

## Analysis of the Algerian industrial sector: strengths, weaknesses, and measures for improvement (2008-2023)

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### Abstract:

The Industrial policies are tangle measures typical of mixed economy countries. There are a lot of types of industrial policies contain common elements with other types of interventionist practices such as trade policy, in some cases, industrial policy involves the development of public companies. The Algerian industry has been one of the most representative experiences, their industrial sector has been increasingly cited in the past years as an example for other developing countries. In recent years the Algerian industrial sector suffers hugely from many constraints, it lacks many reforms.

This article discusses the industrial sector in Algeria, its current state, and its relationship with the Algerian economy. The article highlights the strengths and weaknesses of the Algerian industrial sector and proposes strategies for its development. The first section analyzes the current state of the industrial sector in Algeria, including its major industries, technological advancements, productivity levels, and challenges. The second section explores the relationship between the industrial sector and the Algerian economy, including its contribution to GDP, employment, trade, and investment. The third section examines the weaknesses and strengths of the Algerian industrial sector and proposes strategies for its advancement.

**Keywords:** Industrial sector; Industrial clusters; Imported technology; Industrial labor; Technical capabilities.

**JEL Classification:** L52; L16; N7.

## **Introduction**

The Algerian industrial sector is characterized by diversity, resulting from the abundance of natural resources in the country. It includes various industries such as transformation, mining, food, chemical, and others. The reforms implemented in Algeria to restructure the industrial sector and restore the prominence of public and private institutions have been weak and challenging to implement. The realization of these reforms requires serious and dedicated efforts due to the significant role that the industrial sector can play in promoting economic and social development. However, the performance of this sector has remained very weak and, in many cases, negative. This deficiency can be attributed to a range of technical and managerial problems affecting the industrial sector and its complementary sectors, which are integral parts of the Algerian economy.

Based on the above, we can formulate the main problem of the study by addressing the following essential questions:

What distinguishes the industrial sector in Algeria? What are the main obstacles hindering its development? What effective measures can be taken to address these obstacles?

In light of the aforementioned questions and the identified research problem, the main objective can be summarized as an attempt to achieve a set of goals. The most important among these goals is to study and analyze the current state of the industrial sector in Algeria based on up-to-date data and information. This entails evaluating the sector's performance in relation to key macroeconomic indicators and shedding light on its strengths and weaknesses. Additionally, the study aims to propose effective strategies to address the sector's challenges and obstacles that hinder its growth and prosperity.

Based on the above, it seems appropriate to divide the study into three main axes as follows:

- \* Axis 1: The current state of the industrial sector in Algeria.
- \* Axis 2: The relationship between the industrial sector and key macroeconomic indicators in Algeria.
- \* Axis 3: Strengths and weaknesses of the Algerian industrial sector and strategies for its advancement.

## **1- The Reality of the Industrial Sector in Algeria**

Algeria has followed the logic of a free economy in recent years of the last century. This was accompanied by successive governments implementing policies aimed at maintaining economic stability, especially in the industrial production sector, to support the industrial development strategy and enhance its competitiveness at the local, regional, and international levels.

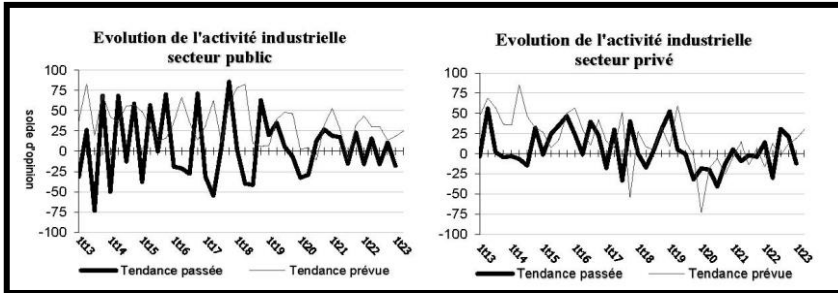
### **1-1 Characteristics of the Algerian Industrial Sector**

Until the beginning of the 1990s, the industrial fabric primarily consisted of the public sector, which represented 80% of the total industrial establishments in Algeria. The private sector, on the other hand, was only represented by a small percentage of the total industrial establishments. As a result, the emergence of the private sector within the production apparatus became an important means that provided a strong impetus to the system. Market mechanisms were favored, especially since the private sector has the advantage of quick responsiveness and optimal management focused on cost reduction and maintaining quality. The structure of the national economy changed, with a decline in the role of the public sector and the rise of the private sector in all economic activities (Naseera KOURICHE, 2007, p. 89).

