prepared. It contains proposals to eliminate ownership restriction on the private sector, reduction in the time required for the approval of FDI, and clarifications of Article 44 as regards areas to be left to the public sector. Foreign investments in the oil sector relies mostly on buyback arrangements, under these arrangements, foreign investors receive a portion of the output generated by the project.

D. Social Issues

25. Policies have been implemented to improve both education and health in the country and the key social indicators have improved in Iran since the beginning of the 1980s. The enrollment rate in primary education is nearly 100 percent (compared with 87 percent in 1980), and many students continue to secondary education, where the enrollment rate has increased to close to 70 percent (compared with 42 percent in 1980); the literacy rate increased from about 50 percent in 1987/88 to around 80 percent in 1997/98. There have been improvements in indices of educational quality. At the same time, students-to-school, students-to-class, and student-to-teacher ratios have fallen (Basic Data).

26. There have also been significant improvements in several health-related indicators over the last 10 to 20 years. These include the coverage of health services, access to safe water and sanitation, as well as the number of physicians, nurses, and hospital beds per person. Furthermore, special attention has been given to the immunization of children. Health policies have achieved a decrease in infant mortality rate to 26 per 1,000 live births in 1997/98, compared with 91 per 1,000 live births in 1980. In order to rationalize population growth, a family planning program has been implemented; it has contributed to a reduction in population growth from 3.2 percent in 1984 to 1.7 percent in 1998.

27. Over the last 15 years, there has also been an improvement in income distribution, but there are still vulnerable segments of the population that require support. In order to improve the situation for the most vulnerable segments, especially in rural areas, the government is considering an anti-poverty program comprising expanded provision of food, clothing, health care, education, social security, and bank credits to these groups. Social safety net constitutes an important component of TFYDP.

III. THE PUBLIC FINANCE

A. Overall Trends[3]

28. Iran has a tradition of relatively prudent budgetary management. Following three years of relatively low deficits, the budget outcome deteriorated substantially in 1998/99 when revenues fell on account of the sharp drop in crude oil prices and the budget deficit soared to close to 7 percent of GDP (Chart 3 and Table 3). In 1999/2000, mirroring the oil price increase, budget performance improved sharply and the central government achieved a small surplus of 1 percent of GDP. This strong improvement in budgetary performance reflected primarily higher oil revenue, but also expenditure restraint. In view of the expected strong oil and gas revenues performance, the budget for 2000/01 calls for a buildup in surplus which would be transferred to the Oil Stabilization Fund (OSF) which will become operational in 2001/02.

29. The budget deficits prior to 1999/2000 were largely financed by credit from the BMI and issuance of participation papers as well as pre-financing for oil deliveries in 1998/99. In the process, the stock of domestic and external government debt increased through 1998/99, peaking at about 15 percent of GDP and 13½ percent of GDP, respectively.[4] However, the stock of external debt was substantially reduced in 1999/2000 to about 10 percent of GDP, while domestic debt fell to an estimated 11 percent of GDP. The structures of the public sector and the fiscal policy are described in Appendix I.

B. Revenue Developments

30. Budgetary revenues continue to rely heavily on proceeds from the exports of oil and gas, and overall revenue performance varies strongly in line with the crude oil price (Chart 4 and Table 3; Appendix II, Table 25). Over the past five years, on average, more than

[3] Progress has been made in recent years to improve fiscal data. However, analysis of budgetary and fiscal operations are complicated by the use of multiple exchange rates and data shortcomings, including disaggregation, frequency, and institutional coverage. The fiscal data reported to the Fund reflect the operations of the central government and 25 provincial administrations, but do not include revenues and expenditures of local governments, while only partly reflecting the financial operations of the Social Security Organization (SOS) and other pension funds. The budgetary accounts do not reflect large quasi-fiscal operations related to the multiple exchange rate regime, domestic energy prices, subsidized financial system operations.

[4] External debt includes government-guaranteed debt, domestic debt includes direct government debt only.

Chart 3. Islamic Republic of Iran: Central Government Fiscal Operations, 1995/96–2000/01

(In percent of GDP)

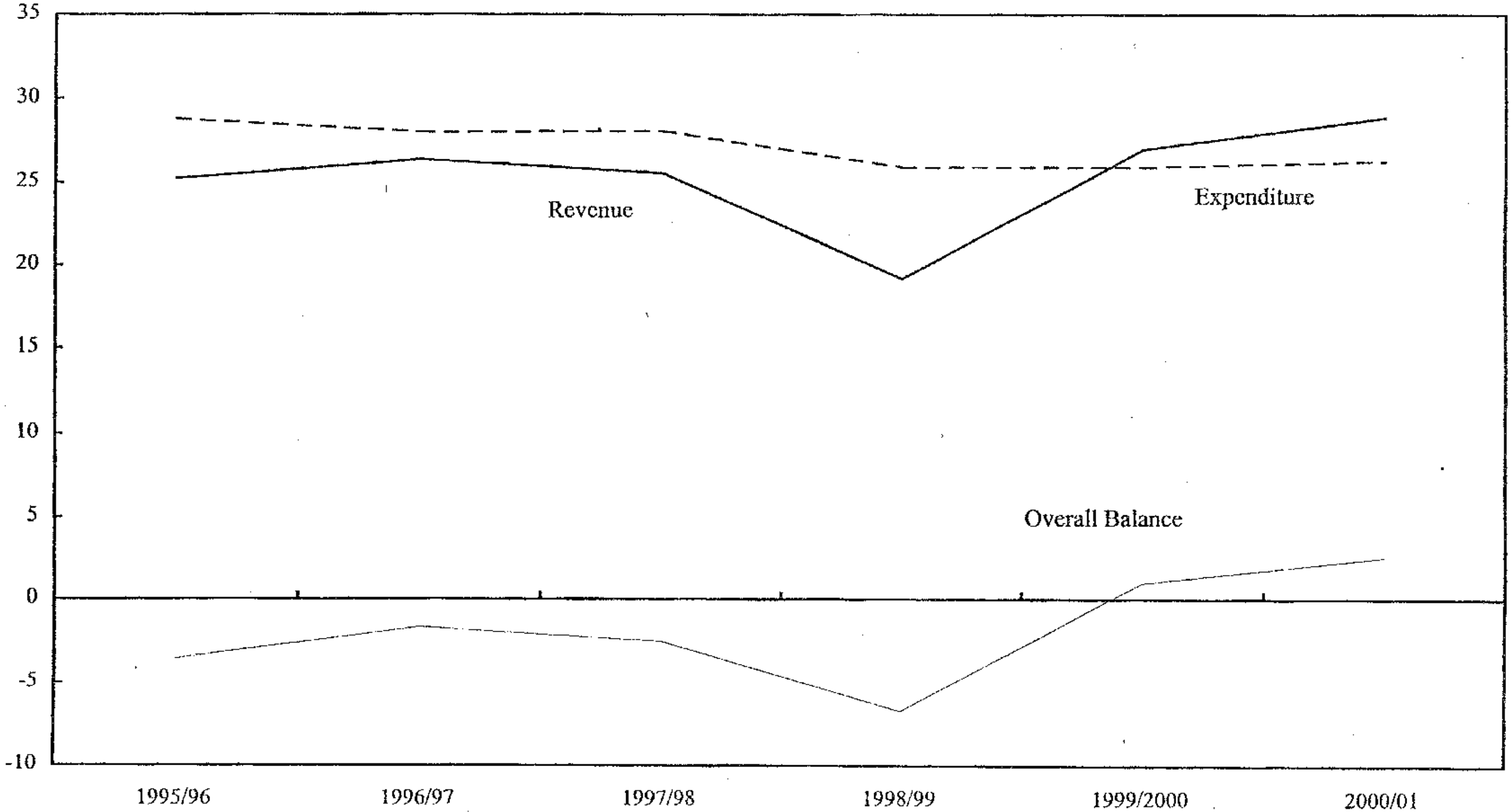


Table 3. Islamic Republic of Iran: Central Government Fiscal Operations, 1995/1996-2000/01 1/

	1995/96	1996/97	1997/98	1998/99	Budget 1999/2000	Est. 1999/2000	Budget 2/ 2000/01
	(In billions of Iranian rials)						
Revenue	45,156	62,056	70,012	62,881	106,326	112,071	150,212
Revenue from oil and gas exports	29,431	38,153	37,493	22,530	35,868	51,408	82,961
of which: Revenue from sales of foreign exchange 3/	2,765	5,407	10,429	5,932	14,720	25,453	58,876
Tax and nontax revenue	15,725	23,903	32,519	40,351	70,458	60,663	67,251
Tax revenue	7,313	12,560	17,345	18,686	29,755	25,831	33,961
Nontax revenue	4,831	6,563	8,777	12,734	28,557	22,686	16,810
Earmarked revenue 4/	3,581	4,780	6,397	8,931	12,146	12,146	16,481
Expenditure and net lending	51,507	65,903	76,842	84,843	111,900	107,771	136,761
Current expenditure	25,720	36,634	44,498	53,632	65,129	66,984	89,096
Capital expenditure	12,883	17,392	19,061	17,655	31,530	27,099	30,009
Earmarked expenditure 5/	3,581	4,780	6,397	8,666	12,146	12,146	16,481
Foreign exchange losses 6/	9,337	7,164	7,216	5,077	3,095	1,813	1,176
Net lending	-14	-67	-330	-187	0	-271	...
Discrepancy	0	2,026	-232	-472	0	1,086	0
Overall balance (deficit (-))	-6,351	-3,847	-6,830	-21,962	-5,574	4,301	13,451
Overall non-oil balance (deficit (-))	-35,782	-42,000	-44,323	-44,492	-41,442	-47,108	-69,510
Financing	6,351	1,821	7,062	22,434	5,574	-5,387	-13,451
Net domestic	6,094	1,820	7,065	16,895	5,628	-5,350	-13,397
Banking system	5,370	1,820	4,891	12,056	1,176	-7,238	-12,727
Nonbanks (participation papers)	0	0	2,174	2,500	2,000	1,884	-170
Privatization proceeds	0	0	0	0	500	4	500
Other	0	0	0	2,339	600	0	0
Net external	257	1	-3	5,539	-54	-37	-54
Tax and nontax revenue	8.8	10.2	11.8	12.4	17.4	14.6	12.9
Tax revenue	4.1	5.3	6.3	5.7	7.3	6.2	6.5
Nontax revenue	2.7	2.8	3.2	3.9	7.0	5.5	3.2
Earmarked revenue 4/	2.0	2.0	2.3	2.7	3.0	2.9	3.2

Table 3. Islamic Republic of Iran: Central Government Fiscal Operations, 1995/1996-2000/01 1/ (concluded)

	1374 1995/96	1375 1996/97	1376 1997/98	1377 1998/99	Budget 1378 1999/2000	Est. 1378 1999/2000	Budget 2/ 1379 2000/01
	(In billions of Iranian rials)						
Expenditure and net lending	28.8	28.0	27.9	26.0	27.6	25.9	26.3
Current expenditure	14.4	15.6	16.1	16.4	16.1	16.1	17.1
Capital expenditure	7.2	7.4	6.9	5.4	7.8	6.5	5.8
Earmarked expenditure 5/	2.0	2.0	2.3	2.7	3.0	2.9	3.2
Foreign exchange losses 6/	5.2	3.0	2.6	1.6	0.8	0.4	0.2
Net lending	0.0	0.0	-0.1	-0.1	0.0	-0.1	...
Discrepancy	0.0	0.9	-0.1	-0.1	0.0	0.3	0.0
Overall balance (deficit (-))	-3.6	-1.6	-2.5	-6.7	-1.4	1.0	2.6
Overall non-oil balance (deficit (-))	-20.0	-17.9	-16.1	-13.6	-10.2	-11.3	-13.4
Financing	3.6	0.8	2.6	6.9	1.4	-1.3	-2.6
Net domestic	3.4	0.8	2.6	5.2	1.4	-1.3	-2.6
Banking system	3.0	0.8	1.8	3.7	0.3	-1.7	-2.4
Nonbanks (participation papers)	0.0	0.0	0.8	0.8	0.5	0.5	0.0
Privatization proceeds	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Other	0.0	0.0	0.0	0.7	0.1	0.0	0.0
Net external	0.1	0.0	0.0	1.7	0.0	0.0	0.0
Memorandum items							
GDP at market prices (in billions of rials)	178,875	235,234	275,903	326,476	405,065	415,499	520,602
Non-oil GDP at market prices (in billions of rials)	151,731	199,843	247,640	306,188	372,069	381,653	468,541

Sources: Bank Markazi Jomhouri Islami Iran; Plan and Budget Organization; and Fund staff estimates and projections.

1/ Fiscal year ending March 20.

2/ Including Rls 11.1 trillion contingency budget, to be implemented only if crude oil prices remain above US$ 15.75 per barrel.

3/ From sale of a portion of oil and gas revenues at the "export" and TSE exchange rates.

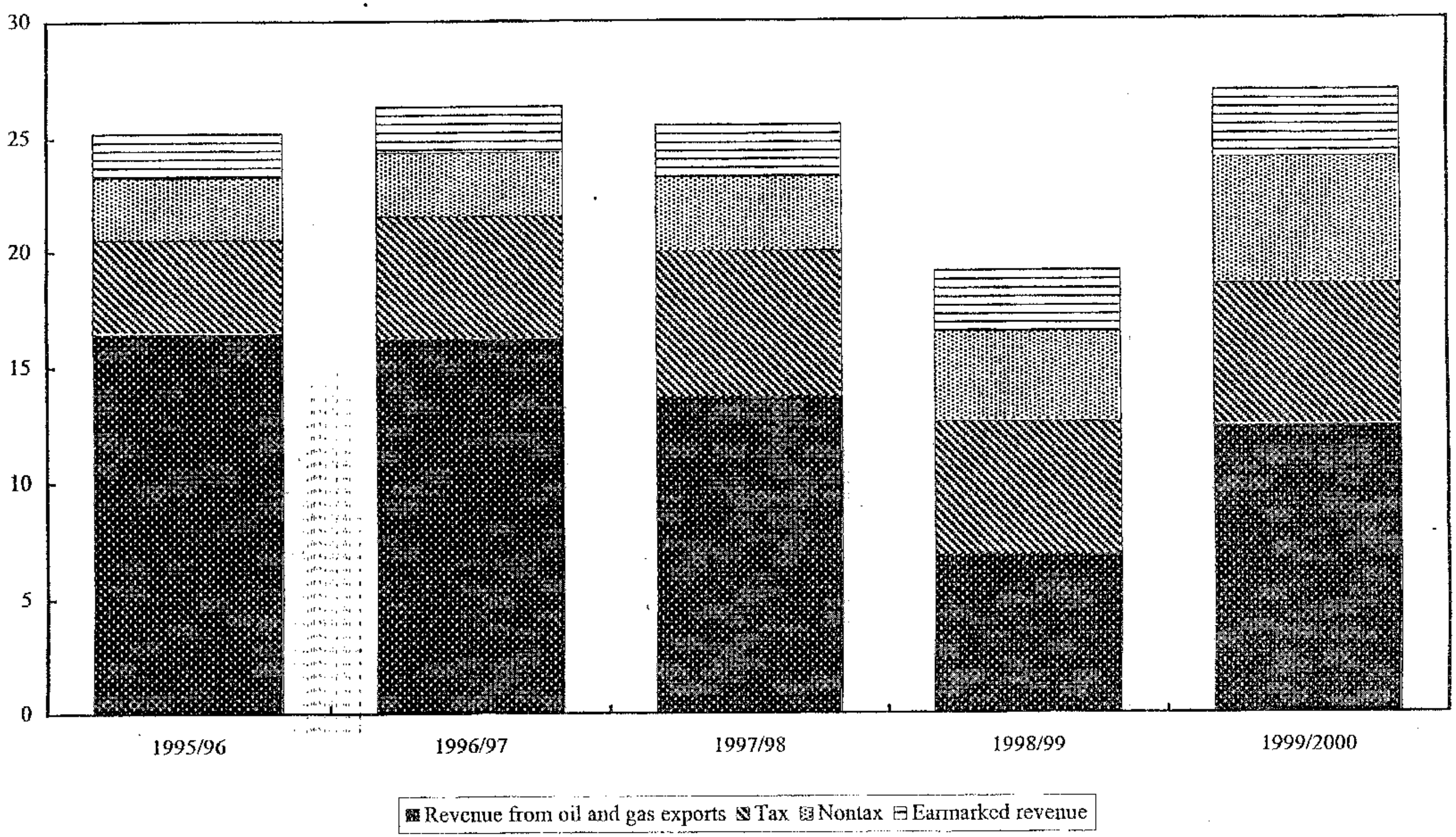
4/ Mostly revenue of the Social Security Organization and medical services provided by universities.

5/ Counterpart of earmarked revenue.

6/ Budget outlays to cover the foreign exchange losses of the central bank.

Chart 4. Islamic Republic of Iran: Central Government Revenue, 1995/96–1999/2000

(In percent of GDP)



50 percent of total budget revenues originated directly from the oil and gas sector. In 1999/2000, revenue from oil and gas export proceeds rose strongly (by 5 percentage points of GDP) compared with the previous year as a result of the sharp rise in the crude oil price. In addition, the sale of larger shares of the proceeds at the market-based TSE exchange rate contributed strongly to revenues.

31. By contrast, tax revenues have remained low, averaging less than 6 percent of GDP over the last five years. In 1999/2000, tax revenue collection improved somewhat compared with the previous year, as both direct and indirect taxes increased slightly relative to GDP. While revenue from the corporate profit tax rose broadly in line with GDP, collections from taxes on wages and salaries increased significantly. Among indirect taxes, revenue from the sales tax on cigarettes fell short of the budget target and remained lower in nominal terms than in 1998/99, despite an increase in the tax rate, suggesting intensified tax evasion and smuggling. This shortfall was, however, more than offset by a strong rise in revenue from sales taxes on automobiles and special goods (e.g., mobile phones). Revenue from import taxes remained low, reflecting large exemptions and the fact that all imports continued to be valued at the official floating exchange rate for customs valuation purposes.

32. Few tax policy changes were introduced over the past five years except for adjustments in rates of specific indirect taxes and customs tariffs for individual products (e.g., sales tax on cigarettes). The general structure of the tax system has, therefore, remained broadly unchanged and continues to be distortionary, inequitable, and revenue inelastic. There exist a plethora of indirect taxes, customs duties, and fees, causing significant collection costs for the tax authorities and excessive compliance costs for taxpayers. The personal income tax is characterized by a high marginal rate and numerous exemptions. The corporate income tax rate generates very little revenue as its rate is low (10 percent) and the tax base has been eroded by many exemptions.

33. Nontax revenues rose strongly in 1999/2000, as a result of increases in domestic administered energy prices. At the beginning of that fiscal year, domestic petroleum prices were raised, on average, by 70 percent, and the water and electricity tariffs were increased by 25 percent and 20 percent, respectively. By contrast, nontax revenue from dividends of state-owned enterprises was much lower than expected and fell in real terms vis-à-vis 1998/99, reflecting in part, a further overall deterioration in the financial performance of these enterprises. Earmarked revenues have remained flat relative to GDP at about 2.5 percent over the past five years.[5]

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[5] Earmarked revenues mainly include a partial transfer of revenues from the SSO to the budget as well as own revenue from taxes and fees levied by specific government organizations (e.g., fees for medical services provided to university students).

C. Expenditure Trends

34. In an attempt to avoid sharp budgetary deficits, expenditures (mainly capital outlays) have in the past been adjusted in response to fluctuations in oil and gas revenues. Overall expenditures remained broadly stable at about 28 percent of GDP during 1995/96–1997/98 before falling to about 26 percent of GDP in 1998/99, in response to the sharp drop in revenues which fell to 19 percent of GDP (Chart 5). Current expenditures expanded significantly in 1999/2000 to 16 percent of GDP, largely reflecting a significant increase in the wage bill, which was facilitated by oil and gas revenues. Subsidies to households and current transfers to state-owned enterprises rose roughly in line with nominal GDP over the past five years, with the exception of 1998/99 when explicit subsidies and transfers to households rose significantly (to more than 4 percent of GDP).

35. The functional classification of current and capital expenditures (Chart 6, Appendix II, Tables 29 and 30) changed little during the past five years. As regards current expenditures, social sector outlays increased significantly in 1997/98 relative to GDP, but fell in 1998/99 as a result of overall expenditure retrenchment because of low oil prices, and remained low in 1999/2000.[6] Specifically, education spending rose by about 1 percentage point of GDP during the period 1995/96–1997/98, in part, reflecting a significant increase in the number of teachers. Defense outlays rose from 2.8 percent of GDP in 1995/96 to 3.2 percent of GDP in 1997/98, and after remaining at this level in the subsequent year, were cut to 2.7 percent of GDP in 1999/2000. Capital outlays were cut sharply in 1998/99 to 5.4 percent of GDP from an average of 7 percent in the previous two years in response to lower oil revenues. Such expenditures were kept below the budgetary level at 6.5 percent of GDP in 1999/2000. The budget does not reflect the large quasi-fiscal subsidies that the government provides mainly through nonmarket prices. While fluctuating over time, implicit subsidies arising out of the low domestic prices of petroleum products are estimated by the staff to have increased to about 11 percent of GDP in 1997/98 before falling to 7 percent of GDP in 1998/99 as global prices of such products fell. However, in 1999/2000, implicit subsidies are estimated by the staff to have risen to 17 percent of GDP despite a 70 percent upward adjustment in domestic prices of such products as world prices rose sharply.

D. The 2000/01 Budget

36. The 2000/01 budget is the first under the TFYDP (Appendix I, Table 1). Reflecting all regular expenditure commitments as well as the "contingency budget", and

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[6] Note that most of the 1999/2000 expenditure data are only budget data. However, as the actual outcome for total current and capital spending deviated relatively little from the budget, it can be assumed that the breakdown of actual current spending by functional classification is also likely to have been broadly in line with the budgetary allocations.

Chart 5. Islamic Republic of Iran: Economic Classification of Central Government Expenditures, 1996/97–2000/01

(In percent of GDP)

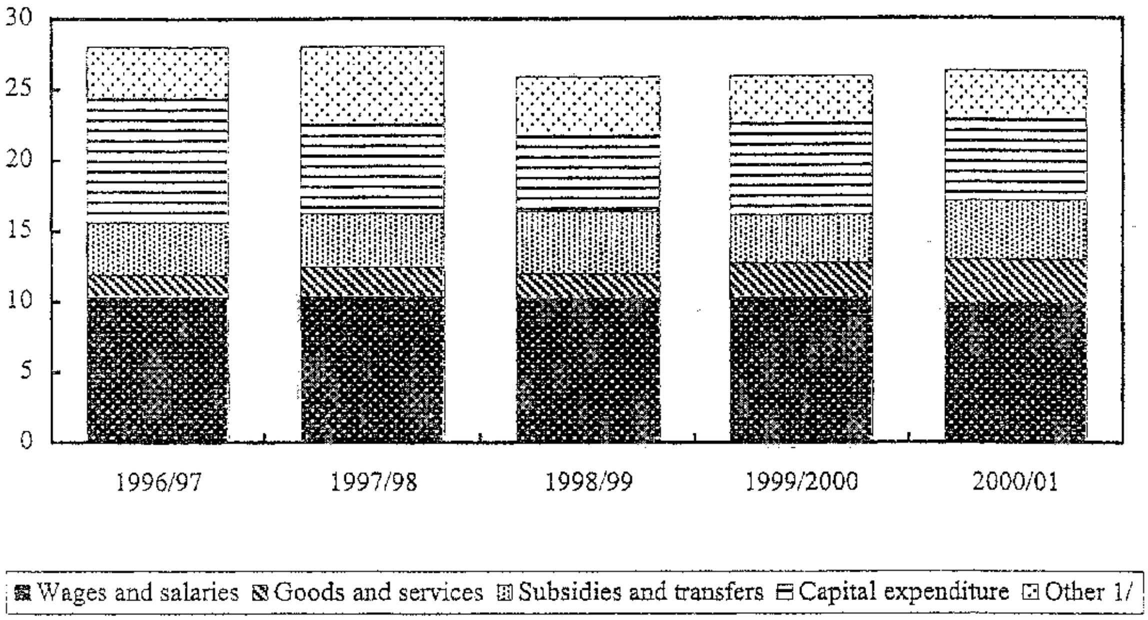
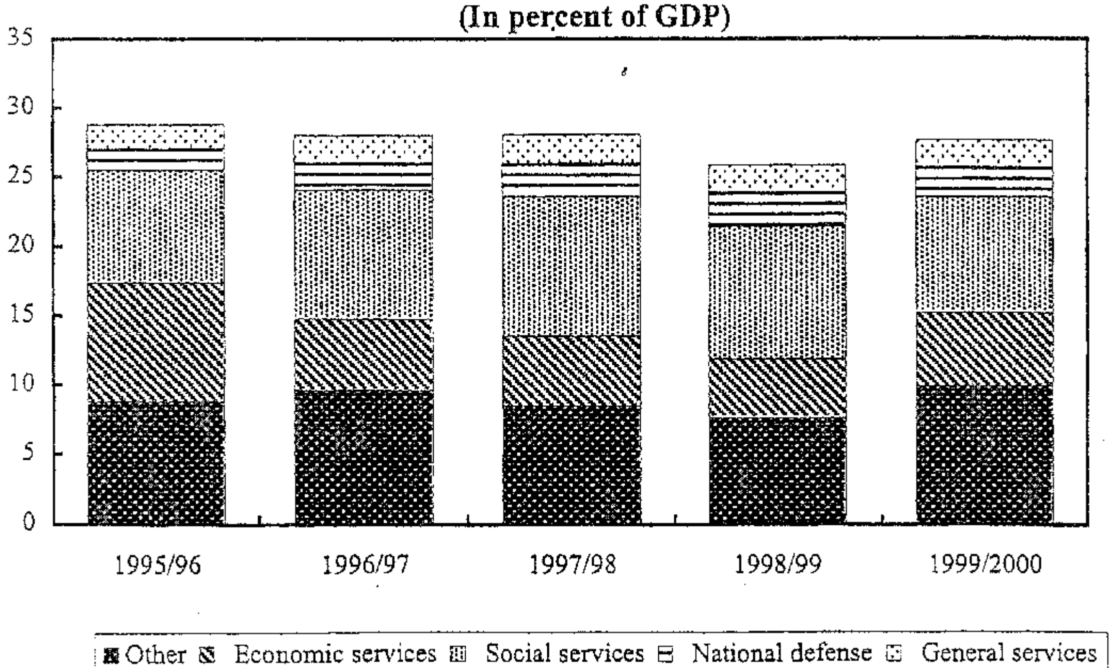


Chart 6. Islamic Republic of Iran: Central Government Total Expenditure by Functional Classification, 1995/96–1999/2000

(In percent of GDP)



allowing a likely increase in capital spending beyond the budgetary target, implementation of the 2000/01 budget is expected to generate a surplus of about 2½ percent of GDP.[7] Revenue is projected to increase significantly (from 27 percent of GDP to 29 percent of GDP), essentially on account of higher proceeds from exports of crude oil, and sales of a larger share of foreign exchange at the TSE rate. The budget includes a few marginal tax policy reforms, including an increase in customs tariffs on manufactured imports and a decrease in the sales tax on cigarettes. The budget's revenue projections can be generally considered as conservative, with the exception of an optimistic estimate of collections from the sales tax on cigarettes.

37. On the expenditure side, the wage bill, which accounts for slightly more than half of the total outlays, is budgeted to rise by about 18 percent. However, the budget entails a "backward indexation" provision, requiring the government to compensate civil servants for the difference between the projected and actual inflation rate experienced in 2000/01. This provision creates a potentially large contingent liability for the 2001/02 budget. Explicit consumer goods subsidies are projected at Rls 8.5 trillion, equivalent to an increase of about 23 percent compared with the previous year. As in previous years, the bulk of this amount (about 75 percent) will be used to subsidize imports and domestic purchases of wheat. Capital outlays are budgeted to increase little in nominal terms and decline relative to GDP (from 6½ percent last year to 6 percent this year).[8]

38. As part of the 2000/01 budget, the authorities intend to sell US$5.5 billion at the floating exchange rate (Rls 1,750 per US$1), compared with US$2.5 billion last year, while up to US$7.5 billion would be sold at the depreciated TSE exchange rate. As in previous years, foreign exchange, sold at the floating exchange rate, will be used within the budget framework to finance imports of essential goods (e.g., wheat, sugar, rice, vegetable oil), military equipment, medical supplies, debt service payments, and a variety of current and capital expenditure items (e.g., imports for the oil sector).

39. In addition to the regular budget, the parliament approved a contingency budget, equivalent to Rls 11.1 trillion (about 2 percent of GDP). Expenditure commitments and envisaged debt repayments under this contingency budget will only become effective if the

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[7] The budget's projections conservatively assume an average crude oil price of US$15.75 per barrel. To the extent that the crude oil price will remain above the conservative assumption used in the budget, this surplus could be even larger.

[8] This, however, masks that last year's government capital spending included a certain share of capital transfers to the NIOC, the electricity parastatal, and other state enterprises. This year's budget does not include such transfers, as these enterprises are expected to finance their capital spending out of their own resources and bank borrowing.

crude oil price remains above US$15.75 per barrel, which is very likely. Such contingency outlays include (a) repayment of external debt in the amount of US$869 million; (b) retirement of Rls 2.3 trillion of debt to domestic commercial banks and the central bank; (c) provision of Rls 3 trillion in subsidies to those importers who have no longer access to foreign exchange at the export rate; (d) transfer of Rls 3 trillion to banks that could be used for lending to state enterprises under a special lending facility; (e) repayment of Rls 0.5 trillion of government debt to the pension funds; (f) increase in the capital of the Export Development Bank by Rls 0.8 trillion; and (g) payment of Rls 1.5 trillion as bonus to retiring government employees.

40. The authorities are committed to setting up an OSF at the beginning of the fiscal year 2001/02. The primary objective of this fund will be to smooth revenues and shield the budget from the adverse impact of volatile and unpredictable movements of the crude oil world market price (short-term stabilization function). The authorities indicated that they would transfer to the OSF all revenues from crude oil and gas exports over and above the budgetary targets by the end of this fiscal year. Starting next year, the authorities intend to base the operations of the OSF on a price-contingent rule and all oil revenue over and above a price of, say US$15.75 per barrel of crude oil will be transferred to the OSF.

IV. The Financial Sector

A. The Structure of the Financial Sector

The banking system

41. The Iranian financial sector is dominated by ten state-owned banks, including six full-service commercial banks, and four sectorally specialized. In addition, four small private nonbank credit institutions have recently been licensed. Total number of state-owned bank branches at end of 1998/99 was 14,518 compared with 11,634 in 1994/95, an increase of about 25 percent.[9] Four private nonbank credit institutions were licensed in 1999/2000 and three started operation. The main difference between these institutions and banks is that they are not allowed to offer their clients payment services. Otherwise, they offer all the financial services that are offered by banks.[10]

[9] It has been suggested that such relatively high growth rate in bank branches reflects, at least in part, competition among banks. Given that banks are unable to attract new deposits by offering competitive rates and products, branching would be an obvious venue left for competing for deposits.

[10] TFYDP has approved the establishment of regular private banking.

42. Commercial banks accept demand, savings and time deposits; engage mainly in short-term lending, primarily to the private sector and public nonbank financial enterprises; and act as agents of depositors in the investment of funds. The profits (losses) from these investments are then distributed to depositors based on the duration and amount of the investment. Specialized banks lend mainly on a long-term basis (five years or more) and have equity participation in the agricultural, industrial, mining, housing, and export sectors. Their sources of funds are low-cost, long-term government deposits and loans, with the exception of the Housing Bank whose resources are largely private deposits.

Capital markets

43. In 1994/95, the issuance of partnership papers in line with Islamic finance principles was approved by the Money and Credit Council. The first issue of partnership papers was carried out by the Teheran Municipality and all subsequent issues have thus far been on behalf of specific public sector agencies, and have been related to specific projects. Government papers, in the form of National Participation Papers, were issued for the first time at the beginning of 1998/99 to finance government development expenditures. These papers are issued with specific rates of return and cannot be discounted in secondary market trading, and banks are not allowed to invest in them.

44. There is an active stock market—the TSE—which benefited from a wave of privatization in the early 1990s. Stock market capitalization of Rls 38 trillion at end-1999 corresponds to about 9 percent of GDP (it peaked at about 14 percent in October 1996), though relatively few of the shares are routinely available for purchase by the general public and liquidity, at 10 percent per annum turnover, is still low by international standards. The TSE has consolidated its position in recent years, showing a good rate of return in the past couple of years. However, the TSE total capitalization remains small, liquidity is very limited and the price-earnings ratio so low as to suggest a considerable degree of investor caution.

45. Ownership of listed stocks is highly concentrated: the largest five shareholders account, on average, for more than 82 percent of company shareholdings. A small handful of institutional investors dominate the market as a whole. These are all either government institutions or state-owned banks or their subsidiaries, albeit operating on market-oriented basis. Over the past two years an overhaul of the TSE regulations was undertaken resulting in an increase in transparency and protection against insider abuses. Further regulatory strengthening and other innovations are be considered, including relaxing the restrictive features of listing requirements (which may have contributed to the slowness of fully private firms to list). There has been a proliferation of unregulated "investment companies" particularly during the past two years. These companies have been offering brokerage and mutual fund investment services.

B. Monetary Policy Structure

46. The monetary policy objectives and instruments are elaborated in the monetary and credit policy statement that is usually issued in conjunction with the annual fiscal budget and approved together by parliament. The statement sets the targets for, inter alia, broad money growth, bank credit growth, distribution of bank credit between the private and public sectors, the targeted sectoral and provincial distribution of bank credit, the deposits (per type) and lending (per sector) rates and required reserve ratios. However, BMI credit expansion is not included in the statement. The monetary program is executed by BMI.

47. Several instruments are available to BMI for implementing its monetary policy. These include (a) direct credit management, (b) reserve requirements, (c) lending and deposits rates of return, (d) sectoral credit allocations, (e) allocation of government bonds to the banking institutions, and (f) penalties for overdrafts. However, BMI has not actively used most of these instruments in executing its monetary and credit policies. Legal reserve requirement ratios, bank lending and deposits rates, and the allocation of government bonds to banks, have basically remained unchanged over the past few years. Although, minor changes were made on the sectoral allocations of credit, BMI has enforced it flexibly, allowing banks to deviate somewhat from the plan and in many instances the BMI adjusted its allocation requirements to encourage certain sectors.

48. The BMI has moved away from setting bank-by-bank credit ceilings. However, it still has significant powers in determining the direction of bank credit. All bank lending to public enterprises must be approved by BMI. Also all bank lending to the private sector enterprises in excess of Rls 5 billion or to individuals in excess of Rls 0.5 billion per loan must be approved by BMI.

49. Bank rates of return on deposits are set administratively by the BMI according to the maturity of deposits rising up to 18.5 percent for deposits of five years maturity. For lending, the rates are set as ranges according to the sector of economic activity to which credit is extended with the lowest rates applying to agriculture (13–17 percent), and the highest for trade and services (22–26 percent). Under the Iranian Islamic banking law, these rates are determined in several ways. On the deposits side, current accounts do not earn income. For investment deposits, the announced rates are expected rates of return; ex-post rates may be higher or lower than the quoted rates, depending on the profitability of the projects financed by banks and of the banks themselves. In practice, however, the ex-post rates have rarely deviated from the quoted rates. The mandated lending rates, on the other hand, represent the rate of profit that banks are allowed to collect from its lending operations.

