Public devices entrepreneurship and employment in the industry in Algeria

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Keywords

Entrepreneurship, employment, public device, unemployment, cluster

Abstract

The company is the basic unit of wealth creation, employment and innovation. Encouraging its creation is to implement the conditions for its development and especially its sustainability. In Algeria, with the liberalization of the economy and trade liberalization, which began with the stabilization programs and expanded thanks to the structural adjustment plan, more recently, free trade agreements, there is a proliferation of companies private. Resulting from the restructuring of the economy and public support schemes (mainly financial) to the creation of companies, without actually being incorporated into a development strategy without preparation to competition, the majority of Algerian industrial and more particularly those from public systems are characterized by low competitiveness against imports and lack of protection means and incentive to evolve and remain permanently active.

Our work shows that these aims public measures should only be a mere adjunct to the free creation of businesses brought about by the market, while the state would intervene in the implementation of all institutions and environmental conditions necessary for the creation and development of these companies.

Introduction

Economic growth depends on the creation of enterprises which in turn is an important source of job creation. In Algeria, since the second half of the eighties, the non-hydrocarbon industry experienced deindustrialization due mainly to the lack of investments and the effects of the measures of the Structural Adjustment Programme implemented during the 1990s (devaluation, liberalization prices, lack of credit and privatization of public enterprises).

At the end of the SAP, the situation of the private as well industry (already marginalized in the economy administered) and public, therefore characterized by a weakness in the creation of businesses and jobs and imbalances at all levels: financial, sectoral and regional etc. Faced with this situation and encouraged by a recovery in export earnings of oil that continue to be for Algeria's main source of income and which it depends to finance its economy, the government has implemented a policy growth and employment focused on supporting the creation of micro enterprises. This assistance takes the form of tax reduction, facilitation of obtaining credit, interest-free credit, access to local etc. Make the finding of this policy is above all, to what extent it has contributed to the reversal of the aforementioned imbalances. Specifically, we look at the regional imbalance in the industry whose situation challenges us.

I. State of Industrial small and Medium-sized enterprises in Algeria

Job creation is intimately linked to the growth and entrepreneurship. The latter can not exist without the creation of new businesses. In Algeria, until the 1990s, the creation of companies fell in the public domain and mainly confined to areas considered non-strategic. From the middle of this decade, under the aegis of international financial institutions (IMF and World Bank), privatization of public enterprises, measures to support the private sector (investment codes promulgated in 2001 and 2006) and liberalization External Trade, were all factors that have favored the emergence of a business class that can be categorized in small rather than medium enterprises.

It seems important before continuing our analysis on SMEs to give its definition as defined in Algerian regulations. Thus, the 01-18 law of 21 December 2001 on the orientation law for the promotion of SMEs defines it as: "any company producing goods and / or services:

- Employing 01-250 people
- Whose annual turnover does not exceed 2 billion dinars or whose annual balance sheet total does not exceed 500 million dinars and that meets the criteria of independence. "

By criteria of independence, this Act means the company whose capital is not owned 25% or more by one or more other companies do not meet the definition of SMEs.

A survey 1 conducted by the National Statistics Office (ONS) in 2011 identified 934,250 economic entities existing at national level. These entities are mainly concentrated in the urban areas (over 83%) in the private sector (almost 98%) and recently (over 78% were created in 2011). The majority of these companies were born of public measures to help the creation of companies set up from the 2000s, privatization of public enterprises or partnership with foreign companies including grenfield brown field IDE .

The breakdown of these enterprises by sector shows their predominance in services and for all years subject to analysis. Services (provided to households and businesses) experienced strong growth during the second half of 2000, driven by food services and those related to the development of telecommunications and health.

Table 1: Evolution of the number of companies by sector

	Tuble 1.	Diolatio	ii or the ii	unice e	or compan.	ico by oc	ctor	
	1995		2000		2004		2011	
Industry	36285		43721		46991		95445	
Building	16010		18674		72869		9117	
Services	183461		224385		102841		829688	
Including Commerce	127234		157392		37954		515700	
Total	235756	100%	286780	100%	182701	100%	934250	100%

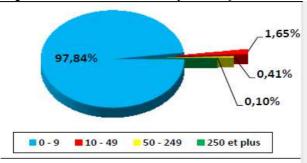
Source: Data from the Ministry of SMEs and crafts, CNAS (National Social Insurance Fund) and ONS

The industrial sector ², supposed to play the role of leverage in overall growth and innovation in particular, recorded a very low rate of business creation see stagnation until 2011. This phenomenon is the result of deindustrialization, first, the implementation of the SAP, trade opening with the corollary expansion of imports, and secondly, the redirection of resources towards the energy sector and unproductive sectors (infrastructure. related to Keynesian stimulus programs).