#### **1-1-1- Evolution of the Performance of the Industrial Sector in Algeria**

The performance of the Algerian industrial sector, both in the extraction and manufacturing sectors, is very modest compared to similar sectors in a group of Third World countries similar to the Algerian economy. What ensures the presence of this sector in Algeria is an important part of the food industries, which contribute more than half of the total industrial production. On the other hand, the contribution of electronic, electrical, mechanical, and even manufacturing industries remains very low, accounting for no more than a small fraction of the total industrial production (AROUB Ratiba, 2012, p. 46). The volume of industrial activity in Algeria has shown significant fluctuations during the period 2008-2018, as reflected in the figures of both the public and private industrial sectors. The total production volume varied during the same period between -75% and +85%, as shown in the following figure:

**Figure number (01): Evolution of industrial activity volume in Algeria from 2008 to the first quarter of 2023**



Source: (ONS, 2018, p. 1).

According to the graph represented in Figure 01, the volume of industrial activity in Algeria fluctuated significantly from 2008 to 2018. The public industrial sector recorded its highest value in 2018, with a percentage of 85%, while its lowest value was in 2011 at -75%. The private industrial sector also experienced fluctuations, but to a lesser extent than the public sector. It reached its highest activity level in 2011 at 85% and its lowest percentage in 2008 at -50% throughout the study period of 2008-2018. This can be attributed to the contraction and reemergence of both public and private national institutions, including large-scale industrial and small and medium-sized enterprises, during the study period. It is worth mentioning that the government has implemented a program to increase the growth rate of the industrial sector in Algeria by 8% to 10% by 2020. The demand for raw materials exceeds the acquisition rate by more than 10% in the public sector and less in the private sector. Consequently, a significant number of public and private sector companies experienced severe disruptions in their inventories due to the suspension of their operations, estimated to be a full month for the majority of them (ONS, 2015, p. 1). Industrial activity has declined during the first quarter of 2023 compared to the previous quarter. The production capacity utilization rate was reported to be above 50% by more than 44% of respondents from the public sector and 70% of those from the private sector. Nearly 39% of respondents from the public sector and over 35% from the private sector expressed that the level of raw material supply was lower than the demand, resulting in stock shortages for almost 19% of those concerned in the first sector and almost 11% in the second sector. The majority of them reported that these shortages lasted less than 29 days (ONS, 2023, p. 1).

The public industrial sector in Algeria relies primarily on electronic, electrical, mechanical, food, plastic, and rubber industries. These industries,

especially in recent years, collectively contribute about one-third of the total output of the public sector.

Restructuring of institutions is considered a necessary policy to drive the industry, initiated by the Algerian public authorities. Through this policy, they aim to (Mohamed BENMERADI, 2012, p. 21):

- \* Enhance the competitiveness of industrial institutions in terms of price, quality, and innovation;
- \* Align industrial institutions with the requirements of free trade;
- \* Drive the production apparatus and increase productivity;
- \* Strengthen and develop the strengths while addressing the weaknesses of public and private industrial institutions;
- \* Increase the capacity for monitoring and controlling technological developments in the markets.

Official Algerian figures indicate that the number of industrial sector institutions has decreased by nearly half during the second decade of the last millennium. According to economic analysis of the sector, around twenty operators represent nearly 100%, and regional concentration has been observed in three industrial basins: the Algiers region, Béjaïa-Sétif region, and Oran region (Ministry of Industry, 2013, p. 2). Therefore, it is necessary to establish a strategic observatory, adapt training to the sector, encourage exports, and develop legal monitoring tools and compliance with ISO standards\*.

