

# CHAPTER FIVE

## MANUFACTURING AND MINING

Manufacturing and mining activities enjoyed an upturn in 1380. According to the estimates, the value-added of manufacturing and mining sectors at constant 1369 prices grew by 10 and 9.6 percent, respectively, in comparison with the previous year. The performance figures of these sectors in comparison with the projected target figures for manufacturing (7.7%) and mining (5.1%) in the 3<sup>rd</sup> FYDP show an increasing trend for production and private sector investment in these sectors. Thus, gross fixed capital formation in manufacturing and mining sectors at constant 1369 prices went up by 10.5 percent. Increase in banking facilities and implementation of monetary and credit policies aiming at financing the required resources underpinning growth, relative stability of foreign exchange and reducing inflation, together with stability in government fiscal position, increase in foreign exchange reserves and the relaxation of import restrictions for raw materials and intermediate goods were amongst the main factors responsible for the relative boom in manufacturing and mining sectors.

According to the Ministry of Industries and Mines, investment based on “establishment permits” and “operation permits” increased by 143.1 and 101.5 percent, respectively, compared with the previous year. Growth in investment helped improve employment indices in manufacturing and mining sectors. Thus, employment based on “establishment permits” and “operation permits” rose by 79.9 and 32 percent, respectively, compared with the previous year. Number of permits issued for mining sector also increased markedly in 1380. According to the Ministry of Industries and Mines, 254 mine exploring permits with estimated reserves of 645 million tons were issued. Furthermore, the number of mining operation permits reached 600, with an investment of Rs. 595.2 billion. The actual reserves of these mines amounted to 2,120.6 million tons and employment opportunities created reached 6,125 persons.

Investment in new industrial projects rose considerably in 1380, so that the average amount of investment for each new industrial project and employment based on establishment permits rose by 29.2 and 35.1 percent, respectively. Moreover, based on operation permits, the average amount of investment for each new industrial project and for creation of each new job opportunity went up by 85.3 and 52.6 percent, respectively, compared with the previous year. Valuation of foreign exchange component of investment for new projects at CD rate, and moving toward capital-intensive technologies are the main factors for the rise in per capita investment for each new employment.

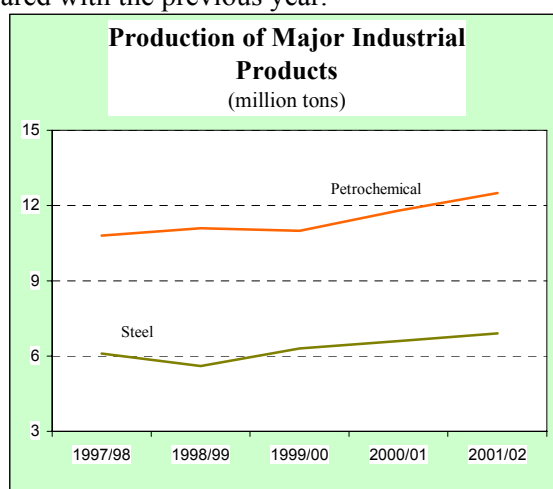
Most industrial products increased in the review year. The production index of large manufacturing establishments grew by 9.6 percent in comparison with the previous year. Despite unfavorable world market conditions, production of petrochemicals and basic metals including aluminum bar and raw steel increased by 6.3, 5.2 and 4.7 percent, respectively, compared with the previous year.

In 1380, facilities extended by banks and credit institutions to non-public manufacturing and mining sector with 45.8 percent rise compared with the year before, amounted to Rls. 58.2 thousand billion at the end of 1380. Government development expenditures in national projects of manufacturing and mining sector declined in this year. On the basis of the data released by the Treasury General Rls. 610.7 billion (equal to 60 percent of approved budget) was paid for national projects of the mentioned sectors and industrial research program in 1380.

