

Competitiveness and upgrade of SME: between the theory and the practice**Nassima BOURI****University of Oran 2, Oran****Professor associate A****Email: nassimabouri@rocketmail.com****Received: 13/04/2019****Accepted: 28/05/2019****Published:15/07/2019****Abstract:**

This purpose of this paper is to study the impact of the upgrading mechanism on the improvement of the performance of Algerian companies and the promotion of their levels of productivity and profitability and their adaptation to the conditions of national competitiveness and even foreign ones. To answer this question, an empirical study was carried out, focusing on a group of industrial SMEs in the Oran wilaya benefiting from the upgrading program, thus presenting their situations before and after the installation of the level program. However, and of all evidences, the results prove that the upgrade performed does not in any way satisfy the conditions checked. Indeed, these companies face enormous difficulties to survive and to promote their economic and managerial level.

Keywords: Algerian SME, industrial Competitiveness, Program ED SME, SME of ORAN, test of Student.

Jel Classification Codes: P42, D41, H53, L32, C12.

I. Introduction

Our problems articulate in particular on the setting in work of the various practices of the programs dislocated on Level, whose Algerian industrial small and medium-size companies are important. And owing to the limpidity of the remarkable development of Algerian SME in particular those which relate to the sector of Manufacturing industries, we undertook our investigation with a group of small and medium-size companies of Wilaya d' Oran recipients of the program Euro Development SME (EDPME). And consequently, the principal question which is put in full light in the middle of our study, could be formulated in the following way: Is the program Euro-Development of SME (EDPME) implemented by the Algerian governmental power with the assistance of European Union (EU), able to promote the competitiveness of Algerian SME? Indeed, the principal assumption guiding our work appears like logical continuity: The average competitiveness of the companies of a sector given after the finalization of their plan of upgrade is higher than their competitiveness without upgrade.

1. Competitiveness and upgrade of the companies: Elements of theories

1.1. The concept of competitiveness

The concept of Competitiveness is appreciably complexed. It presents an answer to the perspective rich person crossed in the middle of the operation of the economy, as well as a translation of the industrial structures in a globalized world (Bouri. N, (2012)).

Thus, Trip hammer [1984] defined competitiveness as being “the aptitude to support competition durably: the competitive company has a set of capacities which authorize it, according to the case, to enter, be maintained or develop in a competing field made up by the whole of the forces crossing its environment, and likely to be opposed to its objectives, its projects and its operations”.

In this context, it should be noted that Competitiveness is thus the concern of various international agencies, namely: the Observatory of competitiveness, [2004]: “Capacity of a company to increase its market shares in a competing environment, and this, all on the national plan that international”, and “the immediate and future capacity, and opportunity, for the entrepreneurs to use overall the resources (countries) to determine the characteristics of price and quality of their goods gravitational than those of its foreign and domestic candidates”, according to (World Economic Forum, [1991]).

1.2. The upgrade

Concept of upgrade (which rests on two principal ideas: progress and the calibration) are very discussed, for some, it is a mission impossible, for others it is a reducing concept, for others still it is a fuzzy concept whose contours are not specified yet (Azouaou. L, Belouard. N.R, [2010]). On the other hand, in spite of that several definitions are presented **to throw light on concept:**

Thus, according to the economists of the Unido¹, [2002] the upgrade is “a great dynamics of designs and achievements of great changes in a total environment. Indeed, the upgrade aims to support the dynamics of reorganization, competitiveness, integration and growth of industries and employment and to facilitate the international market access in the

context of the process of liberalization and opening of the economy”. For others, the upgrade is defined like: “its competitiveness and improvement of the performances of the company (production and growth) to allow him to fight effectively in its new competing field, to be maintained there and to grow” (Hamdane .S, [2001]).

2. The program Euro Development SME (ED-PME)

The program Euro Development SME (ED-PME) lies within the scope of the program of support to the development of the Algerian PME/PMI private (MEDA I) which was the object of a convention of financing between the Algerian Government and the signed European Commission on September 14th, 1999. The purpose of this program is to preempt the coming into effect of the association agreement, and to make so that the program of support to the development of the Algerian private PME/PMI aims primarily the reinforcement of the competitiveness of the industrial companies while being aligned on the international standards of organization and management, and evolution of the managerial behavior of the entrepreneur, with respect to the market, and in particular of the emergence of a euro-Mediterranean market, thus of the good practices of management.

Indeed, this program was spread out over one five years duration, (started in July 2002 and on December 31st, 2007 was completed), with “a budget of 63 million euros which understands 57 million euros coming from the European Commission, 3.5 million euros coming from the Algerian State (Ministry for SME and the Crafts) and the rest constitutes the participation of the companies in their own actions”.

