# CHAPTIER

### MANUFACTURING AND MINING

he analysis of manufacturing and mining sector activities indicates the slowing down of manufacturing growth in 1387. The preliminary estimates of national accounts data show that the value-added of manufacturing and mining sectors grew by 2.4 and 11.1 percent in real terms, respectively, compared with the previous year. In 1386, the growth rates of these sectors were estimated at 0.7 and 12.1 percent, respectively. The shares of manufacturing and mining sectors valueadded in GDP were 10.2 and 0.8 percent, respectively, in nominal terms in 1387. The 4<sup>th</sup> FYDP target for the real growth of these sectors had been 11.5 percent.

#### **Production**

In the review year, most manufacturing groups experienced production growth. Based on relevant data, production index of large manufacturing establishments rose 7.7 percent compared with the previous year. This was attributable to the growth of "non-metallic mineral products" by 17.4 percent, "motor vehicles and trailers" by 12.9 percent, and "chemicals and chemical products" by 11.5 percent, which together enjoyed a relative weight of 47.4 percent.

### **Production of Selected Industries**

In this year, the automotive industry raised the volume of its production. Manufacture of light and heavy vehicles increased by 13.2 percent to 1.3 million. Light passenger cars had a share of 97 percent in total vehicle manufacture, up by 12.8 percent compared with the year before.

In 1387, production of basic metals increased; therefore, the production of crude steel and aluminum bar indicated 5.4 and 22.4 percent growth, respectively.

According to the National Petrochemical Company, petrochemical products (including the performance of privatized companies) amounted to 30 million tons in 1387, indicating 25.9 percent increase.

In the review year, petrochemical exports advanced 28.6 percent to 12.3 million tons. The value of petrochemical exports amounted to \$7.8 billion, up by 29.4 percent compared with the previous year. Due to the noticeable growth in the exports of petrochemical products, the share of these products in total non-oil exports rose from 22.2 percent in 1384 to 43.2 percent in 1387.

In this year, 7.6 million tons of petrochemical products were sold in the domestic market, indicating 18.5 percent growth, well above 5.2 percent growth of the previous year.

### **Government Investment**

According to the Budget Law for 1387, government approved Rls. 3.6 trillion for the implementation and completion of acquisition

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### **Manufacturing and Mining Products**

					Percentag	ge change
		1385 ▲	1386▲	1387	1386	1387
Cement 1	Thousand tons	35,300.0	40,000.0	44,400.0	13.3	11.0
Light vehicles <sup>2</sup>	Thousand	1,077.1	1,116.1	1,259.3	3.6	12.8
Crude steel <sup>3</sup>	Thousand tons	9,928.1	9,944.4	10,483.2	0.2	5.4
Copper (Cathode) <sup>3</sup>	Thousand tons	200.8	203.0	206.1	1.1	1.5
Aluminum bar <sup>3</sup>	Thousand tons	205.5	202.8	248.3	-1.3	22.4

<sup>&</sup>lt;sup>1</sup> Source: www.irancement.org <sup>2</sup> Source: Sapco (Supplying Automotive Parts Co.); it includes various types of passenger cars, pick-ups, vans, and double-differential cars. <sup>3</sup> Source: Iran Mercantile Exchange - For crude steel, it only includes data on public sector and excludes private sector production.

### **Performance of Petrochemical Industry**

				Percentage change	
	1385	1386	1387	1386	1387
Production (thousand tons) 1	17,994	23,869	30,040	32.6	25.9
Exports					
Volume (thousand tons)	6,044	9,530	12,254	57.7	28.6
Value (million dollars)	3,299	6,060	7,843	83.7	29.4
Domestic sale					
Volume (thousand tons)	6,066	6,383	7,566	5.2	18.5
Value (billion rials)	26,520	32,307	40,056	21.8	24.0

Source: National Petrochemical Company

of non-financial—national assets projects in manufacturing and mining sector and industrial research project, indicating 12.8 percent growth compared with the corresponding figure of the previous year.