### **1-1-2- Key Characteristics of the Industrial Sector in Algeria**

The Algerian industrial sector is characterized by its diversity, which is driven by the abundance of natural resources in the country, including food, chemical, and mineral industries, among others. The dominant sector in Algerian industry is the food industry, accounting for only 11% of the contribution of electronic, electrical, and mechanical industries. Chemical industries represent 6% of the total industrial production sold (HAMID Ben Nia, FEKARCHA Sofian, 2018, p. 9). The industrial sector in Algeria is associated with several characteristics that accompany all manufacturing operations, as outlined in the following points (Mohamed ZOUZI, 2010, p. 176):

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\* The term "ISO" stands for the International Organization for Standardization, which was founded in 1947. Its mission is to develop a set of standards or specifications that can be applied in any organization and across all sectors of activity, specifically focusing on quality management systems. However, the organization's role goes beyond just developing standards. It also monitors and oversees the implementation of these standards within organizations. This process involves the participation of national standards organizations, which act as intermediaries between organizations and the ISO. For example, in Algeria, we have the Algerian Institute of Standardization (Institut Algérien de Normalisation or IANor).

### **1-1-2-1- Inability to compete**

According to Kotler & Dubois, competition includes all currently competitive offerings and potential offerings that consumers may consider. However, this concept remains elusive when it comes to the competitiveness of the industrial sector in Algeria. Industrial work in Algeria is mainly limited to meeting a very small portion of total domestic demand.

### **1-1-2-2- Low industrial productivity**

Industrial productivity efficiency is of great importance because focusing on and increasing productivity enables the production of various consumer and intermediate goods. It helps improve working and production conditions, reduces costs, and enhances competition in both domestic and foreign markets (MEKHEDAR Salim, 2018, p. 163).

### **1-1-2-3- Limited industrial production**

The contribution of the industry, in general, to the Algerian economy remains modest in terms of total domestic production. This includes the food industry, extraction industries, and processing industries.

### **1-1-2-5- Increasing production costs**

According to Durand & Giono, an enterprise has a weak competitive position according to the perfect competition model if the average production cost exceeds the selling price of its products in the market. This can be attributed to either low productivity due to ineffective management within the enterprise or high production costs, which accurately depict the state of the Algerian industry.

### **1-1-2-6- Reliance on imported technology**

The inability of the local workforce to control imported technology leads to a decline in labor productivity and underutilization of productive capacities in factories.

### **1-1-3- Industrial Zones in Algeria**

The emergence of industrial zones in Algeria in their modern form dates back to 1973 when the conditions for establishing 77 industrial zones across the country's provinces and municipalities were determined. The management conditions were set by Executive Decree No. 84-45 dated March 3, 1984 (HAMIDA Rabah, 2017, p. 159). Currently, Algeria has 72 industrial zones covering a total area of over 12,000 hectares. The country also has 450 activity zones, spread across the entire national territory, with the most important ones being (The National Agency for Land Intermediation and Regulation, 2018, p. 1) Adrar and Oued Sly in Chlef, Ain M'lila in Oum El Bouaghi, Aris and Djermah in Batna, Akbou in Bejaia, Sidi Khalid in Bouira, Wadi Smar in El Harrach, the Reghaia-Rouiba Industrial Zone in Algiers, and the Industrial Zone in Bir El Djir. Rehabilitating industrial zones is a national project aimed at updating the

infrastructure and developing their management approach in Algeria (AISSAT El Arabi, BRAHIMI Saïd, 2011, p. 7).

Among the important infrastructure that distinguishes the industrial sector in Algeria are the following:

### **1-1-3-1- Public Telecommunications Network in Algeria**

The communication network in Algeria covers the majority of the national territory with a network estimated at 22,000 kilometers of microwave lines, 15,000 kilometers of optical fibers, 50 ground stations, and 100 rural systems. In addition, there is a network for bulk data transmission called DZPAC, which has been operational since 2000, as well as the MEGAPAC network for bulk data transmission, which is under the supervision of the Ministry of Information and Communication (KEBAILI Omar, 2010, p. 31). The public telecommunications network in Algeria includes the following:

- \* Fixed and mobile telephone network with a rate of 86 lines/100 inhabitants (2017 statistics);
- \* Mobile phone subscribers estimated at 45.845 million (2017 statistics) with a growth rate of 0.06% compared to 2016;
- \* Fixed phone subscribers estimated at 4.051 million (end of 2017 statistics), with a coverage rate of 57.6%;
- \* WLL network subscribers estimated at 16.21%, and a digital phone network providing complete coverage of the national territory.