The approval of the bill for “supporting renovation of textile industries”, approval of articles of association of “Privatization Organization” and “Small-scale Industries Organization” and reform of Direct Tax Law paved the way for structural reform and renovation of manufacturing sector. Furthermore, extensive deregulations were made in various areas including in foreign trade sector, which had an important role in timely provision of imports requirements of productive units, and prepared the ground for export of industrial products. This led to high positive growth of export of industrial products by 17.3 and 22.9 percent in weight and value, respectively despite the continued declining trend in international price of certain industrial products. Moreover, in spite of the conditions prevailing in the world economy in the aftermath of September 11 events, share price index of manufacturing companies kept its upward trend, registering 24.1 percent rise, compared with the previous year.

## Production

In 1380, the production of most industrial and mining products increased, as compared with the previous year. The production index of large manufacturing establishments went up by 9.6 percent and amounted to 141.1 in this year. The employment index of large manufacturing establishments grew moderately by 0.3 percent.



**MAJOR MANUFACTURING ESTABLISHMENTS INDICES (1)** (1376=100)

	1378	1379▲	1380	Percentage change	
				1379	1380
Production	113.8	128.7	141.1	13.1	9.6
Employment	102.1	106.0	106.3	3.8	0.3
Wage, salary, and fringe benefits	156.9	201.4	244.4	28.4	21.4
Per capita wage, salary and fringe benefits (in nominal terms)	153.5	189.9	229.8	23.7	21.0
Per capita wage and fringe benefits (in real terms) (2)	108.2	118.9	129.2	9.9	8.7

(1) Includes establishments with 100 employees or more.

(2) Adjusted with CPI in urban areas.

The production of road construction machinery, raw steel, cement, tiles, pane glass, asbestos sheet and porcelain ware rose by 41.2, 4.7, 11.5, 9.1, 15.4, 11.3 and 5.8 percent, respectively, compared with the previous year. Moreover, the production of tractors, vans and agricultural motors required in agriculture sector, grew significantly by 47.5, 27.4 and 38.2 percent compared with the year before. In the industry group related to transportation sector, in addition to production of lorries and automobiles, some products such as various types of wagons, engine, four wheel drive, various types of gearboxes, spare parts of automobile and tires with growths of 47.9, 37.7, 29.6, 36.2, 20.1 and 6.3 percent resulted in the continued boom in activities and the provision of some of the requirements of the transportation sector.

In the review year, the production of mining sector increased. Over 9 million tons of cast iron were produced showing 7.7 percent growth, compared with the previous year. Moreover, the exploitation of copper ore with 7.9 percent rise, amounted to 15.6 million tons.

Petrochemical products reached 12.5 million tons, up by 6.2 percent, compared with the previous year. The capacity utilization ratio of petrochemical units reached 82.9 percent. The highest growth recorded in this period was at Khark, Shiraz and Arak Petrochemical Complexes where production respectively rose by 45.7, 11.2 and 10.4 percent. However, production in Isfahan and Khorasan Petrochemical Complexes fell moderately by 2.2 and 1.3 percent, respectively. Bandar Imam Petrochemical Complex, with a share of 36 percent out of total productions of National Petrochemical Industries Corporation is still the largest petrochemical unit in Iran. In this year, over 1,880 thousand tons of various types of chemical fertilizer were produced by petrochemical complexes. According to the National Petrochemical Industries Corporation, petrochemical exports, with 28.2 percent growth, reached 4,010.8 thousand tons (\$ 795 million). The average value of petrochemical exports was \$ 198.2 per ton, showing a fall of 25.2 percent in comparison with the previous year. Due to the recession prevailing the world market and the competitive condition, the demand for these products declined, resulting in a reduction in international price of certain petrochemical products.

