Profitability and indebtedness of industrial SMEs: results and analyzes

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Abstract:

The objective of this article is to analyze the financial performance of industrial SMEs in the city of Oran, by the treatment of their profitability indicators. The interpretation of the economic situations of these companies expressed low financial and commercial performances, expressed by low profitability and productivity ratios, and very high debt ratios for the majority, especially for a few firms, particularly those in the industry Chemistry, Plastics & Pharmacy ", and" Building Materials ".

Keywords: Performance, Industrial SMEs, Profitability, Debt, Strategy.

Résumé: L'objectif de cet article est d'analyser la performance financière des PME industrielles de la ville d'Oran, par le traitement de leurs indicateurs de rentabilité. L'interprétation des situations économiques de ces entreprises a exprimé des performances financières et commerciales faibles exprimées par des ratios de rentabilité et de productivité faibles, ainsi des taux d'endettement très élevés pour la majorité, notamment pour quelques firmes notamment celles de la branche « Chimie, Plastique & Pharmacie », et des « Matériaux de construction ».

Mots clés: Performance, PME industrielles, Rentabilité, Endettement, stratégie.

الملخص: الهدف من هذا المقال هو تحليل الأداء المالي للمؤسسات الصغيرة والمتوسطة الصناعية في مدينة وهران، من خلال معالجة مؤشرات ربحيتها. وقد عبر تفسير الأوضاع الاقتصادية لهذه الشركات عن انخفاض الأداء المالي والتجاري، حيث عبر عن انخفاض الربحية ونسب الإنتاجية ، ونسب الدين العالمة للغاية للأغلبية، خاصة بالنسبة لعدد قليل من الشركات، لا سيما تلك العاملة في الصناعة. الكيمياء والبلاستيك والصيدلة "، و"مواد البناء."

الكلمات الرئيسية: الأداء ، الشركات الصغيرة والمتوسطة الصناعية ، الربحية ، الديون ، الإستراتيجية.

Introduction

Our anonymous empirical analysis focuses on a group of 64 SMEs in the city of Oran in the "manufacturing industries" sector. The objective of this work is then to analyze the financial situation of each firm in the sample for the period from 2008 to 2012, in terms of calculated performance indicators (the "Return on Equity" RFP (Financial Profitability).), Commercial Profitability, and the "ENDET" Debt Ratio).

1. "Performance": A Complex and Ambiguous Concept

The concept "Performance" is complex. "It is now generating enormous passions and sharp controversies in the field of sustainable managerial thinking" (Capron and Quairel, 2005). It appears as a dependent notion of the disciplines or schools of thought to which the authors belong, as well as the criteria and perspective of analysis chosen, each of which approaches it according to an angle of attack of its own. This made the interpretation and understanding of this concept rather ambiguous.

We will propose the definitions summarized by the authors Bouliane, Guindon, Morin, [1996], and Lorino, [1997]:

Thus, Bouliane, Guindon, Morin, [1996], retain four criteria for measuring performance. It is the sustainability represented by the quality of the product / service, financial profitability and competitiveness; economic efficiency measured by resource efficiency and productivity; the value of human resources, expressed through mobilization, personal development, performance and social climate; and finally the legitimacy of the organization with external groups that materializes by the satisfaction of donors, customers, regulatory bodies and the community.

The author Lorino, [1997] claims that, "... is performance in the business all that, and only what, helps to improve the value-cost combination, ie to improve the net creation of value (Conversely, not necessarily performance which contributes to reducing the cost or increasing the value, in isolation, if it does not improve the value-cost or the value / cost ratio) ... is performance in the company all that, and only what, contributes to achieving the strategic objectives ... ".

