# CHAPPER 5

### MANUFACTURING AND MINING

anufacturing and mining activities grew well in 1384. Based on preliminary estimates, the value-added of the manufacturing and mining sectors increased by 7.1 and 10.5 percent, respectively, at constant 1376 prices.

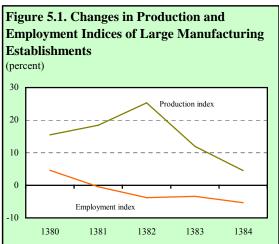
Restructuring of economic enterprises and enhancing competitiveness through creating linkages among small, medium and large enterprises, removing impediments to growth and expanding small and medium enterprises to large and competitive ones were among the objectives set in the 4<sup>th</sup> FYDP for the improvement of the manufacturing sector. Among the measures taken and approvals in 1384 were: approval of the executive by-law for the expansion of SMEs; allocation of banking facilities to the SMEs; approval of Articles of Association for Investment Guarantee Fund of small industries; extension of exemption period of small manufacturing establishments with less than 10 employees from Labor Law for 3 years; prohibition of purchase of consumer durables by the government's administrative organizations, which are produced in local market, from abroad; establishment of Iran Small Industries and Industrial Parks Organization (ISIPO); rescheduling of debts and providing debt relief to manufacturing enterprises on the basis of Article 138 of the Constitution; transferring some part of industrial companies' shares and utilization of administered funds.

#### **Production**

The first year of the 4<sup>th</sup> FYDP witnessed a growth in production of large manufacturing establishments. However, the production growth index of these establishments in 1384 (4.5

percent) was less than 11.9 percent in the previous year.

The highest share in the growth of production general index was related to "chemical products" by 37.5 percentage points. This group, with a remarkable 11.96 percent relative weight and a growth rate of 21.5 percent, raised the general index by 1.7 percentage points. "Motor vehicles and trailers", with 4.7 percent, "radio, television, and telecommunication instruments", with 14.2 percent, and "basic metals", with 7.3 percent growth compared with the previous year, raised the general index by 32.6, 16.1, and 15.1 percent, respectively.



LARGE MANUEA	CTURING	ESTABLISHMENT	CS INDICES (1)

(1376=100)

			_	Percentag	ge change
	1382	1383	1384□	1383	1384
Production	220.6	246.9	258.0	11.9	4.5
Employment	106.2	102.6	97.2	-3.4	-5.3
Wage, salary, and fringe benefits	375.2	442.3		17.9	θ
Per capita wage, salary and fringe benefits (in nominal terms)	353.3	430.9		22.0	θ
Per capita wage, salary and fringe benefits (in real terms) (2)	148.3	157.0		5.9	θ

<sup>(1)</sup> Includes establishments with 100 employees or more.

According to the Ministry of Industries and Mines, production of most selected manufacturing and mining products grew in 1384. Out of 73 selected manufacturing and mining products, production of 55 items in various fields enjoyed growth, 24 items of which registered growth of over 10 percent. Production of raw steel, pane glass and flute, aluminum bar, cement and tile recorded growth of 6.5, 4.3, 2.7, 1.4, and 0.7 percent compared with the previous year. The annual capacity for production of raw steel by public and private sectors is set at 29 million tons by the end of the 4<sup>th</sup> FYDP.

During the review year, automotive industry raised the volume of its production. Manufacture of road construction machinery, passenger cars, and various types of trucks and vans increased by 32.0, 11.8, and 5.0 percent, respectively, compared with the year before.

MANUFACTURING AND MINING PRODUCTS

					Percenta	ge change
		1382▲	1383 ▲	1384	1383	1384
Motor vehicles (1)	Unit	753,472	904,359	1,006,654	20.0	11.3
Cement	Thousand tons	29,782.7	32,195.4	32,633.7	8.1	1.4
Raw steel	Thousand tons	7,991.0	8,989.6	9,574.4	12.5	6.5
Aluminum bar	Thousand tons	180.9	212.1	217.8	17.3	2.7
Copper (Cathode)	Thousand tons	145.7	152.5	178.0	4.7	16.7

Source: Ministry of Industries and Mines

According to the National Petrochemical Company, petrochemical products grew by 4.6 percent to 15.8 million tons in 1384 when compared with the previous year. About 77.1 percent of nominal capacity of petrochemical units was utilized in the review year, as against 82.6 percent of the previous year. This reduction was mainly due to the fact that the new petrochemical units were not utilized to their full potential.