### **1-1-3-2- Information Transport and the Internet**

Information and communication technologies, along with digitalization, are essential factors for the growth of economies. Technology and digitalization have become ubiquitous in all economic, social, and cultural activities and represent a competitive advantage for modern economies. The postal and telecommunications sector, as well as technology and digitalization, are of great importance due to their impact on other sectors and their development. Therefore, it is necessary to monitor and measure the postal and digital economy.

In recent years, the number of institutions operating in the postal and telecommunications sector, as well as technology and digitalization, has significantly increased in Algeria. In 2016, there were around 239,646 institutions, which increased to 646,232 institutions in 2017, with a growth rate of 5.21%. This is attributed to the state's policy of supporting and encouraging the establishment of medium and small enterprises in the field of technology and digitalization. In 2017, 84% of companies had legal registration for individuals, while 16% were legal entities. The services

sector accounted for 39% of the total companies, followed by the retail distribution sector and goods production at 30% and 64% respectively (The People's Democratic Republic of Algeria, 2018, p. 8). The Internet network in Algeria is characterized by providing various services offered by the web, in addition to services required for e-commerce. The postal and communication network has already been established and is ready for operation.

#### **1-1-3-3- Transportation**

Algeria has a highly important transportation network, including maritime and railway transportation. The ports amount to 40, including 11 commercial ports such as Annaba, Skikda, Jijel, Bejaia, Dellys, Algiers, Tenes, Mostaganem, Arzew, Oran, and Beni Saf, some of which are specialized in petroleum products. The ports are equipped to accommodate various types of vessels, including petroleum vessels, container carriers, and passenger ships. They allow the transportation of all types of goods. The railway transportation network extends over 4,200 kilometers across the Algerian territory (BAKHTI Ibrahim, 2002, p. 32).

#### **1-1-3-4- Roads**

Algeria has a road network of over 118,000 kilometers, including 2,450 kilometers of highways. There is a trans-Saharan road connecting the north and south of the country, as well as an East-West highway constructed to link the Algerian-Moroccan and Algerian-Tunisian borders.

#### **1-1-3-5- Airports**

Algeria has 35 airports, including 13 international airports.

### **1-2- Investment Projects in the Industrial Sector in Algeria**

Algeria has implemented new strategies in recent years to revitalize the industrial sector, aiming to integrate, modernize, and develop the Algerian industry. In this context, Algeria seeks to improve its attractiveness as an investment destination, reviving industrial activity, creating business opportunities, and encouraging the establishment of new investments. These initiatives also aim to establish new flexible and innovative mechanisms for project financing and to encourage industrialists, with the goal of achieving comprehensive industrial development.

The following statistical table represents the investment projects approved during the period 2002-2015, and the information is based on a database from the National Agency for Investment Development (National Investment Development Agency (ANDI), 2018, p. 1):



**Table number (01): Summary of Investment Projects during the period  
2002-2017\*\***

Investment projects	The number of projects	%	The value in M of DZD	%	The job positions	%
Local investment	62334	98.58	11780833	82.38	1098011	89.15
Foreign investment	901	1.42	2519831	17.62	133583	10.85
the total	63235	100	14300664	100	1231594	100

**Source: (ANDI, 2016, p. 3).**

According to the reading of Table No. 01, despite the efforts made to restructure the industrial sector, its growth rates remained weak. The growth index of the food, tobacco, and sulfur industry recorded a positive rate of 2.1% in 2007 and 6.8% in 2008. However, this does not mean that the food bill decreased, as it increased by 3 billion \$ between 2007 and 2008. The contribution of the chemical, rubber, and plastic industry to the gross domestic product was estimated at 6.8% in 2008 (AYA Abd Errahman, BELKIOS Abdelkader, 2012, p. 172).