2. The empirical interpretation of the performance of the SMEs surveyed

In fact, the table below deals with a detailed presentation of the 64 SMEs surveyed, the manufacturing sector by main activity, and this during the five years [2008], [2009], [2010], [2011], and [2012]:

<u>Table (1.): The distribution of the 64 SMEs surveyed in the "Manufacturing industries"</u> sector by main activity

Secteur d'activité	Nombre de PME
Industries manufacturières	64
1. Food industry	17
2. Construction materials	15
3. Chemistry & Plastics and Pharmacy	14
4. ISMMEE	6
5. Wood & paper industry	5
6. Textiles	5
7. Leathers, Skins & Shoes	2
Total	64

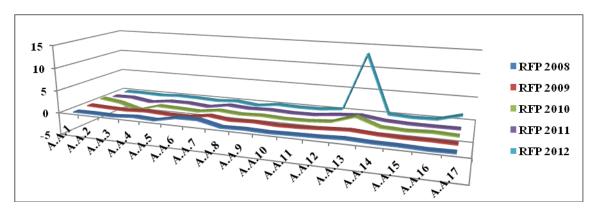
Source: Personal confection.

With this in mind, we have been able to collect the necessary data from these companies to calculate the list of performance variables for each company in our sample. In fact, these indicators are as follows: the Profitability of Equity "R.F.P", the Commercial Profitability, the Value Added Rate, the Productivity "PROD", as well as the Debt Ratio "ENDET".

2.1. Analysis of the Profitability of Equity

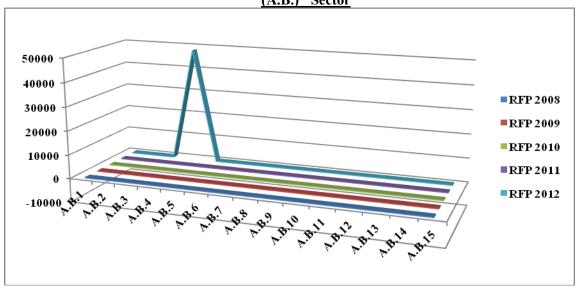
A. The Food Sector

Figure (1.): Evolution of the Equity Profitability of SMEs activating in the food sector (A.A.)



B. The "Building Materials" Sector

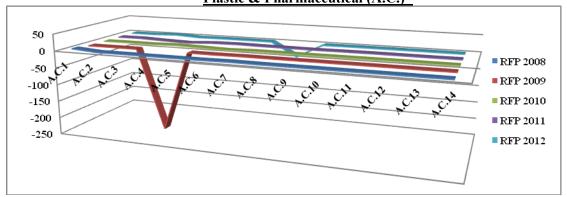
Figure (2.): Evolution of the Capital Profitability of SME Activating in the "Building Materials (A.B.)" Sector



Source: Our calculations from the balance sheets of companies.

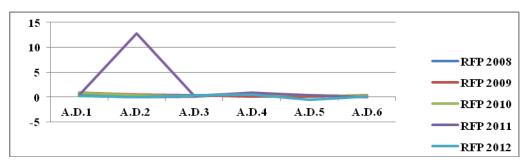
C. The sector "Chemistry, Plastics & Pharmacy"

Figure (3.): Evolution of the Capital Profitability of SME activating in the sector "Chemical, Plastic & Pharmaceutical (A.C.)"



D. The sector "Steel, Metallic, Mechanical and Electronic Industries (ISMME)"

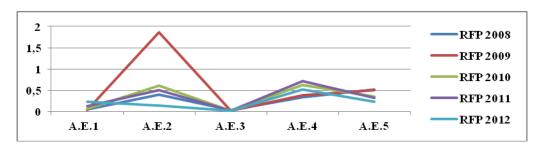
Figure (4.): Evolution of the Capital Profitability of SMEs activating in the sector of Steel,
Metallic, Mechanical and Electronic Industries "ISMME" (A.D.)



Source: Our calculations from the balance sheets of companies.

E. The Wood & Paper Sector

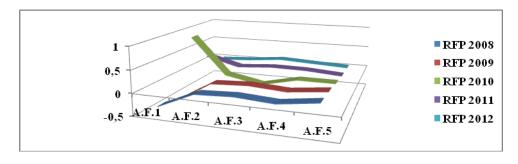
Figure (5.): Evolution of the Equity Profitability of SMEs activating in the "Wood & Paper (A.E.)" sector



Source: Our calculations from the balance sheets of companies.

