CHAPTER 5

MANUFACTURING AND MINING

Despite the outbreak of COVID-19 pandemic and the limitations in energy supply (electricity and gas), the indicators of the manufacturing sector pointed to favorable conditions for 2021/22. However, the mining sector experienced relatively adverse conditions. Accordingly, based on data of national accounts, the value added of the "manufacturing" and "mining and quarrying" subsectors recorded growth rates of respectively 3.3 and -0.4 percent compared with the year before, at constant 2016/17 prices.

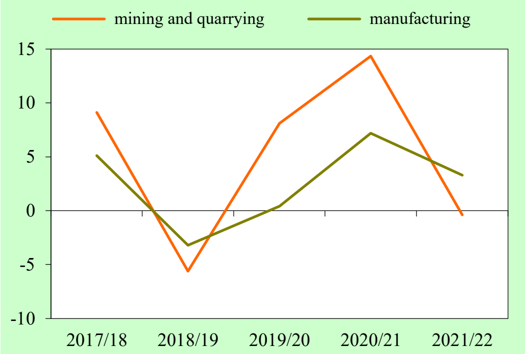
5.1. Production

5.1.1. Production Index of Large Manufacturing Establishments

The production index of large manufacturing establishments indicated a rise of 3.1 percent in 2021/22 (base year 2016/17). Growth in the manufacture of "chemicals and chemical products", "pharmaceuticals, medicinal chemical and botanical products", and "food products" made the biggest contribution to the increase in the production index of large manufacturing establishments in 2021/22. The "employment" and "wage" indices of large manufacturing establishments rose by respectively 5.1 and 57.1 percent.

Figure 5.1. Growth in Value Added of "Manufacturing" and "Mining and Quarrying" Subsectors

(base year 2016/17)(percent)



5.1.2. Production of Selected Industries

In 2021/22, a total of 864.4 thousand vehicles were manufactured, down by 4.4 percent. The production of aluminum bar and copper cathode rose by respectively 25.1 and 2.8 percent, while the production of cement and crude steel fell by respectively 9.1 and 1.8 percent, compared with the volume of production in 2020/21.

Table 5.1. Selected Manufacturing and Mining Products

	2019/20	2020/21	2021/22	Percentage change 2020/21	Percentage change 2021/22
Cement (million tons)	61.7	69.4	63.1	12.6	-9.1
Vehicles (thousand)	758.9	903.9	864.4	19.1	-4.4
Crude steel (million tons)	26.4	28.6	28.1	8.3	-1.8
Copper cathode (thousand tons)	254.1	290.8	299.0	14.4	2.8
Aluminum bar (thousand tons)	287.1	456.4	571.1	59.0	25.1

Source: Ministry of Industry, Mine, and Trade

According to the National Petrochemical Company, the production of petrochemicals (including the performance of privatized companies) amounted to 65.3 million tons in 2021/22, indicating a rise of 6.8 percent compared with 2020/21. The domestic sales of petrochemical products fell by 0.3 percent in terms of weight and increased by 76.9 percent in terms of value, compared with the year before.

5.2. Government Investment

According to the Treasury General, the government approved a sum of Rls. 22.2 trillion in the Budget Law for 2021/22 for the implementation and completion of projects related to the acquisition of non-financial assets in the manufacturing and mining sector. The actual amount paid on this purpose indicated an increase of 77.4 percent compared with the year before to reach Rls. 14.6 trillion (65.7 percent of the budget). This rise was for the most part attributable to an increase by 57.6 percent in the performance of the "establishment and development of industries, mines, and manufacturing and mining infrastructure" project with a share of 72.0 percent in paid credits. The credits actually allocated to the "laboratory studies", "mineral exploration", and "formulation of research-based standards and laboratory services" projects in 2021/22 constituted respectively 85.2, 80.3 and 72.2 percent of the credits originally approved to be allocated to these projects, which were the highest compared with the other projects.