C. Developments during 1999/2000

Monetary and credit developments

50. Broad money growth decelerated in 1999/2000 to about 20 percent compared with about 26 percent in 1998/99 (Tables 4 and Appendix II, Table 37). This monetary growth was caused primarily by significant improvement in the net foreign assets (NFA) positions of the BMI and banks and by sharp increase in bank credit to the private sector. The rising oil prices during the second half of 1999/2000 coupled with continued import compression, led to significant buildup of NFA of about US$3.2 billion (one-third of which is at the banks) by end-1999/2000, contributing 3.4 percentage points to broad money growth as compared with 4.7 percentage points in 1998/99 (Charts 7 and 8). The growth of the banking system net domestic credit (NDC) and its contribution to monetary growth were reduced markedly in 1999/2000 to 22.5 percent and 25.4 percent, respectively, compared with 29.2 percent and 32.3 percent in 1998/99. The containment of NDC growth was achieved through a sharp reduction in government and public sector borrowing. Assisted by a fiscal surplus, the banking system's net claims on government contributed about 1.3 percentage point decline to broad money growth while tight controls on credit to public enterprises limited their borrowing increase to 2.6 percent of broad money. Lending to the private sector was by far the leading factor contributing to NDC growth. Banks' claims to the private sector grew by over 40 percent in 1999/2000 contributing 24.1 percentage points of broad money growth (the highest levels recorded in the past decade). The increase in lending to the private sector reflects the authorities' efforts to reform the public enterprise sector and encourage private sector growth.

51. Developments in BMI's monetary aggregates have largely mirrored those of the banking system. Reserve money growth decelerated to 16.5 percent in 1999/2000 compared with 18.4 percent in the previous year, led by significant increase in BMI's NFA, which rose by about US$2 billion, and lending to banks, which accounted for all BMI's lending (Table 4 and Appendix II, Table 38). There was a contraction in lending and in net claims on government. The increase in BMI's NFA and lending to banks contributed 5.4 percentage points and 16.5 percentage points to reserve money growth in 1999/2000, respectively, compared with -5.9 percentage points and -2.7 percentage points in 1998/99.

52. The broad money multiplier remained virtually unchanged in 1999/2000. However, financial intermediation continued to improve, albeit at a slow pace, with currency-to-total deposits ratio declining from 12.9 percent in 1998/99 to 12.6 percent in 1999/2000, continuing a long-term trend that spanned the past ten years. This decline occurred despite modest increase in the demand for currency as evidenced by the increase in the currency-to-demand deposits ratio from 31.1 percent in 1998/99 to 31.7 percent in 1999/2000. This development, however, might be related to the exchange market reforms that were

Table 4. Islamic Republic of Iran: Selected Monetary Indicators, 1995/96–1999/2000 1/

	1995/96	1996/97	1997/98 2/	1998/99 2/	Prel. 1999/2000
	(Changes in billions of Iranian rials)				
Net foreign assets	7,510	7,748	-12,090	-6,151	5,571
Net domestic assets	15,894	24,238	24,091	39,866	27,737
Claims on government (net)	5,371	1,375	4,743	10,852	-2,136
Claims on non-financial public enterprises	6,673	6,773	10,789	9,671	4,263
Claims on private sector	9,219	14,500	15,000	21,781	39,693
Other items (net)	-5,369	1,590	-6,441	-2,438	-14,083
Broad money	23,404	31,986	12,001	33,715	33,308
Money	10,711	15,810	2,838	17,542	12,987
Quasi-money	12,693	16,176	9,163	16,173	20,321
	(Percent of beginning money stock)				
Net foreign assets	11.8	8.9	-10.2	-4.7	3.4
Net domestic assets	25.0	27.9	20.3	30.5	16.8
Claims on government (net)	8.5	1.6	4.0	8.3	-1.3
Claims on non-financial public enterprises	10.5	7.8	9.1	7.4	2.6
Claims on private sector	14.5	16.7	12.6	16.6	24.1
Other items (net)	-8.5	1.8	-5.4	-1.9	-8.6
Broad money	36.8	36.8	10.1	25.8	20.2
Money	16.9	18.2	2.4	13.4	7.9
Quasi-money	20.0	18.6	7.7	12.4	12.3
Memorandum items:					
Credit sources (in percent of total)					
Bank Markazi	37.5	33.4	30.9	28.5	22.9
Banking institutions	62.5	66.6	69.1	71.5	77.1
Credit distribution (in percent of total)					
Government and public enterprises	48.0	45.6	46.7	47.1	39.4
Private sector	52.0	54.4	53.3	52.9	60.6
Selected ratios					
Income velocity of broad money	2.08	1.98	2.12	1.99	2.11
Money multiplier	2.40	2.39	2.34	2.49	2.57

Source: Bank Markazi Jamhouri Islami Iran.

1/ Iranian years ending March 20.

2/ Data for 1997/98 and 1998/99 have been revised to reflect implementation of the improved classification system and errors in reporting by few banks that were discovered in the course of implementing the new system. Data prior to 1997/98 are still based on the old classification system. Central bank balances were not affected.

Chart 7. Islamic Republic of Iran: Contribution to Broad Money Growth, 1995/96–1999/2000

(In percent of initial broad money stock)

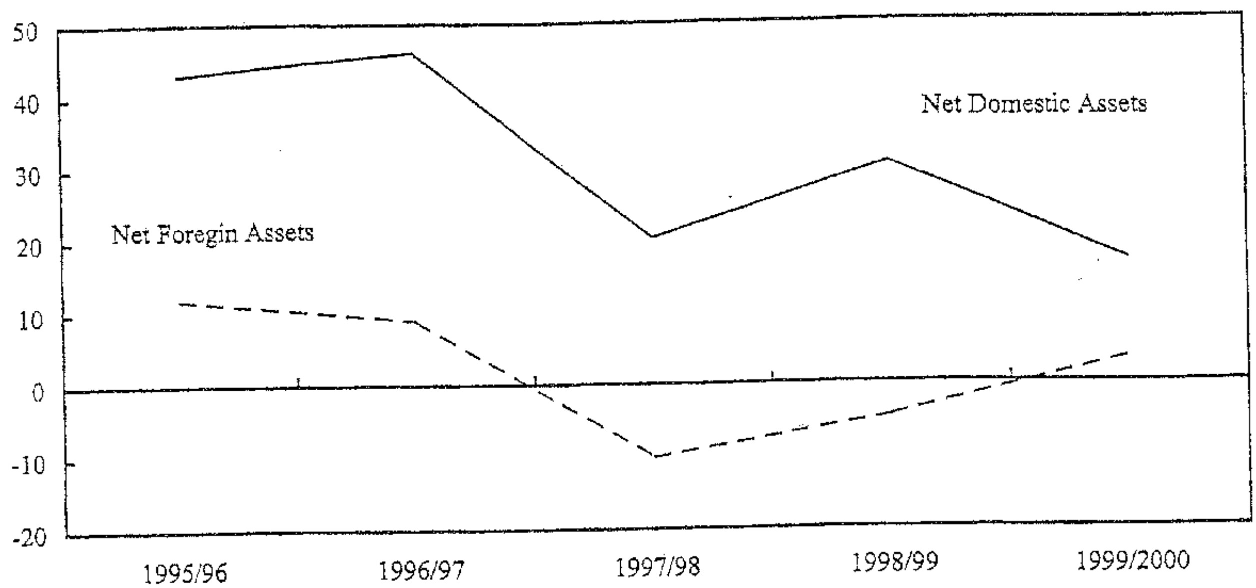
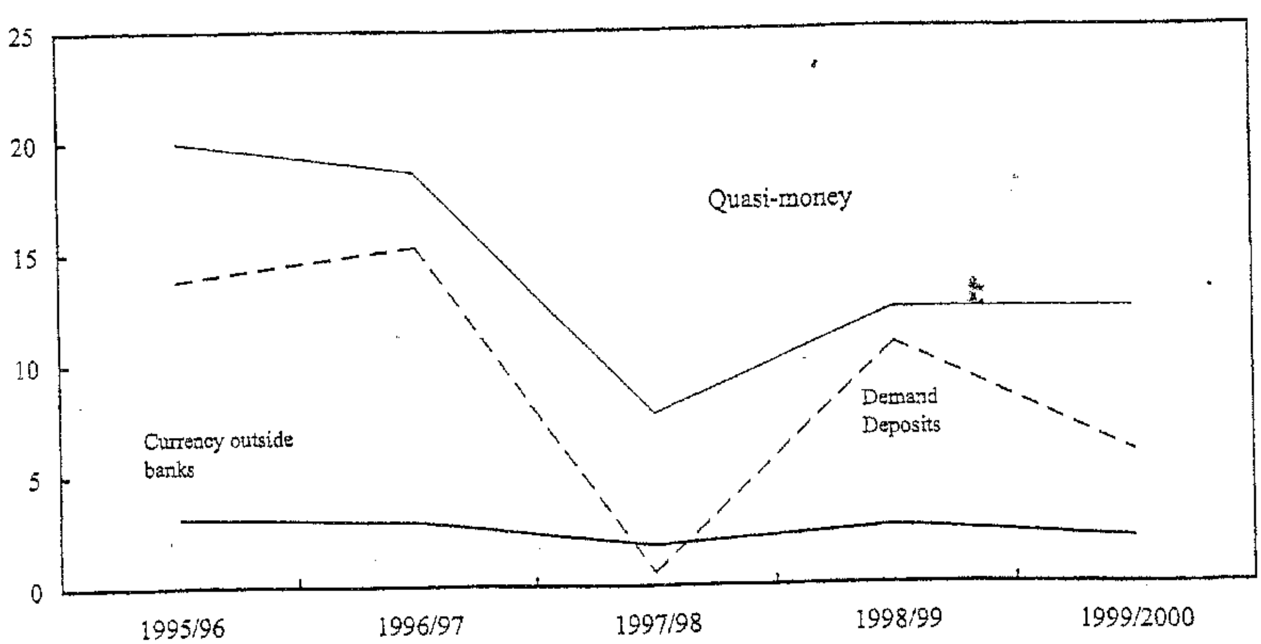


Chart 8. Islamic Republic of Iran: Contribution to Broad Money Growth, 1995/96–1999/2000

(In percent of initial stock of broad money)



undertaken in 1999/2000. More importantly, the ratio of time and savings deposits to demand deposits has increased from 1.42 percent in 1998/99 to 1.52 percent in 1999/2000 (a growth of about 7 percent).

Monetary policy developments

53. The authorities' monetary policy stance during 1999/2000 was shaped mainly by two concerns: containing the large monetary overhang that was created at the end of 1998/99 and the desire to support private sector-led growth, especially in housing construction and agriculture sectors.

54. Owing to the sharp increase in bank financing of the budgetary deficit in 1998/99 and the traditional end-year clearance of budgetary balances of government agencies and public enterprises, significant liquidity expansion occurred toward the end of 1999/2000. As a result, banks' excess reserves (deposits at BMI and cash in vaults) doubled at end-1999/2000 from their level at end of 1998/99 and their share in reserve money rose from 4.8 percent to 8.1 percent. The authorities responded to the buildup in excess reserves by establishing a remunerated time deposit facility, the Open Deposit Account (ODA), at BMI in which banks were encouraged to invest their excess reserves instead of on-lending them.[11] Tight monetary policy was also implemented with reserve money declining slightly during the first quarter. Finally, the exchange rate at the TSE was allowed to appreciate, which contributed to significant absorption of excess liquidity.

55. The tight policy stance was loosened somewhat toward the end of the second quarter, and bank financing was expanded for housing construction and agriculture. Housing construction was viewed as a vehicle that could generate new employment opportunities in a relatively short period of time and additional financing for agriculture was needed to counter the effects of the continued drought. Banks were instructed to increase their lending to those two sectors, and broad money grew by over 5 percent during the second quarter (contributing by about one-third to overall broad money growth in 1999/2000). The additional lending was funded, at least in part, by significant draw down of excess reserves by banks at the end of the second quarter. Excess reserves are estimated to have declined by 2.5 percentage points (or by about 30 percent) of reserve money between the sixth and seventh months of the year.

Liquidity management

56. Traditionally, incentive-based liquidity management arrangements do not exist in Iran. There are no interbank market, tradable liquid securities, or central bank facilities for banks to manage their short-term liquidity needs.

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[11] For detail, see section on liquidity management.

57. The launching of the foreign exchange market liberalization program at the beginning of 1999/2000 heightened the need to institute an arrangement for the BMI to manage banks' liquidity to support the reform process. The BMI also needed to move expeditiously to mop up the large liquidity overhang that emanated from the end-year budgetary operations. As indicated earlier, the ODA was activated at BMI effective April 22, 1999 for the commercial banks to deposit their excess reserves, initially at rates ranging from 14 percent to 18 percent for deposits of 3–12 months in maturity.

58. Deposits at the ODA reached Rls 1.1 trillion in the first quarter or the equivalent of about 1.2 percent of demand deposits, at an average rate of return of 16 percent per annum, mopping up much of the excess liquidity. The deposits declined to about Rls 0.65 trillion by the end of the second quarter and further to a negligible level during the second half of the year. The ODA partially succeeded in achieving the BMI's monetary policy objective by blocking significant portion of banks' usable excessive reserves and thus preventing a sharper exchange rate depreciation when the exchange rate was freed at the beginning of the year. This outcome, however, was not entirely incentive-based (as the ODA rate of return was substantially lower than banks lending rates) but also was facilitated to a certain degree by limiting bank credit operation early in the year.

59. The relatively low rates on the ODA and the lack of movements in these rates to counter liquidity movements have rendered the ODA dormant. Another difficulty with the ODA design is the inability of BMI to make the offered rates be market-determined and tradable in interbank market. To address these shortcomings, BMI allowed the establishment of interbank funds market and have decided to issue its own securities—the Central Bank Participation Paper (CPP).

60. Until last year, banks did not lend to other banks except if allowed to or instructed by BMI. Early last year, the BMI lifted this prohibition; banks were encouraged to establish an interbank market and the BMI set the interbank rate at 18 percent. This measure, however, was largely ineffective as very little interbank lending occurred and no formal market structure emerged. The CPP holds a greater promise for developing into an effective instrument that is liquid and with market-determined price.[12]

[12] The proposed design and the underlying legal process were considered last year, but its debut has been delayed to 2000/01 to secure parliamentary approval for the instrument and its use in open market operations.

D. Banking Supervision

61. Given the controlled rate of return environment, state ownership of all banks, the considerable role of government ministries in directing credit, and the pre-approval by BMI of most of the banks' large loans and of foreign exchange activities, prudential regulation and supervision has in the past played a limited role in the operation of the banking system. However, in anticipation of further financial system liberalization under the TFYDP, BMI have started reorganizing its internal banking supervision structure. The Banking Supervision Department has been split into two: the banking information department which would handle off-site supervision and financial reporting by banks, and banking supervision department which would handle the on-site supervision as well as being responsible for drafting banking regulations.

62. In addition, a comprehensive review of bank accounting and disclosure practices was undertaken in 1999/2000 in cooperation with the Fund and the Bahrain-based Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI). Based on this review, a range of measures have been developed that would be needed to bring accounting and disclosure in conformity to AAOIFI and (when applicable) IAS standards. The BMI also concluded a comprehensive review of bank financial reporting practices and accordingly revised the general monetary and credit classification system. Finally, Iran undertook in 1999/2000 a comprehensive assessment of its financial system under the Fund/Bank Financial Stability Assessment Program (FSAP) pilot project for selected countries.

V. The External Sector

A. Overall Trends

63. Following a strong balance of payments performance in 1996/97, mainly on account of the high oil prices, the period 1997/98–1998/99 witnessed a deterioration in external accounts triggered by tumbling oil prices and stagnant low non-oil exports. Imports were compressed due to the resulting scarcity of foreign exchange, and Iran negotiated re-phasing of part of its rescheduled external debt in 1998 in order to alleviate balance of payments pressures. Gross official reserves fell to a decade low of US$3.7 billion by the end of 1998/99, the equivalent of three months of imports. In 1999/2000, however, a sharp increase in oil prices, enhanced by a 9 percent growth in non-oil exports and a continued compression of imports, allowed for a swift recovery in external sector accounts.

B. Balance of Payments Developments

64. The overall external balance dropped from a surplus of US$2.8 billion in 1996/97 to a deficit of US$4 billion in 1997/98 (Table 5 and Chart 9). A gradual but significant improvement was recorded over the next two years, as the balance of payments deficit declined to US$1.5 billion in 1998/99 and shifted into a surplus exceeding US$2 billion in 1999/2000. Consequently, following the large drop in gross official reserves from

Table 5. Islamic Republic of Iran: Summary Balance of Payments, 1995/96–1999/2000 1/

(In millions of U.S. dollars)

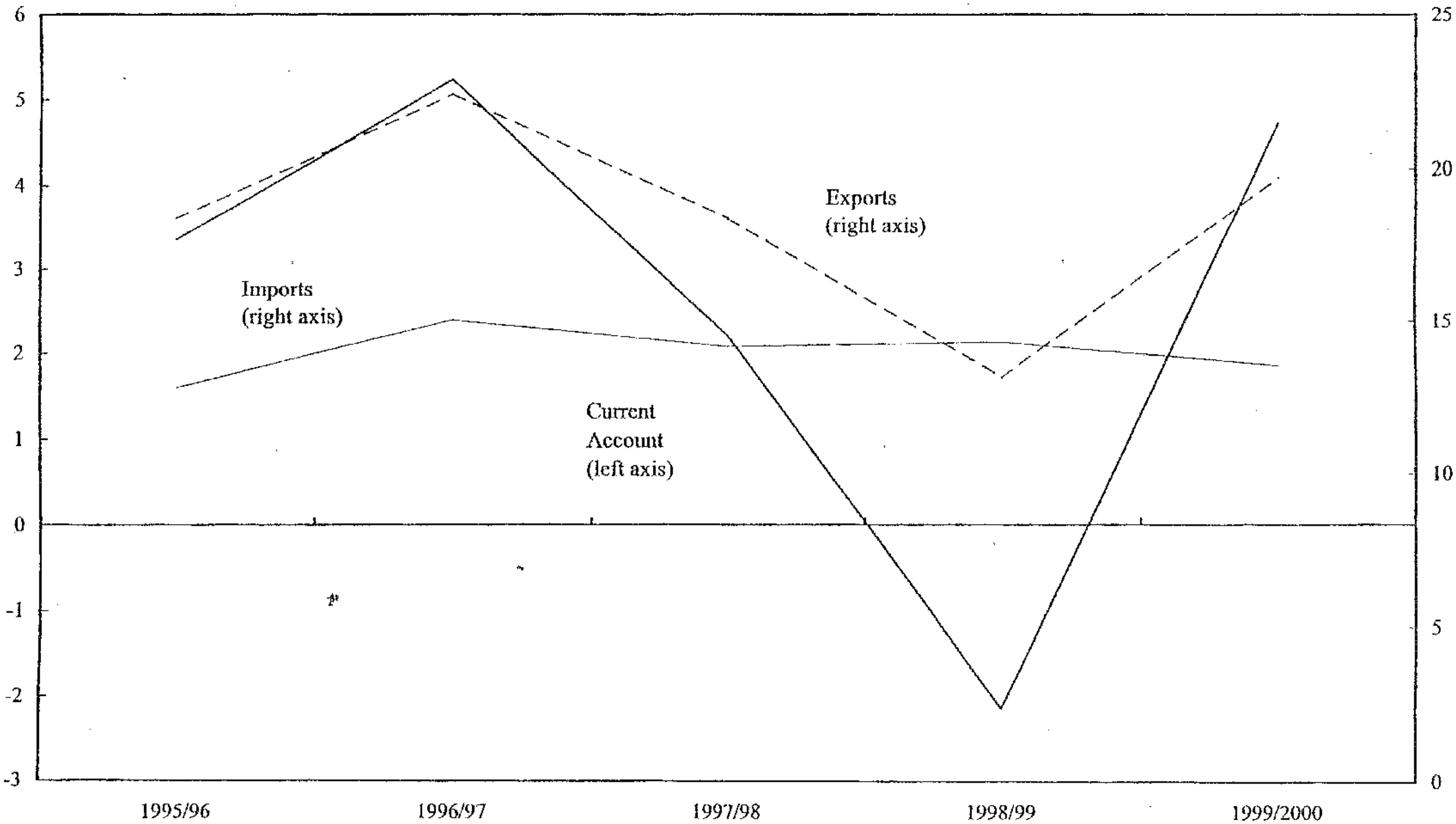
	1995/96	1996/97	1997/98	1998/99	Est. 1999/2000
Current account	3,358	5,232	2,213	-2,140	4,727
Trade balance	5,586	7,402	4,258	-1168	6215
Exports	18,360	22,391	18,381	13,118	19,726
Of which					
Oil and gas	15,103	19,271	15,471	9,933	16,270
Other	3,257	3,120	2,910	3,185	3,456
Imports	-12,774	-14,989	-14,123	-14,286	-13,511
Services account	-2,224	-2,633	-2,438	-1,469	-1,833
Net transfers	-4	463	393	497	345
Capital and financial account 2/	-2,947	-2,471	-6,217	613	-2,641
Of which					
Medium- and long-term capital	-3,679	-5,209	-2,602	-798	-1,942
Short-term capital	796	192	180	-259	-716
Overall balance	411	2,761	-4,004	-1,527	2,086
Financing	-411	-2,761	4,004	1,527	-2,086
Change in net foreign assets (increase -)	-2,529	-2,685	4,170	1,533	-1,917
Exceptional financing	2,118	-76	-166	-6	-169
Change in arrears	-1,060	-1,881	-166	-6	-169
Refinancing	3,178	1,805	...	...	...
Memorandum items:					
Gross official reserves	6,748	9,433	5,263	3,730	5,647
(In months of c.i.f. imports)	6.0	7.1	4.3	3.0	4.9
Current account balance (in percent of GDP)	3.8	5.0	1.5	-2.2	4.7
Stock of external debt	21,928	16,835	14,247	13,184	10,357
Medium- and long-term	15,485	12,081	9,479	8,681	6,739
Short-term	6,443	4,754	4,768	4,503	3,618
Of which: arrears	2,222	341	175	169	0.0
External debt (in percent of GDP)	25.1	16.1	14.0	13.5	10.4

Sources: Data provided by Iranian authorities; and Fund staff estimates.

1/ Iranian years ending March 20.
2/ Including errors and omissions.

Chart 9. Islamic Republic of Iran: Current Account Developments
1995/96–1999/2000

(In billions of US $)



US$9.4 billion in 1996/97 to US$5.3 billion in 1997/98, reserves declined by US$1.5 billion in 1998/99 before rising by nearly US$2 billion in 1999/2000 to reach US$5.6 billion. Underlying this improvement, however, were major swings in both current and capital account balances. Indeed, the current account balance shifted from a surplus of US$2 billion (1.5 percent of GDP) in 1997/98 to a US$2 billion deficit (2.2 percent of GDP) in the following year, but ended the year 1999/2000 with a renewed and even larger surplus of US$4.7 billion (4.7 percent of GDP). These sharp movements mirrored, to a great extent, oil price fluctuations. The capital account balance, including errors and omission, reveals equally large swings as the deficit of US$6 billion in 1997/98 turned into a surplus of US$600 million in 1998/99 before shifting back to a deficit of US$2.6 billion in 1999/2000 as debt repayments increased.

Current account developments

65. Given that oil exports account for the bulk of current receipts, changes in the current external balance in Iran are primarily driven by oil price changes. A 52 percent drop in the average oil export price between 1997/98 and 1998/99, coupled with a 4 percent decline in the volume of crude oil exports, caused a US$5.5 billion fall in receipts from these exports. Hence, despite a 9 percent improvement in non-oil export receipts, total exports fell by about 29 percent in 1998/99 to US$13 billion, compared with US$18 billion in the previous year. In the process, trade balance shifted from a surplus of US$4.3 billion in 1997/98 to a deficit exceeding US$1billion in 1998/99.

66. In 1999/2000, reflecting a 77 percent increase in the average export price of Iranian crude oil, proceeds from crude oil exports rose by 60 percent, despite a decline in the export volume. In addition, the substitution of gas for petroleum products in domestic consumption allowed for increased exports of these products, leading to the doubling of proceeds from these exports. Non-oil exports also rose by about 9 percent to US$3.5 billion, encouraged by a depreciation of the TSE exchange rate. Imports also declined by about 5 percent to US$13.5 billion. As a result, the trade balance registered a massive improvement in 1999/2000, moving into a US$6.2 billion surplus from a US$1.1 billion deficit in the preceding year.

67. The composition of non-oil exports has remained broadly unchanged. Consumer goods accounted for 55 percent of such exports on average over the past three years, followed by raw materials and intermediate goods (about 38 percent on average over the same period). Carpets remain the single most exported Iranian non-oil product. Such exports have significantly declined over the second part of the 1990s, from US$2 billion in 1994/95 to US$570 million in 1998/99, which is attributed to competition from low-priced competitor carpet-producing countries. Exports of fresh and dried fruits, at about US$600 million in 1998/99, have captured a larger share of the total. Chemicals are the most prominent export of raw materials and intermediate goods, hovering at about US$450 million over the past three years. The direction of exports has also remained broadly unchanged during the

past four–five years (Appendix II, Table 53). While Japan and the United Kingdom remain the largest importers of Iranian goods (absorbing about 16 percent and 17 percent of total exports, respectively), Germany and the U.A.E. continue to be the main destination for non-oil exports, capturing 13 percent and 16 percent of these exports, respectively. Other important destinations for Iranian exports are Italy (6 percent of non-oil exports and 9 percent of total exports), Greece and South Korea (5 percent of total exports), and Turkey (5 percent of non-oil exports).

68. Iran imports mainly raw materials and intermediate goods and capital goods; imports of consumer goods, at about US$2 billion per annum, represent only about 14 percent of total imports (Appendix II, Table 54). Imports of machinery and tools average about US$4 billion to US$5 billion annually during 1999/2000–1998/99 which cover the bulk of capital goods imports. The next most important imports for Iran are grains and derivatives (about US$1.8 billion annually). These imports fell drastically in 1998/99 however to below US$900 million. Iran also imports a large quantity of chemical products, totaling about US$1.8–US$2.0 billion per annum. The most important sources of Iranian imports are Germany (12 percent), Japan (7 percent), and Italy (6 percent) (Appendix II, Table 55).

69. Private transfers decreased slightly from an average of US$450 million in 1996/97–1998/99 to US$345 million in 1999/2000, driven by a decline in transfers from Iranian workers living abroad. The balance on the services account which has been in deficit over the past few years, improved somewhat in 1998/99 as the deficit fell by about US$1 billion to US$1.5 billion before increasing again to reach $1.8 billion in 1999/2000. The renewed deterioration in the services balance in 1999/2000 occurred despite lower interest payments on the reduced stock of debt as travel payments rose and services receipts fell by about 26 percent, partly due to a decline in freight, insurance, and transport receipts because of the decline in the volume of oil exports, but also due to the decline of other public and private service receipts.[13]

Capital account and official reserves developments

70. Medium and long-term capital movements were dominated by large debt repayments over the past two years. Indeed, repayments of rescheduled debt exceeded, on average, US$2.5 billion per annum over the period 1997/98–1999/2000, while average net

[13] The major elements driving the decline in other public services receipts were decreases in the receipts of Iranian embassies abroad and in the charges received for foreign exchange transfers. The decline in other private services receipts was largely driven by a reduction in the sale of foreign exchange by foreign firms participating in the annual Iranian trade fair, by returning participants in foreign conferences abroad, and by returning members of sports federations from abroad.

disbursement of funds related to bilateral project financing was slightly above US$100 million on an annual basis. Overall, medium- and long-term capital movements registered a net US$2.6 billion outflow in 1997/98. However, inflows through medium-term oil pre-financing agreements[14] coupled with borrowing undertaken by the ministry of finance and the increased disbursement from a Japanese long-term loan allowed for a reduction in the net medium- and long-term capital outflow to about US$800 million in 1998/99. In 1999/2000, while disbursements of medium- and long-term loans remained below US$800 million, repayments increased strongly, in part, representing accumulated repayment of the loan contracted by the ministry of finance in 1998/99. In the process, net outflow of medium- and long-term capital remained high at US$2.6 billion in 1999/2000.

71. Net short-term capital movements shifted from a US$180 million net inflow in 1997/98 to a net outflow of US$259 million in 1998/99, and over US$700 million in 1999/2000. The outflow in 1998/99 was on account of repayments of oil pre-financing debt, which was not compensated for by similar inflows (the new oil pre-financing contracts were medium term). The short-term net outflow in 1999/2000 is due to a decline in letters of credit borrowing, in part, as a result of the reduced of cover by export credit agencies.

72. The overall external balance position translated into a decline in net foreign assets of BMI in 1997/98–1998/99 followed by a build up in these assets in 1999/2000. Iran also succeeded in clearing all remaining arrears on letters of credit over that period, which accentuated these reserve losses albeit to a small extent. Consequently, after declining to the equivalent of about three months of imports in 1998/99, gross official reserves rose to the equivalent of five months of imports in 1999/2000. This level of international reserves was more than sufficient to cover short-term debt and the ratio of reserves to imports or to broad money compares with several OECD countries, suggesting a comfortable external position.

C. External Debt Developments

73. Iran reduced its stock of debt by almost 40 percent over the past three years, from US$16.8 billion (16.1 percent of GDP) in 1999/2000 to US$10.4 billion (10 percent of GDP) in 1999/2000. The bulk of this reduction took place in 1999/2000 as medium – long-term debt declined by about US$2 billion, short-term debt by about US$1 billion, and all remaining arrears were cleared (US$169 million). Previously, in 1998, owing to the large drop in oil prices and its negative effect on external accounts, the government had negotiated

[14] The authorities sought these agreements from France and Germany in order to help in alleviating balance-of-payments pressures associated with low oil prices. Previously, oil pre-financing agreements were always of a short-term nature.

bilateral rephasing agreements with major creditors with respect to liabilities formerly rescheduled in 1994 (Appendix II, Tables 57 and 58).[15]

74. LCs related borrowing traditionally constituted the majority of short-term debt in Iran. Given the medium-term nature of oil pre-financing agreements contracted in 1998 and onwards and the clearing of all arrears, short-term debt presently comprises only LCs. Because of the loss of cover by major export credit agencies following Iran's liquidity problems in 1998/99, the amount of new LCs opened decreased gradually from US$6.4 billion in 1997/98 to US$5.6 billion in the following year and US$4.1 billion in 1999/2000.[16] Total short-term debt consequently fell from US$4.8 billion in 1997/98 to US$4.5 billion in the following year, and US$3.6 billion in 1999/2000. Despite this declining trend, however, the ratio of short-term debt to total debt slightly edged upward to 35 percent from 34 percent in 1998/99.

75. As oil export revenues dropped in 1998/99, the ratio of external debt to exports deteriorated significantly but strengthened again by end– 1999/2000 to 52 percent from an average of 85 percent in the previous three years, because of both debt repayment and export receipts. The debt-to-GDP ratio improved for last year to 10.4 percent in particular, and average interest rate on medium- and long-term debt remains below LIBOR. Average debt maturity remains relatively low, however, not only because the share of short-term debt in the total is slightly above one third, but also because oil pre-finance and rescheduled debt, which capture another 29 percent of total debt, have relatively short average maturities, of two and three years, respectively, with more than two-thirds of the total amount due in 2000/01. Average maturity as of end 1999/00 for the stock of long-term debt was 6.8 years, while that of bilateral debt was 3.5 years.

D. Exchange Rate Developments

76. After the introduction of the TSE rate in July 1997 and until March 2000, three officially recognized exchange rates have coexisted in Iran: the official floating rate of Rls 1,750 per U.S. dollar, which applies to oil and gas export receipts, imports of essential goods

[15] Originally talks were initiated to rephase the sums of DM 1251 million owed to Germany, US$431 million owed to Italy, and US$284 million owed to Japan. Rephasing agreements were concluded with the first two parties, while Iran was able to repay its debt to Japan on time at end-March 1999, by means of oil repayments. Iran also succeeded at concluding new medium-term oil prefinancing agreements amounting to about US$1.4 billion in 1998, whereas previous oil prefinancing agreements were all of short-term nature.

[16] However, as relations with export credit agencies improved last year, and OECD experts recently gave Iran a favorable recommendation; Iran's credit rating is expected to be raised soon from the level 6 back to the level 5.

and services, and repayment of external debt; the "export" rate, fixed at Rls 3,000 per U.S. dollar since May 1995, which applied to all other current account transactions prior to July 1997 but in the latter part of 1999/2000 mostly applied to capital goods imports of public enterprises; and the variable TSE rate arising from the trading of import certificates on the TSE market which stood at Rls 8,180 per U.S. dollar in May 2000. In addition, an active curb market was reflected in a parallel exchange rate with a significant mark-up above the TSE rate until mid–1999.

77. While the floating and export rates remained fixed, the TSE rate depreciated by 42 percent in 1998/99 and by another 20 percent in 1999/2000, with significant step-adjustments in the third week of September 1998, the first two weeks of March 1999 (an initial, partial attempt to start clearing the market), and the third week of May 1999 (Chart 10 and Appendix II, Table 59). BMI, the main supplier of foreign exchange on the TSE market,[17] has been able to closely control demand in that market through trade policy. Only importers holding a valid license were allowed to purchase foreign exchange on the TSE market and the government could curb such demand by restricting import licensing. However such an instrument could only work with a lag. Indeed, large shortages in foreign exchange arose in late 1998 and the first few months of 1999, due to a run-down in international reserves (reflecting low oil prices) and an unwillingness to allow the TSE rate to adjust. This prevented the TSE market from clearing and led to the formation of a significant queue for foreign exchange.

78. To resolve this queue, the authorities increased their foreign exchange sales and allowed a significant depreciation of the TSE rate in May 1999, acting to clear this market on a daily basis thereafter. This policy seems to have succeeded as the TSE market has stabilized and the parallel rate appreciated during the second half of 1999, implying greater market confidence. By the end of 1999/2000, the parallel market premium had fallen below 2 percent; its subsequent rise in the first quarter of 2000/01 is mainly attributed to political uncertainty surrounding the recent parliamentary elections. Currently, BMI sets the trend for the TSE rate (broadly based on inflation differentials, but with willingness to take into account shifts in foreign exchange demand and supply resulting from factors such as terms of trade shocks) on an annual basis but with quarterly revisions, and undertakes frequent interventions to smooth short-term fluctuations of the exchange rate around that trend.

[17] BMI was supplying about 60 percent of foreign exchange on the TSE market in early 2000/01.

79. In mid-March 2000, the government officially eliminated the export rate, moving all transactions undertaken at that rate to the TSE market.[18] At the same time, as a step toward further liberalization and integration of foreign exchange markets, banks were allowed to begin purchasing foreign exchange from any source other than exporters at freely negotiated rates, to trade it among themselves and to sell it to customers for the same purposes as for purchases from the TSE, plus a few specific additional purposes.[19]

80. During 1999/2000, the Iranian rial depreciated by about 16 percent in real effective terms in the TSE markets, compared to a 2 percent appreciation in 1998/99 (Chart 11). However, only about 37 percent of current account transactions were undertaken at that rate (or at the slightly more depreciated parallel market rate, but to a very small extent), with other transactions taking place at the export and official rates. Consequently, based on the average weighted exchange rate, the real effective depreciation of the Iranian rial was below 1 percent in 1999/2000.

E. The Exchange and Trade Systems

81. Iran's exchange and trade system remains closely controlled and relatively complex, despite the gradual liberalization policies introduced since 1998/99. As previously stated, from July 1997 to March 2000, three officially recognized exchange rates co-existed, and each rate applied to a specific set of transactions. In addition, import and export transactions are subject to a complicated system of regulations. Iran is a member of the Asian Clearing Union (see Box 1 for details).

Sources and uses of foreign exchange

82. On the export side, oil revenues (which accrue to the government and are surrendered to BMI) are allocated at different exchange rates for different uses. The share earmarked for debt repayments, additions to foreign exchange reserves, and imports of basic commodities is recorded at the official floating rate. Until recently, another share was sold at the export rate, mainly to public enterprises for capital goods imports or to finance specific service payments. Current account transactions undertaken at the export rate were gradually shifted to the TSE rate; the process was completed with the elimination of the export rate by law[20] in

[18] While this step had been under preparation for several months through a gradual phasing out of the transactions undertaken at the export rate, the government still gives some public enterprises subsidies to help them adjust to the exchange rate differential.

[19] The permission for banks to begin purchasing foreign exchange from any source is subject to a limit of US$5,000 for cash purchases.

[20] In practice, the export rate was already phased out by the third quarter of 1999/2000.