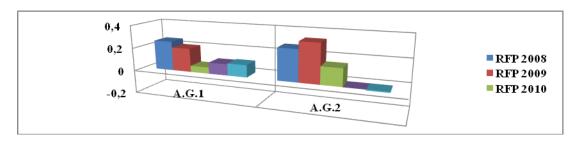
F. The Textile Sector

Figure (6.): Evolution of the Equity Profitability of SMEs activating in the "Textile (A.F.)" sector



G. The sector "Cook, Skin & Shoes"

<u>Figure (7.)</u>: Evolution of the Equity Profitability of SMEs activating in the sector "Cooking, Skins & Shoes (A.G.)"



Source: Our calculations from the balance sheets of companies.

Return on equity or financial profitability is the preferred way for shareholders to measure the profit that pays for their contribution. Indeed, this ratio is expressed by the ratio between net income and equity. (Dumoulin, R, Guieu, G, Meschi, P-X, and Tannery, F, [2010]).

For the agro-food industries sector, this ratio shows an evolution during the period studied, an average value of 0.189 for the year 2008, then of 0.905 in 2012. And as shown in Figure (3.5.), The SMEs surveyed record rates almost similar in 2009, and 2011, recording an overall average successively of 0.13 and 0.09. On the other hand, the company (AA8.) Recorded zero return on equity in 2008, and this is explained by a defective Result Statement Table (TCR) (zero turnover, zero added value, and one result). = 0), then, a positive ratio in 2009, 2010, and 2011, thus explained by a sharp increase in sales; then, a negative rate in 2012 explained by the sharp drop in value added, with a sharp increase in expenses.

On the other hand, the companies (A.A.12.), (A.A.13.), And (A.A.14.) Realized a change in the profitability of Equity during the period studied. In addition, the companies (A.A.3.), (A.A.5.) And (A.A.10.) Presented low and negative rates explained by negative accounting results as well. In addition, the rate of return on equity recorded by the company (AA13.) In particular in 2012 should be taken with caution, since the data presented clearly reflect a sharp increase in 2008, and with a rate that exceeds 1 in 2010 and 2012 (figure 3.5.), which expresses a net result higher than the own funds collected.

The "Building Materials" sector recorded a negative return on equity in 2009, an average of (-0.108) generated by the negative ratios generated by companies (AB4.), (AB8.), And (AB 13.), then, positive rates during the years 2008, 2010, and 2011, respectively 0.30, and 0.27 and 0.16 respectively. On the other hand, this sector scored a very high average return on equity in 2012, ie 3218.72, which is the ratio of the deficit company (AB4.), A rate

of 48278, which represents indeed, the ratio between a negative accounting result and negative shareholders' equity.

The Chemicals, Plastics & Pharmaceuticals sector posted a negative return on equity during the years 2009, 2011 and 2012, respectively -16.8, -0.36 and -2.76 as calculated averages. So, a positive rate was marked in 2008, almost 0.5 as an average return on equity capital. Indeed, the company (A.C.13.) Recorded successive decreases, that is to say negative results during the years [2008-2009-2010-2011].

Thus, the companies (AC4.), (AC5.), and (AC6.) Record zero ratios, thus explained by with net nil accounting results during the year 2008. In turn, the company (AA 1.) declares a zero ratio, during the periods 2009-2010-23011 and 2012, after a return on equity ratio greater than 1, generated by a ratio between a negative net result and a negative sum of shareholders' equity. Then, the company (A.C.4.) Records a significant negative ratio explained by a net book loss result in 2009.