The service sector of the economy in Algeria is not a post-industrial service sector as in the developed economies where it is induced by labor productivity gains and demand for services, rather it reports to a stylized fact in countries development according to [Kalantzis 2005]. A stylized fact it connects to asymmetric sectoral developments, "producer sector the size of non-tradable goods (which generally includes services and construction) increases relative to that of tradable goods producing sector (the manufacturing industry) before the crisis. "

Concerning the size of these companies, we notice that they are mostly very small with a small staff of no more than ten people. These small companies represent over 97% of all entities, while those with numbers 250 and 932 entities represent only 0.1% of the total.

Graph 3: Distribution of enterprises by slices of staff



Source: Data from the National Statistics Office (NSO), 2011

The distribution of firms by annual sales, shows that nearly 8.6% of the companies activating in the industry have an annual figure lower than twenty (20) million dinars and those with a turnover greater than two (2) billion dinars represent only 0.4% of companies. Within this activity, companies with a turnover below 20 million dinars represent almost 84% of the total of this class,

while only 0.4% has annual revenues exceeding 2 billion Dinars. Within this last installment, it is, however, industrial companies occupying first place with a rate of 44% of companies, followed by construction and services.

Table No. 2: Distribution of industrial companies according to turnover

Turnovers in industry (million dinars)	Number of companies	Of total enterprises	On total industry	Including manufacturi eraindustry
<20million DA	80029	8.60%	83.80%	78992
20-200000000 DA	1 3047	1.70%	1 3.2%	11747
> 200 million DA	1946	0.2%	2.03%	1297
> 2milliads	423	0.05%	4~0.4%	300

Source: Ibid

Geographically, the imbalance in the distribution of firms in the country, is as important as that which characterizes sectors. Thus, over 66% of businesses are in the north, North Center with more than 34% of total alone. Some wilayas, like Algiers, Tizi Ouzou and Bejaia total more than 17% of all enterprises and over 53% of industrial companies. Highlands, represented by the wilayas of Setif, Batna and Msila essentially come second.

Table 3: Distribution of industrial enterprises by region

		Industrial companies				
REGION	Number business	Number of Companies	In% of total	As% of totalindustry		
NORTH	Dusiness	of Companies	enterprises	totalilluustiy		
CENTRAL	309830	32650	3.49%	34.2		
NORTH WEST	166632	16563	1.77%	17,35		
NORTH EAST	141090	15454	1.65%	16.20%		
HIGHLANDS	236515	23088	2.47%	24.20%		
GRAND SUD	80183	7690	0.82%	8.05%		
TOTAL	934250	95445		100%		

Source: Ibid

All wilayas, without exception, are business-oriented, industry ranking third behind the services. Thus, for the majority of wilayas, trade is the activity that characterizes more than 50% of companies with the services the rate was over 80%. This has the leading cause expansion of trade opening induced by free trade agreements that Algeria signed with partners in our Party: Algeria Association Agreement European Union and the Free Trade Agreement with Arab countries (AFTA: Arab Free Trade Area). It is basically import of finished products and resale in the state giving rise to any value creation.

L R. Elizondo and Krugman (1992) ³ have, from the example of Mexico (considered the largest urban center), a strong link between the formation of these "giant cited" specialized in exporting manufactures and model of import substitution rather than a more open trade which, in contrast, tend to reduce them. Thus, according to these authors, in economic geography, there is a greater concentration of manufacturing companies of scale economies, where the state opts for a political orientation of the economy towards the domestic market. The agglomerations and built from the interaction of factors such as economies of scale, the size of market and transportation costs. In 2007, the Department of holdings and Investment Promotion (MPPI), has in the "preliminary draft White Paper" on "the strategy and stimulus policies and industrial development" published in 2007 by the MPPI, raised the issue of the need for a strategy and industrial policy: should retain a targeting policy to develop branches and measures to accompany or implement an institutional environment conducive to free enterprise creation.

To alleviate this situation, the authorities have implemented a set of business creation schemes to boost growth and employment.

II. Public devices creation of businesses

From the beginning of the 1980s, it was noted a slowdown in investment in all areas and particularly in industry. This slowdown is justified by the public authorities in the fact that the

leftovers to make development plans are too large, so it seemed more rational to finalize before new spending. Moreover, the process of falling prices for oil began in the same period will reinforce the government in this decision, which will result in reduced growth and employment.