Chart 10. Islamic Republic of Iran: TSE and Parallel Market Exchange Rates March 1998–April 2000

(Iranian Rials per US $)

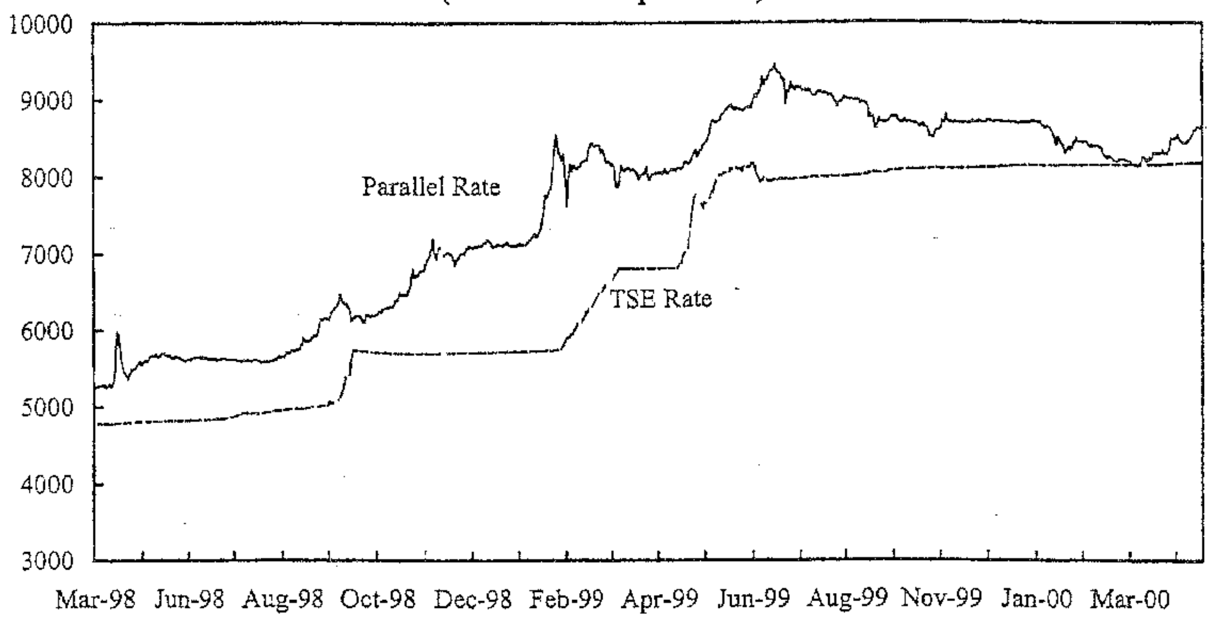
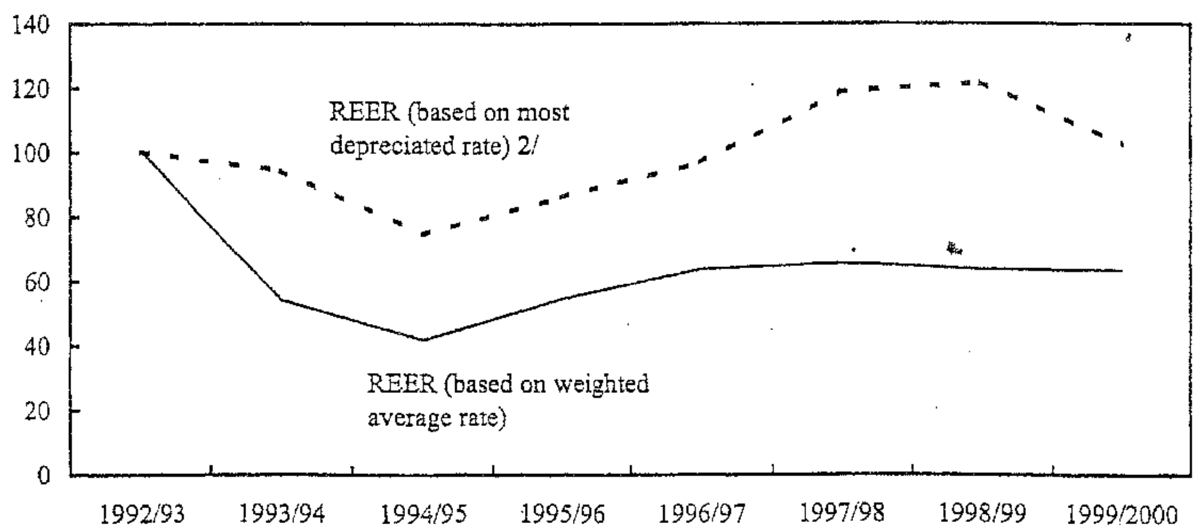


Chart 11. Islamic Republic of Iran: Real Effective Exchange Rates, 1992/93–1999/2000

(1992/93 = 100)



2/ Most depreciated rate used until introduction of the TSE rate since 1997/98

March 2000 (with explicit subsidies being granted by the government in the current transitional period). A third share of oil revenues is sold on the TSE to meet foreign exchange demand in that market. BMI also sells foreign exchange directly to large importers at the TSE rate, rather than have these large importers potentially destabilize the relatively thin TSE market.

Box 1. Islamic Republic of Iran: The Asian Clearing Union

- Iran is one of the founder member countries of the Asian Clearing Union (ACU), established in December 1974 to provide a mechanism for the settlement of transactions among countries in the Asia-Pacific region. Members are Bangladesh, Burma, India, Nepal, Pakistan, Sri Lanka, and Bhutan (which joined only recently).

- The ACU's main stated objectives are to economize on the use of hard currencies and to promote trade and banking systems cooperation among member countries. Trade-related transactions between member countries are recorded in separate accounts for each member country and the balance of the accounts is settled once every two months, on the even month of the calendar year. The unit of account used within the ACU is the Asian Monetary Unit (AMU), which was equivalent to SDR1 originally; however, since 1996, the US dollar is used to convert the balances at the rate of AMU1 = US$1. The clearing system within the ACU has been functioning successfully since inception, as no default or delays in payment was ever recorded. The volume of trade taking place within the ACU rose from US$50 million in 1975 to US$5.2 billion in 1999 (about 5 percent of trade undertaken by all member countries put together). All goods and services are tradable within the ACU.

- Since inception and until 1983, Iran was traditionally a net debtor in the ACU, importing from other member countries more than it exported. However, starting 1983, when crude oil and oil products were allowed to be traded within the ACU, Iran became a net creditor and remains so until today.

- Iran undertakes about 3 percent of its total trade within the ACU. Bangladesh, India, Pakistan, and Sri Lanka, are the most important importers of Iranian oil and oil products. Other exports from Iran to these countries include handicrafts and machinery equipment, purchased mainly by the first three countries listed. Iran's imports from ACU member countries include machinery, spare parts, and spices from India, jute from Bangladesh, and rice and cotton from Pakistan. Iran's trade with the remaining member countries is negligible: it imported rice from Burma once and imports from time to time rubber from Nepal.

- Iranian trade within the ACU is subject to the same regulations as trade undertaken with non-ACU members.

83. While government oil export revenues are the largest source of hard currency in Iran, non-oil export proceeds provide additional foreign exchange inflows. Apart from the retention "bonus" for early repatriation (see below), these proceeds are subject to 100 percent repatriation and surrender requirements. These requirements were recently modified (see below). Until end 1999/2000, upon surrendering non-oil export revenues to banks (which in their turn transferred the foreign exchange to BMI), exporters obtained the equivalent in Iranian rials (valued at the export rate) and an "import certificate" equivalent to 100 percent of the surrendered amount. This certificate granted its owner the right to purchase back the

foreign exchange at the same rate of Rls 3,000 per U.S. dollar. Exporters had the choice to either use this certificate to repurchase the foreign exchange themselves for import purposes, or to sell the certificate on the TSE to other importers with valid import licenses. The price, at which these certificates were traded on the TSE market added to the Rls 3,000 per U.S. dollar applicable for the repurchase of foreign exchange gave rise to the effective TSE exchange rate.

84. With the elimination of the export rate in March 2000, non-oil exporters still have to repatriate their foreign exchange revenues but upon depositing them with commercial banks they are issued foreign exchange certificates of deposits (FX CDs) which can be sold on the TSE market for the same purposes as the import certificates, directly at the effective TSE exchange rate. This policy change is one step closer to making the TSE market an actual foreign exchange market and eliminates the requirement to surrender foreign exchange to BMI.[21]

85. An alternative officially recognized source of foreign exchange resides in the so-called "externally sourced" funds. Iranians are allowed to bring into the country foreign exchange earned and held abroad, and can deposit them in foreign currency accounts with local banks, to be used for almost any purpose.[22] These accounts are registered as "externally sourced" and earn a rate of interest of one percent above LIBOR. Interest payments and withdrawals are all in foreign currency, and these monies can be retransferred abroad without restrictions. They can also be sold domestically at a freely negotiated rate, usually quite close to the parallel market rate, but may loose certification as "externally sourced" after the first such transfer, especially if this domestic transfer is not done through the banks' clearing system (for example, if done in cash). In that case, they become "domestic sourced" and cannot legitimately be used for external transactions. However, by allowing banks to purchase foreign exchange from any source at freely negotiated rates as of the beginning of 2000/01, the government began abolishing the difference between externally sourced and domestic-sourced foreign exchange, which will help to form a deeper and more unified foreign exchange market in the future.

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[21] In April 1999, BMI had already asked all banks not to surrender the foreign exchange received from non-oil exporters, acknowledging the situation that had been de facto established. Indeed, commercial banks had not been receiving hard currency from BMI to repay outstanding letters of credit and had therefore already started keeping new exports proceeds to use for such repayments, rather than surrendering them to the BMI.

[22] If used for imports, a license is needed because of the import-licensing requirement.

Import regulations

86. Goods are classified as "authorized" "conditional" or "prohibited" imports. Authorized goods do not require a special license for importation, such as imports by government corporations or companies whose expenses are provided for by the budget, or imports of goods not involving the transfer of foreign currency. Conditional goods require licensing by the relevant ministry for importation, subject to a registration fee.[23] Imports permitted at the TSE rate and the recently eliminated export rate are listed in Appendix II, Table 60. Imports at the official floating rate that government corporations are allowed to make are listed in Appendix II, Table 61.[24] The category 30 of the list of imports at the TSE rate (Table 60) was added in 1999/2000 while categories 31–41 (covering over 70 different goods) were only introduced in the beginning of the current year.

87. Import licenses are granted by the respective ministries mainly depending on whether or not the good is produced domestically and in sufficient quantities.[25] As of 2000/01, a major reduction in the number of goods subject to this licensing requirement took place, mainly affecting items under the jurisdiction of the Ministry of Industry.[26] After a license is granted, the importer has to register with the Ministry of Commerce (for information purposes only) before opening a letter of credit with a commercial bank. Letters of credit can only be opened after advance deposits are made. These deposits are unremunerated but refundable. Non-budgetary imports at the floating rate and imports at the TSE rate for which importers acquire foreign exchange directly from BMI are subject to advance deposits requirements of 20 percent, 25 percent, 40 percent, 60 percent, or 75 percent. In these cases, importers have to apply to BMI for obtaining the foreign exchange prior to opening a letter of credit. Imports at the TSE rate are subject to 100 percent advance deposits (importers had to buy import certificates[27] on the TSE market before going to commercial banks to obtain a

[23] The registration fee for the licenses was raised from Rls 250 to Rls 275 per US dollar in the beginning of 1999/2000. In the mid-1990s, the fee used to be much lower (Rls 50 per US dollar) for imports of basic commodities. This fee is paid to the Ministry of Commerce through the banks opening the requisite letters of credit. Where the actual cost of the import turn out to be different from (lower than) what was anticipated, the Ministry of Commerce issues a refund to the importer.

[24] Previously, imports listed in Table 60 could also be made by the private sector at the export rate, subject to obtaining a license.

[25] Import licenses are also contingent on the approval of BMI foreign exchange allocations. If foreign exchange is not available, the license may be refused or delayed.

[26] The licensing requirement was eliminated for about a third of the 2,800 industrial goods allowed for importation.

letter of credit).[28] When imports are cleared at customs, the importer pays relevant duties and tariffs; for this purpose, all imports are valued at the official floating rate (even if they were originally financed at the TSE rate).

Export regulations

88. Effective 1997/98, the list of permissible exports was expanded and then replaced by a negative list, before being completely eliminated. A license was until quite recently still required for export purposes however. In 1999/2000 this licensing requirement was partly eliminated and new trading regulations issued for the year 2000/01 abolished all remaining licensing obligations except for the case of genetically protected products, antiques and historical assets, and subsidized commodities. In addition, the previous rule prohibiting exports on the basis of a "domestic need" was also removed.

89. Non-oil exporters have to repatriate all their receipts within eight months from the export date[29] and, until recently, had to surrender them at the export rate to BMI through commercial banks. As mentioned earlier, the requirement to surrender foreign exchange to BMI was formally eliminated with the introduction of FX CDs in March 2000 and exporters currently receive an FX CD from banks which they either use for licensed imports themselves or sell on the TSE market. Revenues from exports to CIS countries however can be used for imports immediately without prior repatriation and surrendering. A "bonus" of one percent per month applies for earnings repatriated before the eight-month deadline expires.[30] This bonus was raised in early 1999 to 1.5 percent for exporters using letters of credit (about 30–40 percent of non-oil exports). Before January 1998, it was given as a sum

[27] As of March 2000, importers buy FX CDs on the TSE instead of import certificates.

[28] The authorities are planning to introduce a number of changes in the advance deposits requirements. Deposits on imports at the official floating rate and on imports at the TSE rate financed by direct purchases from BMI are to be reduced to 20 percent, 40 percent, and 60 percent; deposits on imports at the TSE rate are to be reduced to 60 percent and commercial banks would be allowed to extend credit to the importers for this 60 percent.

[29] The repatriation deadline was extended to a uniform eight months in 1998/99, from six months for carpet exporters, and five months for all other exporters.

[30] The bonus is calculated as follows: 1 percent * (value of exports) * (number of months between repatriation date and repatriation deadline).

in Iranian rials in exchange for the surrendered foreign currency; since then, it is granted in the form of a foreign exchange retention allowance on non-oil export revenue.[31]

90. As explained in the preceding section, until March 2000, exporters obtained an import certificate when they surrendered their foreign exchange earnings. This certificate was valid for three months. Exporters had the first month to decide if they wanted to sell the certificate or use it themselves to repurchase the foreign exchange for import purposes.[32] Exporters could then use the next two months to sell the certificate on the TSE, but had only one more month to use it for their own imports. Similar deadlines apply to the newly introduced FX CDs. Owners of FX CDs must use them within three months for import purposes; past this deadline, they can sell them to banks within an additional three months period, and banks can in their turn sell these FX CDs on the TSE within one month.

Services regulations

91. Individuals receiving medical treatment abroad may obtain foreign exchange at the official floating rate up to an amount specified by the Ministry of Health. Foreign exchange allowances are also provided on a monthly basis at the official floating rate for students on scholarships abroad following approval by the Ministry of Education.

92. Foreign exchange required for other service payments has to be acquired either at the TSE rate or (without specific limits) at the parallel rate from externally sourced accounts.[33] For service payments, residents have to obtain a permit from BMI that enables them to buy foreign exchange from commercial banks at the closing TSE rate of the previous day. No registration fee applies for these payments. Such permits are granted with limits. Non-scholarship students abroad are allowed to purchase foreign exchange for tuition and board within limits specified by the Ministry of Education, depending on their location. Travelers are allowed specific amounts depending on the nature of their trip: US$500 per trip for business travel upon the approval of the Ministry of Commerce, US$500 per individual per year for travel under "group passports," US$1,000 per individual per year for other travelers. For travel to neighboring countries and South East Asia, the allowance is lower, at US$300

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[31] Recent regulations introduced in early 2000/01 enable banks to use foreign exchange purchased at freely negotiated rates to in effect lend foreign exchange to exporters that need to satisfy the repatriation requirement.

[32] Importation rights out of non-oil export earnings were increased to 100 percent for all exporters in 1998/99. Hence the certificate given is equivalent to 100 percent of the receipts surrendered.

[33] Only importers of commodities can currently purchase foreign exchange directly on the TSE market.

and US$500 respectively. A fee of Rls 70,000 for the first trip and Rls 120,000 for consecutive trips, payable to the treasury any time before departure, applies to Iranian nationals leaving the country. Airline tickets can be paid in Iranian rials for the first two segments of a trip, with airlines using a TSE-based rate, but additional legs of a trip are payable in foreign currency. Foreign travelers can bring into the country an unlimited amount of foreign exchange; a declaration is needed only for amounts exceeding US$5,000.

93. Should travelers, medical patients abroad, or students need foreign currency in addition to the limited amounts specified above, they can acquire it legitimately from other sources, in particular from externally sourced accounts. This is very common and seems to work without causing significant delays. Other types of service payments can also be financed using these accounts. Foreign nationals working in the public sector can remit up to 50 percent of their net salaries per month with prior approval by BMI, up to an annual limit of US$500. Previously, this was done at the export rate; with the elimination of this rate, this transaction is undertaken at the TSE rate. Workers in the private sector could only remit their salaries through external sourced accounts. The authorities are considering a policy change whereby all foreign workers would be allowed to remit 100 percent of their salaries (as confirmed by the employer) at the TSE rate.

Other external sector developments

94. There have been no recent changes in regulations regarding foreign investment. A project to reform the FDI law is still ongoing, and more than one version of a new law are under consideration. In the meantime, the 1955 Law on the Attraction and Protection of Foreign Investment still applies, whereby such investments (both portfolio and direct) are allowed up to a 49 percent equity share in any company and the repatriation of profits and dividends overseas at the TSE rates. Nonresidents may invest in all instruments traded on the TSE.

Islamic Republic of Iran: Selected Issues

A. The Third Five Year Development Plan[1]

Overview

1. The Third Five Year Development Plan (TFYDP) covering the period 2000/01–2004/05, this plan succeeds the Second Five Year Development Plan (SFYDP) which expired in 1999/2000. With unemployment rate already high at an officially estimated 13 percent,[2] the rapidly rising demand for jobs poses the single most challenging policy (economic and social) task that faces the authorities. The TFYDP and the SFYDP share many of the basic macro objectives (Table 1); and a relatively significant number of the structural measures that were envisaged, but not implemented, under the SFYDP were carried over to the TFYDP. The SFYDP has targeted a fairly ambitious growth target with a single digit inflation by the end of the SFYDP period. The SFYDP also envisaged, inter alia, reducing the country's reliance on oil revenue, encouraging non-oil exports, liberalizing the trade and foreign exchange regimes (including exchange rate unification), reforming the taxation and expenditure structures, public enterprise reforms (including a fairly ambitious privatization program), opening up the financial system to the private sector, introduction of liquid instruments, and more market based central banking operations.

2. The outcome of the SFYDP, however, was modest. Growth fell well below the target, unemployment rose – inflation rate soared to more than double the targeted level – and many of the structural measures were not implemented, implemented partially, or reversed after implementation. At the onset of the SFYDP, the macroeconomic environment deteriorated markedly as a result of unsterilized large liquidity buildup at the end of 1994/95, that caused sharp depreciation in the recently liberalized exchange rate,[3] and the weakening of oil prices. The declining availability of financial resources and the authorities attempt to stabilize the economy (including through policy reversal to direct controls), pushed back many of the important reforms that were needed to boost economic growth.

3. Despite the similarity between the SFYDP and the TFYDP, there are important differences that give more credibility to the current reform efforts. First, the TFYDP has conceptually moved, to a certain degree, from the mere "planning modes" of the previous

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[1] Prepared by Ghiath Shabsigh, Senior. Economist, MED.

[2] This presumably excludes underemployment particularly in the public sector.

[3] The impact on exchange rate was exacerbated by the United States intensification and extension of sanctions in 1995.

two plans where objectives were generally not tied to measures, to a more specific reform plan where objectives were addressed within specific policy actions with clearer understanding of the implications of these actions. Second, the TFYDP starts with important reform measures either being undertaken (e.g., exchange rate reform) or approved (e.g., allowing private banking). Third, the macroeconomic environment is relatively stable owing to the proactive policy actions that were taken during the 1999/2000. Finally, oil prices have recovered strongly and are projected to remain reasonably strong in the near future. This combination of factors provides a unique window of opportunity to implement a wide ranging reform program.

4. The macroeconomic framework of the Plan targets real GDP growth averaging 6 percent as a means for increasing employment by 760,000 jobs on average per year, and reducing unemployment to 11.5 percent by 2004/05 from 15 percent presently. For this purpose, gross investment is envisaged to grow by an annual average rate of 7.1 percent, with emphasis on private investment, while the budget would remain in approximate balance. There would have been only a limited adjustment of domestic petroleum product prices toward world market levels. The draft envisaged an accommodating monetary program with an inflation rate declining gradually to 14 percent at the end of the five-year period, resulting in an average rate of 16 percent for the Plan period; the authorities viewed such an inflation rate as consistent with the targeted growth rate which is considered as necessary to meet their employment target.

5. The TFYDP, however, has its limitations. Most importantly, the TFYDP envisages only modest increases in domestic oil prices (see below) which would keep these prices at well below international prices and at a huge cost to the budget. On balance, the TFYDP is expected to achieve better growth performance than observed under the SFYDP, but it is unlikely to reach the envisaged high growth rates without mobilizing additional financial resources. The following are some of the more important reform measures that are envisaged under the TFYDP:

Price reform

6. The TFYDP limits the price increases of goods and services produced by state enterprises (SE) and government agencies to a maximum of 10 percent unless specifically approved by parliament. In cases where the government forces lower prices, the affected SE and agency will be compensated directly from the budget. This cap on price increases also covers domestic energy prices. The TFYDP instructs the government to implement a foreign exchange policy that protects the value of the national currency.

State enterprise reform

7. The TFYDP seems to adopt a three-pronged strategy to reform the SE sector: it calls for improving SE operations, opening up the SE to private sector competition and limiting their monopoly powers, and envisages an ambitious privatization program.

8. To improve the SE operations, the TFYDP calls, inter alia, for limiting the authority to create new SE to the parliament, requiring Cabinet of Ministers (CoM) authorization for nonfinancial SE investment in other SE, closing all SE branches and offices abroad (except those established for noneconomic reasons). To increase the SE exposure to private sector competition, the TFYDP stipulates measures to reduce government monopolies of certain economic activities and opening them to the private sector, authorizes the government to take (within one year of the TFYDP approval) legal actions to eliminate monopolies and monopolistic behavior, and requires the government to not discriminate when seeking goods and services against nongovernment entities.

9. The TFYDP does not consider privatization as a goal by itself, rather as a vehicle serving to achieve other reform objectives. Wide authority is accorded to the government to sell all SEs whose activities in the public sector are not needed, excluding those whose government ownership is mandated by the constitution, or because of national security, or if privatization creates monopolies. The TFYDP establishes a High Privatization Board (HPB) to be responsible for all privatization aspects including, inter alia, the selection of companies, method of privatization, and marketing. Privatization could follow: (i) direct sale to individual investors for small SEs, (ii) direct sale to groups, cooperatives and corporations for medium size SEs, and (iii) share offering for large SE. The TFYDP also permits the transfer of SE management to the private sector. The TFYDP stipulates allocating 50 percent of the privatization proceeds to reforming the SE that are about to be privatized, including debt reduction. The remaining 50 percent will be transferred to the budget.

10. The private sector will be allowed to participate in activities relating to refining, distribution and transportation of oil products, provide mail and telecommunication services, and invest in utilities, air, rail, and maritime transportation. The TFYDP also envisages the sale of up to 49 percent of Iran's various government-owned transportation companies (including the national airlines and shipping companies, and the national oil tanker company).

Fiscal policy reforms

11. The TFYDP calls for the elimination (starting 2000/01) of all tax and custom exemptions for government and nongovernment entities with the exception of international organizations, cultural sector, and paper imports, and to centralize all tax related issues in a new government body: the "Civil Organization for taxing Affairs." The budgetary structures of the provinces would be strengthened with emphasis on development expenditures and increased fiscal autonomy.

12. To stabilize the foreign exchange and domestic currency budgetary revenues, the TFYDP calls for the establishment, effective 2001/02, of " Foreign Exchange Reserve Acquired from the Revenue of Crude Oil Account" and the "Rial Reserve Account"—an Oil Stabilization Fund. All oil revenue in excess of the oil revenue benchmark projected under the plan will be transferred to these funds. The budget will be allowed to draw from the

account (on six months interval basis) only when oil revenue fall below the benchmark for the year and if there is no possibility to raise funds through taxation or other sources. On the other hand, if the budget is assured that its revenue for the year will be higher than the benchmark, portion of the foreign exchange could be sold (at the market rate) to support the economy's import needs (the rial counterparts will be kept in the rial reserve account).

Financial sector

13. The main emphasis of the TFYDP in the financial sector would be on reforming the banking system by allowing private banking and strengthening the financial position of the existing state-owned banks through recapitalization. The TFYDP authorizes the government to issue up to Rls 5 trillion of participation papers and use the proceeds to capitalize the banks. These papers will be serviced from the banks' pre-tax profits. The BMI is also authorized to issue CPPs and to use them to regulate liquidity. Steps are envisaged to establish special exchanges for negotiable papers and commodities, strengthen the TSE, and establish regional stock markets.

External trade

14. In order to liberalize the external trade regime and promote non-oil exports, the TFYDP calls for the removal of all non-tariff barriers and convert them into tariffs. The TFYDP lifts all restrictions on the type of goods to be exported (except national treasures, genetically protected plants and animals, and subsidized goods), eliminates all taxes and fees on exports, and removes all permit and licensing requirements for exports. Furthermore, the TFYDP extends to the exports of services, and all promotions and preferences that exist for export goods will be extended to export services. Banks will also be encouraged to provide financing facilities for exports. Finally, a High Council of Non-Oil Export Development (chaired by the president or his first deputy) work be established to promote exports and remove regulatory hurdles.

External debt

15. The TFYDP has set limits on the country debt structure and total borrowing. The schedule of foreign debt repayments (including medium – short-term, but excluding reciprocal purchase) would be set so that total payments would not exceed 30 percent of the government's foreign exchange revenue in the last year of the TFYDP (about US$3.6 billion based on the TFYDP oil revenue projection of US$12 billion in 2004/05). In addition, it is stipulated that the net present value of the country's total foreign debt should not exceed US$25 billion.

Agriculture

16. The TFYDP envisages increased budgetary support for agricultural and water investment, including through funding nongovernment agricultural entities, calls for granting

of tracts of land to individuals to establish agriculture business and provide employment opportunities. Banks will continue under the TFYDP to allocate at least 25 percent of their lending facilities to the agriculture sector.

Social safety system

17. Under the TFYDP, social safety would be addressed through improving the existing structure that is composed of insurance schemes, social security system, and basic goods subsidies. In addition, the TFYDP requires the government, inter alia, to reduce its debt obligations to insurance organizations by 50 percent and expand the insurance coverage for specified basic needs (e.g., medicine, critical care, invalids, etc.). The TFYDP specifies certain measures to strengthen the social security system, including reorganization to eliminate overlapping responsibilities of different agencies, preventing the creation of new organizations, and reducing administrative burdens and operational costs. Finally, the TFYDP envisages a continuation of the policy of subsidizing basic goods (including, wheat, rice, vegetable oil, sugar, cheese, medicine, and dry milk) and basic agricultural inputs (fertilizers, pesticides, and seeds) as was the case under the SFYDP.

Employment

18. The Plan calls for reviewing the labor laws and regulations but does not seem to take a view on the final objective of the review. Tax and other incentives would be provided to companies employing new labor (through the Employment Services Center at the Ministry of Labor) and to companies investing in less developed areas of the country. In support, the banking system would provide low cost funding for poor entrepreneurs or the unemployed to establish their business operations. Moreover, free technical and professional schools will be established and small scale and labor-intensive industries would be encouraged.

The Islamic Republic of Iran:
Objectives and Outcomes of the Development Plans

(Annual average percentage change)

	Plan Targets			Actual Performance	
	FFYDP	SFYDP	TFYDP	FFYDP	SFYDP
GDP	8.1	5.1	6.0	7.2	3.8
Oil	9.5	1.6	...	8.6	-0.9
Agriculture	6.1	4.3	...	6.0	3.7
Industry and mining	15.0	5.9	...	8.7	4.6
Services	6.7	3.1	...	7.3	3.5
Gross fixed capital formation	11.6	6.2	7.1	13.3	2.5
Private consumption	5.7	4.0	3.5	7.7	2.8
Public consumption	3.8	-0.9	2.5	5.4	4.2
Government revenue	25.1	15.2	19.5	57.6	25.9
Oil	15.0	8.3	20.8	78.8	3.9
Tax	26.4	18.2	23.3	32.7	36.4
Other	34.0	29.7	13.3	38.5	78.0
Government expenditures	9.0	15.1	19.6	35.7	26.9
Current	6.6	10.9	18.8	32.1	27.9
Development	17.3	21.1	21.4	51.1	24.6
Imports	16.6	4.3	...	13.4	1.4
Oil exports	11.4	3.4	...	9.8	2.2
Non-oil exports	28.1	8.4	...	17.8	-6.5
Broad money	8.2	12.5	16.4	25.1	25.5
Inflation	14.4	12.4	15.9	16.7	25.5

Source: Bank Markazi Johmhouri Islami Iran

B. Determinants of Economic Growth in the Islamic Republic of Iran—The Long View[1]

Introduction

1. Over the past decade, the Iranian economy has been characterized by wide fluctuations in economic growth around a trend of declining long-term growth rate. This pattern has been preceded by a period of rapid and sustained expansion in real GDP during 1964/65–1971/72; increased fluctuations during 1972/73–1977/78 associated with declining average growth rate; negative real growth during 1978/79–1988/89 which was characterized by the Iran-Iraq war, sanctions, and restrictive domestic policies; and a brief economic recovery during the two post-war years (1990/91–1991/92) following policy liberalization. During the period since 1991/92, economic growth has slowed down to around an average of about 3–4 percent.

2. It has been difficult to clearly define the determinants of growth in Iran owing, in part, to data difficulties, the frequent external shocks including global oil price fluctuations, sanctions, and economic dislocations, Iran-Iraq war, and important socio-political, legal, and institutional changes. This note aims to estimate the evolution of the "potential" growth rate and to examine the major determinants of growth in Iran during the past four decades. Staff estimates show that actual output had significantly lagged potential output during the 1980s, but converged to potential output in the 1990s, during which the latter declined. The rate of investment, the size of the government, and macroeconomic instability have been found to be the major determinants of economic growth.

Estimation of potential output and growth

3. The potential output is estimated by specifying a Cobb-Douglas production function in logarithms form, where output at time t, y_t, depends on the level of technology (level of total factor productivity), a_t, the stock of physical capital, k_t and the labor force, l_t:

$$y_t = a_t + \alpha k_t + \beta l_t \tag{1}$$

The potential output can be derived as:

$$\hat{y}_t = \alpha \hat{l}_t + (1-\alpha)\hat{k}_t + \hat{a}_t \tag{2}$$

[1] Prepared by Olumuyiwa Adedeji, Economist (EP), INS. At the time this note was prepared, Olumuyiwa Adedeji was an Economist in MED.

where $y^\wedge$ is potential output, $l^\wedge$ the labor input trend, $k^\wedge$ the capital input trend and $a^\wedge$ the trend in total factor productivity. The actual level of the capital stock generally replaces its trend. The trends in employment and total factor productivity are derived using Hodrick-Prescott (HP) filters.

The growth rate of potential output is presented in equation (3):

$$\dot{\hat{y}} = \alpha\dot{\hat{l}}_t + (1-\alpha)\dot{\hat{k}}_t + \dot{\hat{a}}_t \qquad (3)^{2}$$

Estimates of α and β have been derived for the Iranian economy by Sarel (1997), where a value of 0.3 was derived for α and 0.7 for β.

4. The annual average potential output growth is estimated to have fallen from 8 percent over the period 1961/62–1978/79, to about 0.4 percent in the course of the period 1979/80–1987/88, with a recovery in the potential growth rate to 4 percent during 1989/90–1997/98. Declining total factor productivity has been the major force behind the fall in potential output growth.

Macroeconomic determinants of growth

5. The wide fluctuations in economic growth and the long-term trend toward a slower growth path in terms of the macroeconomic determinants and exogenous shocks are described by adopting the Goldsbrough, et al, and study (1996). These determinants include investment/GDP ratio, government consumption GDP ratio, macroeconomic instability index, measures of the degree of openness, and changes in the terms of trade. It is postulated that an increase in investment/GDP ratio would facilitate growth and output per worker, while an increase in consumption/GDP ratio would have an adverse effect. Similarly, greater trade openness would imply increased competitiveness of the economy and, thus, benefit growth. Macroeconomic stability index which measures the relative inflationary pressures is a useful proxy for the official macroeconomic policy stance, an increase in the instability index would have a negative effect on growth.[3] Finally, an improvement in terms of trade would typically be associated with higher oil export receipts, and thus capacity to increase investment, with a resultant positive impact on growth.[4]

[2] The dot on each variable captures the growth rate of that variable.

[3] This is the deviation of annual rate of inflation from the five-year moving average.

6. The following growth equation is used to determine the relative importance of the variables mentioned-above on growth in Iran

$$\frac{y'}{y} = \beta_0 + \beta_1 * \frac{INV}{GDP} + \beta_2 * \frac{GC}{GDP} + +\beta_3 \inf i + \beta_4 * \frac{X}{GDP} + \beta_5 * \frac{M}{GDP} + \beta_6 \Delta \frac{p_x}{P_m} + \beta_7 Dw + \beta_8 Dfdp \quad (4)$$

$$(+) \quad (-) \quad (-) \quad (+) \quad (+) \quad (+) \quad (-) \quad (+)$$

where GDP is Gross Domestic Product at current market price; INV/GDP captures investment as a ratio to GDP; GC/GDP, is a government consumption as a ratio to GDP; infi, is an index of macroeconomic instability, Dw is the dummy for the war period (1979–88) X/GDP indicates exports as a ratio to GDP; M/GDP, imports of goods as a ratio to GDP ΔPx/Pm, change in terms of trade and Dfdp captures the dummy for the First Development Plan (1989/90–1993/1994).

Growth rate is estimated to be determined mainly by:

$$\frac{\dot{y}}{y} = 17.04 - 0.23 * \inf i - 1.18 * \frac{GC}{GDP} + 0.84 * \frac{INV}{GDP} - 5.87 * Dw \quad (5)$$

$$(2.7) \quad (-1.78) \quad (-2.55) \quad (2.72) \quad (-2.06)$$

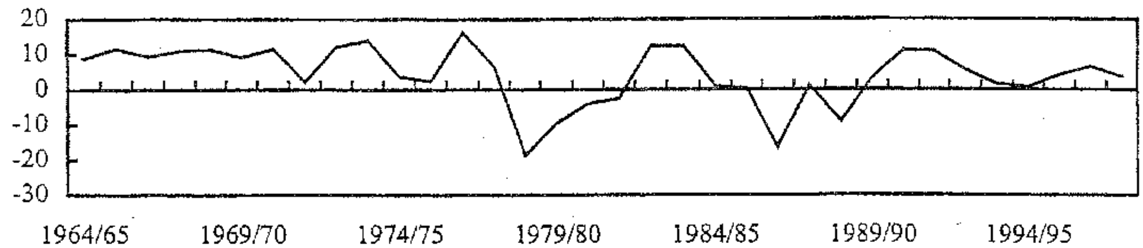
R^2=0.43 DW=2.0

7. The index of macroeconomic stability (*infi*) is found to have a negative impact on the economic growth, a 10 percent increase in the index of macroeconomic instability generates 2.3 percent decrease in output growth rate. Also, the size of the government as proxied by the ratio of government consumption expenditure to GDP is negatively related to the growth rate of per capita income, a 1 percent increase in government consumption expenditure as a ratio of GDP generates approximately 1 percent decrease in per capita output growth rate. On the other hand, the ratio of investment to GDP has positive and significant effect on the rate of economic growth; a 1.percent increase in the investment GDP ratio generates 0.84 percent increase in the per capita growth rate. A dummy variable was introduced to capture the war events of 1980–1988. The rate of growth during that period was significantly below the average for the entire period.