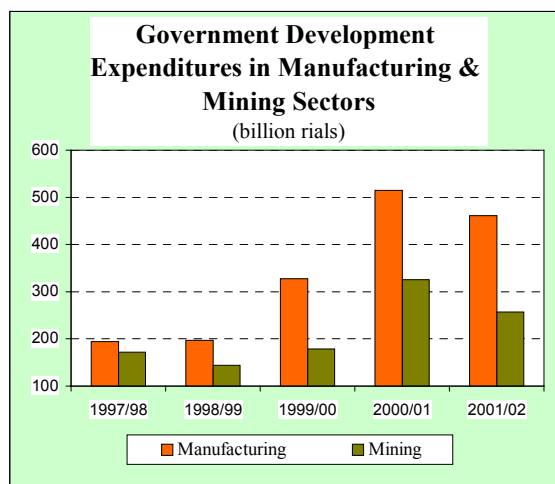
#### PETROCHEMICAL PRODUCTS

	1378	1379	1380	Percentage change	
				1379	1380
<b>Production (thousand tons)</b>	<b>11,001.4</b>	<b>11,807.9</b>	<b>12,542.9</b>	<b>7.3</b>	<b>6.2</b>
Actual production/Nominal capacity (percent)	80.8	75.7	82.9	-6.3	9.5
Actual production/planned production (percent)	89.9	89.2	90.9	-0.8	2.0
<b>Exports</b>					
Amount (thousand tons)	2,884	3,128	4,011	8.5	28.2
Value (million dollars)	579	829	795	43.2	-4.1

Source: National Petrochemical Industries Corporation

#### Government Investment

In 1380, government allocated an amount of Rls. 1,014.8 billion to manufacturing and mining sectors and industrial research program within the context of development expenditures. On the basis of the preliminary data released by the Treasury General, an amount of Rls. 610.6 billion, out of the total approved budget was paid to national programs in manufacturing and mining sector which declined by 20.3 percent compared with the previous year.



#### GOVERNMENT NATIONAL DEVELOPMENT EXPENDITURES IN MANUFACTURING AND MINING SECTORS

	1378	1379	1380 (1)	Percentage change		Share (percent)	
				1379	1380	1379	1380
Manufacturing	88.1	192.2	140.8	118.2	-26.7	25.1	23.1
Mining	172.3	310.6	233.4	80.3	-24.9	40.6	38.2
Industrial research program	211.3	263.0	236.4	24.5	-10.1	34.3	38.7
<b>Total</b>	<b>471.7</b>	<b>765.8</b>	<b>610.6</b>	<b>62.4</b>	<b>-20.3</b>	<b>100.0</b>	<b>100.0</b>

Source: General Budget Laws for 1379-81

(1) Figures are based on the data of Treasury General's payment.

## Banking Facilities

Banks and credit institutions increased facilities to the manufacturing and mining sector by Rls. 75.9 thousand billion, showing a 37.6 percent growth compared with the end of 1379. In this year, the change in the outstanding facilities extended by banks and credit institutions to non-public manufacturing and mining sector was 88.1 percent, showing 45.8 percent growth. The share of the change in the outstanding facilities extended to non-public manufacturing and mining sector out of total change in outstanding facilities extended by banks and credit institutions to all economic sectors was 36.7 percent, the most portion of which was due to the performance of commercial banks. It is worth mentioning that the credit institutions also raised their facilities to non-public manufacturing and mining sector. Non-public manufacturing and mining sector's share out of total outstanding facilities extended by credit institutions to all economic sectors was approximately 52.9 percent to amount to Rls. 379 billion.

### OUTSTANDING FACILITIES EXTENDED BY BANKS AND CREDIT INSTITUTIONS TO MANUFACTURING AND MINING SECTOR (1) (billion rials)