II.Methods and Materials:

The objectives of a program of upgrade are clear. They are summarized in the reinforcement of the competitiveness of the company as well inside the country about the international trade. Indeed, the present part consists in testing the impact of the installation of the program of upgrade (EDPME) on the competitiveness of the small and medium-size companies. It is founded on a method, called moreover static method, which thus makes it possible to test if there were a significant change or not in the level of competitiveness of the companies between the periods before and after the implementation of the program of upgrade. Analytical construction is founded on the test of Student which makes it possible to appreciate the statistical significativity of a change in each variable considered between the two periods of observation.

1. Data sources

The space field of this empirical study covers a group made up of 20 Oranian's SME of the sector of profit manufacturing industries of program of setting level “EDPME”². Indeed, they are shared depending on two different states, of which the data of these last are collected for the year 2005 and 2009 thus presenting their situations before and after the installation of the program.

2. Description of the sample

Our sample is composed of 20 SME shared out of seven (7) industrial sectors; the Agro alimentary sector, Chemistry & plastic and Pharmacy, Textiles, Industries of wood and paper, Leathers, skins & shoes, the sector of the ISMMEE, and building materials.

Table (1.): The distribution of SME surveyed sectors

Sector of Manufacturing industries	number of SME	%
1. AGRO	8	40%
2. Chemistry & Plastic and Pharmacy	4	20%
3. Textiles	2	10%
4. Industry of wood & paper	1	5%
5. Leathers, Skins & Shoes	1	5%
6. ISMMEE	3	15%
7. Building materials	1	5%
Total	20	100%

Source: Personal work.

3. Base of the principal statistical analysis

This analysis is founded on the principle according to which one must consider two interdependent samples which can be two samples made up of observations on the same variable but during two distinct periods.

More precisely, we will test if the upgrade made it possible to increase the profitability of the companies, to reinforce the growth of their activity, to improve their productivity, to stimulate additional investments, to reduce the level of employment to its optimal level, thus the costs of financing by a fall of the level of debt. These indicators are calculated are: **Indicators of structure³**, **Indicators of operation⁴**, and **Indicators of performance⁵**.

4. Test and results of the practical checking

The test T of Student of difference in average makes it possible up to what point to determine the difference of average competitiveness between the two situations is significant. Indeed, it is compared to a parametric test of change of structure between the

two periods of observations of the variable considered. Thus, under the worthless assumption (H_0), no significant change is recorded for the variable in question. This means that the distribution of the observations in two samples is the same one.

The implemented test relates to the difference in average of these indicators between the two situations tested. It aims to compare the competitiveness of the companies, in terms of indicators presented above, in order to know if the upgrade has a positive impact. Indeed, the following table has the results of the parametric test “Student”:

Table (2.): Results of the test of Student ⁶

Indicators of Competitiveness	Tc	p-value	Decision
(RFP)	1,276	0,217	accept H_0
(PROD)	-1,309	0,206	accept H_0
(PRN)	0,777	0,447	accept H_0
(PVENTES)	-1,000	0,330	accept H_0
(INVES)	1,476	0,156	accept H_0
(ENDET)	1,262	0,222	accept H_0
(SDETTE)	-0,236	0,816	accept H_0
(EMPL)	1,217	0,239	accept H_0
(CA)	-1,492	0,152	accept H_0

Source : Our calculations.

The first column of the table above represents the calculated statistics (tcde Student). The second column explains clearly the value of the probability (P – been worth bilateral). Thus, the theoretical statistics (tth) of the Student test are of 2,093. Since the latter is higher than the statistics calculated, and that “P – been worth bilateral” is higher than the level of significance threshold $\alpha = 0.05$, one cannot reject the worthless assumption H_0 . And that compared to the whole of the indicators of competitiveness presented. The structure of the debt records for example (- 0.236) like actual value, and is (0.816) like value of the probability (P – been worth bilateral). Then, the risk to reject the worthless assumption H_0 whereas it is true is of 81.61%.

III. Results and discussion

The process of upgrade is a form of aid to undertakings eager to level itself. It represents thus, the mainstay of the development of Algerian SME. Indeed, the assigned objective of this operation aims at the improvement of their competitiveness, the

maintenance of its internal market share and the possible conquest of the exterior market. On the one hand, the anticipated results of this device implemented relate to viability, the competitiveness of SME and job creation. In addition, and in spite of its statistical weaknesses, our study made it possible to put forward the following fundamental results:

- *The impact of the Program of Upgrade on the real sales is positive*

This Program of Upgrade seems to have exerted a real stimulation on the sales. An increase in turnover is observed. From a technical point of view, for the whole of the sample, our result is confirmed in particular for the real sales (variable SALES) with a test of significant Student to the threshold of 5% that, that is to say 65% of surveyed SME increased their turnover after the installation of the Program of Upgrade. In this meaning, two explanations can be provided:

- The first relates to the nature of the action. Indeed, the shutter marketing and of Marketing associated with the upgrade seems to be quickly comparable and with immediate profitability. The actions of reorganization or upgrade were not difficult to implement on this point and had the adhesion of the professionals;
- The second explanation relates to the vision of the PMN for the adherent companies. Indeed, they seem to grant more interest to the local markets and their immediate profitability. This results in an immediate positive impact on the local sales.