Table 5.2. Performance of Petrochemical Industry

				Percentage change	
	2019/20	2020/21	2021/22	2020/21	2021/22
Production (thousand tons) [1]	**55,393**	**61,155**	**65,312**	**10.4**	**6.8**
Exports					
Weight (thousand tons)	22,261	24,360	..	9.4	..
Value (million dollars)	9,497	8,824	..	-7.1	..
Domestic sales					
Weight (thousand tons)	18,651	20,914	20,852	12.1	-0.3
Value (billion rials)	1,047,835	1,925,376	3,406,853	83.7	76.9

Source: National Petrochemical Company

[1] Due to the utilization of some petrochemical products as intermediate goods, the weight of products in this sector is constantly higher than the sum of the weights of exports and domestic sales.

Table 5.3. Credits Paid on Acquisition of Non-financial Assets in Manufacturing and Mining Sector

(trillion rials)

	Performance			Percentage change		2021/22	
	2019/20	2020/21	2021/22	2020/21	2021/22	Approved	Performance[1] (percent)
Manufacturing and mining sector	3.8	8.2	14.6	117.9	77.4	22.2	65.7

Source: Ministry of Economic Affairs and Finance, Treasury General

[1] Calculated through dividing the performance figure by the approved figure multiplied by 100.

5.3. Banking Facilities

By March 2022, outstanding facilities (net) extended to the manufacturing and mining sector (public and non-public sectors) increased by 63.9 percent to Rls. 7,383.5 trillion, excluding future profits and revenues. Accordingly, the relative share of growth in the outstanding debt of the non-public manufacturing and mining sector in total growth in the outstanding facilities extended by banks and non-bank credit institutions to all non-public sectors of the economy was 26.9 percent.

In 2021/22, a sum of Rls. 26,536.8 trillion was allocated as facilities by banks and non-bank credit institutions to various sectors of the economy. Out of this amount, a sum of Rls. 9,219.7 trillion worth of facilities was extended to the manufacturing and mining sector, up by 53.5 percent compared with 2020/21. Thus, the share of the manufacturing and mining sector in total allocated facilities was 34.7 percent. Of the total sum paid to the manufacturing and mining sector in 2021/22, 76.7 percent was in the form of the working capital.

Figure 5.2. Growth in Outstanding Facilities (Net) Extended by Banks and Non-bank Credit Institutions to Non-public Manufacturing and Mining Sector

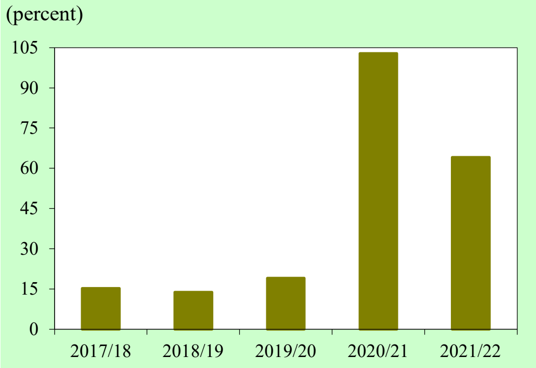


Table 5.4. Outstanding Facilities (Net) Extended by Banks and Non-bank Credit Institutions to Manufacturing and Mining Sector [1, 2] (trillion rials)

	Year-end		March 2022			
	2021	2022	Percentage change	Change in outstanding	Total change in outstanding [3]	Relative share (percent)
Non-public sector	4,493.7	7,372.7	64.1	2,879.0	10,700.4	26.9
Public sector	11.1	10.8	-2.8	-0.3	450.2	-0.1
Total	**4,504.8**	**7,383.5**	**63.9**	**2,878.7**	**11,150.6**	**25.8**

[1] Outstanding facilities (net) are calculated upon the deduction of the outstanding debt of customers and extended facilities under the exchange rate differential, future profits, future profits and commissions, receipts from Mudarabah, partnership contracts (with the bank as partner), and outstanding profits and commissions headings. Outstanding facilities include legal partnership and direct investment contracts.

