The manufacturing sector in Algeria: analysis and interpretation of annual variations

قطاع التصنيع في الجزائر: تحليل وتفسير التغيرات السنوية

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Abstract

The manufacturing sector is at the root of the economic, productive and even social power of each country. Industry from all industries has always been indisputable. Creator of funds, wealth, and employment. It is also the vector par excellence of an active insertion in the tumultuous world of globalization. The industry is thus, a robust instrument for improving performance, profitability and productivity, hence economic growth. Source of technological development, carrier of innovation and technical progress and managerial, it gives a margin of autonomy to the nation. The objective of this article is to present the analysis of the evolution of the industrial production in Algeria, thus to interpret the variation of the index of this evolution, by focusing on the public park.

Keywords:

Sector, public sector, Manufacturing industries, index of industrial production, Variation analysis.

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ملخص

والواقع أن قطاع الصناعات التحويلية هو أصل القوة الاقتصادية والإنتاجية وحتى الاجتماعية لكل بلد. كانت صناعة جميع الصناعات دائما غير قابلة للجدل. خالق الأموال والثروة والعمالة. وهو أيضا ناقل بامتياز لإدخال نشط في عالم العولمة المضطرب. وبالتالي فإن الصناعة هي أداة قوية لتحسين الأداء والربحية والإنتاجية، وبالتالي النمو الاقتصادي. مصدر التطور التكنولوجي، الناقل للابتكار والتقنية التقدمية والإدارية، فإنه يعطي هامش الاستقلال للدولة. والهدف من هذا المقال هو تقديم تحليل لتطور الإنتاج الصناعي في الجزائر، من أجل تفسير التغير في الرقم القياسي لهذا التطور ،مع التركيز على القطاع العام .

كلمات البحث **:**

قطاع النشاط ، القطاع العام ، التصنيع ، مؤشر الإنتاج الصناعي ، تحليل التباين

Introduction

The new international context has altered the relations between developed and developing countries to enable them to seize development opportunities, or even economic catch-up provided that they manage to articulate their national parameters with the evolution of the global economy (MPPI, [2007]). Algeria is one of the formerly colonized countries desperate to build a modern industrial base.

Yet in 1938, Algeria exported 85% of manufactured goods to France from SMEs, and imports covered 75% of its needs (Larabi, M, 2010)[2] and "as a demand for goods and services emerges characteristic of the consumption pattern of developed countries, supply hardly meets the requirements of a highly productive market economy, combining technical change, social progress and democracy"

[2] Bouri. N, [2012].

(Amarouche. A, [2010][3]). As a result, what is the current situation of the Algerian Manufacturing Industries sector?

Industry is, in fact, at the base of economic power. This precept appears today indisputable. Creator of wealth, it is also the vector par excellence of an active insertion in the tumultuous world of globalization. No country that really wants to count can abstract this question. It is therefore positive that the state has become aware of the need to put back in order of battle all the industrial fabric and all the experience accumulated in more than three decades of industrialization (CNC-SME, [2007]). The industry is thus a powerful tool for raising productivity, hence the growth of the national economy. Carrying innovation and technical progress, it gives a margin of autonomy to the nation.

Indeed, the industry, which is defined in a restrictive manner as a complex of processing activities, occupies a central place in the Algerian production system for several reasons [4] :

- Industrial activity can be a powerful element of structuring the national economy;
- Industrial activity positively affects productivity because it is capable, by nature, not only of absorbing and diffusing technical progress but also of being its source;
- In doing so, industrial activity gives companies a competitive capacity and a high bargaining power.

[3] Amarouche. Ahcène, "What place for industrial SMEs in a liberalized economy of rent? Case of Algeria ". In "The Algerian SME and the challenge of internationalization" Foreign experiences, under the direction of (André Joyal, Mohamed Sadeg, Olivier Torres), edition, L'Harmattan, 2010, P 123.
[4] Ministry of Participations and Investment Promotion (MPPI), "Strategy and policies for industrial recovery and development", Imprimerie Officielle, Algiers, 2007, P 20.

1. Activity's Sectors : A question of Nomenclature

1.1. The classification of N.I.S.E.S [5]

Based on the terms sector, branch and sector, INSEE studies companies according to the three classifications; "the classification by sectors brings together companies with the same main activity (this is assessed either by the number of employees per activity or by sales by activity), whereas the classification by branch favors a logic of products and groups together fractions of companies producing the same family of products. The channels include a set of complementary activities from the raw materials to the end user, through the successive transformations "[6].

1.2. Colin Clark's classification

The division of activity is proposed in the 1960s by Colin Clark (British economist and statistician). Indeed, this traditional classification groups companies in three sectors:

- The primary sector

For the British economist Colin Clark, the primary sector is the exploitation of natural resources, and includes activities related to the transformation of the natural environment (fishing, forestry, agriculture) including all the companies producing raw materials (Agriculture, Fisheries, Forestry ...);

- The secondary sector

The secondary sector includes industrial activities, that is, continuous large-scale processing of raw materials into transportable

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[5] I.N.S.E.S : National Institute of Statistics and Economic Studies : (I.N.S.E.E).
[6] Diemer. Arnaud, "Business Economics", IUFM d'Auvergne, 2006, P 22.

products. This sector includes all industrial goods-producing activities (mining, automotive, agro-food, chemistry, pharmaceuticals, construction, public works, etc.). Including mining and processing industries, the secondary sector is relatively heterogeneous. One can distinguish according to the stage of elaboration of the product; extracting industries (ores, quarries), energy industries, basic industries that perform the first processing, and processing industries that operate at a more advanced stage (Diemer, A, [2006]).