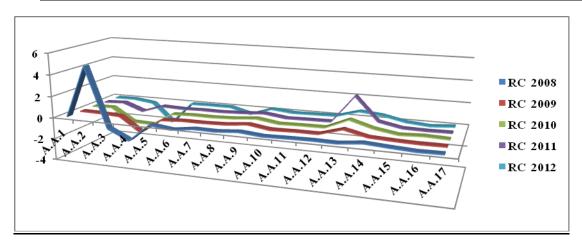
Regarding the "Wood & Paper" sector, the profitability of Equity has recorded positive rates, for the five companies surveyed, and during the years 2008, 2009, 2010, and 2011, as well as 2012. Thus, companies (AE2.), (AE4.) and (AE5.) Scored the highest ratios. Indeed, the company (A.E.2.) Has recorded a rate that exceeds 1, a net result higher than shareholders' equity.

The "Textile" sector consists of five companies surveyed, of which the company (AF1) recorded a negative return on equity explained by the net loss-making results of 2008, 2009, and 2012, which explains a negative average of this ratio, ie (-0.008) in 2008, then, (-0.034) in 2009. In addition, companies (AF2.), (AF4.), and (AF5.) have, in fact, presented positive and significant rates during the study period; [2008-2012].

Regarding the sector "Cook, Skins & Shoes (A.G.)", which is based on our survey of two companies. Indeed, the SME (AG1.) Has recorded a successive decline in the return on Equity between: the year 2008 and 2010 explained by the decline in the net result, then, a timid evolution in 2011, and 2012, a variation successively 4%, and 1% explained by a marked improvement in its net results for the last two years. In contrast, the SME (A.G.1.) Recorded negative rates explained by its deficit results in 2011, and 2012, after very high rates reported in 2008, and 2009, successively 0.27, and 0.33.

2.2. Business Profitability Analysis A. The Food Sector

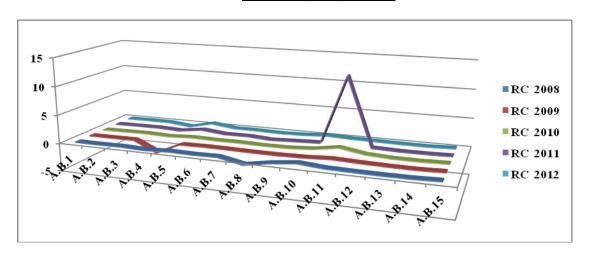
Figure (8.): Evolution of the Commercial Profitability of SME activating in the food sector (A.A.)



Source: Our calculations from the balance sheets of companies.

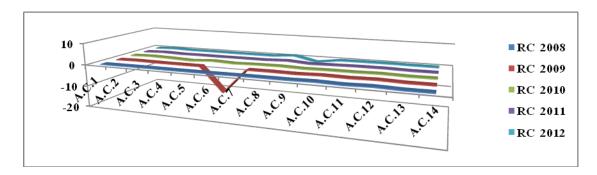
B. The "Building Materials" Sector

Figure (9.): Changes in the Commercial Profitability of SMEs Activating in the "Building Materials (A.B.)" Sector



C. The sector "Chemistry, Plastics & Pharmacy"

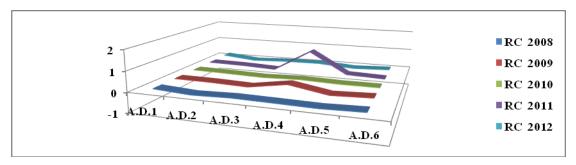
Figure (10.): Evolution of the Commercial Profitability of SMEs activating in the sector "Chemistry, Plastics & Pharmacy (A.C.)"



Source: Our calculations from the balance sheets of companies.

D. The sector "Steel, Metallic, Mechanical and Electronic Industries (ISMME)"

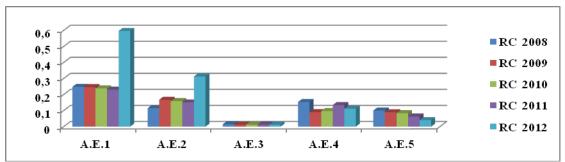
Figure (11.): Evolution of the Commercial Profitability of SME activating in the sector of Steel,
Metallic, Mechanical and Electronic Industries "ISMME" (A.D.)