The situation will further worsen with the implementation of the conditionalities of the structural adjustment program of the 1990s, imposed by the international financial institutions in return for the rescheduling of external debt. Among the conditionalities the disastrous effects on the economy: the devaluation of the exchange rate, price liberalization and privatization. Thus, despite numerous reforms undertaken by the authorities for the recovery of the national economy, the growth situation and employment remains fragile.

To remedy this situation, a package of incentives for the creation of businesses and jobs mechanisms were put in place by the government dice the 1990s. The purpose of these devices was the reduction of unemployment increasingly affecting young major who could not find jobs because of falling investment and cessation of activity of many public enterprises during this period. Improving the financial situation of the country induced by rebuilding foreign exchange reserves at the beginning of the 2000s, encouraged the authorities to initiate Keynesian stimulus plans, articulated around the construction and especially infrastructure. The aim of these plans is to boost growth and consequently employment through business creation facilitation measures (microcredit, tax incentives etc.) and for young graduates jobs .

It is in this context that the two most important incentive schemes for the creation of activity were created. This is the CNAC (National Unemployment Insurance Fund), created in 1994 and ANSEJ (The National Agency for Support to Youth Employment) established in 1996. More recently, in 2004, another agency the ANGEM (National Agency for Microcredit Management) was created. All these devices have a common objective to encourage, support and assist unemployed youth entrepreneurship project leaders. They cover (for ANSEJ and ANGEM) all phases of creation, launch and expansion of the business and all areas of economic activity.

Table 2: Summary of criteria and advantages of job creation schemes

Device	CNAC	ANSEJ	ANGEM
Creation date	1994	1996	1999
		1970	1000
Age	35-50	19-35	18 years and over
-	Unemployed	Unemployed	Low income
Areas of activity covered	All activities	All activities	All activities
, , , , , , , , , , , , , , , , , , , ,			
Tax incentive	VAT exemption	VAT exemption (for	VAT exemption (for
Tax incentive		• `	
Tax incentive	(For goods and services)	equipment)	equipment)
Tax incentive		• `	equipment) Customs duty at 5%
Tax incentive	(For goods and services)	equipment)	equipment) Customs duty at 5% Exemption from
Tax incentive	(For goods and services)	equipment)	equipment) Customs duty at 5% Exemption from property tax (for 3
Tax incentive	(For goods and services)	equipment)	equipment) Customs duty at 5% Exemption from
Tax incentive Type of Funding	(For goods and services)	equipment)	equipment) Customs duty at 5% Exemption from property tax (for 3

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Source: Table prepared from information of various devices sites.

Funding for projects in those three devices is triangular-type: personal contribution, bank credit and unpaid loan (PNR). As an example for devices and ANGEM ANSEJ 4 we have:



Source: data from the two agencies

By industry, the two most important devices (ANGEM and ANSEJ) are characterized by a concentration of activity in industry, agriculture and building in terms of ANGEM and in trade and services (especially transportation and catering) for ANSEJ.



Graph 4: Distribution of projects and ANSEJ ANGEM by sector (2012)

Source: Ministry of Industry data

In terms of number of projects for both devices for the years 2012 and 2013, the data show some

stability in the creation of ANSEJ projects and for all sectors. The same trend is also observed for the ANGEM device. This stability while the number of business start-ups has increased over the period is explained by the death of some SMEs.

Tuble of Mortality private corporations of the					
	Secteurs d'Activité	2011	2012	F	Ecart
				Nbre	Part en%
I	Agriculture et pêche	66	55	-11	0,68
II	Hydrocarbures, Energie,	22	19	-3	0,24
III	ВТРН	3 512	3 004	-508	37,32
IV	Industries manufacturières	1 113	944	-169	11,73
\mathbf{V}	Services	4 476	4 028	-448	50,04
	Total Général	9 189	8 050	-1139	100

Table 3: Mortality private corporations SMEs

Source: Ministry of Industry

Mortality affects all sectors but particularly services, industry and construction. Several causes are behind the disappearances: existence of strong competitiveness in certain sectors (services), use traditional management methods are ineffective as soon as the number of staff exceeds a certain threshold, research easy win and short-term opportunities, market research without offering insight into the most promising sectors in the long term etc.