One of the distinguishing features of the Algerian industry is its modern origin. Algeria has recently developed new strategies to revive the industrial sector. These strategies aim to develop, integrate, and update industrial activities. New industrial investments have been encouraged, aiming to upgrade and diversify the economy. Innovative and flexible mechanisms have been put in place, relying on a set of axes (KHALDI Malika, Hakka Hanane, 2017, p. 5):

**1-2-1- Sectoral expansion of the industry, which includes:** valorizing natural resources, intensifying the industrial fabric, promoting new industries, such as refining crude oil and liquefying natural gas.

**1-2-2- Expansion and enlargement of the industrial space, based on creating cooperation through:** exploiting the concentration of economic activities based on their location, establishing an information network for companies, public institutions, research, training, and expertise entities, creating a suitable business environment, and intensifying investments.

**1-2-3- Industrial development policy, which involves:** rehabilitating institutions, considering innovation as an engine for industrial development, developing human resources, and promoting foreign direct investment.

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\*\* Note: These statistical tables of investment projects authorized during the period 2002-2017 consist of live information from a revised and corrected database of the National Investment Development Agency, taking into account canceled projects.

## 2- The industrial sector and key macroeconomic indicators in Algeria

Despite the efforts made by Algeria through the institutions responsible for supporting and promoting investment, through enacting laws, regulations, and rules aimed at developing the industrial sector, its contribution to key indicators such as gross domestic product and unemployment reduction remains weak and low compared to other sectors, such as the oil sector.

### 2-1- Contribution of the industrial sector to the Gross Domestic Product (GDP)

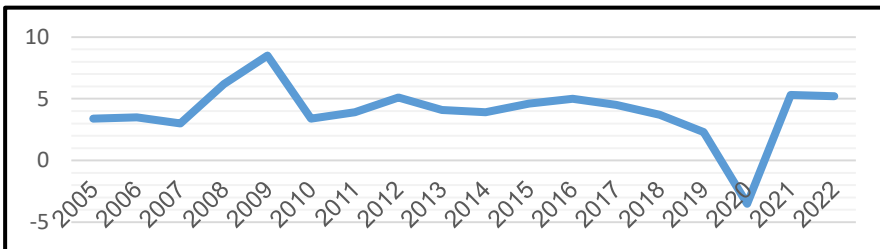
Algeria had to adopt a new economic reform plan, complementing the previous plans, which affects the Algerian economy in general and public institutions in particular, with reform policies that involve comprehensive industrial restructuring (BRIKA Essaid, AMMARA Nour El-Houda, 2015, p. 282). As part of this strategy, the state embarked on establishing economic workshops, and industrial development relied on branches of activities with high growth potential, such as chemistry, petro-chemistry, electrical industries, iron and steel, food industry, and manufacturing industries (SABAGHE Rafika, 2018, p. 11).

**Table number (02): Evolution of the industrial sector's contribution to the (GDP) during the period 2005-2022**

years	2005	2006	2007	2008	2009	2010	2011	2012	2013
The contribution rate of the industrial sector to GDP	3.4	3.5	3.0	6.2	8.5	3.4	3.9	5.1	4.1
years	2014	2015	2016	2017	2018	2019	2020	2021	2022
The contribution rate of the industrial sector to GDP	3.9	4.6	5.0	4.5	3.7	2.3	-3.5	5.3	5.2

Source: (ONS, 2016, 2018, 2023, pp. 14, 06, 03).

**Figure number (02): Evolution of the contribution of the Algerian industry to the (GDP) during the period 2005-2022**



Source: Prepared by the researcher based on the data from Table No. 02

As a reading of the numbers in Table No. 02 and the above figure indicates, the contribution of the industrial sector to the Gross Domestic Product (GDP) in Algeria was almost negligible during the entire study period from 2001 to 2018. This contribution ranged between 2.4% and 8.5% at best. The average contribution rate of this sector to the GDP during the study period was only 4.325%, which is very low compared to strategic sectors such as the oil sector. Furthermore, the table also reveals that the growth rates of the industrial sector were very low, primarily due to the recession in most of its branches (Khaled Ladjedel, 2017, p. 20).