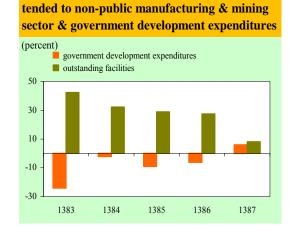
According to the Treasury General of the Ministry of Economic Affairs and Finance, Rls. 2.7 trillion was allocated to the mentioned sector and project, showing 5.9 percent increase compared with last year's performance.

In the review year, Rls. 27.4 billion was paid to the "industrial research project in the manufacturing and mining sector", in the framework of support for commercial and industrial research and development project, showing 17 percent rise.

A review of government budget performance in 1387 reveals that 74.7 percent of credits approved for the acquisition of non-financial—national assets projects in the manufacturing and mining sector and industrial research project were realized.

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Figure 4.1. Change in outstanding facilities ex-



<sup>&</sup>lt;sup>1</sup> Due to the fact that part of the petrochemical sector production is used for intermediate consumption in the same industry, the production volume of this sector is higher than sum of the exports and domestic sale of the same products.

## Credits for Acquisition of Non-financial—National Assets in Manufacturing and Mining Sector and Industrial Research Project (billion rials)

				Percentage change			are cent)	1	1387
	1385	1386	1387	1386	1387	1386	1387	Approved	Realization (percent)
Manufacturing and mining	2,696.4	2,522.5	2,668.2	-6.5	5.8	99.1	99.0	3,567.4	74.8
Industrial research project 1	18.8	23.5	27.4	24.8	17.0	0.9	1.0	40.0	68.6
Total	2,715.2	2,546.0	2,695.7	-6.2	5.9	100.0	100.0	3,607.4	74.7

Source: Treasury General, Ministry of Economic Affairs and Finance <sup>1</sup> In the Budget Law for 1385, industrial research project in the manufacturing and mining sector appeared under the title of "applied research and scientific development project" and during 1386-87, under "support for commercial and industrial research and development project".

### **Banking Facilities**

By end-1387, total outstanding facilities extended to public and non-public manufacturing and mining sectors (excluding profit and revenue receivables) grew by 7.3 percent to Rls. 411.0 trillion compared with end-1386. Accordingly, the share of change in the outstanding debts of the non-public manufacturing and mining sector in total change in the outstanding facilities extended by banks and credit institutions to non-public economic sectors was 21.9 percent. Commercial banks accounted for 66.2 percent of total change in the outstanding facilities extended to the non-public manufacturing and mining sector.

Data drawn by the Ministry of Industries and Mines reveal that \$973.2 million out of OSF was approved to be allocated to 78 investment projects in manufacturing and mining sector in 1387, indicating 74.3 and 60.6 percent decline in terms of value of facilities and number of projects, respectively. In this year, "food and pharmaceutical" and "chemical and cellulose" industries accounted for 40.8 and 20.3 percent of total foreign exchange facilities, respectively.

Based on the executive by-law for the expansion of Small and Medium Enterprises (SMEs) approved in Azar 1384, agent banks

# Outstanding Facilities Extended by Banks and Credit Institutions to Manufacturing and Mining Sector 1 (billion rials)

	***************************************	(cilifoli liuis)					
	Year	-end		1387			
	1386	1387	Percentage change	Change in outstanding	Total change in outstanding <sup>2</sup>	Relative share (percent)	
Non-public sector	373,560.4	403,639.3	8.1	30,078.9	137,269.9	21.9	
Commercial banks	311,873.3	331,787.6	6.4	19,914.3	58,470.7	34.1	
Specialized banks	18,469.9	21,137.9	14.4	2,668.0	44,223.7	6.0	
Private banks and credit institutions	43,217.2	50,713.8	17.3	7,496.6	34,575.5	21.7	
Public sector	9,533.3	7,366.6	-22.7	-2,166.7	5,140.9	-42.1	
Total	383,093.7	411,005.9	7.3	27,912.2	142,410.8	19.6	

<sup>&</sup>lt;sup>1</sup>Excludes profit and revenue receivables.