[2] Excludes future profits and revenues.

[3] It refers to growth in the outstanding facilities extended by banks and non-bank credit institutions to all economic sectors.

5.4. Contribution of Banking Network to SMEs

The implementation of the supportive plan for the financing of the SMEs was put on the agenda of the banking network to boost production and increase employment during the recent years, which continued to 2021/22 in accordance with the requirements of the banking network. Meanwhile, the executive guideline for the financing of the SMEs was formulated by the CBI and communicated through a circular to the banking network. According to data received from the registration platform containing information on facility-requiring manufacturing units, a sum of Rls. 307.7 trillion worth of facilities was allocated to 6.1 thousand eligible manufacturing establishments by the end of the year (March 2022). In addition, the outbreak of COVID-19 pandemic caused business closures as well as demand decreases in different economic sectors. Under these circumstances, the banking network allocated facilities to households and businesses, which were adversely affected by the COVID-19. On this basis, the CBI communicated to banks and non-bank credit institutions the executive guideline on allocating financial assistance to affected businesses amid the ongoing pandemic. Banks were then obligated with the responsibility to grant facilities, up to the approved amount, to qualified applicants identified by the Ministry of Cooperatives, Labor, and Social Welfare. Accordingly, 523.4 thousand businesses were introduced to banks and credit institutions as eligible to receive Rls. 179.1 trillion worth of facilities as compensation for the losses incurred by COVID-19. Overall, 399.4 thousand facilities, valued at Rls. 116.0 trillion, were paid to qualified businesses until March 2022.

5.5. Manufacturing Establishments

The number of establishment permits issued in 2021/22 reached 35.2 thousand, indicating a fall of 2.1 percent compared with 2020/21. The projected investment based on establishment permits increased by 74.1 percent to reach Rls. 10,797.3 trillion in 2021/22. "Manufacture of other nonmetallic mineral products" had the highest share in the number of establishment permits by 15.4 percent, followed by "manufacture of chemicals and chemical products" and "manufacture of food products and beverages", by 11.3 and 11.1 percent, respectively. Thus, the total share of these three groups in the number of establishment permits was 37.8 percent. The average projected investment in each project, based on issued establishment permits, was Rls. 306.4 billion, indicating an increase of 77.7 percent. Average projected investment per employment opportunity, based on establishment permits, rose by 68.3 percent to Rls. 12.3 billion.

Table 5.5. Establishment and Operation Permits Issued for Industrial Groups

				Percentage change	
	2019/20	2020/21	2021/22	2020/21	2021/22
Establishment permits					
Number	25,712	35,988	35,245	40.0	-2.1
Projected investment (trillion rials)	2,864.5	6,202.8	10,797.3	116.5	74.1
Projected employment (thousand persons)	595.5	849.6	879.0	42.7	3.5
Operation permits					
Number	5,782	6,546	7,092	13.2	8.3
Investment (trillion rials, current prices)	504.8	1,700.1	1,862.9	236.8	9.6
Employment (thousand persons)	90.0	114.8	155.0	27.6	35.0

Source: Ministry of Industry, Mine, and Trade

Moreover, 7,092 operation permits, with an investment of Rls. 1,862.9 trillion (at current prices), were issued in 2021/22, indicating increases of 8.3 and 9.6 percent, respectively. "Manufacture of chemicals and chemical products" had the highest share in the number of issued operation permits by 15.2 percent, followed by "manufacture of food products and beverages" with 11.8 percent and "manufacture of rubber and plastics products" with 11.5 percent. The average investment per industrial unit, based on operation permits, totaled Rls. 262.7 billion, up by 1.1 percent compared with the year before.