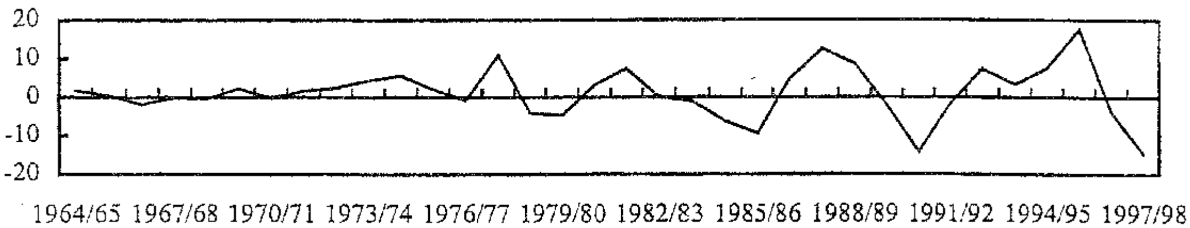
8. Charts 1 and 2, and Table 1 summarize the evolution of these determinants and the annual growth rate of real GDP. It is important to note that the rapid sustained growth during 1964/65–1972/73 was associated with a high degree of macroeconomic stability, a steady investment/GDP ratio of around 10 percent and total factor productivity grew at about 5 percent per year. The 1973/74–1978/79 period was characterized by very wide fluctuations in the macroeconomic instability index and in total factor productivity, which despite a sharp

Chart 1: Islamic Republic of Iran - Selected Determinants of Growth, 1964/65 - 1997/98

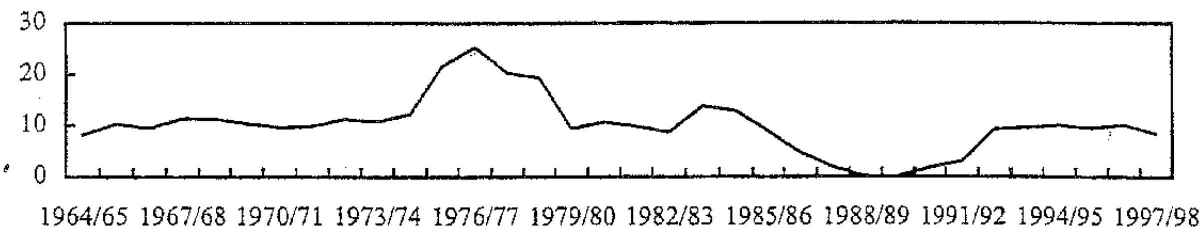
Annual Growth Rate of the GDP, 1964/65 - 1997/98



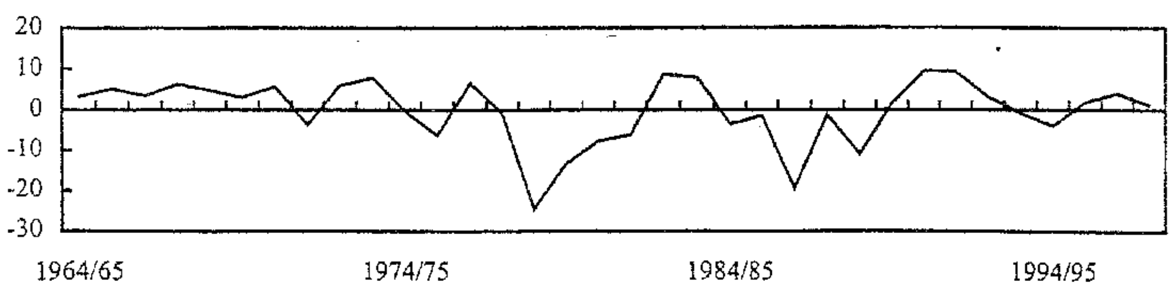
Macroeconomic Instability Index, 1964/65 - 1997/98



Investment - GDP Ratio, 1964/65 - 1997/98



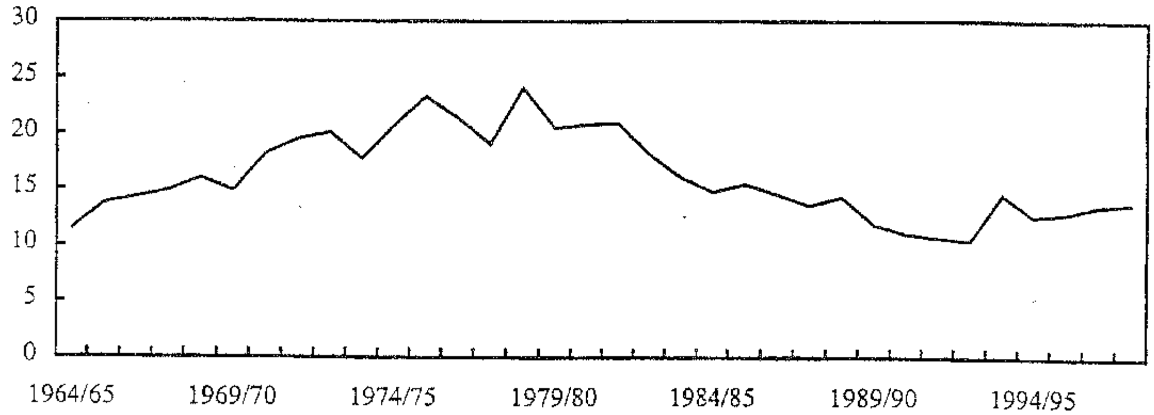
Annual Growth Rate of the Total Factor Productivity, 1964/65 - 1997/98



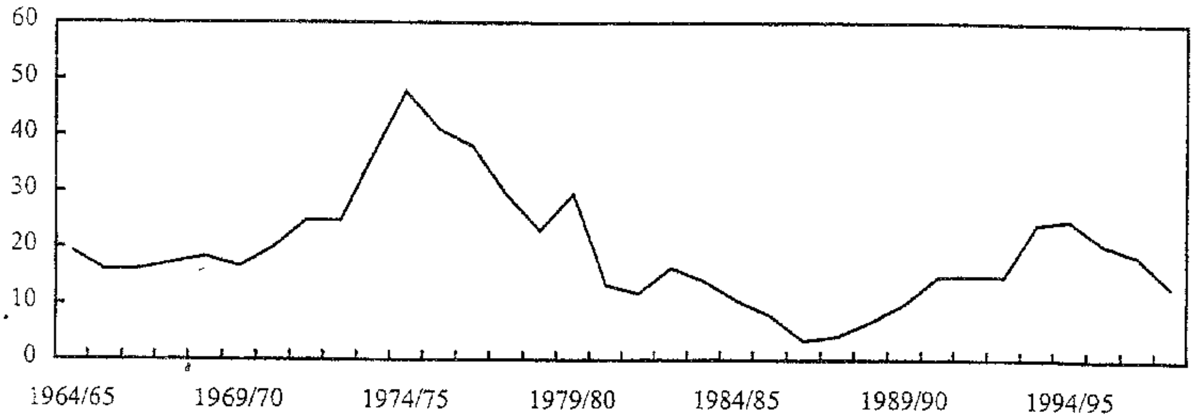
Source: World Bank database on economic growth, IFS, and staff estimates

**Chart 2: Islamic Republic of Iran -
Selected Determinants of Growth, 1964/65 - 1997/98**

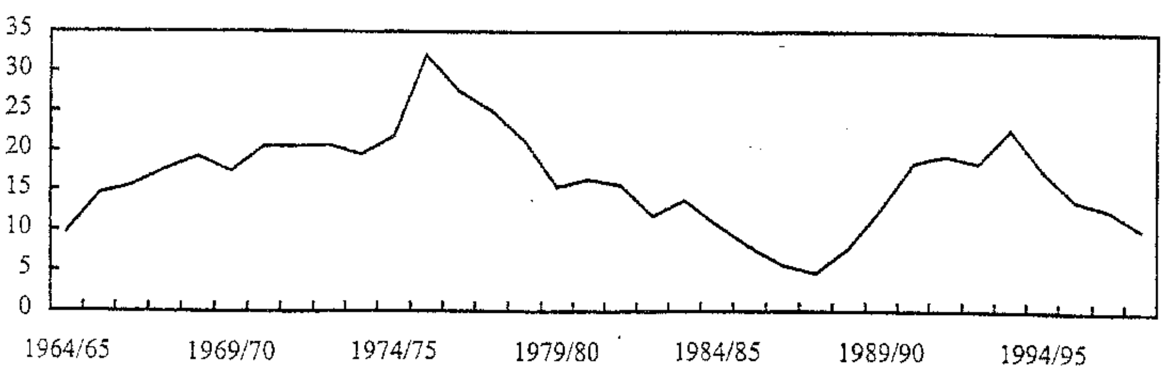
**Government Consumption Expenditure/ GDP ratio
1964/65 - 1997/98**



Exports/ GDP Ratio, 1964/65 - 1997/98



Import /GDP Ratio, 1964/65 - 1997/98



Source: World Bank database on economic growth, IFS, and staff estimates

Table 1: Islamic Republic of Iran-Selected Determinants of Growth

Year	CGDP	INFII	INVG	GTFP	GCG	EXPG	IMPG
1964/65	8.79	1.80	8.17	3.31	11.44	19.22	9.70
1965/66	11.57	0.39	10.33	5.12	13.78	15.87	14.53
1966/67	9.31	-1.88	9.52	3.35	14.31	16.05	15.58
1967/68	10.92	-0.20	11.40	6.29	14.88	17.17	17.52
1968/69	11.30	-0.32	11.28	4.75	16.02	18.31	19.29
1969/70	9.16	2.22	10.45	3.07	14.92	16.57	17.37
1970/71	11.52	-0.22	9.68	5.71	18.21	19.92	20.53
1971/72	2.14	1.66	9.85	-3.58	19.48	24.83	20.57
1972/73	12.15	2.43	11.23	5.96	20.08	24.70	20.78
1973/74	13.96	4.30	10.80	7.87	17.75	36.42	19.58
1974/75	3.76	5.58	12.17	-0.37	20.68	47.83	21.86
1975/76	2.38	2.04	21.54	-6.29	23.28	41.00	32.09
1976/77	16.12	-0.79	25.26	6.59	21.37	38.05	27.57
1977/78	6.46	10.87	20.24	-0.92	19.06	29.44	25.08
1978/79	-18.72	-4.06	19.29	-24.52	24.05	22.96	21.30
1979/80	-9.66	-4.70	9.43	-13.34	20.49	29.52	15.46
1980/81	-4.01	3.11	10.69	-7.61	20.80	13.31	16.42
1981/82	-2.49	7.44	9.88	-6.09	20.93	11.80	15.73
1982/83	12.29	0.18	8.68	8.70	18.12	16.38	11.87
1983/84	12.43	-1.08	13.82	7.94	16.08	14.04	13.84
1984/85	0.91	-6.25	12.79	-3.48	14.79	10.61	10.84
1985/86	0.24	-9.45	8.95	-1.47	15.48	7.93	8.03
1986/87	-16.37	4.65	4.76	-19.35	14.61	3.41	5.76
1987/88	1.16	12.59	1.89	-1.19	13.57	4.20	4.76
1988/89	-9.08	8.66	0.08	-10.96	14.34	6.79	7.87
1989/90	3.26	-2.16	0.04	1.61	11.85	9.98	12.93
1990/91	11.10	-14.18	1.76	9.44	11.06	14.72	18.53
1991/92	10.84	-1.82	2.99	9.36	10.71	14.85	19.46
1992/93	5.57	7.46	9.25	3.16	10.42	14.84	18.54
1993/94	1.58	3.33	9.69	-0.86	14.58	24.16	22.89
1994/95	0.74	7.61	10.07	-3.91	12.60	24.85	17.75
1995/96	4.16	17.64	9.51	1.79	12.89	20.54	13.89
1996/97	6.48	-3.91	10.12	4.00	13.56	18.51	12.75
1997/98	3.63	-14.64	8.50	1.29	13.81	13.09	10.32

CGDP	GDP growth rate
INFI	Macroeconomic Instability Index
GCG	Government Consumption as a ratio of GDP
INVG	Investment Rate
GTFP	Total Factor Productivity Growth rate

increase in the investment/GDP ratio were associated with fluctuations in the real GDP growth rate, averaging below that in the previous period. The Iran-Iraq war period was impacted by extensive economic dislocation, fall in the investment/GDP ratio, and negative growth in total factor productivity, which led to the negative growth of GDP. The short temporary economic recovery following the end of the Iran-Iraq war was associated with a pick-up in investment and increase in total factor productivity. The current growth experience has been significantly affected by the wide fluctuations in the macroeconomic instability index, lack of growth in total factor productivity, and the fall in import/GDP ratio which has created supply bottlenecks.

References

Collins, Susan M. and Barry P. Bosworth, 1996 "Economic Growth in East Asia: Accumulation Versus Assimilation," Brooking Papers on Economic Activity, vol.2, pp.135-203

Dhareshwar, Ashok and Vikram Nehu, 1993, "A New Database on Physical Capital Stock: Sources, Methodology and Results," Revista de Analisis Economico, 8, pp. 37-59.

Fischer, Stanley, "Role of Macroeconomic Factors in Growth," Journal of Monetary Economics, vol.32, pp.485-512.

Goldsbrough David and others, 1996, "Reinvigorating Growth in Developing Countries: Lessons from Adjustment Policies in Eight Economies," IMF Occasional Paper, 139.

C. Macroeconomic Determinants of Inflation in Iran[1]

1. This note attempts to explore the inter-linkages of key macroeconomic variables in Iran during 1989/90–1998/99 so as to assess their impact on inflation. Specifically, equilibrium relationships pertaining to the markets for money, foreign exchange, and goods are established. By developing statistically stable error-correction model (ECM) for money, foreign exchange, and goods markets, along with their dynamic specifications, the study establishes the major determinants of inflation.

2. Based on behaviors of the long-run model for all three markets, ECMs are incorporated in the formulation of the dynamic model. Results strongly support the argument that inflation is a monetary phenomenon in Iran. The combined effect of excess money supply and contemporaneous monetary growth are key determinants of inflation dynamics. A higher price level, in turn, intensifies asset substitution from money to foreign exchange, thereby exerting significant pressures on the market exchange rate. Overall, there is a need for a prudent monetary policy stance on a sustained basis in order to rapidly reduce inflation and stabilize the foreign exchange market so as to support the needed structural reforms and economic liberalization over the medium term.

3. General form of dynamic equations is estimated for inflation. The disequilibria[2] (ECMs) in markets for goods, money, and foreign exchange are represented by ECM_{output}, ECM_{money}, and $ECM_{exchange}$. Excess money supply (ECM_{money}) was found to have significant adverse impact on the short-term dynamics of inflation. The output gap (ECM_{output}), however, was estimated to have no impact on the rate of inflation.

4. A dynamic specification of inflation can be written in terms of the excess money supply (ECM_{money}), monetary growth *(dm)*, changes in the difference between the parallel market rate and weighted average official exchange rates (*dprem*), and expected rate of inflation *(dp(-t)*, that is the first difference of the lagged price variables. Specifically, given the trade regime, the difference between the parallel market rate and weighted average official rates is used as a measure of the degree of exchange restriction in Iran. The greater the restrictions, the higher the foreign exchange subsidies through allocation, and therefore, the lower the weighted-average exchange rate. The inclusion of d*prem* is necessary to measure the impact of exchange liberalization on inflation. A liberalization of the exchange

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[1] Prepared by Olumuyiwa Adedeji, Economist (EP), INS. At the time this note was prepared, Olumuyiwa Adedeji was an Economist in MED.

[2] Long run equilibra conditions in the money, good, and foreign exchange markets were specified. The deviation from the equilibrium value in each markets constitutes possible explanatory variable in the inflation equation. For details see Adedeji and Liu, 2000 "A Macroeconomic Analysis of Inflation in Iran", IMF Working Papers, forthcoming.

regime in Iran will be reflected in a reduction in the allocation of foreign exchange at subsidies rates (thus an effective depreciation of the weighted average exchange rate) and an improved market condition for the foreign exchange trading in the Tehran Stock Exchange. This will result a narrowing of the exchange rate premium (or a decline in *prem*).

The dynamic equation for inflation (after removing insignificant arguments) stimulated as:

$$\underset{(5.04)}{dp = -0.02} + \underset{(4.83)}{0.67 * ECM_{money}(-1)} + \underset{(-3.47)}{1.66 * dm} + \underset{(3.50)}{0.38 * dp(-4)} \qquad (1)$$

$R^2=0.8,\ \sigma=0.03,\ DW=2.0$

5. As expected, excess money supply has a significant impact on inflation. The "speed of adjustment" is relatively fast: a 10 percent excess money supply is likely to push up the rate of inflation by 7 percent in about three months. The elasticity of 1.7 percent with respect to the contemporaneous monetary growth is high, reflecting a compounding effect of a monetary expansion and the contributing effect on monetary overhang. Inflation expectation, expressed by the lagged variables of the rate of inflation, was found to have a significant self fulfilling effect on the inflation dynamics—a 10 percent expected rate of inflation would push up the contemporaneous rate of inflation by 4 percent. The absence of a significant impact on inflation from the exchange market (both in terms of short-run variation and long-run disequilibrium) is not unusual as the causality test indicates that the parallel market exchange rate tends to reflect the movements in the rate of inflation, but not the other way around. Besides, the parallel market exchange rate also contains other random noises emanating from the political and social events, which may not be captured in the empirical analysis on inflation. Chart 1 shows the actual and fitted rate of inflation, while Chart 2 presents both the inflation rate and monetary growth.

Chart 1. Islamic Republic of Iran: Actual (Projected) and Fitted Rate of Inflation (1990/91-1999/2000)

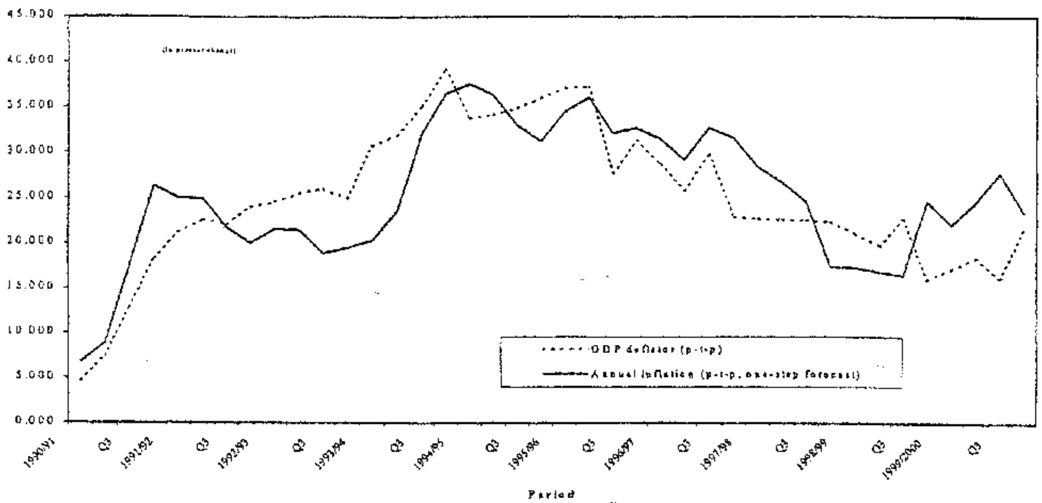
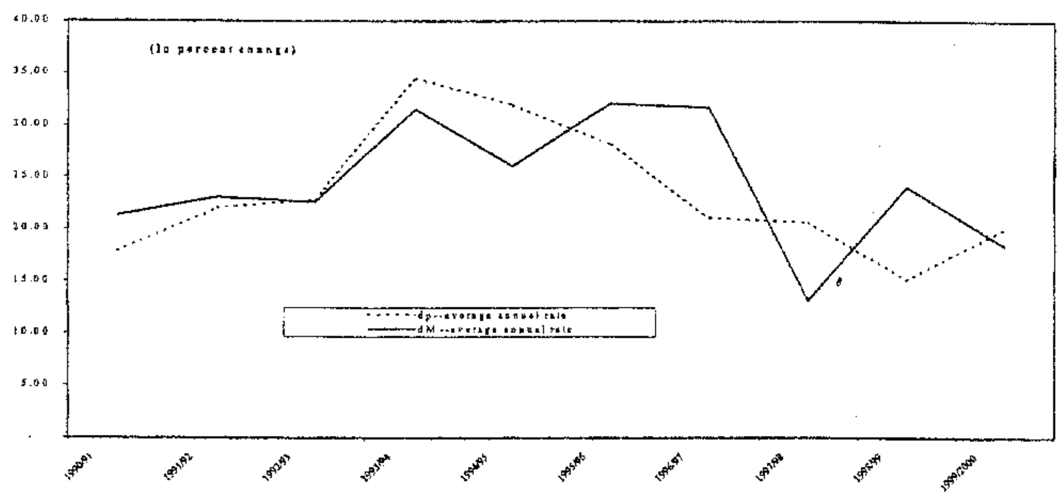


Chart 2. Islamic Republid of Iran: Annual Inflation Rate and Growth of Money 1990/91-1999/00



D. Relationship between Inflation and Growth—Global Experience and an Application to Iran[1]

Introduction

1. Most economists now accept the hypothesis that no long-run trade-off exists between inflation and output. However, Fischer (1993), Lucas (1994), and Motley (1994) have found that inflation has a quantitatively significant and negative long-run effect on real GDP or real GDP growth. The question of whether a trade-off exists between output growth and inflation has been a controversial issue in economics. The issue is particularly salient in the case of Iran as it embarks on the Third Five Year Development Plan (TFYDP). This note argues that the idea of a sustained inflation-output tradeoff has been rejected both at theoretical and empirical levels. Iran has had higher than average inflation as compared to other countries and a negative relationship between the two variables is present in Iran. In particular the note looks at the experience of developing countries, transition economies, and the group of oil producing countries encompassing Iran.

Global experience

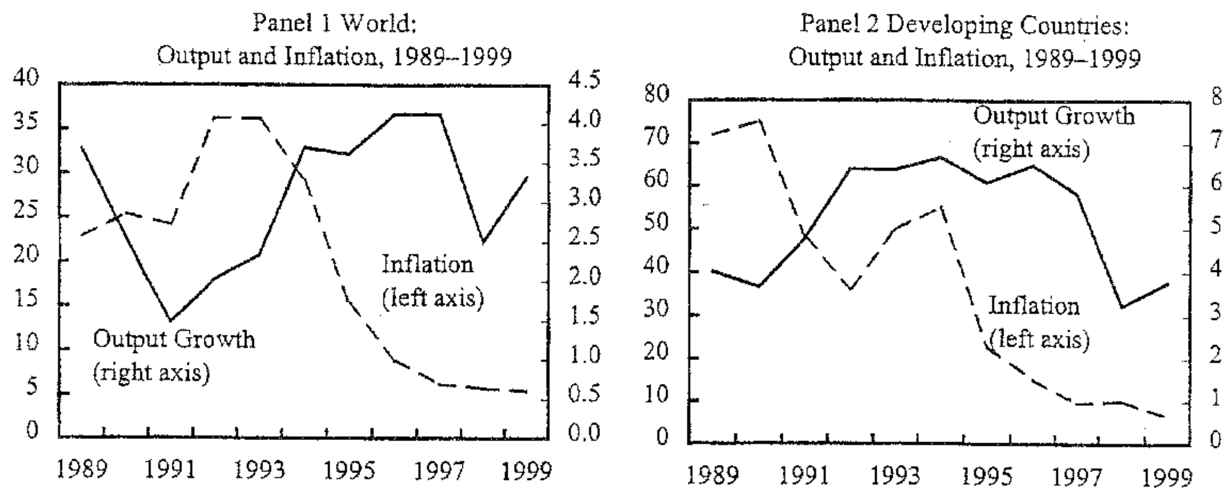
2. Several studies have analyzed the relationship between inflation and growth. Most of the earlier studies were based on the Summers and Heston 1991 data sets and concentrate on cross-sectional aspects of the data. Chart 1 shows the data for inflation and output for the world as a whole and for the subset of developing countries. There has been a steady decline in the world inflation in the last decade (1989–99) which has been associated with generally rising growth rates. In the case of the developing countries, we also see a general decline in inflation, but there does not seem to be a direct relationship between inflation and output. Consider that for the developing countries in 1989 the average inflation was 7.2 percent while growth was 4.0 percent, by the end of the decade inflation was 6.5 percent and average growth was 3.8 percent.

3. In general, the literature has found that there is either no relationship or, if any, a negative relationship between growth and inflation. Levine and Renelt (1992) find that those countries that grew faster than the mean have average inflation rate of 12 percent per year over the period, while those countries that grew more slowly had an average inflation rate of 31 percent. Many authors have found a non-linear relationship between inflation and output. The non-linearities can occur in two different senses. First, although a reduction in inflation is associated with higher growth, the magnitude is affected by the level of inflation. Second some studies have found that for very low inflation, an increase in inflation may actually have a positive effect on growth. A study by Fischer (1991) which divides the countries into different groups by inflation categories, finds that a 10 percentage point increase in the

[1] Prepared by Farhan Hameed, Research Assistant, MED.

inflation rate is associated with a 1.3 percentage point decrease in growth rate in those countries in the low inflation range, 0.75 percentage point decrease for the middle range countries, and a 0.2 percentage point decrease in those countries with high inflation. Roubini and Sala-i-Martin (1992) find that a 10 percentage point increase in the inflation rate is associated with a decrease in the growth rate of between 0.5 and 0.7 percentage points. Barro (1995), attempts to control for institutional factors, but still finds a negative effect of inflation that he estimates to be between 0.2 and 0.3 percentage points for every 10 percentage points increase in inflation. [2]

Chart 1. Islamic Republic of Iran: Output Growth and Inflation for World and Developing Countries



Regional experience

A. Transition economies

4. With a few exceptions, all transition economies experienced an initial spike in inflation as a result of reduction in price controls. In response to high inflation, the authorities implemented extensive disinflation programs. The speed and the success of the disinflations were markedly different across the group. The periods of disinflation were accompanied by sharp drops in output but as inflation stabilized growth resumed. The inflation and growth experience of the transition economies can be observed in Chart 2, which exhibits a negative relationship between output and inflation.

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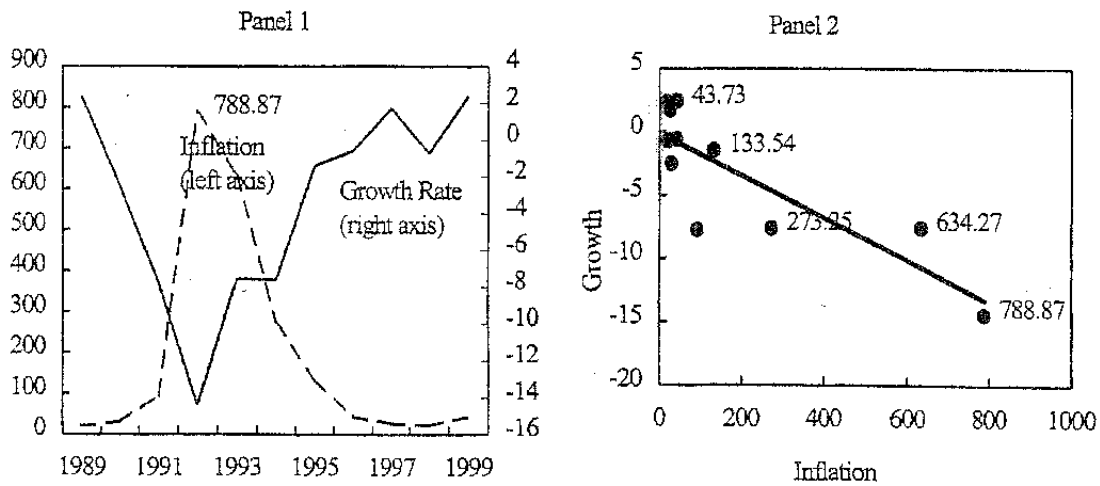
[2] At very low inflation rates, an increase in inflation may have a positive impact on growth. The issue of where the break point for this relationship may occur is far from settled. Sarel (1995) suggests that it might be around 8 percent. Below this rate inflation does not have any effect on growth, or it may even have a slightly positive effect.

Chart 2: Output Growth and Inflation in Transition Economies, 1989–1999

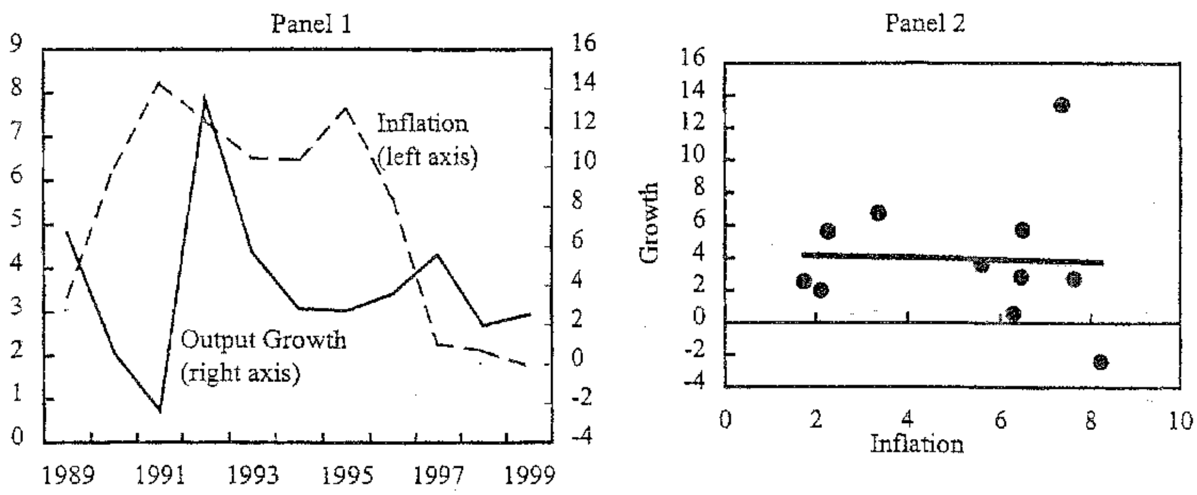


5. A few studies have attempted to conduct formal tests of relationship between inflation and growth in transition economies. Lougani and Sheets (1997) find that, controlling for progress with transition reform in addition to other variables, output growth is negatively related to inflation. Other studies have also looked at whether there might be non-linearities in the relationship between inflation and output. Christofferson and Doyle (1998), using a panel of 22 of the 25 transition economies, find an inflation threshold of about 13 percent. Inflation above that level reduces output growth, while no significant effect is visible for inflation below 13 percent. This break point is somewhat higher than is generally accepted for market economies suggesting that this threshold may fall for the transition economies as they become more market based.

B. Regional oil producers

6. Results are broadly similar for the regional oil producing countries. We choose to look at the regional oil producers in order to isolate any difference that may arise due to the high dependence of Iran on oil exports and to capture any regional differences that may exist. The regional oil producers data is an average of the data from GCC countries, Libya and Algeria. Excluding the impact of the Gulf war, there does not seem to be a clear cut relationship between inflation and output, although the certain years with low growth rates are marked by higher than average inflation.

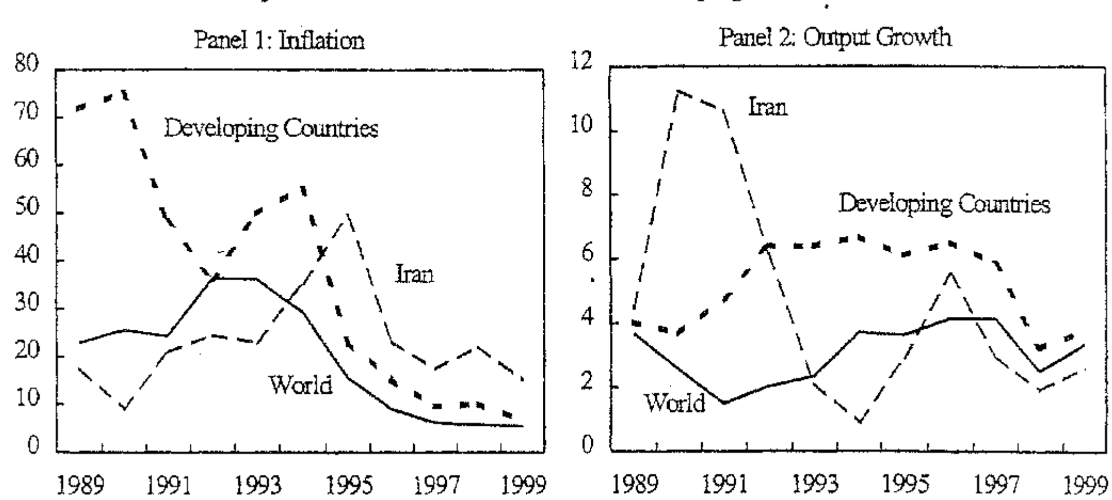
Chart 3: Inflation and Growth in Regional Oil Producers, 1989–1999



Output and inflation experience of Iran

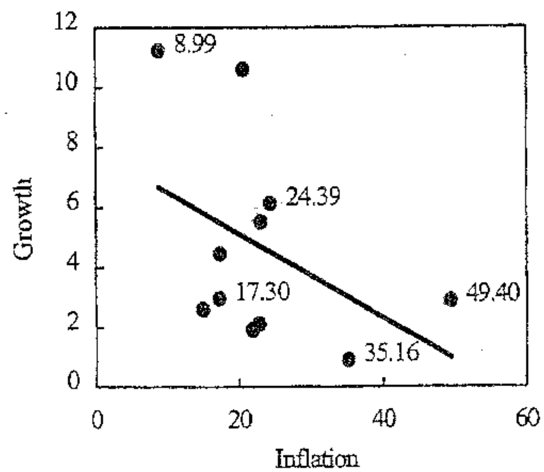
7. In order to exclude the impact of the major shocks experienced by Iran in the form of the Iranian revolution and the prolonged Iran-Iraq war, this note only considers data from the period 1989–99. In general, Iran has had higher than average inflation as compared to other groups of countries evaluated above. On the output side the experience is much more varied.

Chart 4: Comparison of Iran with the World and Developing Countries, 1989–1999



Panel 1 of Chart 4 above plots the average inflation of the world, developing countries and Iran. Early in the decade, Iran had below average inflation with the lowest inflation being 9 percent for 1990 while the average inflation for the world and developing countries was higher earlier in the decade. By the second half of the decade average inflation had fallen throughout the world. While Iran was able to reduce its inflation it still remains substantially above the world average. For 1998, the average inflation in developing countries was about 10 percent while inflation in Iran stood at 22 percent. On the growth side the trend is

Chart 5. Islamic Republic of Iran: Inflation and Output Growth in Iran, 1989–1999



reversed; although earlier in the decade Iran experienced higher than average growth, by the end of the decade its growth rates had fallen below the average growth rates for the world and the group of developing countries. Chart 5 above attempts to capture the relationship between output and inflation in Iran. The periods of low inflation seem to be associated with higher growth and vice versa. The negatively sloped trend line indicates a negative relationship between output and inflation.

E. The Role of the Public Sector and Fiscal Policy[1]

Introduction and background

1. This note discusses the role of the public sector, and objectives and instruments of fiscal policy in Iran, with particular focus on the past decade. Iran's public sector is large and comprises the central government (including the provincial administrations), municipalities, and state-owned enterprises and banks. In addition quasi-fiscal activities, including those emanating from the maintenance of a multiple exchange rate regime, have generally played an important role in Iran, which makes it necessary to broaden the scope of fiscal analysis.[2]

2. The role of the public sector increased in the Iranian economy during the 1980s, following sweeping nationalizations in the first few years after the Islamic revolution of 1979 and reflecting in part the difficult economic conditions during the Iran-Iraq war. Since then, and notwithstanding an episode of economic liberalization during 1993/94 as well as some degree of relaxation in a few policy areas (e.g., price decontrol), the public sector has largely maintained its dominant role in the Iranian economy.