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

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Summary Performance of Approved Projects Financed out of the OSF according to Industrial Groups in 1387

	Nur	Number		Value		
	Number	Share (percent)	Value (million dollars)	Share (percent)	to each project (million dollars)	
Food and pharmaceutical	34	43.6	397.2	40.8	11.7	
Chemical and cellulose	17	21.8	197.8	20.3	11.6	
Mining	4	5.1	183.5	18.9	45.9	
Metallic	7	9.0	64.2	6.6	9.2	
Textile and leather	9	11.5	54.5	5.6	6.1	
Electrical	2	2.6	45.6	4.7	22.8	
Non-metallic ores	5	6.4	30.5	3.1	6.1	
Total	78	100.0	973.2	100.0	12.5	

Source: Ministry of Industries and Mines

continued the extension of facilities in 1387. As of the implementation of this by-law till end-1387, total value of paid facilities (excluding profit receivables) amounted to Rls. 207.6 trillion. In this year, 7.2 thousand projects valuing at Rls. 18.5 trillion were approved and a sum of Rls. 38.7 trillion was paid. The share of manufacturing and mining sector in total extended facilities was 60.7 percent.

### **New Manufacturing Units**

According to the Ministry of Industries and Mines, investment in the manufacturing sector increased in 1387. Based on the data related to issued operation permits, Rls. 226.7 trillion was invested in the establishment of 7,689 new manufacturing units, indicating

63.4 percent growth in terms of investment and 11.9 percent reduction in number. Meanwhile, employment created by these units decreased by 12.5 percent from 167 thousand persons in 1386 to 146 thousand persons in 1387.

Based on the figures related to issued establishment permits, investment in new manufacturing units was projected to decrease by 35.4 percent to Rls. 1,056.6 trillion. The number of these permits and employment created by them show 45.6 and 45.0 percent fall, respectively.

According to statistics related to issued operation permits, in 1387, "non-metallic mineral products" and "basic metals" accounted for respectively 23.6 and 22.5 percent of

Number, Investment, and Employment of Establishment and Operation Permits

				Percenta	ge change
	1385▲	1386▲	1387	1386	1387
Establishment permits					
Number	54,159	48,235	26,239	-10.9	-45.6
Investment (trillion rials)	1,471	1,637	1,057	11.2	-35.4
Employment (thousand persons)	1,494	1,515	833	1.4	-45.0
Operation permits					
Number	7,397	8,731	7,689	18.0	-11.9
Investment (trillion rials)	89	139	227	55.8	63.4
Employment (thousand persons)	138	167	146	21.6	-12.5

Source: Ministry of Industries and Mines

total investments in the manufacturing sector. Average capital formation by an industrial unit was Rls. 29.5 billion, up by 85.6 percent compared with the previous year.

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

In this year, 656 operation permits, with an investment of Rls. 3,881 billion, were issued, showing 7.5 and 100.1 percent increase in terms of number and investment, respectively. These permits, with an actual reserve of 3.8 billion tons, led to an increase

in extraction capacity to 54.3 million tons. With the issuance of 676 discovery certificates and estimated operation expenses of Rls. 149.3 billion, the explored reserve of mines was raised to 3.2 billion tons.