The private industrial sector, mainly represented by small and medium-sized enterprises, accounted for a significant proportion, reaching 83.8% of the gross domestic product (excluding the hydrocarbon sector). This highlights the importance that the private sector has gained in achieving development and economic growth. The National Economic and Social Council, in its 2009 report, considered that intensive public spending and the construction and public works sector contributed to this growth.

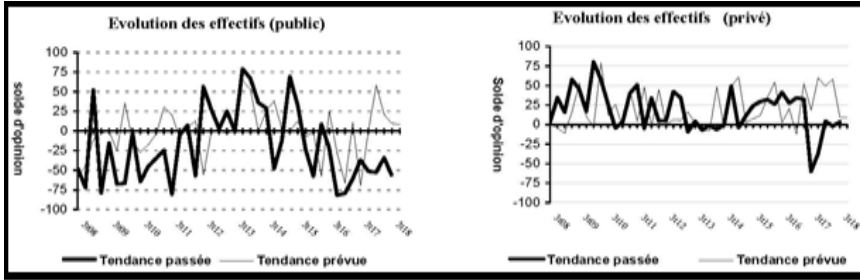
However, industrial production remains somewhat balanced despite the significant increase in domestic demand. On the other hand, the industrial sector does not benefit much from the privileges granted to it by the Algerian domestic market, as its production level remains below the expectations set in recent years.

In the fourth quarter of 2022, the real value added of the industry increases by 5.0% compared to the same quarter in 2021. Given their structure in the industry sector, this growth is mainly driven by the value added of energy, "Chemistry, Rubber, Plastic" and the Agri-food Industries (ONS, 2023, p. 4).

## **2-2- Industrial Workforce in Algeria**

The private sector in Algeria employs 6.95 million workers, accounting for 63% of the total workforce in the country. The public sector, on the other hand, employs approximately 4.09 million workers, representing 37% of the working population, estimated at 11.048 million workers. The total workforce, estimated at 11.048 million workers, consists of 9.073 million men, representing 82.1%, and 1.975 million women, representing 17.9%. Additionally, nearly seven out of ten workers are wage earners, representing 69.6%. This ratio is higher in the female workforce, estimated at 75.3%.

**Figure number (03): Evolution of Industrial Labor Density in the Public and Private Sectors in Algeria from 2008 to the first quarter of 2023**



Source: (ONS, 2023, p. 2).

According to the analysis of the graph number (03), it can be observed that employment in the public industrial sector has experienced a significant and continuous decline, especially during the period from 2015 to 2018. On the other hand, employees in the private industrial sector show some stability, except for a period from mid-2016 to early 2017, where employment witnessed a decline before returning to stability again. Approximately 76% of the workforce in the public sector have sufficient technical qualifications compared to their job requirements, while around 17% of the combined public and private sector workforce faced difficulties in employment, including administrative and supervisory staff. The report also indicates that 90% of employees in the public sector and over 69% of employees in the private sector have been unable to contribute to increased production in recent years, which is reflected in the concept of disguised industrial unemployment.

The industrial production of the National Public Sector records a significant increase of +5.6% in the first quarter of 2023 compared to the same period of the previous year, which was defined by a moderate decrease of 0.4%. In fact, the energy sector continues its upward trend and achieves a new performance of +5.6% during this first quarter of 2023.

After having rebounded significantly from the second quarter of 2022, hydrocarbons record a new positive variation of 6.4% during this quarter. The activity in the Mines sector is highly recovering and records a positive variation of 12.3%, after having experienced declines in the last two quarters of the previous year (respectively -0.5% and -3.4%). Similarly, the production in the ISMMEE sector is rising again and records a rate of +5.1% during this first quarter of 2023, thus interrupting the successive declines experienced since the third quarter of 2021. Additionally, significant increases define the Chemical Industries which show a rate of

+11.0%, the agro-food industries +3.7%, the leather industries +11.2%, and the Wood industries +38.6%.