3. Fiscal and other policies have been strongly influenced by redistributive and social considerations. In this pursuit, taxation and expenditure policies have been combined with manifold and large quasi-fiscal activities through the exchange and trade systems, low domestic energy prices, directed lending at low interest rates, and other channels. These policies have given rise to price distortions and misallocation of resources.

4. More recently, economic policies have begun to emphase the need to liberalize the economy, increase efficiency, and establish a more market-oriented system. The macroeconomic situation has improved, helped in large part by the sharp rise in oil prices and revenues over the past year. During 1999/2000 and in the first few months of the current fiscal year (2000/01),[3] the Iranian authorities have initiated a number of fiscal policy reforms, including streamlining the tax system, reducing explicit subsidies, and limiting quasi-fiscal activities.

[1] Prepared by Gunther Taube, Senior Economist, FAD.

[2] The foundations (Bonyads), though formally in the private sector, also play an important role in providing social services.

[3] The Iranian fiscal year is March 21–March 20.

The public sector and fiscal policy in Iran

The size of the government and the public sector

5. The constitution stipulates that Iran's economic system is to consist of three sectors: public, cooperative, and private.[4] The cooperative sector can be entirely or partly privately owned, and other articles of the constitution affirm the right of everyone to choose his or her own line of work, and affirm private property rights as long as they do not go beyond the bounds of Islamic law or harm society. The constitution also charges the government with the responsibility of providing every citizen with the opportunity to work, although the government itself must not become a major or dominant employer. It calls for planning of the national economy at each stage of its growth; and the provision of basic necessities to all citizens, whereby basic necessities are defined to include "accommodation, food, clothing, health care, medicine, education, and the necessary facilities for the establishment of a family." Finally, it proclaims that everyone has the right to benefit from social security with respect to retirement, unemployment, old age, disability, destitution benefits, as well as health care, to be provided through insurance or other means.

6. Against this background, the Iranian public sector has become large, although it is difficult to determine its size, especially if the focus is only on conventionally measured indicators such as the ratio of government revenue and expenditure to GDP. The following indicators show that the size of the **government** is not particularly large, but the more widely defined **public sector** is very large and controls or dominates much of the Iranian economy:

- Central government revenues and expenditures as a share of GDP averaged slightly more than 25 percent over the past four years and the 2000/01 budget. However, if revenues and expenditures of municipalities and state-owned enterprises (SOEs) are taken into account, staff estimates suggest that the public sector accounts for at least 60 percent of Iran's GDP.[5]

- Analogously, the share of central government workers in overall employment is relatively limited at approximately 13 percent of all employed persons (2.1 million

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[4] According to Chapter IV of the Constitution, the public sector includes "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."

[5] According to official data, the budgets of municipalities are relatively small, adding only about 2 percent of GDP to central government revenues and expenditures. Municipalities are generally required to balance their budgets.

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out of a total of about 18 million employed persons). Although official data on the number of employees in state-owned enterprises (SOGs)for recent years are unavailable, one official estimate suggests that at least 4.8 million persons, equivalent to almost one third of total employment, are employed in the government and SOGs.[6]

- On a more disaggregated basis, data suggest that the public sector is even more important than the above mentioned estimates would suggest. The most important sectors of the economy are entirely or largely owned or controlled by the government, including the production and distribution of oil and gas, heavy industries (e.g., steel), and important industrial and transport sectors (e.g., automobiles, shipping). For example, the National Iranian Oil Company's (NIOC) export revenue from oil and gas exports accounts for approximately 80 percent of total exports proceeds.

- In the services sectors, all banks are currently state-owned. SOGs control or dominate the import and domestic distribution of large quantities of major essential items (e.g., wheat, sugar).[7]

- A number of public or quasi-public institutions, including the government-controlled Social Security Organization (SSO) which is primarily responsible for the administration of pensions and other social insurance activities, are important economic players (Box 1). The SSO owns about 70 enterprises in various sectors, has large financial reserves and real estate holdings, and is by far the largest non-bank institutional investor at the Teheran Stock Exchange (TSE).

The fiscal policy stance

7. Although Iran is characterized by a product budgetary strain, the conduct of fiscal policy has generally been complicated by the strong dependence on the highly volatile oil and gas revenue. Revenue directly accounts for approximately 50 percent of government revenues. In addition, a significant part of tax and nontax revenues is indirectly related to the exploitation and distribution of oil and gas. Faced with an adverse oil price shock, the government has typically tended to use capital spending as a first line of defense to absorb

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[6] This estimate appears on the low side, but is consistent with the other available estimates. Shaban et al. (1994) estimated that in the late 1980s and early 1990s approximately 30 percent of Iran's labor force was employed in the public sector.

[7] Many sectors of the Iranian economy are characterized by high concentration ratios, i.e., these sectors are controlled or dominated by a small number of enterprises or single firms. In addition, the government applies indirect price controls by setting ceilings on wholesale and resale margins by SOGs.

the shock—investment spending was cut when the oil price fell below expectations.[8] By contrast, recurrent spending has remained relatively unaffected and has, in fact, tended to increase relative to GDP during the past decade. As recurrent spending was not adjusted and the scope for reducing capital spending was limited, budget deficits have tended to increase significantly when the oil price fell. Also, it is noteworthy that although budgetary performance improved when the oil price recovered, no surpluses have been achieved. To a large extent, budgetary deficits have been financed through borrowing from the central bank, which has contributed importantly to the high level of inflation and macroeconomic instability, thus significantly hampering real GDP growth.[9]

The tax system

8. Iran's tax system places much emphasis on equity and income redistribution, but at the same time it is distortionary, revenue inelastic, and inefficient. It is characterized by a plethora of indirect taxes, a personal income tax with a high maximum marginal rate, numerous exemptions, and an outdated, and weak tax administration which often relies on bilateral negotiations with taxpayers. The collection of indirect tax revenue is costly for the tax authorities, while compliance costs for taxpayers are also high. The heavy reliance on oil revenue and non-tax revenues, has in the past resulted in the neglect of taxation as an instrument of revenue generation. Iran's tax-to-GDP ratio has remained low, averaging less than 6 percent of GDP over the last five years. The tax structure is highly inelastic with respect to nominal income due to narrow tax bases, manifold tax loopholes, and lags in tax collection. However, the authorities envisage overhauling this system fundamentally over the next few years, with technical assistance from the Fund and the World Bank. They aim at introducing a simpler system of personal income taxation with a lower maximum rate, replacing the plethora of indirect taxes with the VAT, and reducing and simplifying import taxation in combination with eliminating quantitative import restrictions.

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[8] Yavari (1996) shows that this type of fiscal adjustment mechanism also prevailed in Iran during the 1960s and 1970s. This behavior has also been observed in several other major oil-producing countries (Liuksila et al. (1994), Chalk (1998)).

[9] It is generally acknowledged that conventional measures of fiscal policies like the deficit-to-GDP ratio provide an incomplete picture of fiscal performance in countries that rely heavily on revenue from sales of commodities such as oil with volatile and uncertain prices. However, in the case of Iran the measurement of the non-oil fiscal balance is rendered difficult as a breakdown between oil and non-oil government expenditures is unavailable. However, an estimate on the basis of non-oil revenues and non-oil GDP displays an even more pronounced budget trajectory, with substantially higher fiscal deficits in years when the oil price was low.

9. The corporate income tax has yielded little revenue (2½ percent of GDP), largely as a result of the low standard tax rate (10 percent) and a porous tax base. There are widespread exemptions of preferential tax rates for enterprises in a variety of sectors, including agriculture, publishing, tourism, and high-growth sectors such as mining. In addition, enterprise profits derived from exports as well as those of cooperatives and a number of large foundations (bonyads) remain essentially under taxed. Enterprises located in Iran's free trade zones benefit from corporate income tax holidays of up to15 years.

10. The relatively low level of the corporate profit tax is combined with a cumbersome and highly progressive personal income tax schedule with 9 brackets, a top marginal rate of 54 percent, and a relatively large deduction from the tax liability (equivalent to almost half of the average government wage in 1999/2000). Revenue from the personal income tax remains low (1½ percent of GDP) because of a combination of (i) high marginal rates which give rise to tax evasion; and (ii) salaries of certain professional groups (e.g., university professors) are taxed at a low standard rate (10 percent) or entirely exempted (e.g., defense and domestic security staff, dividends received by individuals from banks and government securities).

11. The revenue yield of indirect taxes has been small (on average about 2 percent of GDP over the past few years), with the bulk of the collections stemming from import taxes (1½ percent of GDP). There are many specific sales taxes, a smaller number of excise duties (including on petroleum products, cigarettes, vehicles, cement, steel, telephones and telecommunication services, and soft drinks).[10] To provide protection, in some cases (e.g., automobiles, and cigarettes) imports have higher excise tax rates than domestically produced goods. Because of their specific character and infrequent adjustments, the revenue yield of many domestic sales taxes has declined relative to GDP.

12. The customs administration collects revenue from some 30 different import taxes, levies, and charges; many of these are specific in nature. Although some of the statutory rates are high (e.g., the maximum combined tariff and "commercial benefit tax" on certain manufactured items is currently 240 percent), effective import taxation is substantially lower because all imports are valued for customs purposes at the overvalued official exchange rate (currently Rls 1,750 per U.S. dollar as compared to the TSE rate of about Rls 8,200 to the U.S. dollar). In combination with the multiple exchange rate regime, this system provides ample opportunity for rent-seeking. Moreover, there are many customs exemptions (e.g., all

[10] Tax revenues are understated because they exclude payroll tax proceeds which are collected by the SSO and other pension funds. The operations of these funds are not consolidated with those of the central government, with the exception of some revenues and outlays of the SSO which are included in the central government budget under earmarked revenues and expenditure.

government imports), and according to official estimates and anecdotal evidence smuggling and tax evasion are substantial.[11]

Expenditure policies

Wage outlays and consumer subsidies

13. Government expenditures have generally been strongly influenced by oil price developments. As indicated above, capital expenditures have generally served as the major shock absorber in the case of a sharp drop in the oil price. On the other hand, current expenditures have expanded steadily over the past decade, from less than 13 percent of GDP at the beginning of the 1990s to more than 16 percent of GDP in recent years. Although disaggregated official data on current spending by economic classification are unavailable for more recent years, staff estimates suggest that this trend is essentially the result of relatively strong increases in the central government wage bill, on the one hand, and subsidies and transfers to households and state-owned enterprises on the other hand (Appendix II, Table 28).

14. Wages and salaries form the largest component in current expenditures. Following a significant increase in the wage bill relative to GDP in the first half of the 1990s, the government has sought to keep wage increases more in line with inflation.

15. Explicit subsidies to households and state-owned enterprises comprise the second-largest component of government current expenditures. The government provides explicit subsidies through the (CPPO), which sells a number of essential items (e.g., wheat, rice, vegetable oil, sugar, milk, and cheese) at subsidized prices to households.[12] As part of Iran's social safety net, rationed quantities of these products are made available to urban households through a coupon system.[13] In recent years, the government has gradually reduced these subsidies, and, with the exception of wheat, they have become negligible as the quantities of products supplied at subsidized prices have decreased over time. However, in 1999/2000 these consumer subsidies still amounted to about 1¾ percent of GDP, including the wheat subsidy of about 1¼ percent of GDP.

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[11] The official estimate put the value of smuggled goods at about US$3 billion, equivalent to more than 20 percent of officially registered imports.

[12] In addition, the CPPO also pays subsidies on the provision of fertilizer and other agricultural inputs to farmers.

[13] For eligibility, households have to register with neighborhood committees.

Social sector spending and the safety net

16. Iran's social safety net is comprehensive and generous, but untargeted. The safety net consists of a variety of instruments and schemes operated by institutions in the public, quasi-public, and private domain. Broadly categorized, it includes (i) government and nongovernment spending on education and health; (ii) the provision of implicit and explicit subsidies, especially those covering essential items such as wheat (as discussed above) and energy products; and (iii) the provision of pensions and other social assistance (e.g., health services, and unemployment insurance) through the SSO.

17. The strong emphasis on social justice and improving social standards is mirrored in the government's functional allocation of expenditures. Both current and capital spending on education and health account for significant shares in total spending, and especially current outlays for education have risen strongly in recent years, reflecting in part, a substantial increase in the number of teachers.[14] As a result, Iran has achieved impressive improvements in a number of human development indicators. For example, during the decade through 1997/98 for which detailed data are available:

- the adult literacy rate increased from 57 percent to 75 percent (for females, it rose from 46 percent to 67 percent);
- female life expectancy rose from 63 years to 71 years; and
- the infant mortality rate fell from 64 to 31 in every 1000 live births (UNDP 1999).

18. While these indicators clearly show that living conditions have improved for many Iranians, it is less clear as to what extent there has been progress in raising average incomes and reducing income poverty. The poverty rate peaked at 22 percent in 1991 and fell to less than 19 percent in 1997 (UNDP 1999). However, the average real income, which declined during the 1980s, has grown only modestly over the last 10 years.

19. Iran's pension system comprises the government-controlled SSO and a number of smaller pension funds. The SSO also administers the government's unemployment insurance system and provides extensive health care to pensioners (Box 1). In addition to these organizations, a number of large foundations (Bonyads) provide social protection for specific target groups (Box 2). The largest of these foundations, the Bonyad-e-Mustazafan va Janbazan, provides financial assistance, free health service, and other support to families of about 120,000 war veterans and others.

[14] The total number of teachers in Iran rose from slightly less than 700,000 in 1994/95 to almost 900,000 in 1998/99. According to World Bank estimates, health expenditures are below the regional average, but above the level found in other countries with comparable income levels.

Box 1: The Social Security Organization (SSO)

The SSO operates the largest social assistance program in Iran, including the PAYG pension system for many formally employed persons. In 1999/2000, it covered approximately 750,000 retirement and disability pensioners as well as about 1 million survivor families. It collected contributions from about 6.1 million persons (about 25 million persons including dependents), equivalent to about 45 percent of all formally employed in Iran.[1] The SSO also administers Iran's unemployment insurance program.

Basic Facts

The PAYG system is financed through a 27 percent tax, comprising contributions from employers (20 percent), and employees (7 percent). In addition, employers pay 3 percent to employee's wages to finance the unemployment insurance scheme, bringing the total payroll tax to 30 percent. The government provides a general subsidy equivalent to 3 percent of each employee's wage to the SSO; this subsidy amounted to about 10 percent of total SSO revenues (Rls 9.6 trillion in 1999/2000).

Replacement rates are generally high (up to 95 percent of the average wage of the last three years of employment). While there is no explicit indexation mechanism, pensions generally are increased in line with inflation based on decisions taken by the government and parliament in the context of the government budget deliberations.

In addition to pension payments, the SSO provides generous, costly health services. About one third of the total social security contributions are used to finance health care services. The SSO owns and operates a large number of health care facilities, including (in 1995) about 30 hospitals with more than 5,000 beds, and some 230 clinics.

Financial performance and other activities

Despite generous pension and health benefits and an increase in the number of pensioners, the financial operations of the SSO appear to have remained sound. According to official information, the SSO has generally achieved balanced budgets, although in recent years the available funds for investment purposes (i.e., current and capital revenue minus current spending) have declined. Nonetheless, the SSO was still able to finance investments in the amount of about 5 percent of total expenditure in 1999/2000.

The SSO is a wealthy institution. It has accumulated large assets; investment income accounts for some 6 percent of total revenue. The SSO owns about 70 enterprises, has significant real estate holdings, and holds substantial financial assets (domestic and foreign). In 1999/2000, its financial reserve was estimated at Rls 27 trillion, or 5 percent of GDP. Data from the TSE show that the SSO is by far the largest nonbank institutional investor in Iran; together with its subsidiary, the Social Security Investment Fund, it owns about 7½ percent of all shares at the TSE. The SSO has, for example, recently purchased a 34 percent share in Iran's largest car manufacturer (Pars Khodro) as part of the largest ever sale on the TSE.

The SSO has established the Iran Housing Construction Company, which builds hospitals and clinics as well as housing units for low-income households insured with the SSO. It also provides short and long term loans to enterprises through its bank (Refah Kargaran), and it makes socially oriented investments. These include "employment generating" investments whereby the SSO agrees to lend to an enterprise which in turn agrees to hire a certain number of unemployed.

[1] In addition, about 15 smaller public sector pension funds and about 5 larger foundations (bonyads) cover a number of specific groups of government employees and war veterans. Private insurance companies or non-bank financial institutions also offer pension insurance plans, especially in large urban centers, which employees are free to subscribe to. Participation in the SSO is mandatory for all formally employed individuals.

Box 2. Iran: The Bonyad-e-Mustazafan va Janbazan and Other Large Foundations

The largest foundation is the **Bonyad-e-Mustafazan va Janbazan** (BMJ; Foundation of the Oppressed and Injured). According to official information, it owns about US$3.5 billion in assets, including real estate and about 350 enterprises with approximately 60,000 employees. It is estimated that about 30 percent of these enterprises have been established after 1979. The total turnover of these enterprises is estimated by the foundation at about US$ 1.5 billion, equivalent to about 1½ percent of GDP. The BMJ's Managing Director and the members of the Board of Trustees are directly appointed by the Supreme Leader.

The BMJ was established in 1979 and bestowed with the property of the Pahlavi Foundation and other confiscated assets. In subsequent years, the foundation also benefitted from large bank loans. Its objective has been to use these assets and spend derived income to the benefits of those who had suffered under the Shah's regime. In 1989, its scope was expanded as the foundation also began to support war victims. Its enterprises are active in a wide range of sectors, including heavy industry, chemical production, textiles, agriculture, food processing, tourism, and export and import. In a number of sectors (e.g., textiles, glass, and tire production), enterprises owned by this foundation have market shares of two thirds or more. The foundation also appears to be an important player in the transportation sector. The foundation is also active in non-bank financial services. In recent years, the BMJ has sought to expand its economic activities in high-growth sectors (e.g., financial services), while divesting enterprises in more traditional sectors (e.g., textiles). The BMJ has been a significant player on the TSE, including by purchasing stakes in state-owned enterprises that have been put up for privatization. Given their interest in export and international trade, the BMJ and other bonyads have supported government policies aiming at trade liberalization.

The **Bonyad-e Shahid** was established in 1980 to administer the needs of veterans of the Islamic revolution and their families, on the basis of expropriated assets and subsidies from the government (Rls 400 million in 1994). As of 1991/923, it owned 150 enterprises in the industrial, construction, agriculture, and services sectors. Its largest enterprise is the Shahid Investment Company.

The **Imam's Relief Committee (IRC)** which owns the country's largest rock quarry and receives government subsidies (Rls 230 million in 1994/95 and Rls 720 million in 1998/99). The IRC also engages in international development work and relief assistance in neighboring and other countries (e.g., builds cultural centers and health clinics in southern Lebanon). Domestically it provides pensions to some four million poor Iranians and educational support to 650,000 primary students and 15,000 university students, together with a rural development agency (Jehad-e Sazandegi). The IRC specifically also supports needy women.

The **Bonyad-e Astan-e Qods-e Razavi** owns or controls reportedly large real estate and other assets in Khorasan province, as well as real estate property in Tehran.

Subsidies to state-owned enterprises

20. The government provides significant current and capital transfers to (SOEs). The dearth of information and data about SOEs, which makes it difficult to analyze the financial performance of these enterprises.[15] Available data suggests that a sizable number of SOEs are loss-making, despite substantial implicit and explicit subsidies from the government. Official budget data for a number of selected SOEs show that in recent years these have combined financial losses (excluding taxes) in the magnitude of 5½ percent of GDP (Statistical Appendix Table 36). In 1997/98, official data show that major losses were incurred, for example, by the Iranian Automobile Production Company (SAIPA), the Iranian Railroad Company, and a number of industrial sector holding companies. These losses were financed in part through budgetary transfers or through bank lending. SOEs comprise approximately 15 percent of the number of enterprises in the industrial sector, but produce about 70 percent of this sector's value added. As industry accounts for about 22 percent of total GDP, by implication, SOEs in the industrial sector alone account for an estimated 15 percent of GDP.

21. While the operations of SOEs appear to have grown in importance during the 1980s and much of the 1990s, there is evidence that over the past few years the government has started to reduce budgetary transfers in real terms to enforce a harder budget constraint and instill greater financial discipline. The recently implemented measures to liberalize imports should put additional competitive pressure on SOEs.

Quasi-fiscal activities

22. Through various policies and instruments, public sector institutions and the central bank play an important role as agents of fiscal policy. These quasi-fiscal activities (QFAs) can have important allocative effects, acting as implicit but de facto government subsidies or taxes (Mackenzie and Stella (1996)). In Iran, the following QFAs could be identified:

- the application of different exchange rates, notably the official (floating) exchange rate (Rls 1,750 to the U.S. dollar) and the TSE rate (currently about Rls 8,200 to the U.S. dollar), combined with restrictions in the access to foreign exchange, including advance import deposit requirements, and quantitative trade restrictions;

- administratively determined low domestic energy prices; and

- implicit subsidies through the financial system, including negative or low real interest rates, credit allocation, and government loan guarantees (for both domestic and external borrowing).

[15] No consistent and reliable time-series data on the financial performance of individual SOEs are available. The most recent available official data on the financial performance of a selected number of SOEs are for fiscal year 1997/98 (Tables 34-36).

23. As conventionally measured, the central government accounts in Iran do not reflect these QFAs. Some QFAs have resulted in contingent liabilities for the government which may adversely affect budgetary performance in future. In particular, this applies to the provision of government guarantees for domestic and external borrowing. Other QFAs include the preferential access to government contract, administrative regulations, and monopolies.

References

Chalk, Nigel (1998), Fiscal Sustainability with Non-Renewable Resources, WP/98/26, IMF, Washington, D.C.

Liuksila, Claire et al. (1994), Fiscal Policy Sustainability in Oil-Producing Countries, WP/94/137, IMF, Washington, D.C.

Mackenzie, G.A. and Peter Stella (1996), Quasi-Fiscal Operations of Public Financial Institutions, IMF Occasional Paper No. 142, IMF, Washington, D.C.

Shaban,, Radwan A. and Ragui Assad, Sulayman Al-Qudsi (1994), Employment Experience in the Middle East, Economic Research Forum Working Paper No. 9401

UNDP (1999), Human Development Report Iran, New York, December

Yavari, Kazem (1996), Symmetric and Asymmetric Effects of Oil Shocks on Government Expenditures: The Case of Iran, unpublished manuscript, University of Toronto

F. Analysis of the Demand for Money[1]

1. In Iran, financial markets are in their early stage of development. Investment options are limited to three main categories: money, real assets, and foreign exchange. Asset allocation is influenced by the expected long-run rates of return, liquidity, and associated transaction costs. Interest rates on money are not only fixed in nominal terms but also significantly negative in real terms. Over time, a permanent shift away from the holding of money to real assets and foreign exchange has been observed as a result of a sustained misalignment in the interest rate structure.

2. The specification of the demand for money function relates it to the level of income and asset preferences between money and foreign exchange. When the expected real rate of return on foreign exchange far exceeds that on money (i.e., negative in real terms) over the long run, an investor would be better off by substituting money for foreign exchange to the extent possible at a given level of income. In this context, the degree of asset substitution between money and foreign exchange is affected by the market exchange rate.

Demand for money is therefore specified as:

$$M = \alpha * Y^{\beta} * PAR^{-\gamma} * P^{\eta}, \qquad \alpha, \beta, \gamma, \text{ and } \eta > 0 \qquad (1)$$

where M is the nominal money balance; Y, real income; PAR, the parallel market exchange rate; and P, the price level (measured by GDP deflator). Taking logarithms, the long run real demand for money can be written as:[2]

$$m - p = a + b_1 * y - b_2 * par \qquad a, b_1, \text{ and } b_2 > 0 \qquad (2)$$

where m-p denotes real money balance, deflated by the GDP deflator, p;[3] y is the real income; and par is the parallel market exchange rate.

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[1] Prepared by Olin Liu, Economist, APD, and Olumuyiwa Adedeji, Economist (EP), INS.

[2] Equation (2) was obtained after imposing the restriction of homogeneity between money and price (η=1). The restriction is tested and cannot be rejected at the 10 percent interval. In addition, the rate of inflation, typically used to measure the opportunity cost associated with the foregone return on physical assets is found to be stationary (while all other variables have the unit root), thus it has no bearing on the determination of money demand in the long-run.

3. Using the cointegration technique, a long-run real demand for money as expressed by Equation (2), was estimated and a unique cointegration vector was found among real money balance, real income, and parallel market exchange rate. The restriction of homogeneity between money and price was imposed.[4] The real demand for money in the long run can be written as:

$$\underset{}{m - p} = \underset{(24.33)}{0.63 * y} - \underset{(3.48)}{0.11 * par} \tag{3}$$

4. Income elasticity of money is estimated at around 0.6, significantly below unity. The exchange rate elasticity of money is estimated at about 0.1, suggesting that, over the long run, a 10 percent permanent depreciation in the parallel market exchange rate would lead to a decline in real demand for money by about 1 percent. A prolonged period of negative real rates of return on money has induced a permanent shift away from money to holding of foreign exchange that is expected to yield superior rates of return while, at the same time, providing virtually the same degree of liquidity. Over the entire period, the parallel market exchange rate depreciated by more than 500 percent, implying a significant weakening in the real demand for money (Chart 1).

5. Based on Equation (3), there was a high-level of excess money supply in 1990/91 that contributed to the buildup of inflation and economic instability in the following years. While monetary expansion continued through 1995/96, excess money supply narrowed as excessively high rate of inflation absorbed it during 1993/94 to end-1995/96, before it widened from end-1995/96 to sustain at a range of 5–10 percent of broad money (Chart 2).

In order to assess the dynamic properties of the demand for money, a dynamic model for nominal money growth was specified as:

$$\begin{aligned} dm = 0.02 &- \underset{(-5.94)}{0.23 * ECM_{money}(-1)} + \underset{(6.60)}{0.17 * dy} - \underset{(-5.93)}{0.25 * dp(-1)} - \underset{(-4.14)}{0.20 * dp(-2)} - \underset{(-2.89)}{0.1 * dp(-3)} \\ &+ \underset{(8.98)}{0.04 * seasonal_{dummy}} \end{aligned} \tag{4}$$

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[3] In Iran, a more appropriate measure of prices in the economy is the implicit GDP deflator. The CPI basket contains a large share of government subsidized essential goods and services as well as energy and transportation that are administratively priced.

[4] The test of homogeneity between money and price was accepted at 10 percent interval whereas homogeneity between money and real income is rejected.

$R^2 = 0.87$, $\sigma = 0.007$, $DW = 1.97$

where *dm* is nominal money growth; ECM_{money}, the excess money supply; *dy*, change in real income; and *dp*, rate of inflation.

6. Equation (4) indicates that, in the short-run, money growth adjusts itself toward the long run equilibrium level at a speed of about one-year (a coefficient of 0.23 on quarterly observations). Neither the $ECM_{exchange}$ nor ECM_{output} was estimated to have an impact on the money growth. However, an increase in real income of 10 percent would lead to a money growth of about 2 percent. The expected rate of inflation, measured by the lagged variables of inflation, is found to exert significant effect on the growth of money. The combined inflation elasticity on money growth is estimated to be negative and large (at -0.5), indicating that, a combined inflation of 10 percent over the last three quarters would lead to a decline in money growth by 5 percent as investors reduce their holding of money in favor of alternative assets. The lack of impact of the exchange rate movement seems to reflect the moderate importance of depreciation on money growth. Chart 3 shows that inflation variations can be well predicted by the stance of monetary policy.

Chart 1. Islamic Republic of Iran:
Equilibrium and Actual Demand for Money, 1990/91-1999/00

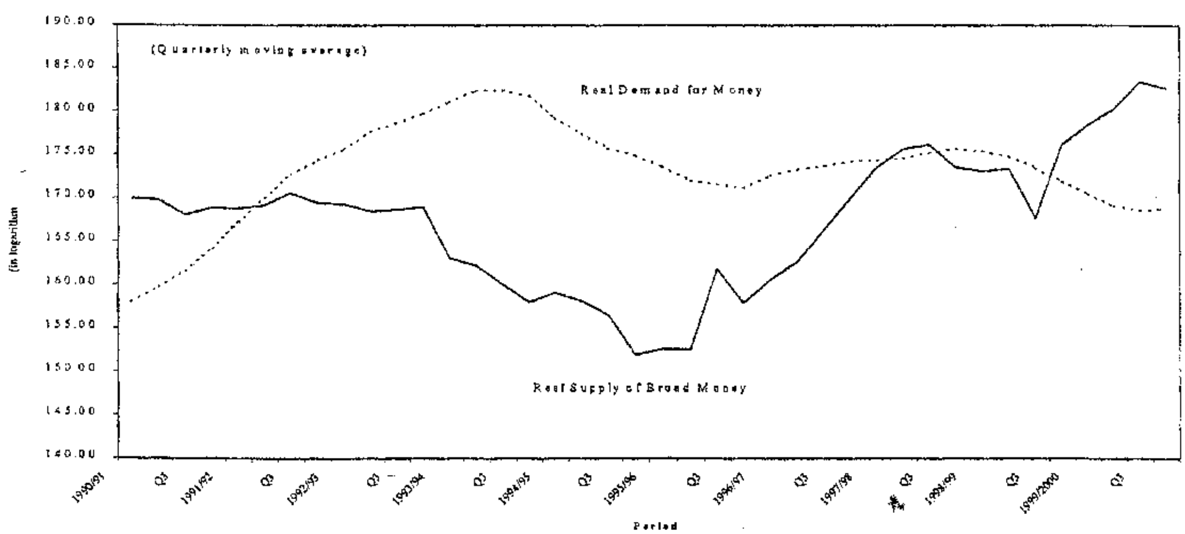

Chart 2. Islamic Republic of Iran:
Excess Money Supply, 1990/91-1999/00

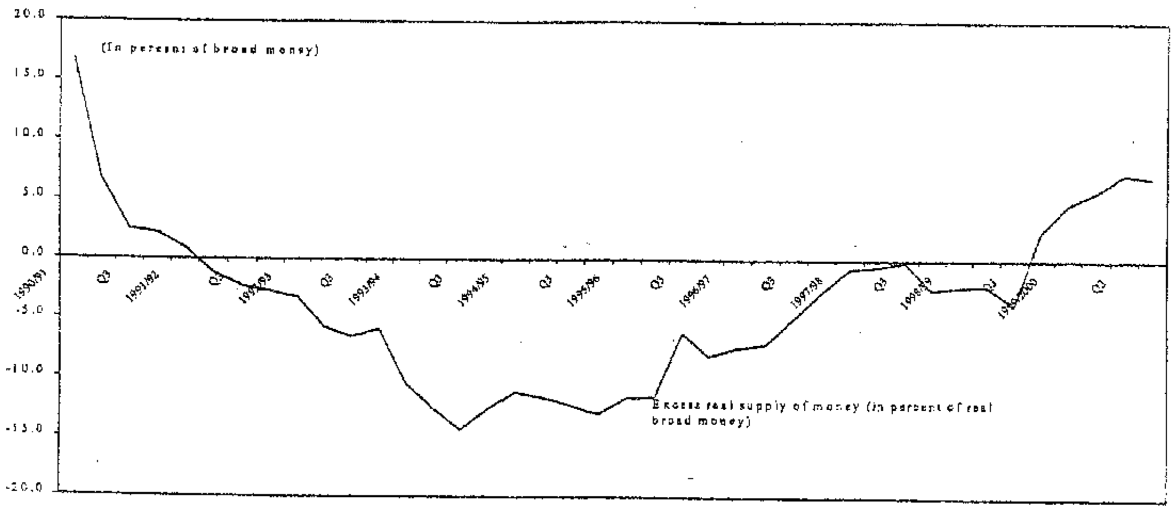

Chart 3. Islamic Republic of Iran: Annual Inflation Rate and Growth of Money
1990/91-1999/00

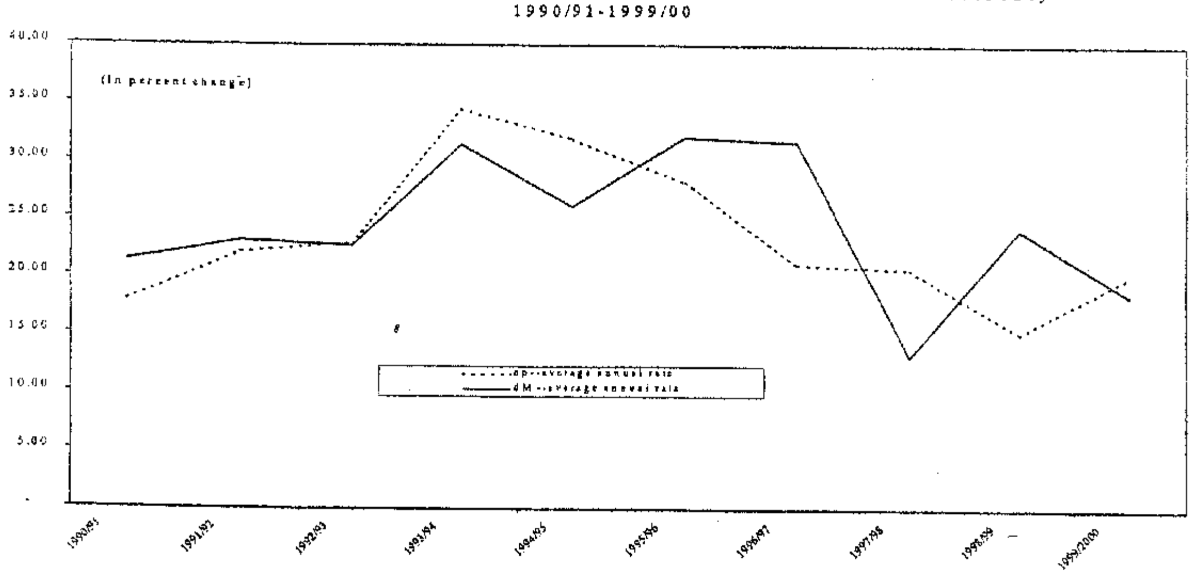

Table 6. Islamic Republic of Iran: Gross Domestic Product by Industrial Origin at Constant Prices, 1995/96–1999/2000 1/

	1995/96	1996/97	1997/98	1998/99	Prel. 1999/2000
	(In billion of Iranian rials)				
GDP at factor cost	15,458	16,192	16,698	17,047	17,455
Oil 2/	2,518	2,566	2,430	2,410	2,386
Non-oil	12,940	13,626	14,268	14,636	15,069
Agriculture	3,688	3,823	3,958	4,334	4,321
Industry	3,286	3,541	3,731	3,735	3,900
Mining	84	88	91	95	98
Manufacturing	2,181	2,320	2,510	2,561	2,625
Construction	624	708	686	613	687
Water and power	397	425	444	467	490
Services	5,966	6,262	6,579	6,568	6,848
Transport and communication	1,106	1,167	1,345	1,307	1,372
Banking and insurance	137	135	136	148	151
Trade	1,363	1,468	1,565	1,614	1,645
Ownership and dwellings	1,778	1,804	1,731	1,757	1,834
Public services	1,239	1,393	1,472	1,407	1,499
Private services	401	372	360	367	380
Less: Imputed bank service charge	58	77	30	32	33
Net indirect taxes	-144	-33	9	34	56
GDP at market prices	15,314	16,159	16,707	17,081	17,081
	(In percent)				
GDP at factor cost	3.2	4.7	3.1	2.1	2.4
Oil 2/	0.9	1.9	-5.3	-0.8	-1.0
Non-oil	3.6	5.3	4.7	2.6	3.0
Agriculture	2.3	3.7	3.5	9.5	-0.3
Industry	5.5	7.8	5.4	0.1	4.4
Mining	5.0	4.8	3.4	4.0	4.0
Manufacturing	5.8	6.4	8.2	2.0	2.5
Construction	4.5	13.5	-3.1	5.2	5.0
Water and power	5.3	7.1	4.4	-10.6	12.0
Services	3.4	5.0	5.1	-0.2	4.3
Of which				-2.9	5.0
Transportation and communication	-6.3	5.5	15.3	8.8	2.0
Banking and insurance	-2.1	-1.5	0.9	3.2	1.9
Trade	-0.8	7.7	6.6	1.5	4.4
Ownership and dwellings	9.8	1.5	-4.1	-4.4	6.5
Public services	3.0	12.4	5.6	1.8	3.7
Private services	9.0	-7.2	-3.2	8.8	2.0
GDP at market prices	2.9	5.5	3.4	2.2	2.5

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.
2/ Includes oil and gas production, refining, and distribution.