III. The creation of jobs

There is no doubt that economic growth is the main source of jobs, and we can not conceive of job creation without entrepreneurship. The development of human capital as the main engine of economic growth. In Algeria, job creation has experienced contrasting trends over the past three decades. During the 1980s, job creation was mainly the result of the implementation of development plans focused on the industrialization of the 1970s The 1990s will conversely marked by a decline of more and faster the loss of jobs caused by the decline in investment and the closure of businesses mainly due to the implementation of the SAP. Improving the financial situation of the economy has caused the rise in oil prices during the 2000s, will push the authorities to address the imbalance in the labor market expressed by very high unemployment rate. Thus, medium-term development plans financed by the state and on infrastructure spending will be launched: the first in 2001, this is the plan to support economic recovery; the second in 2005, the additional Economic Recovery Plan; a third in 2009 and finally the 2014 progress.

All these plans aim to create direct and indirect jobs by stimulating the creation of companies in infrastructure-related sectors. These plans have certainly helped reduce the unemployment rate, but it remains high and marked by a change in structure.

Taux de chômage

To provide the difference (1700-2014)

Taux de chômage

To provide the difference (1700-2014)

To provide the difference (1700-2014)

Graph 5: Evolution of the unemployment rate (1980-2014)

Source: data of the National Statistics Office

The analysis by age enables further identify the most affected by unemployment populations. The data indicate that the segments most affected are those of [15-24] and [25-35ans].

Table 5: Characteristics of employment 2005-2014

	Formation professionnelle	Enseignement supérieur	Total diplômés
Masculin			
Taux d'activité économique	89,1	85,3	87,9
Ratio emploi/population	73,0	69,6	71,9
Taux de chômage	18,0	18,4	18,1
Taux d'inactivité	10,9	14,7	12,1
Féminin			
Taux d'activité économique	46,2	71,6	59,7
Ratio emploi/population	33,0	43,0	38,4
Taux de chômage	28,4	39,9	35,8
Taux d'inactivité	53,8	28,4	40,3
Ensemble			
Taux d'activité économique	72,6	77,1	74,5
Ratio emploi/population	57,6	53,7	56,0
Taux de chômage	20,6	30,3	24,9
Taux d'inactivité	27,4	22,9	25,5

Source: ONS data

For the category of unemployed youth, graduates and particularly university graduates are most at risk of unemployment. The reasons for this phenomenon lies in the mismatch between labor demand above all from a low capital intensive productive sector do not require a high level of qualification. According to the 2012 IMF report on employment in Algeria, the private sector has not been able to create enough skilled jobs, in addition there is a distribution of students in favor of sectors such as law, humanities and education that do not meet the needs of this sector.

By industry, it is mainly the sectors of public works and services which share the employed population come we reported earlier.

Table 6: Population distribution occupied by industry in 2012

	1	J	J		1	En milliers
Secteur	Masculin		Féminin		Total	
d'activité	Effectif	9/0	Effectif	9/0	Effectif	%
Agriculture ⁸	1 040	12,6	95	6,5	1 136	11,7
Industrie extractive	177	2,1	14	0,9	191	2,0
Industrie manufacturière ⁹	747	9,0	399	27,1	1 146	11,8
Construction	1 860	22,5	25	1,7	1 886	19,4
Commerce ¹⁰	1 415	17,1	60	4,1	1 475	15,2
Transport et communication	513	6,2	29	2,0	542	5,6
Autres services marchands ¹¹	323	3,9	52	3,6	375	3,9
Autres services non marchands ¹²	2 185	26,5	799	54,2	2 985	30,7
Total	8 261	100	1 474	100	9 735	100

Source: National Statistics Office

Furthermore, the creation of jobs by incentive schemes for the creation of enterprises remains very low and is characterized by job insecurity due to the death of these companies.

	Jobs created by SEA microenterprises
2001	2 3800
2002	28400
2003	28100
2004	19100
2005	36500

Source: Ministry of Industry

For such jobs, their cost is relatively low when it comes to integration measures while their cost is very high as it passes through the credits granted to business creation.

Statistical's detection of agglomeration's industrial enterprises in Algeria

A cluster is a spatial organization defined as an aggregate, a case of grouping close to each other; the proximity being defined in the sense of geographical distance. The methods of local's detection of cluster identify cases incoherent clusters under the null hypothesis of no clustering and evaluate their level of significance .Since methods of global's detection of aggregation case, they study the spatial correlation and detect the trend of clustering.

The purpose of this work is firstly test for employment and industrial projects funded by ANSEJ the trend of clustering using the Moran's test and secondly locate significant clusters by Kulldorff scanning's method.