5.6. Employment in the Manufacturing Sector

Data related to employment based on issued operation permits indicate that 155.0 thousand job opportunities were created in the manufacturing sector in 2021/22. Based on the report released by the Ministry of Industry, Mine, and Trade, the number of persons employed in the manufacturing sector, based on operation permits, was 22 on average. Hence, the average investment per employment opportunity decreased by 18.8 percent compared with the year before, to reach Rls. 12.0 billion.

5.7. Permits Issued in the Mining Sector

Totally, 486 discovery certificates, with a projected reserve of 917 million tons, were issued by the Ministry of Industry, Mine, and Trade in 2021/22, indicating a fall of 9.5 percent as against a rise of 28.0 percent, respectively. In order to put new mines into operation, 561 operation permits, with a nominal extraction capacity of 28 million tons, were issued. This indicated decreases of 18.0 and 42.6 percent, respectively. Employment based on operation permits fell by 17.5 percent compared with 2020/21, to 4,597 persons in 2021/22. Furthermore, 1,097 mining exploration permits were issued, up by 7.2 percent.

Table 5.6. Average Investment and Employment Generation by Permit

				Percentage change	
	2019/20	2020/21	2021/22	2020/21	2021/22
Establishment permits					
Average projected investment in each project (billion rials)	111.4	172.4	306.4	54.7	77.7
Average projected employment generation by each project (person)	23	24	25	1.9	5.6
Average projected investment per employment opportunity (billion rials)	4.8	7.3	12.3	51.8	68.3
Operation permits					
Average investment per industrial unit (billion rials)	87.3	259.7	262.7	197.5	1.1
Average employment generation per industrial unit (person)	16	18	22	12.7	24.6
Average investment per employment opportunity (billion rials)	5.6	14.8	12.0	164.1	-18.8

Source: Ministry of Industry, Mine, and Trade

Table 5.7. Permits Issued for Mining Activities

	2019/20	2020/21	2021/22	Percentage change 2020/21	Percentage change 2021/22
Exploration permits[1]	**960**	**1,023**	**1,097**	**6.6**	**7.2**
Discovery certificates[2]					
Number	507	537	486	5.9	-9.5
Projected reserve (million tons)	587	716	917	21.9	28.0
Operation costs (billion rials)	1,111	1,565	4,267	40.9	172.6
Operation permits[3]					
Number	576	684	561	18.8	-18.0
Nominal extraction capacity (million tons)	24	48	28	102.3	-42.6
Employment (person)	4,778	5,570	4,597	16.6	-17.5

Source: Ministry of Industry, Mine, and Trade

[1] It is a license issued by the Ministry of Industry, Mine, and Trade, permitting the exploration of minerals within a specific scope.

[2] It is an endorsement certificate issued by the Ministry of Industry, Mine, and Trade, in the name of the owner of the exploration permit, after the completion of exploration and ore discovery procedures.

[3] It is a license issued by the Ministry of Industry, Mine, and Trade, which allows extracting, ore dressing, and obtaining salable mining products.

5.8. Industrial Exports

Based on the Customs Administration, the weight and value of industrial exports increased by respectively 9.7 and 51.4 percent compared with the year before, to reach 109.9 million tons and $42.8 billion in 2021/22. Thus, the average value of industrial exports amounted to $389.7 per ton, up by 38.0 percent compared with 2020/21. "Gas and oil products" had the highest share in the value of industrial exports with 30.7 percent, followed by "cast iron, iron, steel, and their articles" with 19.1 percent, and "rubber and plastics products" with 14.8 percent.

5.9. Producer Price Index (PPI) of Manufacturing Products

The Producer Price Index (PPI) is a measure of the average change over time in the selling prices received by domestic producers for their goods and services. In 2021/22, the PPI indicated a growth rate of 60.9 percent compared with 2020/21 (base year 2016/17). The growth rate of the PPI in 2020/21 had stood at 55.2 percent, compared with 2019/20 (base year 2016/17). The producer price index (PPI) for manufacturing products increased by 59.9 percent in the year under review, when compared with 2020/21.