### 3- Strengths and Weaknesses of the Algerian Industrial Sector and its Development Strategy

Algeria has attempted to implement numerous reforms and regulations in its industrial sector to adapt to the structural changes it has undergone. However, these efforts have exposed the sector to various risks and shocks, ultimately leading to its failure in achieving comprehensive economic development advantages.

#### **3-1- Weaknesses of the Algerian Industrial Sector and its Constraints**

Algeria continues to struggle with a set of weak economic policies due to the successive governments' inability to adopt a forward-looking position. They have also failed to formulate plans and programs capable of developing the industrial sector. This lack of clarity in the state's industrial policy is evidenced by its resort to multiple solutions within the framework of what it described as reform programs, which have proven to be unsuccessful. These failed choices have resulted in the dismantling of the industrial fabric and the collapse of industrial production tools, dispersing them into separate and unproductive units incapable of competing. Furthermore, the state's recent attempts to protect the public industrial sector and some of the decisions taken have hindered the promotion of the industry, leading to a decline in industrial output more than ever before. The weakness in the contribution of small and medium-sized industries to industrial development in general, particularly in non-hydrocarbon exports, can be attributed to several reasons, including (Tarek GUENDOUI, 2011, p. 10):

- \* The competitiveness of Algerian industrial institutions, whether in domestic or international markets, is weak. This weakness is due to the low level of training for workers, with productivity not exceeding 47% under the best conditions. Additionally, the raw materials used in production do not meet quality standards;
- \* Difficulty in obtaining accurate and up-to-date economic information about potential export markets, export credit details, insurance services, as well as import requirements related to importing raw materials for production intended for export. This hinders national operators from developing marketing plans for their products in international markets;
- \* Access to bank loans and the ineffectiveness of the stock exchange as an intermediary space are among the most significant problems, especially in light of the ongoing discussions regarding the previously called for

new industrial strategy by the government. This strategy includes utilizing the accumulated massive inventories held in bank funds for years, as well as the inability of small and medium enterprises to access the securities market due to their legal form, depriving them of the opportunity to benefit from direct financing;

- \* The majority of small and medium enterprises do not prioritize export within their goals, contenting themselves with a presence in the local markets. There is also a significant lack of utilization of modern technologies and innovation in all areas of their activities, along with a weak entrepreneurial culture in most institutions;
- \* Insufficient tax and customs incentives. The tax and customs burdens borne by small and medium enterprises hinder and disrupt productive work, in addition to the spread and growth of parallel activities;
- \* The supply of raw materials and semi-finished products, especially those imported, represents a real problem faced by small and medium enterprises, as most of them lack experience in managing import operations, especially modern ones;
- \* Insufficient preparation and monitoring of Algeria's participation in international economic exhibitions, resulting in limited recognition of Algerian products in foreign markets;
- \* Inadequate expertise within small and medium enterprises to engage in export activities, negatively impacting the sustainability of these institutions in exporting their products;
- \* The Algerian industry operates in sectors that lack industrial linkages among them. Transforming Algerian industrial sectors into industrial clusters by establishing some related industries would help reduce import costs, especially in the category of semi-finished goods and various types of equipment.

There are several weaknesses affecting the Algerian industrial sector, summarized as follows (BRIKA Essaid, AMMARA Nour El-Houda, 2015, p. 283):

- \* The existence of an important production tool, composite cards, capable of meeting the demand for a large number of products and national integration capabilities in various forms;
- \* The presence of essential elements of expertise in various technological processes and professions;
- \* Availability of raw materials, affordable energy, and cheap labor, along with the existence of a general market for all products;
- \* The geographical location of Algeria is conducive to the emergence of a regional market and industrial transportation;

- \* Possession of a huge financial surplus owned by the state, resulting from the enormous revenues from the Algerian hydrocarbon sector, which helps maintain economic stability when spent;
- \* Underutilized immense production capabilities due to weak production factors.