In 1384, petrochemical complexes produced 1.8 million tons of various types of chemical fertilizers. The great portion is related to urea fertilizer by 78.4 percent and di-ammonia phosphate by 16 percent. Petrochemical exports, with a mere 0.3 percent rise, reached 5.2 million tons, valuing at \$2.3 billion. The lion's share of petrochemical exports belonged to Bandar Imam Petrochemical Complex by 41.7 percent. The unit value of products exported by the National Petrochemical Company was \$445.4, up by 34.2 percent compared with the previous year.

<sup>(2)</sup> It is adjusted with CPI in urban areas.

<sup>(1)</sup> Includes various types of trucks and vans, passenger cars, pick-ups, buses, minibuses, and double-differential cars.

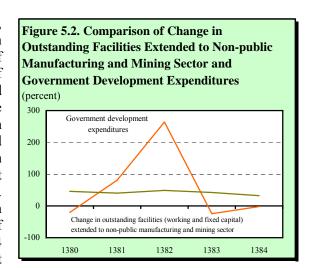
PETROCHEN	TTO AT	DDODITORG
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				Percentage	e change O
	1382	1383 ▲	1384	1383	1384
<b>Production (thousand tons)</b>	13,969	15,070	15,756	7.9	4.6
Actual production/nominal capacity (percent)	75.4	82.6	77.1	9.5	-6.7
Actual production/planned production (percent)	95.2	92.5	87.9	-2.8	-5.0
Exports					
Volume (thousand tons)	4,544	5,201	5,216	14.3	0.3
Value (million dollars)	1,225	1,726	2,323	40.6	34.6

Source: National Petrochemical Company

#### Government Investment

According to the Budget Law for 1384, the government approved Rls. 3,594.4 billion for the implementation and completion of acquisition of non-financial assets projects of manufacturing and mining sector and industrial research program. According to the Treasury General, a sum of Rls. 2,987.4 billion was allocated to the mentioned sector and program, showing 2.2 percent reduction compared with the previous year. The great portion of these credits (39.9 percent i.e. Rls. 1,192.3 billion) was paid to the program "establishment and development of industries" and 19.9 percent (Rls. 595.4 billion) to the program of "technical and credit assistance to private and cooperative sectors".



In 1384, Rls. 83.7 billion was paid to the program of "research in manufacturing and mining sector", indicating a 73.8 percent reduction compared with the previous year. Government budget performance for 1384 shows that 83.1 percent of credits allocated to the projects of acquisition of non-financial assets and research program in manufacturing and mining sectors was realized. This was lower than the performance of this variable in the year before, which showed a realization of 103.5 percent.

ACQUISITION OF NON-FINANCIAL – NATIONAL ASSETS IN MANUFACTURING AND MINING SECTOR AND INDUSTRIAL RESEARCH PROGRAM (billion rials)

				Percentage change O		Share (percent)		Approved	Implementation rate (%)	
	1382	1383	1384	1383	1384	1383	1384	1384	1384	
Manufacturing and mining	3,642.4	2,736.0	2,903.7	-24.9	6.1	89.6	97.2	3,564.4	81.5	
Industrial research program	384.6	318.8	83.7	-17.1	-73.8	10.4	2.8	30.0	278.9	
Total	4,027.0	3,054.8	2,987.4	-24.1	-2.2	100.0	100.0	3,594.4	83.1	

Source: Ministry of Economic Affairs and Finance -Treasury General

#### **Banking Facilities**

According to the MCC approval, banks and non-bank credit institutions raised their credits and facilities extended to manufacturing and mining sectors, so that outstanding facilities extended to public and non-public sectors (excluding profit and revenue receivables) grew by 30.1 percent to Rls. 252.3 trillion. The share of non-public manufacturing and mining sector in total change in the outstanding facilities extended by public banks to the non-public economic sectors, including free uses, was 26.8 percent. The share of commercial banks in total change in the outstanding facilities extended to the non-public manufacturing and mining sector was 58.8 percent.