- **The tertiary Sector**

The tertiary sector says "services" merchant or not (health, education, banking, insurance, etc.). As a result, this sector produces intangible goods that include all public and private service activities. It should be noted in this regard that this (Clark's) classification, however, remains relatively "imprecise and not very operational due to the heterogeneity of the sectors of activity.[7] ".

1.3. The Algerian nomenclature of activities (NAA)

Regarding the question of classification of activities, and highlighting the case of Algeria, it should be noted that the former Nomenclature of Activities and Products (NAP80) has many technical and methodological shortcomings including the lack of clear criteria for defining the activity, absence of explanatory notes, imbalances in the classifications. For this, and in order to open up to the market economy, Algeria must include its nomenclature system in the context of ongoing developments, through the development of a new nomenclature of activities and products (NAP 2000) by reference to international nomenclatures.

Indeed, the new Algerian nomenclature of activities (NAA) is an approach to provide a hierarchical set of categories of

[7] Diemer. Arnaud, "Business Economics", IUFM d'Auvergne, 2006, P 22.

economic activities usable which allows a classification as easy as possible economic agents according to their main activity (N.O.S, [2011]). It should be noted in this regard that these categories of activities are hierarchical in 17 sections, 60 divisions, 559 groups and classes, and 2261 sub-categories, as shown in the table below:

Table (1.): Structure of activity classifications

	nomenclature NAP 80	**New nomenclature NAP 2000**
Sectors	22 Sectors **NSA** : 17 Sectors	17 sections
Branches of Activities	**NAPR** : 99 branches	60 divisions
Activities	**NAP** : 614 activity	**NAA** : 559 classes
Product	**NAP** : 2027 Product	**NPA** : 2261 Sub Categories

Source : S.O.S, [2011][8].

2. Presentation and analysis of the evolution of industrial production in Algeria

In Algeria, the industrial sector has experienced considerable growth and a rapid rate of growth during the 1970s and early 1980s. However, this rate showed a weak performance of this sector and the economy in general. during the 1990s.

[8] N.O.S, "Note of presentation of the Algerian nomenclature of activities" (NAA), undated document, P 7.

According to the Ministry of Industry and Restructuring (MIR, [1999]), the recession that hit the industrial sector during [1989 and 1998] resulted in a 25.8%[9] decline in industrial production during this period, and an under utilization of production capacity which stabilized around 30% to 60%, as well as an insufficient representation of the value added of the industrial sector and finally a stagnation of exports of industrial products . On the other hand, the year 1998 seems to be that of the recovery because the data of the ministry show a growth of the index of the industrial production of 10.50% compared to the previous years.

The following tables present the evolution and the variations of the annual index of industrial production of the national public sector:

[9] Miliani. Y, [2005], P 22.

Table (2.): Annual evolution of the index of industrial production between [1998-2009] "National public sector"

Base 1989=100

Codes Nome	Entitled Aggregation	1998	1999	2000	2007	2008	2009
General index		**83,8**	**83,8**	**85,2**	**90,1**	**91,8**	**92,2**
Index Excluding Hydrocarbons		**75,6**	**75,1**	**75,0**	**73,1**	**76,2**	**78,9**
Industries		**69,0**	**67,7**	**66,8**	**51,8**	**52,8**	**53,6**
02	**Energy**	156,2	167,3	171,3	253,8	273,8	293,4
03	**Hydrocarbons**	119,2	121,5	129,3	150,6	147,1	139,2
05	**Mines and quarries**	70,8	68,7	79,6	120,9	132,8	137,3
06	**ISMMEE**	51,1	55,4	56,6	55,4	57,6	62,9
07	**Mat. Const. Ceramic**	93,4	91,2	97,1	116,1	114,2	113,1
09	**Chemistry, Plastics**	93,2	91,6	97,2	67,4	69,1	70,5
10	**Agro. Tobacco**	95,4	93,9	85,5	32,3	34,5	31,3
11	**Textile, Bonn. Confection**	48,1	39,0	33,4	18,4	18,2	18,4
12	**Leather and Shoes**	22,4	16,5	15,5	7,4	7,3	6,6
13	**Wood, Cork and Paper**	45,2	38,8	35,6	23,2	20,4	16,0
14	**Various industries**	20,6	19,1	26,5	13,0	10,3	10,3

Source : ONS, Statistiques économiques N° 149, N° 152, [2010].