### **3-2- Strengths of the industrial sector in Algeria and its development strategy**

Economic adjustment programs are among the most debated issues in terms of their intended goals, achieved results, measures, and implementation mechanisms, both at the individual and international levels. This is due to their adoption by major international economic organizations such as the International Monetary Fund and the World Bank, as well as the increasing number of countries that have fully or partially adopted them. There is also a growing number of developing countries that are inclined to adopt or draw inspiration from these policies in designing local economic reform programs. Additionally, their repercussions on the economic, social, and political situations of the countries implementing them cannot be ignored. The emergence of these programs was linked to the beginning of the external debt crisis faced by developing countries in the 1980s, which was severe enough to threaten the entire international lending system. Many borrowing countries in Latin America, Africa, and Asia declared their inability to repay their debts, resulting in a deterioration of their balance of payments and the value of their local currencies, as well as a constriction of economic and social development processes within them (ZOUZI Mohamed, 2010, p. 70).

Algeria's experience in supporting and rehabilitating the industrial sector remains quite modest compared to the experiences of some similar countries. This necessitates making the most of those experiences whenever possible. In recent years, Algeria has embarked on a national program to rehabilitate industrial institutions that extends over many years into the future, aiming to enhance the competitiveness of domestic products to meet global standards. This program aims to (DERRADJI Said, 2012, p. 11):

- \* Assist industrial institutions in meeting the requirements of trade liberalization and the movement of goods and services between the European Union and Algeria;
- \* Improve and enhance the competitiveness of small and medium-sized national enterprises in terms of pricing, quality, and keeping up with technological advancements;

- \* Establish a national information bank to provide informational support for streamlining and improving decision-making in Algerian small and medium-sized enterprises;
- \* Focus on what is known as industrial clusters, which are groupings of institutions that share common factors, such as the use of similar technologies, participation in the same marketing channels, consultation among shared workforce, and even front-end and back-end relationships. These clusters also include a group of associated and supporting institutions that are considered necessary for enhancing the competitiveness of cluster members, such as universities and educational institutes (ATTAYEBI Abdallah, 2016, p. 85);
- \* Define more accurate criteria for classifying industries as capital-intensive or labor-intensive and provide greater technological flexibility. It is essential to differentiate between core or pivotal processes and additional processes and adopt strategic axes to achieve comprehensive industrial development based on resource valorization, intensification of the industrial fabric, and the promotion of new industries (ZOUBIR Mohammed, 2012, p. 26);
- \* Foster collaboration among industrial institutions themselves by expanding the industrial scope, its dissemination, and leveraging the concentration of economic activities according to their location. This includes establishing an information network for companies, public institutions, research and training bodies, and expertise, while creating a conducive business climate and intensifying investments;
- \* Adopt approaches that serve industrial development more effectively through rehabilitating institutions and emphasizing innovation as an engine for industrial progress. This involves developing human resources and their requalification, along with efforts to attract more foreign direct industrial investment (National Investment Development Agency (ANDI), 2018, p. 1).

### **Conclusion**

The industry holds great importance, both at the individual and institutional level, for investors, governments, countries, leaders, and policymakers. This is due to its significant contribution to the national economy and its indicators, such as employment generation, reducing unemployment rates, and contributing to the Gross Domestic Product (GDP), capital circulation, capital flows, and other factors that greatly influence overall development rates. Despite this increasing importance, the non-hydrocarbon industrial sector in Algeria continues to suffer from



stagnation and a decline in performance due to the suboptimal and inefficient utilization of available production capacities.

Economic development in Algeria has consistently followed a specific strategy that prioritizes certain sectors over others, particularly the oil sector. This has led to an imbalance in the industrial sector, which is heavily dependent on external markets for industrial equipment, technological facilities, and even raw materials, despite possessing a competitive advantage in most cases. The diversity and multiplicity of strategies indicate the fragility and weakness of the Algerian industrial sector, necessitating its rehabilitation through the formulation of a unified and long-term strategy that relies on the abundance of financial resources derived from the oil sector. This would provide a strong push for the industrial sector to become the driving force behind public expenditures in Algeria.

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