The Moran's test is based on Moran's statistics which measures the similarity between neighboring spatial units, its interpretation is similar to that of a correlation coefficient (Gaudart (2007). The spatial autocorrelation is positive when values high or low of a variable tend to cluster in space and is negative when spatial units are surrounded by neighbors with very different values for the same random variable. The determination of spatial interactions requires defining links Neighbourhood between the spatial units. All of these links is summarized in a matrix $W = [w_{ij}]$ called proximity 's matrix. Each term w_{ii} indicates how two regions i and j are spatially arranged. In the framework of this work, the proximity's matrix used is adjacency matrix because the only information available is the geographical origin. It is defined by:

$$w_{ij} = \begin{cases} 1 & \text{if wilaya i has borders with the wilaya j} \\ 0 & \text{otherwise} \end{cases}$$

assumed that the wilaya i has no borders with itself implying $w_{ii} = 0$. It was

Moran's test

The test is based on statistical said Moran's index denoted I and defined by:

$$I = \frac{1}{w_+} \cdot \frac{\sum_{i=1}^{i=K} \sum_{j=1}^{j=K} w_{ij} (y_i - \bar{y}) (y_j - \bar{y})}{\sum_{i=1}^{i=K} (y_i - \bar{y})^2 /_K}$$

Où K = number of spatial units

 $w_{ij} = elements of the adjacency matrix for the regions i and j.$

$$w_{+} = \sum_{i,j=1}^{K} w_{i,j}$$

 $\begin{aligned} w_+ &= \sum_{i,j=1}^K w_{ij} \\ y_i &= value \ of \ the \ variable \ for \ the \ \ r\'egion \ i \end{aligned}$

$$\overline{y} = \frac{\sum_{i=1}^{i=K} y_i}{K} = average \ of \ observations \ on \ the \ K \ regions$$

So the statistic I is a random variable. Under H₀, I follows a normal distribution asymptotically identical regardless of the spatial unit($I \rightarrow N(m, \sigma^2)$) with:

$$\widehat{m} = {}^{-1}/_{K-1},$$

$$\widehat{\sigma^2} = \frac{(K^2 \cdot \frac{1}{2} \cdot \sum_{i \neq j}^{K} (w_{ij} + w_{ji})^2 - K \cdot \sum_{i=1}^{i=K} (w_{i+} + w_{+i})^2 + 3w_{+}^2)}{(K-1)(K+1)w_{+}^2} - \widehat{m}^2$$

$$w_{i+} = \sum_{j=1}^{K} w_{ij}, w_{+j} = \sum_{i=1}^{K} w_{ij}$$

I<0 \Leftrightarrow Negative spatial autocorrelation, so neighboring spatial units are different.

 $I \simeq 0 \Leftrightarrow$ there there's no correlation between the neighboring spatial units, and spatial model is perfectly random.

I> 0 ⇔ The neighboring spatial units are similar (there is a pattern in the form of a

Cluster of spatial units).

In the latter case, it would be interesting to identify potential clusters.

The scan statistic is one of the methods of local clustering of cases detection; some spatial units can be homogeneous in terms of creation of industrial projects or jobs and constitute a cluster. This approach aims to bring together the various spatial units into potential clusters. There are different scanning methods which the spatial scan statistic Kulldorff. SaTScan software can be used to implement the spatial scan statistic. This is a software developed by Kulldorff. It will detect spatial clusters and see if they are statistically significant; he test whether the number of cases (in our case: number of projects or number of jobs) are distributed randomly in space.

The method of spatial scanning Kulldorff remains the most used tool for identifying potential clusters.

Application:

data

The study covers 2668 jobs and 786 projects operating in the industrial sector created and funded by ANSEIJ during 2008 Data include the number of projects, jobs, industries and the total Job by wilaya (Geographical origin).

Methods and software

Excel was used to calculate Moran's index and SatScan software to detect the existence and significance of the clusters. The application of the scan method Kulldorff ([14]) allows us to group different neighboring wilayas units into meaningful clusters.