	Year-end		Change in outstanding 1380	Percentage change 1380	Share of change in outstanding (percent)	Total change in outstanding (2)	Relative share (percent)
	1379	1380					
<b>Non-public sector</b>	<b>39,913.2</b>	<b>58,190.8</b>	<b>18,277.6</b>	<b>45.8</b>	<b>88.1</b>	<b>49,858.4</b>	<b>36.7</b>
Commercial banks	36,350.4	54,376.4	18,026.0	49.6	86.9	38,203.1	47.2
Specialized banks	3,482.7	3,435.4	-47.3	-1.4	-0.2	11,090.1	-0.4
Credit institutions	<b>80.1</b>	379.0	298.9	373.2	1.4	565.2	52.9
<b>Public sector</b>	<b>15,258.0</b>	<b>17,729.9</b>	<b>2,471.9</b>	<b>16.2</b>	<b>11.9</b>	<b>8,684.9</b>	<b>28.5</b>
<b>Total</b>	<b>55,171.2</b>	<b>75,920.7</b>	<b>20,749.5</b>	<b>37.6</b>	<b>100.0</b>	<b>58,543.3</b>	<b>35.4</b>

(1) Excludes profit and revenue receivables.

(2) The change in the outstanding facilities extended by banks and credit institutions to all economic sectors.

In 1380, Rls. 322.9 billion was paid by Bank of Industries and Mines in the form of 986 facilities to the mentioned sectors, which shows 21.3 and 35.1 percent reduction in the amount and value, respectively compared with the previous year. This Bank allocated Rls. 631 billion in the form of administered funds to 1,883 applicants.

### PAYMENTS BY THE BANK OF INDUSTRIES AND MINES (billion rials)

	1378	1379	1380(1)	Percentage change		Share (percent)	
				1379	1380	1379	1380
<b>Direct investment and legal partnership</b>							
Number	7	8	4	14.3	-50.0	0.6	0.4
Amount	194.1	89.8	42.2	-53.7	-53.1	18.1	13.1
<b>Banking facilities (2)</b>							
Number	807	1,245	982	54.3	-21.1	99.4	99.6
Amount	264.7	407.7	280.7	54.0	-31.2	81.9	86.9
<b>Total</b>							
Number	814	1,253	986	53.9	-21.3	100.0	100.0
Amount	458.8	497.5	322.9	8.5	-35.1	100.0	100.0

Source: Bank of Industries and Mines

(1) Excludes Bank's payments in the form of administered funds and facilities extended through Article 60 of the 3<sup>rd</sup> FYDP Law.

(2) Includes other contracts except direct investment and legal partnership.

## Performance of Industrial Stocks at the Tehran Stock Exchange

Tehran Stock Exchange indices indicate relative boom in industrial and producing activities in 1380. In spite of the relative recession prevailing the world markets in the aftermath of September 11 events, and difficulties of the domestic manufacturing units, industrial index increased by 24.1 percent compared with the previous year. According to Tehran Stock Exchange, the highest growth recorded was that of “Print and publication” industry (121.2 percent), “Non-metallic minerals” (106.2 percent), “Electrical devices” (100.6 percent), “Oil refined products” (58.7 percent) and “Fabricated metals” (32 percent).

Share price index and cash dividend yield index enjoyed 43.7 percent growth at the end of the year. This is due to the benign and optimistic investment outlook for industrial activities.

## New Manufacturing and Mining Units

Rls. 13,023 billion was invested to establish new manufacturing and mining units and to expand the existing units. This shows 101.5 percent growth as compared with the previous year. Operation of new industrial units created 74.6 thousand job opportunities. To meet the quantitative targets set in the 3<sup>rd</sup> FYDP, new job opportunities in manufacturing and mining sectors were projected for 99.4 thousand persons in 1380.

In this year, the private sector’s tendency to investment in this sector increased markedly. The private sector requested establishment permits for more than 17.1 thousand new manufacturing units with Rls. 164.3 thousand billion investment. It is worth mentioning that, amongst the establishment permits issued, the establishment permits related to “textiles” industry, ranked the first. About 2,555 establishment permits were issued for “textiles”, “wearing apparel, dressing and dyeing of fur”, and “tanning and dressing of leather, manufacture of luggage, handbags and footwear”.