Table 7. Islamic Republic of Iran: Gross Domestic Product by Industrial Origin at Current Prices, 1995/96–1999/2000 1/

	1995/96	1996/97	1997/98	1998/99	Prel. 1999/2000
	(In billions of Iranian rials)				
GDP at factor cost	180,800	235,758	277,665	327,596	416,697
Oil 2/	29,069	35,915	30,025	21,408	35,044
Non-oil	151,731	199,843	247,640	306,188	381,653
Agriculture	40,091	47,803	55,820	72,422	86,997
Industry	35,577	49,544	61,794	76,353	94,909
Mining	884	1,246	1,616	2,142	2,740
Manufacturing	25,877	34,133	44,317	57,180	70,665
Construction	6,386	10,147	11,061	11,071	14,083
Water and power	2,430	4,018	4,801	5,961	7,421
Services	76,063	102,496	130,026	157,414	199,747
Transport and communication	11,368	16,987	22,389	27,487	34,387
Banking and insurance	1,745	2,112	2,499	3,341	3,926
Trade	28,989	37,438	47,032	58,183	76,802
Ownership and dwellings	15,309	20,776	26,038	30,992	40,833
Public services	15,687	21,726	27,006	30,976	35,652
Private services	3,706	4,657	5,604	6,842	8,628
Less: Imputed bank service charge	741	1,200	541	407	480
Net indirect taxes	-1,925	-524	-1,762	-1,120	-1,198
GDP at market prices	178,875	235,234	275,903	326,476	415,499
	(In percent of GDP at factor cost)				
GDP at market prices	98.9	99.8	99.4	99.7	99.7
Oil 2/	16.1	15.2	10.8	6.5	8.4
Non-oil	83.9	84.8	89.2	93.5	91.6
Agriculture	22.2	19.2	20.1	22.1	20.9
Industry	19.7	21.0	22.3	23.3	22.8
Mining	0.5	0.5	0.6	0.7	0.7
Manufacturing	14.3	14.5	16.0	17.5	17.0
Construction	3.5	4.3	4.0	3.4	3.4
Water and power	1.3	1.7	1.7	1.8	1.8
Services	42.1	43.5	46.8	48.1	47.9
Transport and communication	6.3	7.2	8.1	8.4	8.3
Banking and insurance	1.0	0.9	0.9	1.0	0.9
Trade	16.0	15.9	16.9	17.8	18.4
Ownership and dwellings	8.5	8.8	9.4	9.5	9.8
Public services	8.7	9.2	9.7	9.5	8.6
Private services	2.0	2.0	2.0	2.1	2.1
Less: Imputed bank service charge	0.4	0.5	0.2	0.1	0.1
Net indirect taxes	-1.1	-0.2	-0.6	-0.3	-0.3

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.
2/ Includes oil and gas production, refining, and distribution.

Table 8. Islamic Republic of Iran: Gross Domestic Expenditure at Current Prices, 1995/96–1999/2000 1/

	1995/96	1996/97	1997/98	1998/99	Prel. 1999/2000
	(In billion of Iranian rials)				
Gross domestic expenditure	173,246	223,109	270,182	333,659	396,070
Consumption expenditure	119,264	173,828	210,020	255,261	320,340
Private sector	95,952	141,922	171,655	211,470	264,044
Public sector	23,312	31,906	38,365	43,792	56,296
Gross domestic investment	53,982	49,281	60,161	78,397	75,729
Gross fixed capital formation	43,634	60,535	69,232	72,446	92,619
Private sector	24,416	33,495	39,460	44,001	54,280
Public sector	19,218	27,040	29,772	28,445	38,338
Change in stocks 2/	10,348	-11,254	-9,070	5,952	-16,889
Net exports of goods and nonfactor services	5,629	12,125	5,721	-7,183	19,429
Exports 3/	37,684	52,434	53,865	50,146	87,929
Imports 3/	32,056	40,309	48,143	57,329	68,500
GDP at market prices	178,875	235,234	275,903	326,476	415,499
Net factor income from abroad 3/	-1,274	-1,401	-713	-1,685	-1,147
GNP at market prices	177,601	233,833	275,190	324,791	414,351
Transfers (net)	-7	1,039	1,082	1,671	1,439
Gross national income	177,594	234,873	276,272	326,462	415,791
Memorandum items:					
Gross national savings	58,330	61,045	66,251	71,201	95,450
Public savings	12,867	23,193	23,128	6,483	42,639
Private savings	45,463	37,852	43,124	64,717	52,811
	(In percent of GDP)				
Gross domestic expenditure	96.9	94.8	97.9	102.2	95.3
Consumption expenditure	66.7	73.9	76.1	78.2	77.1
Private sector	53.6	60.3	62.2	64.8	63.5
Public sector	13.0	13.6	13.9	13.4	13.5
Gross domestic investment	30.2	20.9	21.8	24.0	18.2
Gross fixed capital formation	24.4	25.7	25.1	22.2	22.3
Private sector	13.6	14.2	14.3	13.5	13.1
Public sector	10.7	11.5	10.8	8.7	9.2
Change in stocks 2/	5.8	-4.8	-3.3	1.8	-4.1
Net exports of goods and nonfactor services	3.1	5.2	2.1	-2.2	4.7
Exports 3/	21.1	22.3	19.5	15.4	21.2
Imports 3/	17.9	17.1	17.4	17.6	16.5
Gross national savings	32.6	26.0	24.0	21.8	23.0
Public savings	7.2	9.9	8.4	2.0	10.3
Private savings	25.4	16.1	15.6	19.8	12.7

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.
2/ Includes statistical discrepancy.
3/ Staff estimates based on balance of payments data provided by the authorities which have been converted into rials at the corresponding exchange rates for various current account transactions.

Table 9. Islamic Republic of Iran: Gross Domestic Expenditure at Constant Prices, 1995/96–1999/2000 1/

	1995/96	1996/97	1997/98	1998/99	Prel. 1999/2000
	(In billions of Iranian rials at 1982/83 prices)				
Gross domestic expenditure	13,853.0	14,000.2	14,831.8	15,451.0	15,716.0
Consumption expenditure	10,645.0	11,720.3	12,050.8	12,339.1	12,802.0
Private sector	8,686.0	9,641.5	9,905.0	10,149.6	10,464.2
Public sector	1,959.0	2,078.8	2,146.6	2,189.5	2,338.0
Gross domestic investment	3,208.0	2,279.9	2,781.0	3,112.0	2,914.0
Gross fixed capital formation	2,289.0	2,467.0	2,461.6	2,306.6	2,495.0
Private sector	1,317.0	1,394.6	1,406.0	1,403.7	1,495.4
Public sector	972.0	1,072.4	1,055.6	902.9	999.5
Changes in stocks 2/	919.0	-187.1	319.4	805.0	419.0
Net exports of goods and nonfactor services	1,461.0	2,159.4	1,875.0	1,630.0	1,795.0
Exports	2,238.0	2,875.9	2,502.7	2,221.0	2,345.0
Imports	777.0	716.5	627.7	592.0	550.0
GDP at market prices	15,314.0	16,459.6	16,706.8	17,081.0	17,511.0
Net factor income from abroad	-26.0	-27.4	-13.7	-27.0	-15.0
GNP at market prices	15,288.0	16,132.2	16,693.1	17,054.0	17,496.0
Memorandum items:					
Gross national income 3/	13,713.6	14,633.9	15,189.3	15,481.0	-1,487.0
Gross national savings	3,068.6	2,913.6	3,138.0	3,142.0	16,009.0
	(Annual percentage changes)				
Gross domestic expenditure	10.7	1.1	5.9	4.2	1.7
Consumption expenditure	-3.4	10.1	2.8	2.4	3.7
Private sector	-4.8	11.0	2.7	2.5	3.1
Public sector	3.2	6.1	3.3	2.0	6.8
Gross domestic investment	115.6	-28.9	22.0	11.9	-6.4
Of which:					
Gross fixed capital formation	3.8	7.8	-0.2	-6.3	8.2
Private sector	3.1	5.9	0.8	-0.2	6.5
Public sector	4.7	10.3	-1.6	-14.5	10.7
Changes in stocks 2/	-228.0	-120.3	-270.6	152.3	-48.0
Memorandum item:					
Gross national savings	43.3	-5.0	7.7	0.1	2.1

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.
2/ Includes statistical discrepancy.
3/ Adjusted for changes in terms of trade.

Table 10. Islamic Republic of Iran: Production, Exports, and Domestic Consumption of Oil, 1995/96–1999/2000 1/

(In thousands of barrels per day)

	1995/96	1996/97	1997/98	1998/99	Est. 1999/2000
Crude oil production	3,600	3,610	3,623	3,713	3,439
Total crude exports	2,440	2,441	2,400	2,300	2,079
Crude oil exports	2,290	2,441	2,400	2,300	2,079
Crude oil exports in the form of consignment 2/	150	...	...	...	...
Net exports of refined products	24	9	56	113	197
Domestic consumption 3/	1,136	1,155	1,161	1,251	1,131
Gasoline	194	201	220	212	212
Kerosene	182	187	183	173	157
Gas oil	386	390	405	376	364
Fuel oil	264	263	230	310	225
Liquid petroleum gas	53	55	58	44	43
Other products 4/	57	59	65	135	130

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.

2/ Crude oil exports for refining abroad, or in exchange for refined products.

3/ The discrepancy between domestic consumption and the amount obtained by subtracting net exports from production reflects changes in inventories, crude oil flowing in the pipelines, and refining wastage.

4/ Includes aviation fuel, tar, lubricants, solvents, and insecticides.

Table 11. Islamic Republic of Iran: Oil Production and Trade, 1995/96–1999/2000 1/

(In millions of liters)

	1995/96	1996/97	1997/98	1998/99	Est. 1999/2000
Imports	4,407	4,381	3,951	...	...
Kerosene	1,791	956	477	551	...
Gas oil	1,413	2,021	1,359	...	...
Gasoline	1,200	1,400	2,114	1,277	1,450
Liquefied petroleum gas	0	0	0	...	...
Other products 2/	3	4	1	...	...
Exports	10,181	10,764	12,861	6,557	11,431
Fuel oil	9,162	10,218	10,811	6,557	11,141
Other	1,019	546	2,050	...	290

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.
2/ Includes oil and aviation fuel.

Table 12. Islamic Republic of Iran: Crude Oil Deliveries to Domestic Refineries, 1995/96–1999/2000 1/

(In thousands of barrels per day)

	1995/96	1996/97	1997/98	1998/99	Est. 1999/2000
Abadan	315	322	349	340	312
Teheran (I and II)	230	220	207	200	210
Tabriz	102	104	95	100	100
Shiraz	41	39	38	44	40
Bakhtaran	24	23	19	24	23
Isfahan	300	280	312	280	280
Lavan Topping Plant	22	23	24	27	25
Arak	140	150	151	154	150
Bandar Abbas	0	0	86	220	220
Total	1,174	1,161	1,281	1,389	1,360

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.

Table 13. Islamic Republic of Iran: Domestic Retail Prices of Petroleum Products and Electricity, 1995/96–2000/01 1/

(In Iranian rials per liter)

	1995/96	1996/97	1997/98	1998/99	Est. 1999/2000	Budget 2000/2001
Gasoline						
High octane	140	180	220	280	420	500
Regular	100	130	160	200	350	385
Kerosene	20	30	40	60	100	110
Gas oil	20	30	40	60	100	110
Fuel oil	10	15	20	30	50	55
Electricity	...	...	...	...	...	...
Average price per Kw/h	34.5	41.3	50	60	72	80

Source: Bank Markazi Jomhuri Islami Iran.

1/ Iranian years ending March 20. Petroleum product prices are set at the beginning of the fiscal year.

Table 14. Islamic Republic of Iran: Natural Gas Production and Uses, 1995/96–1999/2000 1/

(In billions of standard cubic meters)

	1995/96	1996/97	1997/98	1998/99	Est. 1999/2000
Gross production 2/	59.4	64.2	69.5	72.5	80.0
Domestic consumption	39.0	42.4	47.6	51.5	58.7
Exports	0.0	0.0	0.0	0.0	0.0
Flared	11.8	13.2	11.5	11.1	10.8
Local consumption and losses	8.6	8.6	10.4	9.9	10.5
Memorandum item:					
Gas reinjected	19.9	21.4	22.3	24.9	24.6

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.
2/ Excludes gas reinjected.

Table 15. Islamic Republic of Iran: Domestic Prices for Major Agricultural Products and Fertilizers, 1995/96–1999/2000 1/

(In Iranian rials per kilogram)

	1995/96	1996/97	1997/98	1998/99	Est. 1999/2000
Agricultural products 2/					
Cotton	800	1,600	...	...	1,990
Corn	280	348	430	534	598
Wheat	330	410	480	600	672
Rice	950	1056	1350	1555	1742
Sunflower	700	1200	1350	1400	1490
Barley	255	317	387	478	535
Sugar beets	78	97	125	157	175
Soybean	550	1100	1100	1200	1300
Green tea	650	700	820	950	...
Potatoes	140	174	210	262	293
Onion	110	137	180	225	252
Lentil	720	895	1050	1312	1469
Peas	585	727	860	1075	1204
White beans	700	870	1030	1287	1441
Red beans	650	808	950	1187	1330
Mixed beans	700	870	1030	1287	1441
Fertilizers					
Urea	150	210	224	247	...
Potash	...	200	220	252	...
Diammonium phosphate	190	200	292	325	...

Sources: Ministry of Agriculture; and Consumer and Producer Protection Organization.

1/ Iranian years ending March 20.

2/ The domestic prices presented for the agricultural crops in this table are the guaranteed floor prices payable to the domestic farmers. For most crops, the actual market price is above the guaranteed floor price.

Table 16. Islamic Republic of Iran: Output, Cultivated Area, and Yield of Major Crops, 1995/96–1999/2000 1/

(Output in thousands of tons, cultivated area in thousands of hectares, and yield in tons per hectare)

	1995/96	1996/97	1997/98	1998/99	Est. 1999/2000
Cotton					
Production	523	598	451	460	441
Area	272	320	238	229	216
Yield	1.9	1.9	1.9	2.0	2.0
Wheat					
Production	11,228	10,015	10,045	11,955	8,673
Area	6,567	6,328	6,299	6,189	4,739
Yield	1.7	1.6	1.6	1.9	1.8
Barley					
Production	2,952	2,736	2,499	3,301	1,999
Area	1,752	1,674	1,501	1,825	1,403
Yield	1.7	1.6	1.6	1.8	1.4
Rice					
Production	2,301	2,685	2,350	2,771	2,348
Area	566	600	563	615	587
Yield	4.1	4.5	4.2	4.5	4.0
Sugar beets					
Production	5,521	3,687	4,754	4,987	5,587
Area	203	149	191	185	188
Yield	27.2	24.7	24.9	27.0	29.7
Oil seeds					
Production	234	210	267	329	271
Area	198	198	233	259	237
Yield	1.2	1.1	1.2	1.3	1.1
Pistachio					
Production	239	260	112	314	291
Area	218	232	247	259	257
Yield	1.1	1.1	0.5	1.2	1.1
Green tea					
Production	243	277	309	270	233
Area	34	35	35	35	31
Yield	7.2	7.9	8.8	7.7	7.5
Tobacco					
Production	14	17	24	23	22
Area	14	18	21	21	23
Yield	1.0	0.9	1.1	1.1	1.0
Onions					
Production	1,130	1,200	1,157	1,210	1,677
Area	48	41	46	48	56
Yield	23.5	29.3	25.1	25.2	29.9
Potatoes					
Production	3,074	3,140	3,284	3,430	3,433
Area	145	143	158	163	164
Yield	21.2	21.9	20.8	21.0	20.9

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.

Table 17. Islamic Republic of Iran: Output, Value of Major Crops, 1995/96–1999/2000 1/

(In millions of Iranian rials at 1982/83 prices)

	1995/96	1996/97	1997/98	1998/99	Est. 1999/2000
Cotton	43,388	49,610	37,415	38,162	36,586
Wheat	394,103	351,527	352,580	419,621	304,423
Barley	123,098	114,091	104,208	137,652	83,358
Rice	310,865	362,744	317,485	374,362	317,215
Sugar beet	7,204	7,103	9,175	9,625	10,783
Oil seeds	24,216	22,493	28,596	35,236	29,024
Pistachio	68,768	74,904	32,266	90,460	83,834
Green tea	13,778	15,706	17,520	15,309	13,211
Tobacco	4,732	5,746	8,112	7,774	7,436
Onions	40,228	42,720	41,189	43,076	59,701
Potatoes	107,897	110,214	115,268	120,393	120,498
Total	1,138,277	1,156,858	1,063,814	1,291,670	1,066,069
Annual percentage change	2.79	1.63	-8.04	21.42	-17.50

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.

Table 18. Islamic Republic of Iran: Production Index for Large Manufacturing Establishments, 1994/95–1998/99 1/

(1990/91 = 100)

	Weights	1994/95	1995/96	1996/97	Prel. 1997/98 2/	Prel. 1998/99
Food, beverages, and tobacco	9.6	135.0	151.0	168.2	171.1	192.1
Textiles, clothing, and leather products	18.4	116.1	116.3	122.7	116.3	117.7
Wood and wood products	1.9	91.9	91.5	82.3	78.1	79.4
Paper and paper products	2.3	104.6	123.7	126.0	114.4	117.8
Chemical, basic materials, and products	14.7	152.2	183.6	205.6	211.2	204.6
Nonmetallic mining products (except oil and coal)	9.0	122.4	138.2	151.3	151.4	145.0
Basic metals	17.7	158.1	158.2	182.5	233.7	215.6
Fabricated metal products, machinery and equipment	26.4	111.9	115.5	146.3	187.4	204.4
Overall production	100.0	129.4	138.4	157.9	177.3	179.4
Annual percentage change	...	6.7	7.0	14.1	0.0	1.2

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.

2/ Includes the establishments with more than 100 employees and are not comparable with the previous years data.

Table 19. Islamic Republic of Iran: Employment Indices for Large Manufacturing Establishments, 1994/95–1997/98 1/

(1990/91 = 100)

	1994/95	1995/96	1996/97	1997/98
Food, beverages, and tobacco	107.8	112.3	112.8	114.4
Textiles, clothing, and leather products	100.9	101.0	102.2	101.3
Wood and wood products	89.6	86.4	82.5	78.5
Paper and paper products	114.3	117.2	117.5	119.1
Chemical, basic materials, and products	117.0	119.2	122.5	124.9
Nonmetallic mining products (except oil and coal)	111.9	114.6	118.1	119.7
Basic metals	100.1	97.9	92.3	94.9
Fabricated metal products, machinery and equipment	102.1	102.4	110.1	117.3
Overall index of employment	105.1	106.1	108.4	110.7

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.

Table 20. Islamic Republic of Iran: Index of Wages, Salaries, and Fringe Benefits for Construction Workers in the Private Sector, 1995/96–1999/2000 1/

(1990/91 = 100)

	1995/96	1996/97	1997/98	1998/99	Prel. 1999/2000
April	240.9	320.5	399.8	476.5	524.0
May	250.8	336.6	413.7	478.6	535.1
June	257.1	354.9	419.8	481.6	542.2
July	261.9	364.4	428.1	485.7	550.3
August	269.9	372.0	436.0	489.1	556.1
September	274.9	374.9	440.9	495.0	562.1
October	282.0	384.8	447.5	497.5	566.8
November	287.2	387.3	449.2	499.8	567.6
December	300.6	389.7	450.6	500.3	571.1
January	300.7	392.7	453.9	502	568.2
February	304.6	392.4	462.6	504.6	...
March	308.3	395.1	463.7	512.7	...

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.

Table 21. Islamic Republic of Iran: Population and Employment, 1986/87–1998/99 1/

	1986/87	1991/92	1996/97	1997/98	Plan and Budget Est. 1998/99
			(In thousands)		
Population	49,445	55,837	60,055	60,994	61,842
Urban	26,845	31,837	36,818	37,816	38,681
Rural	22,600	24,000	23,237	23,178	23,162
Male	25,281	28,768	30,515	...	31,385
Female	24,164	27,069	29,540	...	30,457
0-14	22,364	24,542	23,629	...	...
15-54	22,821	26,266	30,855	...	...
55+	4,027	4,664	5,327	...	...
Active population	12,820	14,737	16,027	16,840	17,312
Urban	7,026	8,489	9,655	9,907	10,134
Rural	5,794	6,248	6,372	6,933	7,178
Male	11,512	13,107	13,990	...	...
Female	1,307	1,630	2,037	...	...
Employment	11,002	13,097	14,572	14,803	14,897
Urban	5,953	7,609	8,799	9,058	9,283
Rural	5,049	5,488	5,773	5,745	5,614
Male	10,027	11,866	12,807	...	...
Female	975	1,231	1,765	...	...
Agriculture	3,190	3,205	3,357	...	...
Industries	2,749	3,515	4,353	...	...
Mining	32	101	120	...	...
Services	4,669	5,713	6,484	...	...
Other	362	563	258	...	...
Unemployment	1,813	1,626	1,450	2,037	2,415
Urban	1,073	880	855	...	...
Rural	740	746	595	...	...
Male	1,481	1,231	1,180	...	...
Female	332	395	270	...	...
			(In percent)		
Population growth rate	2.5	2.3	1.6	1.6	1.4
Active population as ratio of total	25.9	26.4	26.6	...	...
Urban	14.2	15.2	16.1	...	...
Rural	11.7	11.2	10.5	...	...
Male	23.3	23.5	23.3	...	...
Female	2.6	2.9	3.3	...	...
Unemployment rate	14.2	10.0	9.1	12.1	13.9

Source: Based on Iranian census data.

1/ Iranian years ending March 20.

Table 22. Islamic Republic of Iran: Education Indicators, 1980–98 1/

	1980	1985	1990	1995	1997	1998
Literacy rates			(In percent)			
Adult literacy rate (age +15)						
Male	...	62.9	73.9	...	79.7	...
Female	...	40.9	55.8	...	65.9	...
Urban	...	65.5	75.7	...	81.1	...
Rural	...	34.5	50.0	...	58.8	...
Literacy rate (age 6-29)	...	77.2	88.4	...	92.8	...
Urban	...	87.3	93.4	...	96.0	...
Rural	...	65.4	82.0	...	87.7	...
Enrollment rates			(In percent gross)			
Primary level	87	96	110	105	96 2/	...
Male	...	106	118	109	111 2/	...
Female	...	85	102	101	81 2/	...
Secondary level	42	44	54	66	...	...
Male	52	52	62	74	...	...
Female	32	35	45	58	...	...
Tertiary level	...	4.1	9.1	15.1	...	...
School enrolled to population 6-14 years	...	77.4	88.2	...	89.0	...
			(In thousands)			
Number of students						
Primary level	4,799	6,788	8,262	9,446	8,938	8,667
Male	3,170	3,828	1,639	4,997	4,218	4,106
Female	2,133	2,960	1,086	4,449	4,720	4,561
Secondary level	2,517	3,204	1,363	4,955	5,283	5,295
Male	1,532	1,907	778	2,730	2,402	2,405
Female	985	1,297	585	2,225	2,881	2,890
Tertiary level	...	...	...	...	3,705	3,920
Public universities and higher education	...	...	251	527	625	639
Male	...	...	145	355	287	268
Female	...	...	...	172	339	371
Islamic Azad University	...	...	...	521	659	667
Indices of educational quality	...	...	...	...	...	...
Students to school	...	...	169.3	177.4	173.6	167.8
Students to class	...	...	31.3	29.8	29.3	28.9
Students to teacher	...	...	25.1	24.8	21.5	20.7
			(In billions of Iranian rials)			
Education and research expenditure	...	...	951.6	7,141	8,622	...
Education	...	...	816.8	5,446	10,382	12,121
Percent of government expenditure	...	...	16.6	10.6	9.3	...
Percent of GDP	...	...	3.0	3.0	2.7	...
Higher education and research	...	...	134.8	1,695	3,553	3,429
Percent of government expenditure	...	...	2.7	3.3	3.4	...
Percent of GDP	...	...	0.5	0.9	1.0	...

Source: Bank Markazi Jomhouri Islami Iran.

1/ Data refer to range of years with the middle year of the range displayed. If data are available for more than one year in the range, data closest to the middle year are shown.

2/ Data refer to 1996.

Table 23. Islamic Republic of Iran: Health Indicators, 1985–1998/99 1/

	1985	1990	1995	1996/97	1997/98	1998/99
Life expectancy at birth	65.2	67.5	68.4	...	...	...
Male	65.0	67.0	68.0	68.0	...	...
Female	65.5	68.0	69.2	70.0	...	...
Mortality rates						
Infant (per 1,000 live births)	59.0	50.0	45.2	26.0	...	...
Under 5 years (per 1,000 live births)	70.0	40.0	33.0	33.0	...	...
Maternal (per 100,000 live births)	120.0	90.0	45.0	40.0	...	...
Crude death rate (per 1,000 people)	9.7	6.4	5.9	4.7	...	...
Total fertility rate (births per woman)	5.6	5.2	4.5	2.8	...	...
Family planning (percent coverage)	...	33.0	51.0	55.0	...	...
Population growth rate	2.5	2.4	1.8	1.6	...	...
Population with access to						
Health service	67.0	75.0	...	90.0	...	...
Safe water	71.0	89.0	90.2	90.0	...	...
Rural	52.0	55.0	...	82.0	...	...
Urban	90.0	97.0	...	98.0	...	...
Sanitation	65.0	82.0	80.5	...		
Rural	...	35.0	...	74.0	...	...
Urban	...	87.0	...	90.0	...	...
Number of						
Physicians/10,000	...	3.8	...	8.2	54,812	60,000
Dentists/10,000	...	0.6	...	1.5	10,178	11,400
Pharmacists/10,000	...	...	...	1.0	7,412	8,500
Nurses/10,000	8.5	8.7	...	23.4	...	...
Hospital beds/100,000	148.0	150.0	154.0	156.0	96,148	98,669
Health houses	1,800	11,200	...	14,666	...	...
Rural health centers	1,200	2,090	...	2,181	...	...
Maternity facilities	...	...	...	452.0	...	...
Urban health centers	1,220	1,520	...	1,890	...	...
Immunization (percent under 12 months)						
Measles	...	63.0	95.0	...	...	...
DPT	...	67.0	97.0	...	...	...
Public expenditure						
Health	...	...	...	...	...	...
Percent of total expenditure	...	8.4	8.2	6.3	...	...
Percent of GDP	...	1.4	1.6	...	...	...

Source: Bank Markazi Jomhouri Islami Iran.

1/ Data refer to range of years with the middle year of the range displayed. If data are available for more than one year in the range, data closest to the middle year shown.

Table 24. Islamic Republic of Iran: Price Developments, 1995/96–1999/2000 1/

	1995/96	1996/97	1997/98	1998/99	1999/2000
			(1990/91 = 100)		
Wholesale price index (WPI)	482.7	604.0	663.6	740.3	911.5
Domestic goods 2/	463.4	573.5	643.5	749.2	915.5
Imported goods	540.0	697.2	745.4	797.7	964.7
Exported goods	383.1	436.0	469.7	444.9	667.6
Consumer price index (CPI)	372.4	458.8	538.2	645.6	777.4
Food, beverages and tobacco	434.0	499.2	568.4	709.6	867.2
Housing	276.1	372.0	482.5	573.9	666.9
Clothing	320.0	431.0	487.8	521.8	564.1
Household	319.1	377.5	405.8	435.0	502.3
Transportation and communication	413.4	480.9	548.3	657.4	828.3
Water, fuel, and power	306.5	427.3	596.4	829.3	1,225.4
Health and medical care	536.5	721.5	914	1,141.8	1,408.7
Recreation and education	379.3	477.2	522.5	568.1	673.7
Miscellaneous goods and services	382.4	504.2	552.6	649.0	822.0
GDP deflator (factor cost)	394.0	490.5	568.4	660.9	823.5
Non-oil GDP deflator	358.8	448.8	537.5	656.7	797.9
Oil GDP deflator	689.1	835.5	767.8	525.9	867.9
			(Annual percentage changes)		
Wholesale price index	60.2	25.1	9.9	11.6	23.1
Domestic goods 2/	53.6	23.8	12.2	16.4	22.2
Imported goods	71.9	29.1	6.9	7.0	20.9
Exported goods	54.4	13.8	7.7	-5.3	50.1
Consumer price index	49.4	23.2	17.3	20.0	20.4
Food, beverages and tobacco	60.3	15.0	13.9	24.8	22.2
Housing	28.1	34.7	29.7	18.9	16.2
Clothing	61.5	34.7	13.2	7.0	8.1
Household	55.0	18.3	7.5	7.2	15.5
Transportation and communication	44.7	16.3	14.0	19.9	26.0
Water, fuel, and power	42.0	39.4	39.6	39.1	47.8
Health and medical care	32.7	34.5	26.7	24.9	23.4
Recreation and education	61.9	25.8	9.5	8.7	18.6
Miscellaneous goods and services	47.0	31.9	9.6	17.4	26.7
GDP deflator (factor cost)	35.5	24.5	15.9	18.0	24.6
Non-oil GDP deflator	39.6	25.1	19.8	23.6	21.5
Oil GDP deflator	17.9	21.2	-8.1	-28.7	65.0

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.
2/ Domestically produced and consumed goods.

Table 25. Islamic Republic of Iran: Central Government Revenues, 1995/96-2000/01

	1374 1995/96	1375 1996/97	1376 1997/98	1377 1998/99	Est. 1378 1999/2000	Budget 1379 2000/01
	(In billions of rials)					
Total revenue	45,156	62,056	70,012	62,881	112,071	150,212
Revenue from oil and gas exports	29,431	38,153	37,493	22,530	51,408	82,961
Oil and gas revenue valued at official exchange rate	26,666	32,746	27,064	16,598	25,955	24,085
Revenue from sales of foreign exchange 1/	2,765	5,407	10,429	5,932	25,453	58,876
Nonoil revenue	15,725	23,903	32,519	40,351	60,663	67,251
Tax	7,313	12,560	17,345	18,686	25,831	33,961
Income and wealth taxes	5,649	8,971	11,053	12,675	16,584	21,845
Corporate taxes	3,296	5,378	6,858	7,922	10,048	12,899
Public corporations 2/	1,065	2,328	3,197	3,827	4,944	6,099
Private corporations 3/	2,231	3,050	3,661	4,095	5,105	6,800
Taxes on wages & salaries	902	1,586	1,616	1,698	2,469	3,400
Taxes on professions	845	1,204	1,588	1,803	2,424	3,500
Taxes on other income 4/	122	204	280	396	490	620
Wealth and inheritance taxes	484	599	711	856	1,153	1,426
Import taxes	1,250	2,934	4,289	4,432	5,805	6,900
Customs duties	793	1,536	2,055	2,558	3,046	3,771
Order registration fees	405	1,358	2,163	1,846	2,532	3,000
Other 5/	52	40	71	28	228	129
Taxes on consumption and sales	414	655	2,003	1,579	3,442	5,216
Cigarettes	38	66	58	111	106	1,261
Petroleum products	60	63	83	74	76	73
Beverages	74	82	91	91	299	400
Automobiles	81	179	269	165	1,403	1,720
Excise tax on special goods	...	...	1,118	503	1,043	1,157
Other 6/	161	265	384	635	517	605
Nontax	4,831	6,563	8,777	12,734	22,686	16,810
Income from government monopolies and corporations	161	195	218	1,500	1,409	914
Services and sales of goods	1,346	2,132	2,490	3,373	5,300	8,626
Other	3,207	4,180	6,069	7,861	15,977	7,270
Earmarked revenue	3,581	4,780	6,397	8,931	12,146	16,481
	(In percent of GDP)					
Total revenue	25.2	26.4	25.4	19.3	27.0	28.9
Revenue from oil and gas exports	16.5	16.2	13.6	6.9	12.4	15.9
Oil and gas revenue valued at official exchange rate	14.9	13.9	9.8	5.1	6.2	4.6
Revenue from sales of foreign exchange 1/	1.5	2.3	3.8	1.8	6.1	11.3
Nonoil revenue	8.8	10.2	11.8	12.4	14.6	12.9
Tax	4.1	5.3	6.3	5.7	6.2	6.5
Income and wealth taxes	3.2	3.8	4.0	3.9	4.0	4.2
Import taxes	0.7	1.2	1.6	1.4	1.4	1.3
Taxes on consumption and sales	0.2	0.3	0.7	0.5	0.8	1.0
Nontax	2.7	2.8	3.2	3.9	5.5	3.2
Earmarked revenue	2.0	2.0	2.3	2.7	2.9	3.2
Memorandum item						
GDP (in billions of rials)	178,875	235,234	275,903	326,476	415,499	520,602

Sources: Ministry of Economy and Finance; and Bank Markazi Jomhouri Islami Iran; and Fund staff estimates and projection

1/ Sales of oil and gas export proceeds at the export and TSE rates.
2/ Includes procurement and distribution centers.
3/ Includes enterprises and foundations under the supervision of ministries and government organizations.
4/ Mostly taxes on income of the self-employed.
5/ Includes excises and taxes on imported automobiles, and a portion of import order registration fees allocated to various organizations (e.g., Red Crescent)
6/ Includes taxes on telephones, sales of caviar, audiotapes and videotapes.

Table 26. Islamic Republic of Iran: Valuation of Budgetary Oil and Gas Export Receipts, 1995/96–1999/2000 1/

	1995/96	1996/97	1997/98	1998/99	Est. 1999/2000
	(In millions of U.S. dollars)				
Oil and gas exports	15,103	19,271	15,471	9,933	16,270
Crude oil export revenue	14,043	17,875	14,009	8,586	13,899
Revenue from exports of petroleum products and gas	1,060	1,396	1,462	1,347	2,371
Less: amount not accruing to the budget	71	0	0	0	1,438
Oil and gas revenue	15,032	19,271	15,471	9,933	14,832
Valued at Rls 1,750 per U.S. dollar	12,532	14,945	14,867	9,484	10,667
Valued at Rls 3,000 per U.S. dollar	2,500	4,326	604	449	1,500
Valued at the TSE rate 2/	...	...	...	...	2,665
	(In billions of Iranian rials)				
Oil and gas revenue	29,431	39,131	36,447	22,620	44,488
Valued at Rls 1,750 per U.S. dollar	21,931	26,153	26,018	16,598	25,956
Valued at Rls 3,000 per U.S. dollar	7,500	12,978	10,429	6,022	1,875
Valued at the TSE rate	...	...	...	...	16,657

Sources: Data provided by the Iranian authorities; and Fund staff estimates.

1/ Iranian years ending March 20.
2/ For 1997/98 and 1998/99 this amount was included in the amount valued at the 3000 rate.