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

	Year	-end	Change in	Percentage	Share of change	Total change in
	1383	1384	outstanding 1384	change 1384	in outstanding (percent)	outstanding (2)
Non-public sector	172,642.3	228,133.2	55,490.9	32.1	95.0	206,758.8
Commercial banks	151,789.0	186,118.6	34,329.6	22.6	58.8	113,894.8
Specialized banks	8,211.1	15,453.7	7,242.6	88.2	12.4	50,153.8
Private banks and non-bank	,	,				,
credit institutions	12,642.2	26,560.9	13,918.7	110.1	23.8	42,710.2
Public sector	21,238.8	24,170.6	2,931.8	13.8	5.0	10,809.3
Total	193,881.1	252,303.8	58,422.7	30.1	100.0	217,568.1

<sup>(1)</sup> Excludes profit and revenue receivables.

#### **New Manufacturing and Mining Units**

According to the Ministry of Industries and Mines, investment, mostly private sector investment, in manufacturing and mining sector went up in 1384. The number of operation permits issued indicated that Rls. 55.2 trillion was invested in the establishment of 6,025 new manufacturing and mining units and expansion of existing units. This shows 12 and 22.3 percent growth when compared with the previous year; however, employment based on operation permits recorded a 6.6 percent decrease. In this year, 1,473 manufacturing units, with a total employment of 27,896 persons had development plans for expanding their activities. Moreover, 31.2 thousand establishment permits, with employment opportunities for 979.4 thousand persons, were issued. The amount of investment envisaged for the operation of these permits was Rls. 900.9 trillion, showing a rise of 17.9 percent. The number and employment based on these permits grew respectively by 5.3 and 3.1 percent. Based on last years' performance, however, about 25 percent of these permits become operational.

NUMBER, INVESTMENT AND EMPLOYMENT OF MANUFACTURING AND MINING PERMITS

				Percenta	ige change
	1382	1383 ▲	1384	1383	1384
Establishment permits					
Number	27,548	29,638	31,205	7.6	5.3
Investment (billion rials)	410,226	763,986	900,874	86.2	17.9
Employment (person)	827,593	949,752	979,418	14.8	3.1
Operation permits					
Number	4,482	4,926	6,025	9.9	22.3
Investment (billion rials)	28,875	49,248	55,181	70.6	12.0
Employment (person)	113,372	129,834	121,319	14.5	-6.6

Source: Ministry of Industries and Mines

<sup>(2)</sup> It refers to the change in outstanding facilities extended by banks and credit institutions to all economic sectors.

#### **Chapter 5** MANUFACTURING AND MINING

INVESTMENT AND EMPLOYMENT OF MANUFACTURING AND MINING PERMITS

				Percentage	change O
	1382	1383 ▲	1384	1383	1384
Establishment permits					
Average investment in each project (million rials)	14,891	25,777	28,870	73.1	12.0
Average employment created by each project (person)	30	32	31	6.7	-2.1
Average investment for each occupation (million rials)	496	804	920	62.3	14.3
Operation permits					
Average investment by an industrial unit (million rials)	6,442	9,998	9,159	55.2	-8.4
Average employment created by an industrial unit (person)	25	26	20	4.2	-23.6
Average investment for each occupation (million rials)	254.7	379.3	454.8	48.9	19.9

Source: Ministry of Industries and Mines

According to the Ministry of Industries and Mines, 3,089 new manufacturing units, with an investment of Rls. 29.0 trillion, came on stream in 1384, thereby creating 66.0 thousand job opportunities.

#### **Permits Issued in the Mining Sector**

Mining activities witnessed an upturn in 1384. In this year, 1,575 exploration permits and 508 discovery certificates with a projected reserve of 2,865.5 million tons mining products were issued by the Ministry of Industries and Mines. Moreover, 654 operation permits with an actual reserve of 2,831.4 million tons were issued, of which 563 permits were new. The amount of investment based on these permits amounted to Rls. 2,402.0 billion. Based on the kind of material exploited from mines, the number of permits issued came to 462 for construction materials, 33 for metallic and 159 non-metallic materials. In addition, 546 exploitation permits with the exploitation of 10.3 million tons were issued.