### NUMBER, INVESTMENT AND EMPLOYMENT OF INDUSTRIAL PERMITS(1)

	1378	1379▲	1380(2)	Percentage change	
				1379	1380
<b>Establishment permits</b>					
Number	8,096	9,087	17,098	12.2	88.2
Investment (billion rials)	28,980	67,578	164,288	133.2	143.1
Employment (person)	208,962	269,905	485,522	29.2	79.9
<b>Operation permits</b>					
Number	3,387	3,264	3,550	-3.6	8.8
Investment (billion rials)	10,330	6,462	13,023	-37.4	101.5
Employment (person)	67,144	56,493	74,578	-15.9	32.0

Source: Ministry of Industries and Mines

(1) Since 1379, number of permits includes permits issued for mining sector as well.

(2) In 1380, figures of establishment permits include establishment notices which have been substituted for establishment permits, since Mordad.

The amount of investment for new industrial projects went up markedly, so that the average amount of investments projected for each new industrial project reached Rls. 9,609 million, showing a 29.2 percent growth compared with the previous year. The average amount of investment projected for each job (per capita capital) grew by 35.1 percent, compared with the previous year to reach Rls. 338.4 million. Valuation of investment for new projects at CD rates and moving towards capital-intensive technologies, are the main factors for the rise in per capita investment for each new employment.

In 1380, on the basis of data on operation permits issued, the average volume of investment for each new industrial project amounted to Rls. 3,668.5 million, up by 85.3 percent compared with the previous year. Moreover, the amount of investment for each new job

opportunity grew by 52.6 percent in comparison with the previous year to amount to Rls. 174.6 million. Operational delays in industrial projects were responsible for the rise in investment outlays in the recent years.

In the review year, 1,140 exploration permits with estimated reserves of 645 million tons were issued. Moreover, the number of mining operation permits reached 600. The actual reserves of these mines amounted to 2.12 billion tons, and employment created by these permits 6,125 persons. The amount of investment done for this purpose was approximately Rls. 595.2 billion.

According to the report released by the Ministry of Industries and Mines, the number of industrial projects being implemented reached 49,879 with an investment of Rls. 322.6 thousand billion, creating 1,509.7 thousand new job opportunities.

### **Export and Import of Manufacturing and Mining Products**

In 1380, 11 million tons of industrial products valued at \$ 2,282.6 million were exported, showing 17.3 and 22.9 percent growth in amount and value, respectively, compared with the previous year. In the review year, export value of “transportation vehicles and their spare parts”, “chemical and petrochemical products” and “copper and aluminum bar, sheet and wire” rose by 86.9, 52 and 30.1 percent, respectively, enjoying the highest increase amongst export of industrial goods as compared with the previous year. The share of these products out of total value of industrial exports was 57.3 percent. Export of “copper and aluminum bar, sheet and wire”(by 87.7 percent), “cement, stones and construction materials” (by 49.5 percent) and “transportation vehicles and their spare parts” (by 28.9 percent) enjoyed the highest growth in amount among other industrial products.

In spite of the global price reduction of certain industrial commodities, the average unit value of industrial exports went up by 4.7 percent, to reach \$ 207.5 in comparison with \$ 198.1 in the year before.

In this year, the amount and value of import of major industrial goods rose by 23.3 and 30.5 percent, respectively. More than 60 percent of these imports was related to industrial equipment and machinery valued at \$ 5,732 million.

#### **EXPORT AND IMPORT OF INDUSTRIAL PRODUCTS**

	1378	1379	1380	Percentage change	
				1379	1380
<b>Export</b>					
Amount (thousand tons)	9,588.5	9,374.9	11,000.0	-2.2	17.3
Value (million dollars)	1,430.8	1,857.3	2,282.6	29.8	22.9
Unit value (\$ / tons)	149.2	198.1	207.5	32.8	4.7
<b>Import (1)</b>					
Amount (thousand tons)	3,512	5,499	6,778.4	56.6	23.3
Value (million dollars)	6,365	7,238	9,447.7	13.7	30.5
Unit value (\$ / tons)	1,812.4	1,316.2	1,393.8	-27.4	5.9

Source: Customs preliminary data

(1) Includes import of major industrial products.