Results

Table 1: Resultats of Tests

Variable		Moran's index	Moran's Score	Critical value	Significance level
Number	of	0,57	6,7	1,65	5%
projects					
jobs		1,2	11,6	1,65	5%

Source : made by the authors

For both variables, Moran's index is positive and well above its average theoretical value (E(I)=-0.0212), which induces a score higher than the critical value 1.65. Then we accept the hypothesis of spatial heterogeneity at 5% significance level. This means that projects funded by ANSEIJ and the jobs created by them are not randomly distributed over the national territory. Therefore there's a trend of clustering, then the next step will be to identify clusters using statistical scan statistic

Table 2: Clusters of Number of jobs

Cluster	Wilayas	p-value
1	20	<10-16
2	12, 40, 4, 24, 36, 23, 5, 21, 43, 7, 39,	<10-16
	19, 18, 6, 41, 34, 28	
3	10, 35, 15, 16	<10-16
4	26,9	82.10 ⁻¹⁶

Source: made by the authors

Table 3: Clusters of Number of projects

Cluster	Wilayas	p-value
1	15	<10-14
2	33, 11, 30, 39, 47, 1, 7, 12, 4, 3,40, 32, 5, 17, 28, 24, 25, 19, 36, 43, 23, 34, 21, 45, 8, 18	<10-14
3	27	<10-14
4	16	<10-14
5	46, 22, 31, 13	45. 10 ⁻⁷

Source : made by the authors

The approach Kulldorff highlights four significant spatial clusters for the variable job and five for the variable number of projects with a p-value (probability that the cluster is not significant) negligible (p < 10-6).

Conclusion

The conclusion that emerges from this analysis is that growth in Algeria is not generating enough jobs. Growth remains the prerogative of the capital intensive sector alone hydrocarbons sector which drains a skilled workforce but very few. The public measures for job creation, certainly beneficial, must take more account of market needs, but also oriented towards innovation in products and processes as well as in scientific and technical research. To do a rapprochement university - companies should be undertaken by public authorities by multiplying the creation of BLUE in all regions. The creation of venture capital companies should be encouraged to fund research projects.

The industry and particularly manufacturing industry whose industrialization process is well under way should know a turnaround by promoting local and foreign investments (FDI). The financial resources are not sufficient alone to trigger the recovery that require the implementation of an industrial policy that takes account of the reality of the Algerian economy and not on the basis of other models.

Bibliography

Barrow Rj.Et Sala-I-Martin X. "Economic growth", MIT Press, 1995

Barro Rj, "Economic Growth in a cross section of countries" quaterly journal of Economy 1991

Benhabib J and M Spiegel. "The role of human capital in economic development" evidence from aggregate cross country DATA, journal Economics of Money, 1994

Berthelemy J. and Varadoukis A "human capital and growth: the role of the trade regime", OECD Development Centre, No. 121, 1997

CNES 1996. Proceedings of the International Forum on Youth Employment, National Economic and Social Council, Algiers

Englander S. and A. **Gurney** "*Productivity in the OECD area: medium-term determinants*", Economic Review of the OECD, No. 22, 1994 pp. 53-119

Elizondo R. L And Krugman (1992) ³: " *Trade Policy and the third word Metropolis*", Working Paper No .: 4238, December 1992.

Kalantsis Y. "deindustrialization and financial crisis in an emerging economy," Economic Review 3/2005 (vol56)

Kulldorff M, 1997 "A spatial scan statistic." In Stat Theory Methods; 26 (6)

Kulldorff M, N Nagarwalla, 1995 "Space disease clusters: detection and inference." In Stat Med; 14

Mankiw N. D. Romer And Weild N. "Contribution to the empirics of economic growth", quarterly journal of economics money 1994

Musette Ms, Ma And Slire Hammouda N "Labour Market and Employment in Algeria: elements for a national employment policy.", ILO, Algiers 2003

Malbouci. L. (2004), "The Rise of Algerian SMEs by the resource theory" 7th International Francophone Congress in Entrepreneurship and SME -CIFEPME. Vol.1: 51-64

Maja Klun And Renata Slabe-Erker "opinions about corporate regulation and tax, environmental and employment institutions": the case of Slovenia, International Review of Administrative Sciences, 2009/3 Vol. 75, pp. 583-603. DOI: 10.3917 / risa .753.0583

ONS website of the National Office of Statistics, Algeria

Report MFIs selected issues, in February 2012

Gaudart J Et Al., 2007, "spatial clusters detection without predefined source point: use of five methods and Comparing Their results. In "Journal of Epidemiology and Public Health 55, p.297-306.

Belkacem Kasmi Djamila, Herizi Ratiba And Moussi Oumelkheir: the detection of industrial clusters in Algeria

O. Moussi Et Al., 2012, Thyroid Cancer Detection Cluster, 4 Days 3ièmes statistics, Toulouse.