MINING PERMITS ISSUED

				Percentage	change O
	1382	1383 ▲	1384	1383	1384
Number of exploration permits (1)	1,583	1,696	1,575	7.1	-7.1
Discovery certificates (2)					
Number	377	481	508	27.6	5.6
Reserve (million tons)	1,543.2	3,706.4	2,865.5	140.2	-22.7
Operation expenses (billion rials)	60.5	92.5	172.4	52.9	86.4
Operation permits (3)					
Number	578	616	654	6.6	6.2
Extraction volume (million tons)	22.6	24.7	31.2	9.2	26.4
Employment (person)	9,430	6,499	7,171	-31.1	10.3
Actual reserve (million tons)	2,012.8	2,231.4	2,831.4	10.9	26.9
Investment (billion rials)	868.3	970.3	2,402.0	11.7	147.6
Exploitation permits (4)					
Number	674	631	546	-6.4	-13.5
Extraction volume (million tons)	5.3	10.3	10.3	93.4	-0.1

Source: Ministry of Industries and Mines

<sup>(1)</sup> It is a license issued by the Ministry of Industries and Mines which permits exploitation of minerals within a specific scope.

<sup>(2)</sup> It is an endorsement certificate issued by the Ministry of Industries and Mines in the name of the owner of exploration permit after the completion of exploration and discovery.

<sup>(3)</sup> It is a license issued by the Ministry of Industries and Mines for extracting, ore dressing and obtaining salable mining products.

<sup>(4)</sup> It is a license issued by the Ministry of Industries and Mines for procurement of construction materials required for development projects, exploitation of colluviums and limited and marginal reserves as well as laboratory operations.

#### **Foreign Investment**

According to the Ministry of Industries and Mines, implementation of 47 industrial projects was approved at \$2 billion. This was as a foreign joint venture and under Foreign Investment Promotion and Protection Act. The amount of investment was 28.1 percent more than the previous year.

According to Article 24, 4<sup>th</sup> FYDP Law, in the implementation of Foreign Investment Promotion and Protection Act approved on 19.12.1380, the government was authorized to provide the appropriate ground to attract foreign investment. This is to be achieved with the aim of enhancing economic growth, developing new technologies, improving production qualitatively, increasing job opportunities and raising exports in the realm of manufacturing, mining, agriculture, infrastructure, services and information technology.

## APPROVED MANUFACTURING AND MINING PROJECTS WITH FOREIGN JOINT VENTURE (1)

Subject	Operation site	Volume of foreign partnership (million dollars)
Methanol production	Bushehr	699.1
Exploration and operation of Mahdiabad zinc mine	Yazd	682.0
Heavy Polyethylene production	Bushehr	136.0
Capital increase for development and optimization of Foolad Mobarake Complex	Isfahan	98.4
Manufacture of machinery used in road construction, agriculture, and industry	Markazi	64.5
Manufacture of glass (flute method)	Kerman	47.7
Manufacture of two-piece aluminum cans	Markazi	54.4
Production of fruit juice	Markazi	32.0
Manufacture of automobile's front and rear axles	Tehran	27.9
Production of non-alcoholic beverages	Tehran	21.5

Source: Ministry of Industries and Mines

(1) Includes approved projects of over \$10 million foreign financing.

#### **Employment**

Based on the 4<sup>th</sup> FYDP, it is expected that unemployment rate, with 3.9 percentage points decrease, stand at 8.4 percent in 1388, against 12.3 percent in 1383. Moreover, labor force demand with annual average growth rate of 4.3 percent is to reach 23.4 million persons in 1388. Manufacturing and mining sector is regarded as a leading sector in creating demand for labor force for 7 million persons.

Employment index of large manufacturing establishments registered a fall of 5.3 percent in 1384. This was basically due to performance of "basic metals", "non-metallic mineral products", "chemical products", "textiles", and "food and beverages".

Data related to operation permits issued by the Ministry of Industries and Mines indicate that about 121.3 thousand job opportunities were created in manufacturing and 7.1 thousand in mining sector. This shows 6.6 percent decrease and 10.3 percent increase. Moreover, average employment rate for industrial projects based on operation permits fell from 26 persons in 1383 to 20 persons in 1384. The investment required for creation of each new job opportunity based on the mentioned permits equaled Rls. 454.8 million, up by 19.9 percent.