Table 27. Islamic Republic of Iran: Central Government Total Expenditure by Functional Classification, 1995/96–1999/2000

	1374 1995/96	1375 1996/97	1376 1997/98	1377 1998/99	Budget 1378 1999/2000
	(In billions of rials)				
Total expenditure and net lending	51,507	65,903	76,842	84,843	111,900
General services	3,149	4,778	5,777	6,469	8,062
National defense	2,774	4,616	6,548	8,144	8,660
Social services	14,556	21,799	27,490	31,151	33,752
Education	7,153	10,964	14,159	16,344	17,484
Health and nutrition	2,280	3,108	3,458	3,694	4,066
Other	4,836	7,243	9,404	10,767	11,774
Economic services	15,350	12,109	13,792	13,920	21,252
Agriculture	1,647	1,357	1,587	1,591	1,799
Water resources	1,514	2,045	1,863	1,444	3,500
Energy	5,245	4,756	6,214	6,803	8,301
Industry	217	402	241	276	343
Transport and communication	1,929	2,876	3,086	3,156	4,303
Other	4,798	673	801	650	3,006
Other	2,774	10,724	9,952	11,373	24,933
Foreign exchange losses	9,337	7,164	7,216	5,077	3,095
Earmarked expenditure	3,581	4,780	6,397	8,666	12,146
Net lending	-14	-67	-330	-187	...
	(In percent of GDP)				
Total expenditure and net lending	28.8	28.0	27.9	26.0	27.6
General services	1.8	2.0	2.1	2.0	2.0
National defense	1.6	2.0	2.4	2.5	2.1
Social services	8.1	9.3	10.0	9.5	8.3
Education	4.0	4.7	5.1	5.0	4.3
Health and nutrition	1.3	1.3	1.3	1.1	1.0
Other	2.7	3.1	3.4	3.3	2.9
Economic services	8.6	5.1	5.0	4.3	5.2
Agriculture	0.9	0.6	0.6	0.5	0.4
Water resources	0.8	0.9	0.7	0.4	0.9
Energy	2.9	2.0	2.3	2.1	2.0
Industry	0.1	0.2	0.1	0.1	0.1
Transport and communication	1.1	1.2	1.1	1.0	1.1
Other	2.7	0.3	0.3	0.2	0.7
Other	1.6	4.6	3.6	3.5	6.2
Foreign exchange losses	5.2	3.0	2.6	1.6	0.8
Earmarked expenditures	2.0	2.0	2.3	2.7	3.0
Net lending	0.0	0.0	-0.1	-0.1	...
Memorandum item					
GDP (in billions of rials)	178,875	235,234	275,903	326,476	405,065

Sources: Plan and Budget Organization; Bank Markazi Jomhouri Islami Iran; and Fund staff estimates and projections.

Table 28. Islamic Republic of Iran: Economic Classification of Central Government Expenditures, 1995/96–2000/01

	1995/96	1996/97	1997/98	Est. 1998/99	Est. 1999/2000	Budget 2000/01
			(In billions of rials)			
Total expenditure and net lending	51,507	65,903	76,842	84,843	107,771	136,761
Current expenditure	25,720	36,634	44,498	53,632	66,984	89,096
Wages and salaries	15,533	24,191	28,316	33,466	42,682	51,219
Goods and services	3,708	3,769	5,759	5,685	10,235	16,167
Subsidies and transfers	6,479	8,674	10,423	14,481	14,067	21,710
Subsidies and transfers to households	5,589	7,048	8,482	11,729	11,597	17,338
Current transfers to state-owned enterprises	890	1,626	1,941	2,752	2,470	4,372
Capital expenditure	12,883	20,754	17,392	17,655	27,099	30,009
o/w Capital transfers to state-owned enterprises	...	9,421	9,720	11,144	12,066	5,200
Other 1/	12,904	8,515	14,952	13,556	13,688	17,657
			(In percent of GDP)			
Total expenditure and net lending	28.8	28.0	27.9	26.0	25.9	26.3
Current expenditure	14.4	15.6	16.1	16.4	16.1	17.1
Wages and salaries	8.7	10.3	10.3	10.3	10.3	9.8
Goods and services	2.1	1.6	2.1	1.7	2.5	3.1
Subsidies and transfers	3.6	3.7	3.8	4.4	3.4	4.2
Subsidies and transfers to households	3.1	3.0	3.1	3.6	2.8	3.3
Current transfers to state-owned enterprises	0.5	0.7	0.7	0.8	0.6	0.8
Capital expenditure	7.2	8.8	6.3	5.4	6.5	5.8
o/w: Capital transfers to state-owned enterprises	...	4.0	3.5	3.4	2.9	1.0
Other 1/	7.2	3.6	5.4	4.2	3.3	3.4
Memorandum item						
GDP at market price (in billions of rial	178,875	235,234	275,903	326,476	415,499	520,602

Sources: Plan and Budget Organization; Bank Markazi Jomhouri Islami Iran; and Fund staff estimates and projections.

1/ Including earmarked expenditures, foreign exchange losses, and net lending.

Table 29. Islamic Republic of Iran: Central Government Current Expenditure by Functional Classification, 1995/96-2000/01 1/

	1374 1995/96	1375 1996/97	1376 1997/98	1377 1998/99	Budget 1378 1999/2000	Budget 1379 2000/01
	(In billions of Iranian rials)					
Total current expenditure 2/	25,720	36,634	44,498	53,632	65,129	84,965
General services	2,551	3,810	4,546	5,632	6,897	10,572
National defense	2,774	4,616	6,548	7,937	8,245	12,243
Social services	10,835	15,929	21,334	25,502	27,259	37,541
Education	5,906	9,052	12,146	14,492	15,031	20,725
Health and nutrition	1,851	2,390	2,895	3,198	3,452	4,373
Housing	14	30	37	53	61	85
Other 3/	3,064	4,457	6,256	7,759	8,715	12,359
of which: social security and welfare	2,612	3,784	5,350	6,643	8,484	10,124
Economic services	7,075	2,405	2,761	3,188	3,307	2,037
Agriculture 4/	999	556	710	762	824	1,042
Water resources	20	26	21	16	17	18
Energy	1,359	1,073	1,026	1,448	1,123	4
Industry	39	49	74	117	127	149
Transport and communication	132	313	412	425	354	414
Other 5/	4,526	388	518	420	862	410
Other 6/	2,485	9,874	9,309	11,287	19,693	22,573
of which: defense	2,093	2,292	2,315	2,503	2,995	4,696
	(In percent of GDP)					
Total current expenditure 2/	14.4	15.6	16.1	16.4	16.1	16.3
General services	1.4	1.6	1.6	1.7	1.7	2.0
National defense	1.6	2.0	2.4	2.4	2.0	2.4
Social services	6.1	6.8	7.7	7.8	6.7	7.2
Education	3.3	3.8	4.4	4.4	3.7	4.0
Health and nutrition	1.0	1.0	1.0	1.0	0.9	0.8
Housing	0.0	0.0	0.0	0.0	0.0	0.0
Other 3/	1.7	1.9	2.3	2.4	2.2	2.4
of which: social security and welfare	1.5	1.6	1.9	2.0	2.1	1.9
Economic services	4.0	1.0	1.0	1.0	0.8	0.4
Agriculture 4/	0.6	0.2	0.3	0.2	0.2	0.2
Water resources	0.0	0.0	0.0	0.0	0.0	0.0
Energy	0.8	0.5	0.4	0.4	0.3	0.0
Industry	0.0	0.0	0.0	0.0	0.0	0.0
Transport and communication	0.1	0.1	0.1	0.1	0.1	0.1
Other 5/	2.5	0.2	0.2	0.1	0.2	0.1
Other 6/	1.4	4.2	3.4	3.5	4.9	4.3
of which: defense	1.2	1.0	0.8	0.8	0.7	0.9
Memorandum item						
GDP at market prices (in billions of rials)	178,875	235,234	275,903	326,476	405,065	520,602

Sources: Ministry of Economy and Finance; Plan and Budget Organization; Bank Markazi Jomhouri Islami Iran; and Fund staff estimates.

1/ Fiscal year ending March 20.
2/ Excludes net lending and current expenditure financed by earmarked revenue. In 2000/01, excluding contingency budget.
3/ Includes expenditures on social security and welfare, and housing development.
4/ Includes OPCP fertilizer subsidies.
5/ Includes expenditures on commerce, tourism, and mining.
6/ Includes some outlays for defense, domestic trade, transfers to charities (e.g., foundations) and operations of the CPPO.

Table 30. Islamic Republic of Iran: Central Government Capital Expenditure by Functional Classification, 1995/96–1999/2000

	1995/96	1996/97	1997/98	1998/99	Budget 1999/2000
	(In billions of Iranian rials)				
Total capital expenditure 1/	12,883	17,392	19,061	17,425	31,530
General services	598	968	1,231	837	1,165
National defense	0	0	0	207	415
Social services	3,721	5,870	6,156	5,649	6,493
Education	1,247	1,912	2,013	1,852	2,453
Health and nutrition	429	718	563	496	614
Housing	273	454	432	293	552
Other 2/	1,772	2,786	3,148	3,008	2,874
o/w Rural and urban development	1,233	1,931	2,114	2,009	1,779
Economic services	8,275	9,704	11,031	10,732	17,945
Agriculture	648	801	877	829	975
Water resources	1,494	2,019	1,842	1,428	3,483
Petroleum, fuel, and power 3/	3,886	3,683	5,188	5,355	7,178
Industry	178	353	167	159	102
Transport and communication	1,797	2,563	2,674	2,731	4,158
Other 4/	272	285	283	230	2,049
Other expenditure 5/	289	850	643	0	5,512
	(In percent of GDP)				
Total capital expenditure 1/	7.2	7.4	6.9	5.3	7.8
General services	0.3	0.4	0.4	0.3	0.3
National defense	0.0	0.0	0.0	0.1	0.1
Social services	2.1	2.5	2.2	1.7	1.6
Education	0.7	0.8	0.7	0.6	0.6
Health and nutrition	0.2	0.3	0.2	0.2	0.2
Housing	0.2	0.2	0.2	0.1	0.1
Other 2/	1.0	1.2	1.1	0.9	0.7
o/w Rural and urban development	0.7	0.8	0.8	0.6	0.4
Economic services	4.6	4.1	4.0	3.3	4.4
Agriculture	0.4	0.3	0.3	0.3	0.2
Water resources	0.8	0.9	0.7	0.4	0.9
Petroleum, fuel, and power 3/	2.2	1.6	1.9	1.6	1.8
Industry	0.1	0.2	0.1	0.0	0.0
Transport and communication	1.0	1.1	1.0	0.8	1.0
Other 4/	0.2	0.1	0.1	0.1	0.5
Other expenditure 5/	0.2	0.4	0.2	0.0	1.4
Memorandum item					
GDP at market prices (in billions of rials)	178,875	235,234	275,903	326,476	405,065

Sources: Ministry of Economy and Finance; and Bank Markazi Jomhouri Islami Iran.

1/ Excludes capital expenditure financed by earmarked revenue.
2/ Includes social security and welfare, environmental protection, and multi-purpose projects.
3/ Counterpart to earmarked revenue from the sale of petroleum, fuel, and power.
4/ Includes mining, internal commerce, and tourism.
5/ Includes counterpart to earmarked revenue from the provision of military construction services.

Table 31. Islamic Republic of Iran: Subsidies Paid Through the Consumer and Producer Protection Organization, 1995/96–2000/2001 1/

	1995/96	1996/97	1997/98	1998/99	1999/2000	Budget 2000/2001
	(In billions of Iranian rials)					
Fertilizer	558	492	522	548	471	473
Sugar	329	345	292	85	20	345
Wheat	2,881	3,933	3,390	4,447	5,200	6450
Milk and cheese	226	234	440	284	481	645
Rice and vegetable oil 2/	561	604	212	336	98	-79
Other 3/	340	372	245	187	611	611.0
	4,895	5,980	5,101			
Total	4,895	5,980	5,101	5,339	6,881	8445
	(In percent of GDP)					
Fertilizer	0.3	0.2	0.2	0.1	0.1	0.1
Sugar	0.2	0.1	0.1	0.0	0.0	0.1
Wheat	1.6	1.7	1.2	1.3	1.2	1.2
Milk and cheese	0.1	0.1	0.2	0.1	1.1	0.1
Rice and vegetable oil 2/	0.3	0.3	0.1	0.1	0.1	-0.0
Other 3/	0.2	0.2	0.1	0.1	0.2	0.1
Total	2.7	2.5	1.9	1.7	1.7	1.6

Sources: Bank Markazi Jomhouri Islami Iran; and the Consumer and Producer Protection Organization.

1/ Does not include transfers for commodities whose transactions are self-liquidating.

2/ Prior to 1994/95, this category was self-liquidating as it benefited from subsidies through the official exchange rate of Rls 70 = US$1. Since then, imports of such goods have been imported using an exchange rate of Rls 1,750 = US$1. Hence, the subsidies to this category have become more explicit.

3/ Includes transfers to agro-industry complexes, and the Agricultural Products Insurance Fund, as well as subsidies for meat and seeds. Since 1995/96, this line has also included subsidies for pesticides.

Table 32. Islamic Republic of Iran: Quantities and Prices of Subsidized Food Items, 1996/97–1999/2000 1/

(In thousands of tons and rials per kilogram)

	Subsidized Quantity				Price			
	1996/97	1997/98	1998/99	1999/2000	1996/97	1997/98	1998/99	1999/2000
Wheat	9,400	8,200	8400	9300	93	116	128	152
Rice	297	275	286	301	300	400	500	500
Sugar	346	570	588	356	100	150	170	170
Edible oil	223	150	155	170	300	500	600	600
Red meat	54	52	27	22	1,000	1,500	2,000	770
Cheese 2/	24	22	0	35	1,000	1,500	5,000	5,000
Total	10,344	9,269	9,456	10,184				

Source: Consumer and Producer Protection Organization.

1/ Iranian years ending March 20.
2/ Cheese was dropped from the list of subsidized food items in 1998/99.

Table 33. Islamic Republic of Iran: Estimated Consumption of Subsidized Food Items, 1999/2000

(In thousands of tons)

	Subsidized Quantity			Other Consumption 1/			
	Total	Domestically Produced	Imported	Total	Domestically Produced	Imported	Total Consumption
Wheat	9,300	4,800	4,500	1,600	900	700	10,200
Rice	301	0	301	2,114	1,600	514	2,400
Sugar	356	0	356	572	286	286	1,160
Edible oil	170	0	170	745	100	645	900
Red meat	22	22	0	723	700	23	750

Source: Consumer and Producer Protection Organization.

1/ Partly implicitly subsidized through controlled prices and allocation of foreign exchange for importation at the appreciated floating rate (Rls/US$1,750). In addition to the items noted, other commodities subject to pricing policy are tea, dairy products, detergents, propylene bags, veterinary medicine, heavy vehicle tires, paper, medicine, car batteries, motor oil, and various plastic threads, and fibers.

Table 34. Islamic Republic of Iran: Budgetary Operations of Selected Public Enterprises, 1995/96–1999/2000 1/ 2/

	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000
				(In billions of Iranian rials)		
Operating balance		604.8	-280.2	520.1	1,094.8	1,047.3
Revenue		9,076.9	11,607.8	16,173.8	21,374.0	19,077.1
Current expenditure		8,472.1	11,888.0	15,653.7	20,279.2	18,029.8
Current transfers from the government		10.4	13.5	17.8	23.2	17.0
Current balance		615.2	-266.7	537.9	1,118.0	1,064.3
Capital expenditure		5,063.2	7,288.3	8,304.0	10,371.8	11,294.8
Overall balance		-4,448.0	-7,555.0	-7,766.1	-9,253.8	-10,230.5
Domestic financing		4,448.0	7,555.0	7,766.1	9,253.8	10,230.5
Capital transfer		3,048.9	3,779.3	3,380.7	3,977.4	3,865.7
Banking system		585.0	342.6	406.1	467.2	284.7
Other sources		814.1	3,433.1	3,979.3	4,809.2	6,080.1
				(In percent of GDP)		
Operating balance		0.4	-0.1	0.2	0.3	0.3
Revenue		5.3	4.9	5.8	6.4	4.6
Current expenditure		4.9	5.1	5.6	6.1	4.3
Current transfers from the government		0.0	0.0	0.0	0.0	0.0
Current balance		0.4	-0.1	0.2	0.3	0.3
Capital expenditure		2.9	3.1	3.0	3.1	2.7
Overall balance		-2.6	-3.2	-2.8	-2.8	-2.5
				0.0	0.0	
Domestic financing		2.6	3.2	2.8	2.8	2.5
Capital transfer		1.8	1.6	1.2	1.2	0.9
Banking system		0.3	0.1	0.1	0.1	0.1
Other sources		0.5	1.5	1.4	1.4	1.5

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.

2/ Includes the Armed Forces Medical Services Organization; Central Organization for Rural Cooperatives; Iran Khodro Company; Iran Steel National Industrial Group; Iran Telecommunications Company; Iranian Fisheries Company; Isfahan Steel Mill Company; National Iranian Offshore Company; National Iranian Oil Company; National Iranian Refining and Distribution Company; Provision Production and Distribution of Fodder Crops Company.

Table 35. Islamic Republic of Iran: Budgetary Transfers to Cover Financial Losses of Public Enterprises, 1995/96–2000/2001 1/

(In billions of Iranian rials)

	Actual				Budget	
	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
Central Organization for Rural Cooperatives	11.8	18.0	22.5	23.5	17.0	33.0
Organization for Procurement Distribution of Seeds	0.0	0.0	0.0	0.0	0.0	0.0
Regional Water Authorities	19.5	30.9	28.4	20.4	23.1	25.1
National Wheat Board	26.2	36.7	40.1	44.4	45.0	55.9
Iranian National Railroad Company	0.0	0.0	0.0	0.0	0.0	0.0
National Airline of Iran	0.0	0.0	0.0	0.0	0.0	0.0
News Agency of Iran	13.1	15.7	22.3	26.5	28.0	36.0
Iranian Postal Company	14.0	21.0	32.6	0.0	0.0	0.0
Iranian Radio and Television	275.5	456.6	561.6	416.5	481.5	633.0
Organization for Promotion of Children's Education	9.7	18.5	25.3	24.5	26.0	38.9
CPPO	1.8	1.9	3.0	2.9	4.1	6.1
Total	371.6	599.3	735.8	558.7	624.7	828.0

Sources: Bank Markazi Jomhouri Islami Iran; and Plan and Budget Organization.

1/ Iranian year ending March 20.

Table 36. Islamic Republic of Iran: Proposed Budgets of Banks and Public Enterprises, 1996/97–1999/2000 1/

(Budgeted figures)

(In billions of Iranian rials)

	1996/97		1997/98		1998/99		Est. 1999/2000		Budget 2000/01	
	Public enterprises, banks, and govt, profit institutions	Public enterprises	Public enterprises, banks, and govt, profit institutions	Public enterprises	Public enterprises, banks, and govt, profit institutions	Public enterprises	Public enterprises, banks, and govt, profit institutions	Public enterprises	Public enterprises, banks, and govt, profit institutions	Public enterprises
Revenue	59,819	50,475	82,395	70,295	114,947	97,845	127,607	107,938	187,146	162,524
Operational revenue	51,355	42,216	73,031	60,931	98,160	82,640	112,131	94,028	167,422	143,264
Other revenue	8,464	8,259	9,364	9,364	16,787	15,205	15,476	13,910	19,724	19,260
Expenditure	74,199	63,986	103,088	89,359	133,235	116,082	152,512	132,714	203,604	177,233
Current expenditure	52,260	43,627	70,418	59,246	94,803	79,866	108,356	90,643	145,158	121,832
Transfers to general revenue	0	0	0	0	100	0	0	0	0	0
Taxes	1,465	1,288	2,621	2,300	2,897	2,670	2,779	2,586	1,147	885
Distributed profits of public enterprise	351	266	715	567	882	795	1,065	999	2,245	2,157
Other distributed profits less savings	16	16	123	117	70	68	34	33	96	94
Capital expenditure	24,320	22,531	34,725	32,035	40,575	37,905	47,721	45,010	64,747	60,287
Amortization in current expenditure	-4,213	-3,742	-5,514	-4,906	-6,092	-5,222	-7,443	-6,557	-9,789	-8,022
Deficit	-14,380	-13,511	-20,693	-19,064	-18,288	-18,237	-24,905	-24,776	-16,458	-14,709
Financing	14,380	13,511	20,693	19,064	18,288	18,237	24,905	24,776	16,458	14,709
Current expenditure	1,626	1,626	1,941	1,941	2,751	2,752	2,470	2,470	1,372	1,372
Capital expenditure	9,517	9,421	9,765	9,720	11,151	11,144	14,028	14,026	5,185	5,179
Domestic loans (net)	3,080	3,044	4,748	4,732	3,772	3,792	11,202	11,216	8,348	8,348
Receipts	13,509	13,459	18,026	17,996	21,566	21,566	29,480	29,480	27,482	27,482
Amortization	-10,429	-10,415	-13,278	-13,264	-17,794	-17,774	-18,278	-18,264	-19,134	-19,134
Foreign loans	-1,901	-1,901	649	654	1,048	1,070	4,044	4,044	7,905	7,905
Receipts	1,013	1,013	1,885	1,885	2,161	2,161	6,119	6,119	12,755	12,755
Amortization	-2,914	-2,914	-1,236	-1,231	-1,113	-1,091	-2,075	-2,075	-4,850	-4,850
Current assets	2,058	1,321	3,590	2,017	-434	-521	-1,012	-1,244	2,105	250
Receipts	3,594	2,765	4,634	3,061	1,409	1,322	3,310	2,926	5,441	3,560
Payments	-1,536	-1,444	-1,044	-1,044	-1,843	-1,843	-4,322	-4,170	-3,336	-3,310
Repayment of deposit, debt, and other	0	0	0	0	0	0	-5,827	-5,736	-8,457	-8,345

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.

Table 37. Islamic Republic of Iran: Monetary Survey, 1995/96–1999/2000 1/

	1995/96	1996/97	1997/98 2/	1998/99 2/	1999/2000
	(In billions of Iranian rials)				
Net foreign assets	11,432	19,180	7,090	938	6,510
Foreign assets	20,419	27,259	15,189	10,782	17,147
Foreign liabilities	-8,987	-8,079	-8,099	-9,844	-10,637
Net domestic assets	75,497	99,735	123,826	163,688	191,429
Domestic credit	90,274	112,922	143,454	185,758	227,578
BMJII 3/	33,860	37,754	44,264	52,968	52,180
Banks	56,414	75,168	99,190	132,791	175,398
Claims on government (net)	26,928	28,303	33,046	43,898	41,762
BMJII 3/	25,336	26,759	31,597	38,654	38,377
Claims	33,723	37,798	43,425	54,903	58,371
Deposits	8,387	11,039	11,828	-16,250	19,994
Banks	1,592	1,544	1,449	5,245	3,385
Claims	1,824	1,825	3,407	7,742	7,151
Deposits	232	281	1,958	-2,498	3,766
Claims on NFPEs	16,407	23,180	33,969	43,640	47,903
BMJII 3/	8,524	10,995	12,667	14,314	13,803
Banks	7,883	12,185	21,302	29,326	34,100
Claims on private sector	46,939	61,439	76,439	98,220	137,913
Other items (net)	-14,777	-13,187	-19,628	-22,071	-36,149
Broad money	86,929	118,915	130,916	164,626	197,939
Money	42,824	58,634	61,472	79,008	92,001
Currency outside banks	10,672	13,216	15,380	18,773	22,120
Demand deposits	32,152	45,418	46,092	60,235	69,881
BMJII 3/	1,858	2,362	3,401	4,224	5,249
Banks	30,294	43,056	42,691	56,011	64,632
Quasi-money	44,105	60,281	69,444	85,617	105,938
	(In millions of U.S. dollars)				
Net foreign assets	6,533	10,960	4,051	537	3,720
Foreign assets	11,668	15,576	8,679	6,161	9,798
Foreign liabilities	-5,135	-4,617	-4,628	-5,625	-6,078
Memorandum items:					
Accounting exchange rate	1,750	1,750	1,750	1,750	1,750

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.
2/ Data for 1997/98 and 1998/99 have been revised to reflect the implementation of improved classification system and errors in reporting by few banks that were discovered in the course of implementing the new system. Data prior to 1997/98 are still based.
3/ Bank Markazi Jomhouri Islami Iran.

Table 38. Islamic Republic of Iran: Summary Accounts of the Bank Markazi Jomhouri Islami Iran, 1995/96–1999/2000 1/

	1995/96	1996/97	1997/98	1998/99	1999/2000
	(In billions of Iranian rials)				
Net foreign assets	11,399	16,211	7,333	4,039	7,630
Foreign assets	14,282	18,919	11,373	8,358	11,857
Foreign liabilities	-2,883	-2,708	-4,040	-4,319	-4,227
Net domestic assets	24,859	33,484	48,582	62,150	69,496
Net claims on government	25,336	26,759	31,597	38,654	38,377
Claims on government	33,723	37,798	43,425	54,903	58,371
Government deposits	-8,387	-11,039	-11,828	-16,250	-19,994
Claims on NFPEs	8,524	10,995	12,667	14,314	13,803
Claims on banks	10,420	10,190	14,930	13,400	24,329
Other items (net)	-19,421	-14,460	-10,612	-4,218	-7,013
Reserve money	36,258	49,695	55,915	66,189	77,126
Bank reserves	22,639	33,104	35,721	41,794	47,963
Deposits of NFPEs 2/	1,858	2,362	3,401	4,224	5,249
Currency	11,761	14,229	16,793	20,171	23,914
Currency outside banks	10,672	13,216	15,380	18,773	22,120
Currency in banks' tills	1,089	1,013	1,413	1,398	1,794
	(In millions of U.S. dollars)				
Net foreign assets	6,514	9,263	4,190	2,309	4,360
Foreign assets	8,161	10,811	6,499	4,776	6,775
Foreign liabilities	-1,647	-1,547	-2,309	-2,467	-2,415
Memorandum items:					
Accounting exchange rate	1,750	1,750	1,750	1,750	1,750

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.
2/ Includes deposits of municipalities.

Table 39. Islamic Republic of Iran: Detailed Accounts of the Bank Markazi Jomhouri Islami Iran, 1995/96–1999/2000 1/

(In billions of Iranian rials)

	1995/96	1996/97	1997/98	1998/99	1999/2000
Total assets	73,228	87,835	92,439	105,639	120,782
Foreign assets	14,282	18,919	11,373	8,358	11,857
In millions of U.S. dollars	8,161	10,811	6,499	4779	6,775
Gold 2/	3,081	3,404	2,475	1,931	2,645
In millions of U.S. dollars	1,761	1,945	1,414	1,103	1,511
Gold for note cover	1,887	1,901	1,670	1,627	1,627
Exchange rate	1,750	1,750	1,750	1,750	1,750
In millions of U.S. dollars	1,078	1,086	954	930	930
Other gold	1,194	1,503	805	304	1,018
Exchange rate	1,750	1,750	1,750	1,750	1,750
In millions of U.S. dollars	682	859	460	174	582
Foreign exchange	7,558	11,662	5,199	3,318	5,429
In millions of U.S. dollars	4,319	6,664	2,971	1,896	3,102
For note cover	495	760	1,063	1,630	2,553
Exchange rate	1,750	1,750	1,750	1,750	1,750
In millions of U.S. dollars	283	434	607	931	1,459
Other foreign exchange	7,063	10,902	4,136	1,688	2,876
Exchange rate	1,750	1,750	1,750	1,750	1,750
In millions of U.S. dollars	4,036	6,230	2,363	965	1,643
Subscriptions to international organizations 3/	519	660	784	822	850
Exchange rate	1,750	1,750	1,750	1,750	1,750
In millions of U.S. dollars	297	377	448	470	486
Foreign exchange clearing	2,758	2,615	2,339	2,285	2,458
Exchange rate	1,750	1,750	1,750	1,750	1,750
In millions of U.S. dollars	1,576	1,494	1,337	1,306	1,405
SDR holdings, IMF record	366	578	576	2	475
Exchange rate	1,750	1,750	1,750	1,750	1,750
In millions of U.S. dollars	209	330	329	1	271
Reserve position in IMF	0	0	0	0	0
Claims on government	33,723	37,798	43,425	54,903	58,371
Government obligations for note cover	8,117	10,109	12,630	15,105	17,910
Government securities	836	836	836	836	836
Loans and credits	5,585	3,145	817	4,698	3,526

Table 39. Islamic Republic of Iran: Detailed Accounts of the Bank Markazi Jomhouri Islami Iran, 1995/96–1999/2000 1/

(In billions of Iranian rials)

	1995/96	1996/97	1997/98	1998/99	1999/2000
Loans to cover interest payments to banks	415	498	590	658	658
Reserve account for foreign obligations	18,775	23,215	28,557	33,612	35,446
Treasury-IMF account	-5	-5	-5	-5	-5
Securities	40	40	40	40	40
Less subsidies by treasury	-45	-45	-45	-45	-45
Claims on NFPEs	8,524	10,995	12,667	14,314	13,803
Claims on banks	10,420	10,190	14,930	13,400	24,329
Commercial banks	6,082	5,812	10,939	8,474	16,510
Specialized banks	4,378	4,378	3,991	4,926	7,819
Unclassified assets	6,279	9,933	10,044	14,665	12,422
Gold with IMF: BMJII	97	92	89	91	89
Subscriptions to IMF: BMJII	656	619	604	865	851
Subscriptions by treasury	45	45	45	45	45
Securities by treasury	-40	-40	-40	-40	-40
Reserve position in IMF	0	0	0	0	0
SDR holdings: BMJII	366	578	576	2	475
SDR holdings: IMF record	-366	-578	-576	-2	-475
Government promissory note for IMF quota	3,109	3,109	2,948	3,685	3,685
Others 4/	2,412	6,108	6,398	10,018	7,792
Total liabilities	73,228	87,835	92,439	105,639	120,782
Reserve money	36,448	49,933	56,236	66,525	77,528
Currency outside banks	10,672	13,216	15,380	18,773	22,120
Currency issue	11,861	14,261	16,990	20,345	24,134
Currency in BMJII's till	-100	-32	-197	-174	-220
Currency in banks' tills	-1,089	-1,013	-1,413	-1,398	-1,794
Currency in banks' tills	1,089	1,013	1,413	1,398	1,794
Deposits of banks	22,639	33,104	35,721	41,794	47,963
Legal	21,713	31,756	34,461	37,835	45,377
Sight	926	1,348	1,260	3,959	2,586
Deposits of NFPEs 5/	2,048	2,600	3,722	4,560	5,651
Rial deposits of NFPEs	1,693	1,983	3,141	3,538	4,868
Foreign exchange deposits of NFPEs	190	238	321	336	402
Exchange rate	1,750	1,750	1,750	...	1,750
In millions of U.S. dollars	109	136	183	...	230
Rial deposits of municipalities	165	379	260	...	381

Table 39. Islamic Republic of Iran: Detailed Accounts of the Bank Markazi Jomhouri Islami Iran, 1995/96–1999/2000 1/

(In billions of Iranian rials)

	1995/96	1996/97	1997/98	1998/99	1999/2000
Government deposits	8,387	11,039	11,828	16,250	19,994
Rial deposits	8,000	10,205	10,640	14,641	16,613
Foreign currency deposits	387	834	1,188	1,609	3,381
Exchange rate	1,750	1,750	1,750	...	1,750
In millions of U.S. dollars	221	477	679	...	1,932
Foreign liabilities	2,883	2,708	4,040	4,319	4,227
In millions of U.S. dollars	1,647	1,547	2,309	...	2,415
Foreign currency deposits of foreign banks	1,417	1,882	3,177	3,347	3,406
Exchange rate	1,750	1,750	1,750	...	1,750
In millions of U.S. dollars	810	1,075	1,815	...	1,946
Bilateral arrangements	1,466	826	863	971	821
Exchange rate	1,750	1,750	1,750	...	1,750
In millions of U.S. dollars	838	472	493	...	469
Import deposits	8,637	9,228	6,439	3,777	3,549
Private sector	3	2	3	2	2
Public sector	8,634	9,226	6,436	3,775	3,547
Capital accounts	955	969	996	1,096	1,095
Capital and reserves	331	380	421	511	510
SDR allocations	624	589	575	585	585
Unclassified liabilities	15,918	13,958	12,900	13,673	14,389
Liabilities to the IMF	3,109	3,109	2,948	3,685	3,685
Other	12,809	10,849	9,952	9,988	10,704

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.
2/ Excludes "Gold with IMF".
3/ Excludes subscriptions to IMF.
4/ Includes cash in till.
5/ Includes deposits of municipalities.

Table 40. Islamic Republic of Iran: Summary Accounts of the Banking Institutions, 1995/96–1999/2000 1/

(In billion of Iranian rials)

	1995/96	1996/97	1997/98 2/	1998/99 2/	1999/2000
Net foreign assets	33	2,969	-243	-3,101	-1,120
Foreign assets 3/	6,137	8,340	3,816	2,424	5,290
Foreign liabilities	-6,104	-5,371	-4,059	-5,525	-6,410
Net domestic assets	74,366	100,368	112,378	144,729	171,690
Net claims on government	1,592	1,544	1,449	5,245	3,385
Claims on government	1,824	1,825	3,407	7,742	7,151
Government deposits	-232	-281	-1,958	-2,498	-3,766
Claims on NFPEs	7,883	12,185	21,302	29,326	34,100
Claims on private sector 4/	46,939	61,439	76,439	98,220	137,913
Net claims on BMJII	13,308	23,927	22,205	29,792	25,428
Liabilities to BMJII	-10,420	-10,190	-14,930	-13,400	-24,329
Deposits with BMJII	22,639	33,104	35,721	41,794	47,963
Notes and coins in till	1,089	1,013	1,414	1,398	1,794
Other items (net)	4,644	1,273	-9,017	-17,853	-29,136
Liabilities to the private sector	74,399	103,337	112,135	141,628	170,570
Demand deposits 5/	30,294	43,056	42,691	56,011	64,632
Time and savings deposits 5/ 6/	44,105	60,281	69,444	85,617	105,938
Net foreign assets	19	1,697	-139	-1,772	-640
Foreign assets	3,507	4,766	2,181	1,385	3,023
Foreign liabilities	-3,488	-3,069	-2,319	-3,157	-3,663
Accounting exchange rate	1,750	1,750	1,750	1,750	1,750

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20. Comprises the commercial banks and specialized banks. Some foreign branches are also consolidated.

2/ Data for 1997/98 and 1998/99 have been revised to reflect the implementation of the improved classification system and errors in reporting by few banks that were discovered in the course of implementing the new system. Data prior to 1997/98 are still based on the old classification system. Central bank balances were not affected.

3/ Includes foreign exchange deposits with the central bank.

4/ Includes investments, foreign exchange bills, equity participation in companies, and claims for foreign exchange losses. Claims on some nonfinancial public enterprises are also included.

5/ Includes deposits of some nonfinancial public enterprises.

6/ Includes government lending funds.

Table 41. Islamic Republic of Iran: Detailed Accounts of the Banking Institutions, 1995/96–1999/2000 1/

(In billions of Iranian rials)

	1995/96	1996/97	1997/98 2/	1998/99 2/	1999/2000
Total assets	119,524	152,479	175,718	218,559	274,098
Balance sheet	123,892	156,969	180,105	223,052	278,803
Interbank claims	-4,368	-4,490	-4,387	-4,453	-4,705
Foreign assets	6,137	8,340	3,816	2,424	5,290
In millions of U.S. dollars	3,507	4,766	2,181	1,385	3,023
Gold	5	5	7	7	7
Exchange rate	1,750	1,750	1,750	1,750	1,750
In millions of U.S. dollars	3	3	4	4	4
Foreign exchange 3/	6,132	8,335	3,809	2,417	5,283
Exchange rate	1,750	1,750	1,750	1,750	1,750
In millions of U.S. dollars	3,504	4,763	2,177	1,381	3,019
Claims on government	1,824	1,825	3,407	7,742	7,151
Claims on NFPEs	7,883	12,185	21,302	29,326	34,100
Claims on private sector 4/	46,939	61,439	76,439	98,220	137,913
Loans and credit	3,287	3,426	6,601	5,433	3,865
New facilities	41,699	54,214	65,814	88,243	128,435
Direct investment and legal partnership	1,953	3,799	4,024	4,544	5,613
Reserves	23,728	34,117	37,135	43,192	49,757
Notes and coins in till	1,089	1,013	1,414	1,398	1,794
Deposits with BMJII	22,639	33,104	35,721	41,794	47,963
Legal	21,713	31,756	34,461	37,835	45,377
Sight	926	1,348	1,260	3,959	2,586
Unclassified assets	33,013	34,573	33,619	37,695	39,887
Unclassified assets	37,381	39,063	38,006	42,148	44,592
Interbank claims: commercial banks	-4,260	-4,291	-4,209	-4,279	-4,100
Interbank claims: specialized banks	-108	-199	-178	-174	-605
Total liabilities	119,524	152,479	175,718	218,599	274,098
Balance sheet	123,892	156,969	180,106	223,052	278,803
Interbank claims	-4,368	-4,490	-4,388	-4,453	-4,705
Foreign loans and FCDs	6,104	5,371	4,059	5,525	6,410
Exchange rate	1,750	1,750	1,750	1,750	1,750
In millions of U.S. dollars	3,488	3,069	2,319	3,157	3,663
Demand deposits 5/	30,294	43,056	42,691	56,011	64,632
Time and savings deposits 5/ 6/	44,105	60,281	69,444	85,617	105,938
Government deposits	232	281	1,958	2,498	3,766
Credit from BMJII	10,420	10,190	14,930	13,400	24,329
Capital accounts	5,264	5,257	5,508	5,933	5,873
Unclassified liabilities	23,105	28,043	37,130	49,615	63,150

Table 41. Islamic Republic of Iran: Detailed Accounts of the Banking Institutions, 1995/96–1999/2000 1/

(In billions of Iranian rials)

	1995/96	1996/97	1997/98 2/	1998/99 2/	1999/2000
Balance sheet	27,473	32,533	41,516	54,068	67,855
Interbank liabilities: commercial banks	-1,143	-1,496	-1,590	-1,656	-1,359
Interbank liabilities: specialized banks	-2,903	-2,923	-2,868	-2,934	-3,132
Interbank adjustment	-322	-71	70	137	-214

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20. Comprises the commercial banks and specialized banks. Some foreign branches are also consolidated.