<u>Table (3.):</u> Annual changes in industrial production between [1998-2009]

"National public sector"

Base 1989=100

Codes Nome	Entitled Aggregation	1998/ 1997	1999/ 1998	2000/ 1999	2007/ 2006	2008/ 2007	2009/ 2008
General index		**7,2**	**0,0**	**1,7**	**0,3**	**1,9**	**0,4**
Index Excluding Hydrocarbons		**9,8**	**-0,7**	**-0,1**	**-0,3**	**4,3**	**3,5**
Industries		**9,3**	**-1,9**	**-1,3**	**-3,9**	**1,9**	**1,5**
02	**Energy**	8,7	7,0	2,4	6,0	7,9	7,2
03	**Hydrocarbons**	0,8	2,0	6,4	1,4	-2,4	-5,4
05	**Mines and quarries**	5,4	-3,0	15,9	8,0	9,8	3,4
06	**ISMMEE**	13,5	4,4	2,2	-8,9	3,9	9,2
07	**Mat. Const. Ceramic**	4,7	-2,3	6,4	2,7	-1,6	-1,0
09	**Chemistry, Plastics**	16,7	-1,8	6,2	-4,4	2,5	2,0
10	**Agro. Tobacco**	14,9	-1,6	-9,0	-2,1	6,8	-9,1
11	**Textile, Bonn. Confection**	-1,1	-19,0	-14,4	-15,0	-1,1	1,2
12	**Leather and Shoes**	-5,3	-26,4	-6,0	-4,8	-1,2	-10,3
13	**Wood, Cork and Paper**	-4,3	-14,3	-8,2	-6,8	-11,9	-21,4
14	**Various industries**	-2,0	-6,9	38,2	-31,2	-20,6	-20,6

<u>Source</u> : O.N.S, Statistiques économiques N° 149, N° 152, [2010].

Reading the tables makes it possible to make a clear use of the growing trend of the General Industrial Production Index over the [1998-2009] period, from 83.8 in 1998 to almost 92.2 in 2009, whose variations reflect the same logic especially between [2006-2007] and

[2007-2008]. Thus, after a relatively large increase of 2.8% in the first half of 2008, the industrial output of the national public sector shows a deceleration of the pace with a rate of (+ 1.0%) in the second half of the same year, thus placing growth in 2008 compared to 2007 (+ 1.9%) and (+ 0.4%) in 2009.

And as stated by the ONS, [2010], the downward trend in the rate of increase is mainly due to a significant drop in hydrocarbon production levels in the fourth quarter (-7.5%) in 2008, as well as to the three first quarters of 2009 respectively -9.9%, -8.7% and -3.6% locating the growth rate of the year -5.4% (ONS, [2010]).

Notwithstanding the increasing decline in industrial activity throughout the period [1998-2008], from 69.0% to 52.8%, manufacturing industries nevertheless scored a good performance (+ 1.9%) in 2008 despite a decline of 2.4% recorded in the third quarter of the same year, and after negative and successive rates of change since 1999.

Indeed, this result is the result of significant growth in the Iron and Steel, Metal, Mechanical, Electrical and Electronic Industries (ISMMEE), that is, (+ 3.9%) as a rate of change between [2007-2008], with a substantial increase in the fourth quarter reported by the ONS, which comes to (+ 27.7%), agri-food industries (IAA), ie (+ 6.8%) as a rate of change between [2007-2008], however a decrease of (+ 9.3%) in the fourth quarter, as well as the chemical industries with a rate of change during the same period, ie (+ 2.5%), and with a fall of 12.9% in the second half.

The energy and mining and quarrying sectors show an increase in their production levels in 2008 compared to the previous year. The latter recorded respective increases of (+ 7.9%) and (9.8%).

In addition, it should be noted that, these industries thus experienced a positive growth rate in 2009, that is, (+ 1.6%), despite the significant decrease of 5.0% recorded in the third quarter of the same year. As in the previous year, this increase is explained by a significant increase in ISMMEE (+ 9.2%), registering a substantial increase of (+ 23.7%) in the first half of the year and a decrease of 2 , 6% in the second half, the chemical industries (+ 2.0%), with a significant increase of 17.5% in the second half, and with however a fall of 9.3% in the first half. In turn, the energy and mining and quarrying sectors recorded respective increases of 7.2% and 3.4%.

Conclusion

Based on this analysis, we have clearly seen an increasing evolution of the General Index of Industrial Production during the period [1998-2009]. According to (O.N.S, [2012]), a number of activities have contributed to this trend up to 2012. The production of electrical energy continues to evolve positively with increasing rates. Thus the growth recorded in 2012 is 12.1% compared to the previous year which saw a variation of + 8.2%, of lesser magnitude, but still important.

Among other things, manufacturing industries show a stagnation of production, after decreases recorded in 2010 and 2011 (respectively -5.4% and -1.2%). And as reported by the ONS, [2012], hydrocarbons have thus posted negative variations with more or less significant rates since 2008. The four quarters of 2012 are characterized by decreases, the largest (-12.1%) is recorded in the third. Mines and quarries follow the same trend over three consecutive years. For this sector, the rate recorded in 2012 is -5.6% with significant decreases in the first and third quarters (-11% and -9.4% respectively).

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