And as we have it to quote in top, unavailability, the mediocrity of the data did not enable us to calculate, thus to analyze the level of exports (variable EXPORT), and which is measured by the relationship between exports and the turnover.

- *The impact of the Program of Upgrade on the rationalization of employment is rather weak*

A program of upgrade is accompanied, in general, of major restructuring plans which affect directly or indirectly employment. Indeed, theoretical waiting's of a process of reorganization relate to a wave of rationalization and fall of employment in order to increase the productivity and the productive effectiveness. The results got on a total scale rather present a fall of the mean level of the use of approximately 155 employees, presenting is a fall from almost 5% of the totality of the companies listed compared to the basic year (2005).

- *The impact of the Program of Upgrade on the productivity of the value and the profitability of equities is rather weak*

The policy of upgrade necessarily leads to internal reorganizations within the companies eager to be leveled. In a first phase, these changes can lead to a reduction or a stagnation of the productivity of the profit companies of an upgrade. They relate to in particular organizational and technological reorganizations, which require a period of time of

assimilation and which are seldom absorbed in an instantaneous way by the companies (Bennaceur. S, Ben Youcef. With, Ghazouani. S, and Me Neighed. H, [2007]). Indeed, it is advisable to note the absence of immediate effects of the upgrade on the results in terms of productivity of the value. This can make it possible to explain why, the Oranian companies grant only one weak interest to long-term dynamics and potential competition in the future liberalized market.

In a more technical way, the productivity of sales (PVENTES), work productivity (PROD) provides rises on average after the finalization of the reorganization within the company. However, one records falls of profitability of equities, which expresses the proportion (Bottom line/Equities). According to these results, it is probable that the Oranian companies committed in the process of upgrade were not yet able to appreciably improve their productivities of value, financial and technical.

- *The impact of the Program of Upgrade on the investment is positive*

Notwithstanding limits observed on the market of the credit and the financing of the production, which constitute indeed, of the major hurdles at the present time, the results concerning the investment are thus convincing. So It seems that the firms reacted in a strong way to increase the level of investment since 75% of surveyed SME brought a positive difference. It is what expresses that the investment is well stimulated by the Program.

- *Degearing was not recorded*

Lastly, a negative note relates to the evolution of the level of debt, since an increase is observed for two measurements of the debt, namely the structure of the debt, as well as the rate of debt. The program allowed much more the rebalancing of the financial situation of these companies, but such as it is presented, it seems difficult to us to carry out such an ambition.

These results indicate that there does not exist a statistically significant change between the two situations tested (rejection of H1), thus relating to the 9 indicators of competitiveness on which the statistical test, of checking of the positive effect of the upgrade on the competitiveness of the companies was highlighted. What suggests that the upgrade did not really have a significant impact on the competitiveness represented by these above-mentioned indicators.

In other words, the results of the statistical test obtained do not offer a convincing proof that the upgrade made it possible to improve competitiveness of the companies, this parametric test attests that the upgrade did not play a decisive part on the indicators of competitiveness. In spite of the insufficiencies of our investigation, the studied sample enabled us to note that the upgrade of Algerian SME was not committed with much conviction. Indeed, the program of upgrade represents a form of aid to undertakings eager to level it. But such as it is led in our investigation, it seems difficult to us to carry out such an ambition.

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¹ United Nations Organization for Industrial development.

² As we already mentioned, Program ED-PME is presented as having had more success because of the number of companies who were adhered. It is what justifies the choice of our field of study.

³ *Evolution of equities. *Total Employ (EMPL) = Full number of employees. And, *Investment (INVES) = Investment/CA

⁴ *Rate of debt (ENDET) = $\sum \text{Debts} / \text{Active}$. *Structure of the debt = DLT/DCT. And *Vents= turnover (CA).

⁵ *Evolution of the bottom line. *Rate of added-value = Added-value/Turnover. *The profitability of Equities (RFP) = Equities/Bottom line. *Productivity (PROD) = Added-value/ employees. *The productivity of value (PRN) = Bottom line/ employees. *The Productivity of sales (PVENTES) = Sales/ employees.

⁶ These results are got by the software XLSTAT.