2/ Data for 1997/98 and 1998/99 have been revised to reflect the implementation of the improved classification system and errors in reporting by few banks that were discovered in the course of implementing the new system. Data prior to 1997/98 are still based on the old classification system. Central bank balances were not affected.

3/ Includes foreign exchange deposits with the central bank.

4/ Includes investment, foreign exchange bills, and equity participation in companies. Claims on some nonfinancial public enterprises are also included.

5/ Includes deposits of some nonfinancial public enterprises.

6/ Includes government lending funds.

Table 42. Islamic Republic of Iran: Foreign Assets and Liabilities of the Banking System, 1995/96–1999/2000 1/

	1995/96	1996/97	1997/98	1998/99	1999/2000
	(Stocks in millions of U.S. dollars)				
Bank Markazi (net)	6,514	9,263	4,190	2,309	4,360
International reserves (net)	6,289	8,939	4,714	3,000	4,884
Reserve assets	6,289	8,939	4,714	3,000	4,884
Gold 2/	1,761	1,945	1,414	1,103	1,511
Foreign exchange assets 3/	4,319	6,664	2,971	1,896	3,102
SDR holdings	209	330	329	1	271
Reserve position in IMF	0	0	0	0	0
Reserve liabilities	...	...	...	...	...
Bilateral balances (net)	738	1,022	843	751	935
Other foreign assets	904	1,184	1,810	1,905	1,947
Other foreign liabilities	1,417	1,882	3,177	3,347	3,406
Commercial and specialized banks (net)	19	1,697	-138	-1,772	-640
Foreign assets	3,507	4,766	2,181	1,385	3,023
Foreign liabilities	3,488	3,069	2,319	3,157	3,663
	(Changes in millions of U.S. dollars)				
Bank Markazi (net)	2,209	2,750	-5,073	-1,881	2,051
International reserves (net)	2,418	2,651	-4,225	-1,714	1,884
Reserve assets	2,418	2,651	-4,225	-1,714	1,884
Gold 2/	590	185	-531	-311	408
Foreign exchange assets 3/	1,766	2,345	-3,693	-1,075	1,206
SDR holdings	62	121	-1	-328	270
Reserve position in IMF	0	0	0	0	0
Reserve liabilities	...	...	...	...	...
Bilateral balances (net)	62	284	-179	-92	184
Other foreign assets	341	280	626	95	42
Other foreign liabilities	612	465	1,295	170	59
Commercial and specialized banks (net)	2,065	1,678	-1,835	-1,634	1,132
Foreign assets	409	1,259	-2,585	-796	1,638
Foreign liabilities	-1,656	-419	-750	838	506

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.

2/ Excludes gold with IMF.

3/ Excludes participation in IMF.

Table 43. Islamic Republic of Iran: Reserve Requirements on Bank Deposits, 1995/96–1999/2000 1/

(In percent of total deposits)

	1995/96	1996/97	1997/98	1998/99	1999/2000
Commercial banks					
Demand deposits	30	30	30	30	30
Qarz ul-Hasanah savings deposits 2/	25	25	25	25	25
Short-term investment deposits	25	25	25	25	25
One-year investment deposits	25	25	25	25	25
Two-year investment deposits	15	15	15	15	15
Three-year investment deposits	15	15	15	15	15
Five-year investment deposits	10	10	10	10	10
Prepayments for letters of credit 3/	30	30	30	30	30
Specialized banks					
Demand deposits	10	10	10	10	10
Qarz ul-Hasanah savings deposits 2/	10	10	10	10	10
Short-term investment deposits	10	10	10	10	10
One-year investment deposits	10	10	10	10	10

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.

2/ Noninterest bearing savings deposits.

3/ From 1995/96, commercial banks were required to deposit an additional 60 percent of prepayments for letters of credit with the central bank.

Table 44. Islamic Republic of Iran: Average Rates of Return on Deposits
1995/96–1999/2000 1/

(In percent per annum)

	1995/96	1996/97	1997/98	1998/99	1999/2000
Short term	8.0	8.0	8.0	8.0	8.0
Long term					
1-year	14.0	14.0	14.0	14.0	14.0
2-year	15.0	15.0	15.0	15.0	15.0
3-year	16.0	16.0	16.0	16.0	16.0
5-year	18.5	18.5	18.5	18.5	18.5
Weighted average deposit rate	12.4	12.4	12.6	12.6	...

Sources: Bank Markazi Jomhouri Islami Iran; and Fund staff estimates.

1/ Iranian years ending March 20.

Table 45. Islamic Republic of Iran: Approved Sectoral Allocation of Credit to the Nongovernment Sectors, 1995/96–1999/2000 1/

(In percent of change in total credit)

	1995/96	1996/97	1997/98	1998/99	1999/2000
Agriculture	25	25	25	25	25
Industry and mining	33.5	33.5	33.5	33.5	33.5
Housing and construction	29	29	29	29	29
Trade and other services	12.5	12.5	12.5	12.5	12.5
Of which					
Export finance	7.5	7.5	7.5	7.5	7.5

Source: Bank Markazi Iran

1/ Iranian years ending March 20.

Table 46. Islamic Republic of Iran: Sectoral Rates of Charge on Bank Investments, 1995/96–1999/2000 1/

(In percent per annum)

	1995/96	1996/97	1997/98	1998/99	1999/2000
Agriculture	13-16	13-16	13-16	13-16	13-17
Industry and mining	17-19	17-19	17-19	17-19	17-20
Housing	15-16	15-16	15-16	15-16	15-17
Trade and services	22-25	22-25	22-25	22-25	22-26
Exports	18	18	18	18	18
Weighted average rate of charge	16.8	18	17	...	...

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20. These are announced rates representing the minimum payable return. As such, they may be lower than the actual ex-post rates of return.

Table 47. Islamic Republic of Iran: Structure of the Banking System, 1995/96–1998/99 1/

(Number of branches)

	1995/96	1996/97	1997/98	1998/99
Central Bank Bank Markazi Jomhouri Islami Iran	1	1	1	1
Deposit money banks and other banking institutions 2/				
Commercial banks	10,667	11,410	11,996	12,126
Bank Mellat (People's Bank)	1,735	2,042	2,101	1,893
Bank Melli Iran (National Bank)	2,607	2,766	3,009	3,150
Bank Tejarat (Mercantile Bank)	1,385	1,538	1,601	1,709
Bank Saderat (Export Bank)	3,333	3,373	3,428	3,407
Bank Refah Karagaran (Workers' Welfare Bank)	325	422	478	506
Bank Sepah (Army's Bank)	1,282	1,269	1,379	1,461
Specialized banks	1,703	2,070	2,198	2,392
Bank Keshavarzi (Agricultural Bank)	1,240	1,525	1,590	1,743
Bank Maskan (Housing Bank)	452	523	577	618
Bank Sanat-va-Madan (Industrial and Mining Bank)	10	10	14	13
Bank Tozea-e-Saderat Iran (Export Promotion Bank)	1	12	17	18
Memorandum items:				
Number of foreign branches	61	62	58	58
Commercial banks	61	62	58	58
Specialized banks	0	0	0	0

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.
2/ Includes all the domestic and foreign branches of Iranian banks.

Table 48. Islamic Republic of Iran: Partnership Papers

(As of December 1999)

Name of Partnership Papers 1/	Issuer(s)	Amount approved (in billion Rls)	Amount transacted (in billion Rls)	Times of issue	Agent	Redemption (billion Rls)	Date of first issue	Term maturity (years)	Profit rate (Prov.) (percent p.a.)
Navab Project (Tehran)	Teheran Municipality	250	250	4	Bank Melli Iran	1.3	Oct. 1994	4	20
Renovation of Hazrat Abdolazim Shrine	Teheran Municipality and Superintendence of Hazrat Abdolazim Foundation	70	70	1	Bank Melli Iran	9.9	Nov. 1995	2.5	20
Hospital Projects	Ministry of Housing and Urban Development	30	16	1	Bank Mellat	0	Feb. 1996	5	20
Hazrat Imam Reza residential construction	Maskan Sazan Khorasan Corporation	80	25	3	Bank Sederat	...	Aug. 1996	5	20
Iran Khurdro Auto plant	Iran Khurdro	585.8	325.6	3	Bank Melli Iran	...	Jan. 1997	4	20, 24
New satellite cities	New Satellite Cities Development Corporation	110.3	35	3	Bank Maskan	...	May 1997	3	20
Gharb Bazar Tabriz	Azerbaijan Development Corporation	100	50	2	Bank Melli Iran	...	Dec. 1997	4	20
National Participation	Government	2,250	2,174	1	Bank Melli Iran	...	Mar. 1998	3	20
Niroo Investment	Ministry of Energy	300	300	1	Bank Tejarat		Oct. 1998	3	20
Petrochemical	Khark Petrochemical Company	200	...	1	Bank Melli Iran	...	Nov. 1998	2.5	20

Source: Bank Markazi Jomhouri Islami Iran.

1/ All partnership papers are "bearer papers."

Table 49. Islamic Republic of Iran: Balance of Payments, 1995/96–1999/2000 1/

(In millions of U.S. dollars)

	1995/96	1996/97	1997/98	1998/99	Est. 1999/00
Current account	3,358	5,232	2,213	-2,140	4,727
Trade balance	5,586	7,402	4,258	-1,168	6,215
Exports	18,360	22,391	18,381	13,118	19,726
Oil and gas	15,103	19,271	15,471	9,933	16,270
Other	3,257	3,120	2,910	3,185	3,456
Imports 2/	-12,774	-14,989	-14,123	-14,286	-13,511
Services account	-2,224	-2,633	-2,438	-1,469	-1,833
Service receipts	909	1,348	1,658	2,023	1,506
Freight and insurance		366	323	298	163
Transportation	138	123	174	166	120
Travel	67	19	16	490	523
Investment income	316	488	466	230	156
Other public	35	51	80	436	260
Other private	353	301	599	403	284
Service payments	-3,133	-3,981	-4,096	-3,492	-3,339
Freight and insurance	-1,108	-1668	-1550	-1711	-1499
Transportation	-6	-16	-14	-2	-13
Travel	-241	-258	-382	-153	-560
Interest payments	-794	-898	-725	-731	-431
Other public	-725	-872	-1297	-817	-720
Other private	-259	-269	-128	-78	-116
Transfers	-4	463	393	497	345
Official	-4	-8	-7	-3	-5
Private	...	471	400	500	350
Capital account	-2,559	-6,490	-3,015	293	-2,558
Medium- and long-term capital	-3,679	-5,209	-2,602	-798	-1,942
Bilateral debt	-1,010	-580	948	-203	-409
Disbursements	150	429	1756	702	760
Repayments	-1,160	-1009	-808	-905	-1169
Repayments of rescheduled debt	-2,690	-4885	-3562	-2769	-1330
Long-term loans 3/	21	256	12	611	-366
Oil prefinancing	...	...	...	1563	163
Short-term capital	796	192	180	-259	-716
LC related and bank borrowing	399	-497	566	774	-716
Oil prefinancing	397	689	-386	-1,033	
Foreign direct investment	24	14	...	350	400
Other capital	300	-1487	-593	1000	-300
Errors and omissions	-388	4,019	-3,202	320	-83
Overall balance	411	2,761	-4,004	-1,527	2,086

Table 49. Islamic Republic of Iran: Balance of Payments, 1995/96–1999/2000 1/

(In millions of U.S. dollars)

	1995/96	1996/97	1997/98	1998/99	Est. 1999/00
Financing	-411	-2,761	4,004	1,527	-2,086
Change in reserves (increase -)	-2,529	-2,685	4,170	1,533	-1,917
Exceptional financing	2,118	-76	-166	-6	-169
Change in arrears	-1,060	-1,881	-166	-6	-169
Increase in arrears (+)	3,578	106	0	0	0
Clearing of arrears (-) 4/	-4,638	-1,987	-166	-6	-169
Refinancing	3,178	1,805	...	...	...
Memorandum items:					
Gross official reserves	6,748	9,433	5,263	3,730	5,647
(In months of c.i.f. imports)	6.0	7.1	4.3	3.0	4.9
Current account/GDP ratio (in percent)	3.8	5.0	1.5	-2.2	4.7

Sources: Bank Markazi Jomhouri Islami Iran; and Fund staff estimates.

1/ Fiscal years ending March 20.
2/ Up to 1996/97, includes interest on short-term issuance LCs.
3/ Includes World Bank lending, and one-time borrowing by MoF in 1998/99 and repayment of this loan in 1999/2000.
4/ Includes both refinanced arrears and cash payments (some of which are downpayments in the context of refinancing agreements).

Table 50. Islamic Republic of Iran: Value of Non-Oil Exports, 1994/95–1998/99 1/

(In millions of U.S. dollars)

	1994/95	1995/96	1996/97	1997/98	1998/99
Agricultural and traditional goods	3,259	1,901	1,646	1,251	1,412
Carpets	2,133	981	643	636	570
Cotton	2	1	31	17	6
Fresh and dry fruits	628	580	639	338	592
All kinds of skins and leathers	135	115	98	101	54
Caviar	28	31	24	29	38
Casings	37	40	36	36	34
Gum tragacanth	1	0	2	1	2
Cumin	23	10	20	7	22
Others	272	143	153	86	94
Metal ores	56	74	47	45	13
Industrial goods	1,510	1,276	1,413	1,580	1,588
Detergents and soaps	15	20	24	29	28
Inorganic chemical products	68	136	183	102	140
Shoes	37	51	61	62	47
Copper ingots, sheets, and wires	107	64	41	41	28
Ready-made clothes, knitwear, and all kinds of fabrics	96	75	75	41	18
Cement, stones, tiles, and construction materials	33	33	30	23	37
Transportation vehicles	24	29	11	7	12
Home appliances and sanitary ware	138	42	59	48	6
Cast iron, iron, and steel	341	169	70	184	139
Hydrocarbons (gas)	74	97	113	152	183
Others	577	560	746	891	950
Non-classified goods	6	6	14	34	172
Total	4,831	3,257	3,120	2,910	3,185

Source: Bank Markazi Jomhouri Islami Iran

1/ Fiscal years ending March 20.

Table 51. Islamic Republic of Iran: Distribution of Exports by Country, 1994/95–1998/99 1/

	1994/95	1995/96	1996/97	1997/98	1998/99
	(In millions of U.S. dollars)				
Japan	2,941	2,775	3835	2787	2060
United Kingdom	1,790	1,439	3908	3037	2204
United States	2,707	762	3	5	4
Germany	1,204	783	570	428	434
Switzerland	552	140	71	72	57
Turkey	865	761	706	546	497
South Korea	927	1,108	1716	1280	648
Greece	704	839	1119	989	651
Singapore	702	392	586	695	514
Belgium	466	524	29	236	177
France	398	848	721	684	445
Italy	758	1,587	1822	1631	1122
India	493	555	722	531	365
United Arab Emirates	780	809	695	775	885
China	223	216	74	543	350
Poland	158	109	0	0	5
Other	3,767	4,713	5,814	4,142	2,700
Total	19,435	18,360	22,391	18,381	13,118
	(In percent of total)				
Japan	15.1	15.1	17.1	15.2	15.7
United Kingdom	9.2	7.8	17.5	16.5	16.8
United States	13.9	4.2	0.0	0.0	0.0
Germany	6.2	4.3	2.5	2.3	3.3
Switzerland	2.8	0.8	0.3	0.4	0.4
Turkey	4.5	4.1	3.2	3.0	3.8
South Korea	4.8	6.0	7.7	7.0	4.9
Greece	3.6	4.6	5.0	5.4	5.0
Singapore	3.6	2.1	2.6	3.8	3.9
Belgium	2.4	2.9	0.1	1.3	1.3
France	2.0	4.6	3.2	3.7	3.4
Italy	3.9	8.6	8.1	8.9	8.6
India	2.5	3.0	3.2	2.9	2.8
United Arab Emirates	4.0	4.4	3.1	4.2	6.7
China	1.1	1.2	0.3	3.0	2.7
Poland	0.8	0.6	0.0	0.0	0.0
Other	19.4	25.7	26.0	22.5	20.6
Total	100.0	100.0	100.0	100.0	100.0

Source: Bank Markazi Jomhouri Islami Iran.

1/ Fiscal years ending March 20.

Table 52. Islamic Republic of Iran: Composition of Non-Oil Exports, 1994/95–1998/99 1/

(In millions of U.S. dollars)

	1994/95	1995/96	1996/97	1997/98	1998/99
Raw materials and intermediate goods	1,342	1,034	1,113	1,195	1,211
Industrial and mineral products	1,208	958	891	1,081	958
Textiles	54	25	38	23	8
Chemicals	308	331	401	452	477
Skin and leather	122	98	87	88	45
Metal smelting	326	219	73	129	86
Food	47	32	75	72	58
Others	351	253	217	317	284
Construction	38	64	183	73	82
Agriculture	90	5	18	4	45
Services	6	7	21	37	126
Capital goods	72	57	57	57	69
Consumer goods	3,398	2,120	1,936	1,625	1,733
Other	19	46	14	33	172
Total	4,831	3,257	3,120	2,910	3,185

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.

Table 53. Islamic Republic of Iran: Country Distribution of Non-Oil Exports, 1994/95–1998/99 1/

	1994/95	1995/96	1996/97	1997/98	1998/99
	(In millions of U.S. dollars)				
Germany	1,128	722	570	392	410
United Arab Emirates	499	298	257	286	516
Italy	469	263	205	276	202
Switzerland	264	129	71	72	57
Russia	74	43	49	46	36
Japan	182	130	99	104	43
France	113	61	54	40	62
Netherlands	40	30	49	67	75
United Kingdom	82	66	32	41	23
Austria	62	35	33	12	15
China	157	73	74	62	92
Belgium	51	28	29	15	22
The Czech Republic	2	2	2	2	2
Turkey	279	164	134	90	158
Canada	131	48	37	55	59
India	136	150	120	95	145
Hungary	2	3	3	3	4
Denmark	10	9	10	9	9
Other	1,150	1,003	1,292	1,243	1,255
Total	4,831	3,257	3,120	2,910	3,185
	(In percent of non-oil exports)				
Germany	23.3	22.2	18.3	13.5	12.9
United Arab Emirates	10.3	9.1	8.2	9.8	16.2
Italy	9.7	8.1	6.6	9.5	6.3
Switzerland	5.5	4.0	2.3	2.5	1.8
Russia	1.5	1.3	1.6	1.6	1.1
Japan	3.8	4.0	3.2	3.6	1.4
France	2.3	1.9	1.7	1.4	1.9
Netherlands	0.8	0.9	1.6	2.3	2.4
United Kingdom	1.7	2.0	1.0	1.4	0.7
Austria	1.3	1.1	1.1	0.4	0.5
China	3.2	2.2	2.4	2.1	2.9
Belgium	1.1	0.9	0.9	0.5	0.7
The Czech Republic	0.0	0.1	0.1	0.1	0.1
Turkey	5.8	5.0	4.3	3.1	5.0
Canada	2.7	1.5	1.2	1.9	1.9
India	2.8	4.6	3.8	3.3	4.6
Hungary	0.0	0.1	0.1	0.1	0.1
Denmark	0.2	0.3	0.3	0.3	0.3
Other	23.8	30.8	41.4	42.7	39.4
Total	100.0	100.0	100.0	100.0	100.0

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.

Table 54. Islamic Republic of Iran: Composition of C.I.F. Imports, 1995/96–1998/99 1/

(In millions of U.S. dollars)

	1995/96	1996/97	1997/98	1998/99
Raw materials and intermediate goods	8,524	9,115	7,524	6,310
Industrial and mineral products	...	7,779	6,542	5,372
Construction	...	667	464	571
Services	...	490	332	229
Agriculture and animal husbandry	...	179	186	138
Capital goods	1,860	3,807	4,661	6,002
Industries and mines	...	2,315	2,678	3,809
Services	...	773	1,109	961
Agriculture	...	117	129	148
Consumer goods	1,864	2,194	2,007	2,011
Nonclassified goods	65	1	4	0
Total 2/	12,313	15,117	14,196	14,323

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.

2/ Customs clearance data (c.i.f. base) including registration fee, but not including defense-related imports and refined-oil products which are included in f.o.b. import data in the balance of payments table. Registration fee is included in trade statistics

Table 55. Islamic Republic of Iran: Country Distribution of Imports, 1994/95–1998/99 1/

	1994/95	1995/96	1996/97	1997/98	1998/99
	(In millions of U.S. dollars)				
Germany	2,209	1,777	2,100	1,854	1,660
Japan	894	886	844	882	1,005
Italy	1,008	535	675	795	1,188
Brazil	176	227	349	294	472
United Kingdom	544	505	685	681	574
Turkey	274	240	284	289	272
United Arab Emirates	647	441	473	562	759
Argentina	287	544	798	833	632
Australia	260	412	741	522	358
Belgium	649	663	926	457	899
South Korea	320	342	445	552	687
Netherlands	263	281	268	296	362
Switzerland	212	509	812	531	326
Russia	268	372	644	704	549
New Zealand	17	84	78	28	87
Austria	228	189	172	265	267
Thailand	69	225	405	173	162
Bulgaria	7	15	18	26	14
Spain	136	154	252	263	410
Denmark	77	94	74	71	57
Yugoslavia	76	1	38	14	20
Canada	293	458	449	616	311
Romania	32	36	52	35	15
France	479	498	437	675	556
Others	2,370	2,825	3,098	2,778	2,681
Total 2/	11,795	12,313	15,117	14,196	14,323
	(In percent of total imports)				
Germany	18.7	14.4	13.9	13.1	11.6
Japan	7.6	7.2	5.6	6.2	7.0
Italy	8.5	4.3	4.5	5.6	8.3
United Kingdom	4.6	4.1	4.5	4.8	4.0
Turkey	2.3	1.9	1.9	2.0	1.9
United Arab Emirates	5.5	3.6	3.1	4.0	5.3
Belgium	5.5	5.4	6.1	3.2	6.3
France	4.1	4.0	2.9	4.8	3.9
All others	43.2	55.0	57.5	56.4	51.7
Total	100.0	100.0	100.0	100.0	100.0

Source: Bank Markazi Jomhouri Islami Iran.

1/ Iranian years ending March 20.

2/ Customs clearance data (c.i.f. base) including registration fee, but not including defense-related imports and refined-oil products which are included in f.o.b. import data in the balance of payments table. Registration fee is included in trade statistics because customs duties are levied on a registration fee-inclusive basis.

Table 56. Islamic Republic of Iran: Value of Imports According to the International Classification of Goods, 1994/95–1998/99 1/

(In millions of U.S. dollars)

	1994/95	1995/96	1996/97	1997/98	1998/99
Food and live animals	1,369	2,404	2,581	2,508	1583
Dairy and eggs	60	96	60	35	77
Grains and derivatives	693	1,444	1,881	1,705	878
Sugar, its derivatives and honey	251	376	335	405	23
Coffee, tea, cocoa, spices, etc.	52	40	28	38	37
Fruits and vegetables	34	7	4	4	3
Others	279	442	273	321	565
Beverages and tobacco	36	2	11	8	9
Raw non-edible products (excluding petroleum fuels)	649	660	770	647	596
Raw caoutchouc	73	119	113	72	52
Textile fibers unlisted elsewhere	207	204	226	200	201
Others	369	337	431	375	343
Mineral products, fuel, oil products and their derivatives	324	228	377	265	186
Vegetable and animal shortening	392	490	602	434	654
Vegetable shortening	376	455	580	420	633
Others	16	35	22	14	21
Chemical products	1,376	1,733	1,931	1,890	1774
Chemicals and their compounds	306	430	571	494	458
Raw materials for paints, dyes and tanning	86	101	116	169	135
Plastic, cellulose and artificial resins	237	259	385	403	413
Other unlisted chemicals	313	293	242	267	316
Others	434	650	617	557	452
Goods classified according to their composition	1,654	2,533	3,704	2,720	2520
Paper, cardboard and derivatives	256	527	569	392	266
Various textile yarns and related products	224	206	304	324	310
Nonmetal mineral goods	129	136	137	163	166
Iron and steel	686	820	2,049	1,290	1287
Others	359	844	645	551	491
Transportation vehicles, machinery and tools	5,525	3,656	4,205	5,045	6348
Nonelectric machinery	4,054	2,285	2,325	2,672	3501
Electric machinery, tools and appliances	834	892	1,184	1,444	1521
Transportation vehicles	637	479	696	929	1326
Miscellaneous finished products	403	306	353	384	538
Scientific and professional tools	316	222	217	271	380
Artificial goods unlisted elsewhere	79	75	130	108	155
Others	8	9	6	5	3
Other	67	301	583	295	115
Total 2/	11,795	12,313	15,117	14,196	14323

Source: Bank Markazi Jomhouri Islami Iran

1/ Iranian years ending March 20.
2/ Customs clearance data (c.i.f. base) including registration fee, but not including defense-related imports and refined-oil products which are included in f.o.b. import data in the balance of payments table. Registration fee is included in trade statistics because customs are levied on a registration-fee-inclusive base.

Table 57. Islamic Republic of Iran: Summary of External Debt, 1995/96–1999/2000 1/

(In millions of U.S. dollars, end-of-period)

	1995/96	1996/97	1997/98	1998/99	Est. 1999/2000
Total external debt	21,928	16,835	14,247	13,184	10,357
Medium- and long-term debt	15,485	12,081	9,479	8,681	6,739
Bilateral debt	3,233	2,653	3,601	3,398	2,989
Disbursements	150	429	1,756	702	760
Repayments 2/	-1,160	-1,009	-808	-1,005	-1,169
Long-term loans	262	518	530	1,141	775
World Bank	262	412	404	478	487
Japan	...	106	122	215	288
Borrowing by MoF 3/	...	...	...	448	...
Islamic Development Bank	...	...	4	...	...
Refinanced debt	11,990	8,910	5,348	2,579	1,249
Refinancing	3,178	1,805	...	...	...
Repayments 2/	-2,690	-4,885	-3,562	-2,769	-1,330
Oil prefinancing	...	...	...	1,563	1,726
Short-term debt	6,443	4,754	4,768	4,503	3,618
LC related bank borrowing	3,491	2,994	3,560	4,334	3,618
Arrears	2,222	341	175	169	...
Oil prefinancing	730	1,419	1,033	...	...
Memorandum item:					
Total external debt/GDP (including arrears)	25.1	16.1	14.0	13.5	10.4

Sources: Bank Markazi Jomhouri Islami Iran; and Fund staff estimates.

1/ Iranian years ending March 20.
2/ Including valuation adjustments.
3/ Collateral by securities.

Table 58. Islamic Republic of Iran: Composition of the External Debt, 1995/96–1999/2000 1/

(In millions of U.S. dollars)

	1995/96	1996/97	1997/98	1998/999	Est. 1999/2000
Medium- and long-term external debt	15,485	12,081	9,479	8,681	6,739
Bilateral debt (nonrescheduled debt)	3,233	2,653	3,601	3,398	2,989
Of which					
Germany	1,017	713	675	441	442
Japan	608	614	763	720	569
Italy	688	435	527	350	292
France	364	299	420	267	264
Austria	174	187	262	212	186
Others	382	405	954	1,408	1,236
Rescheduled debt	11,990	8,910	5,348	2,579	1,249
Official creditors (export credit agencies)	8,228	5,524	3,439	1,847	978
Of which					
Germany	2,728	1,668	979	702	560
Japan	2,428	1,958	1,135	284	...
Austria	359	253	163	93	16
France	305	196	121	53	...
Switzerland	352	208	135	69	15
Others	2,056	1,241	906	646	387
Private creditors	3,762	3,386	1,909	732	271
Of which					
Germany	775	580	314	98	35
Japan	622	531	297	82	15
Italy	14	225	245	124	24
South Korea	484	388	181	115	62
United Kingdom	442	282	152	77	16
Others	1,425	1,380	720	236	119
Oil Prefinance	...	...	...	1,563	1,726
Of which					
France	...	...	...	1,409	773
Japan	...	...	...	...	493
Germany	...	...	...	154	360
Others	...	...	...	...	100
Long-term loans 2/	262	518	530	1,141	775
Short-term external debt	6,443	4,754	4,768	4,503	3,618
Arrears	2,222	341	175	169	0
Of which:					
Japan	114	10	14	39	0
Germany	381	69	35	33	0
Italy	310	21	16	9	0
Switzerland	151	34	8	5	0
United Kingdom	227	44	18	12	0
Others	1,039	163	84	71	0
Other than arrears	4,221	4,413	4,593	4,334	3,618
Of which:					
Japan	401	343	373	321	99
Germany	573	637	574	537	281
Italy	99	111	138	152	52
Switzerland	249	225	306	503	504
United Kingdom	328	328	278	350	179
Others	2,571	2,769	2,924	2,471	2,503
Total external debt	21,928	16,835	14,247	13,184	10,357

Sources: Bank Markazi Jomhouri Islami Iran; and Fund staff estimates.
1/ Iranian years ending March 20.
2/ Includes World Bank lending.

Table 59. Islamic Republic of Iran: Exchange Rate Developments, 1997/98–1999/2000 1/

(In Iranian rials per U.S. dollar)

	Banking System		Authorized Dealers Market (Nonbank)	Parallel Market Rate	Teheran Stock Exchange
	Floating	Export			
1997/98					
Mar/Apr	1,750	3,015	...	...	...
Apr/May	1,750	3,015	...	...	...
May/Jun	1,750	3,015	...	...	...
Jun/Jul	1,750	3,015	...	...	...
Jul/Aug	1,750	3,015	...	...	4,623
Aug/Sep	1,750	3,015	...	...	4,627
Sep/Oct	1,750	3,015	...	...	4,630
Oct/Nov	1,750	3,015	...	...	4,629
Nov/Dec	1,750	3,015	...	...	4,630
Dec/Jan	1,750	3,015	...	...	4,631
Jan/Feb	1,750	3,015	...	...	4,641
Feb/Mar	1,750	3,015	...	...	4,702
Average	1,750	3,015	...	...	4,639
1998/99					
Mar/Apr	1,750	3,015	...	5,418	4,784
Apr/May	1,750	3,015	...	5,611	4,809
May/Jun	1,750	3,015	...	5,632	4,827
Jun/Jul	1,750	3,015	...	5,610	4,880
Jul/Aug	1,750	3,015	...	5,683	4,954
Aug/Sep	1,750	3,015	...	6,159	5,170
Sep/Oct	1,750	3,015	...	6,267	5,706
Oct/Nov	1,750	3,015	...	6,849	5,692
Nov/Dec	1,750	3,015	...	7,057	5,706
Dec/Jan	1,750	3,015	...	7,140	5,720
Jan/Feb	1,750	3,015	...	7,966	5,826
Feb/Mar	1,750	3,015	...	8,232	6,472
Average	1,750	3,015	...	6,469	5,379
1999/2000					
Mar/Apr	1,750	3,015		8,059	6,807
Apr/May	1,750	3,015		8,130	7,015
May/Jun	1,750	3,015		8,703	7,917
Jun/Jul	1,750	3,015		9,144	8,015
Jul/Aug	1,750	3,015		9,099	7,847
Aug/Sep	1,750	3,015		8,903	8,017
Sep/Oct	1,750	3,015		8,703	8,080
Oct/Nov	1,750	3,015		8,656	8,099
Nov/Dec	1,750	3,015		8,708	8,120
Dec/Jan	1,750	3,015		8,650	8,140
Jan/Feb	1,750	3,015		8,410	8,146
Feb/Mar	1,750	3,015		8,210	8,149
Average	1,750	3,015		8,615	7,863

Sources: Bank of Markazi Jomhouri Islami Iran; and Fund staff estimates.

1/ Iranian years ending March 20.

2/ This rate was introduced in April 1994.

3/ Starting July 1997, "import certificate" which gives the right to import at Rls 3,000 per U.S. dollar are allowed to be traded on the Teheran Stock Exchange (TSE). The price is such certificate in effect gives rise to an effective TSE exchange rate.

Table 60. Islamic Republic of Iran: Categories of Goods and Services Imported at the TSE Rate

1. Raw materials, spare parts needed for agricultural machinery and equipment
2. Industrial and mining equipment
3. Agricultural machinery and spare parts
4. Raw materials and equipment needed for irrigation system
5. Various kinds of chemical fertilizers
6. Hybrid seeds of vegetables, grass micro-elements, and peat moss
7. Certain strings (cotton yarn)
8. Packaging equipment and harvest machinery for tea and olives
9. Packaging paper for compounds and potassium carbonate powder
10. Stretch films
11. Equipment for packaging and packaging of agricultural products
12. Meat
13. Butter
14. Cheese starter (rennet)
15. Aquarium food
16. Eggs, larvae, hatchlings, and other requirements for aquatic animals
17. Fishing equipment including buoys and other navigation equipment
18. Cold storage equipment, facilities for fishing, slaughter houses and poultry
19. Milk and cheese packaging equipment
20. Fertilized eggs and chicks for all types of birds, fowl, and ostriches
21. Frozen semen and cattle embryos and containers for the transportation of nitrogen
22. Wool and strings used in carpets, washing, preparing and packaging of carpets
23. Burlap and jute string and cloth
24. Various tires (for light, semi-light, and heavy vehicles)
25. Black cloth for veils
26. Iron and steel
27. Medical, hospital, and laboratory equipment and machinery spare parts
28. Paper and cardboard
29. Tea
30. Red meat and poultry
31. Electric and hand tools, instruments, etc.
32. Spare parts for all types of automobiles and road making equipment
33. Industrial and marketing services
34. All types of seeds, cuttings, saplings, bulbs, and plants
35. Raw materials, spare parts, and other requirements of the agricultural sector
36. Equipment and supplies for office machines
37. Gas-operated coolers
38. Eyeglass lenses and frames (excluding sunglasses and fashion wear)
39. Spare parts for household appliances, etc
40. Photographic film
41. Powdered milk (for infants)

Services/invisibles:
- trade (up to limits);
- study (without scholarship, up to limits)

Source: Ministry of Commerce

Table 61. Islamic Republic of Iran: Goods and Services Imported at the Official Floating Rate

I. Basic goods

1. Wheat
2. Agricultural pesticides
3. Fertilizer
4. Sugar
5. Milk and cheese
6. Rice and vegetable oil
7. Red meat

II. Related goods and services

8. Flour
9. Inputs for sugar cubes
10. Sugar beat waste (to feed animals)

III. Goods produced by monopolies

11. Paper
12. Agricultural machinery
13. Petrochemicals
14. Automobile batteries

IV. Other goods

15. Detergents
16. Soap
17. Medicine
18. Syringes
19. Books

V. Services

20. Medical treatment abroad
21. Study abroad with scholarship

Source: Ministry of Commerce