### **Employment**

Data related to employment based on operation permits issued by the Ministry of Industries and Mines indicate that about 146.4 thousand job opportunities were created in the manufacturing sector, showing a decline

### Average Capital Formation and Employment Generation of New Manufacturing Permits

			Percer	ntage change
1385.	1386	1387	1386	1387
Establishment permits				
Average capital formation forecast in each project (million rials) 27,16	9 33,929	9 40,268	24.9	18.7
Average employment generation forecast by each project (person) 27.	6 31.4	31.8	13.9	1.1
Average capital formation per employment opportunity (million rials) 98	5 1,080	1,268	9.7	17.4
Operation permits				
Average capital formation by an industrial unit (million rials) 12,03	5 15,886	5 29,481	32.0	85.6
Average employment generation by an industrial unit (person) 18.	6 19.2	2 19	3.0	-0.7
Average capital formation per employment opportunity (million rials) 64	7 829	1,548	28.2	86.8

Source: Ministry of Industries and Mines

### Mining Permits Issued

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				Percenta	age change
	1385	1386	1387	1386	1387
Number of exploration permits <sup>1</sup>	1,549	1,632	1,731	5.4	6.1
Discovery certificates <sup>2</sup>					
Number	529	519	676	-1.9	30.3
Reserve (million tons)	3,079.5	2,694.2	3,242.0	-12.5	20.3
Operation expenses (billion rials)	159.1	95.5	149.3	-40.0	56.3
Operation permits <sup>3</sup>					
Number	595	610	656	2.5	7.5
Extraction capacity (million tons)	28.7	30.5	54.3	6.3	78.4
Employment (person)	6,130	6,505	10,393	6.1	59.8
Actual reserve (million tons)	2,811.3	2,345.0	3,803.0	-16.6	62.2
Investment (billion rials)	1,449.0	1,939.7	3,880.9	33.9	100.1
Exploitation permits <sup>4</sup>					
Number	629	694	811	10.3	16.9
Extraction volume (million tons)	13.5	11.4	9.7	-15.8	-15.1

Source: Ministry of Industries and Mines

1 It is a license issued by the Ministry of Industries and Mines which permits exploitation of minerals within a specific scope.

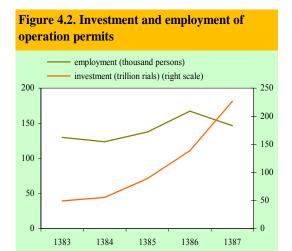
2 It is an endorsement certificate issued by the Ministry of Industries and Mines in the name of the owner of exploration permit after the completion of exploration and discovery.

3 It is a license issued by the Ministry of Industries and Mines for extracting, ore dressing, and obtaining salable mining products.

4 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.

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compared with the previous year. Meanwhile, 10.4 thousand job opportunities were created in the mining sector, up by 59.8 percent. Average employment generation by an industrial unit based on operation permits decreased from 19.2 persons in 1386 to 19 persons in 1387. Average capital formation per employment opportunity based on operation permits was Rls. 1.5 billion, indicating 86.8 percent increase compared with the previous year.



# **Producer Price Index of Manufacturing and Mining Products**

In the review year, the producer price index (1376=100) in manufacturing and

mining sectors reached 417.9 and 270.7, showing 19.7 percent rise and 6.1 percent fall, respectively, compared with the previous year. Therefore, shares of manufacturing and mining products in the growth of general index (21.8 percent) were 7.5 and -0.04 percentage points, respectively. Among manufacturing products, the highest growth of PPI was related to "non-metallic mineral products" by 46.2 percent, "paper and paper products" by 30.2 percent, "fabricated metal products except machinery and equipment" by 29.2 percent, and "leather and leather products" by 24.0 percent. Reduction in the PPI of the mining sector was attributable to the decline in the price index of metallic ores by 47.1 percent.

### **Industrial Exports**

The share of industrial exports in total non-oil exports increased from 71.0 percent in 1383 to 80.0 percent in 1387. This was mostly due to development projects carried on in the manufacturing and mining sectors, particularly the growth in the exports of "gas and oil products" and "organic chemical products". The total value of industrial exports in 1387 amounted to \$14.7 billion, showing 27.0 percent growth compared with the previous year. The unit value of exports in 1387 was \$608.2 per ton, up by 15.2 percent compared with the year before.