Source: Our calculations from the balance sheets of companies.

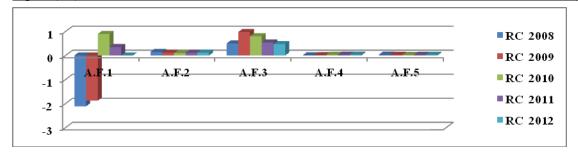
E. Le secteur « Bois & Papier »

Figure (12.): Évolution de la Rentabilité Commerciale activant dans le secteur « Bois & Papier (A.E.) »



F. Le secteur « Textile »

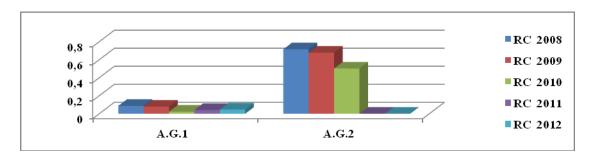
Figure (13.): Évolution de la Rentabilité Commerciale des PME activant dans le secteur « Textile (A.F.) »



Source: Our calculations from the balance sheets of companies.

G. The sector "Cook, Skin & Shoes"

<u>Figure (14.): Evolution of the Commercial Profitability of SMEs Activating in the Sector "Cook, Skin & Footwear (A.G.)"</u>



Source: Our calculations from the balance sheets of companies.

Commercial profitability is one of the financial indicators of the model that measures the firm's ability to generate significant margins. It represents the ratio between the net result and the turnover. (Dumoulin, R, Guieu, G, Meschi, P-X, and Tannery, F, [2010]).

Commercial profitability recorded almost similar ratios in 2008, 2010, and 2012, respectively 0.049, 0.086, and 0.023 as the average recorded. Then, a negative rate was recorded in 2009, that is (-0,279). In fact, the agri-food sector recorded negative ratios in 2009, 2010 and 2012, as average commercial profitability recorded. The company (A.A.10.) Recorded negative ratios during the years 2008, 2009, 2010, and 2011, as well as in 2012, and this explains the loss-making accounting results achieved. The company (A.A.2.) Recorded a rate higher than 1 in 20089, or 4.89, which is what expresses the superiority of the net result in relation to turnover.

The Building Materials sector recorded a negative rate in 2009, ie (-0.03) as a realized average, after 0.028 as the average achieved in 2008. This drop in 2009 is, in fact,

explained by either (-1.83) as a ratio generated by the company (AB4.) after a negative accounting result, and a very low level of sales. On the other hand, this sector experienced a change in commercial profitability in 2010, ie .15 as a realized average, thus 0.89 in 2011. This ratio expresses a very high commercial profitability released by the company (AB11.), either 12.3 as a result of superiority of its net book result compared to its realized turnover.

The Chemicals, Plastics & Pharmaceuticals sector recorded very low values during the period studied. It declares a negative commercial profitability ratio in 2009, ie (-0.74) as the average of the 14 companies surveyed, which is explained by, or (-11.3) as a ratio recorded by the company (AC6.), after a net loss and equal to its value added (figure 3.16.). Among other things, the company (A.C.1.) Did not achieve any results from 2008, which reflects zero commercial profitability. In turn, the firm (A.C.9.) Recorded a clear decrease in this ratio (Figure 3.16.) During the period [2009-2012] following successive losses. In this regard, it should be noted that seven companies were able to achieve positive ratios as a result of earnings over the five-year period [2008-2012], that is to say businesses (AC2.), (AC3.), (AC5.), (AC7.), (AC8.), (AC11.) And (AC12.).

The sector "Steel, Metallic, Mechanical and Electronic Industries (ISMME)" recorded a positive commercial profitability during the five study periods [2008-2009-2010-2011-2012], ie 0.046, 0.126, 0.081, 0.251, and 0.063 as realized averages. In addition, the company (A.D.2.) Presented a zero commercial profitability in 2008, and 2012, after a net book profit nil in 2008, then a turnover = 0, with a deficit result in 2012.

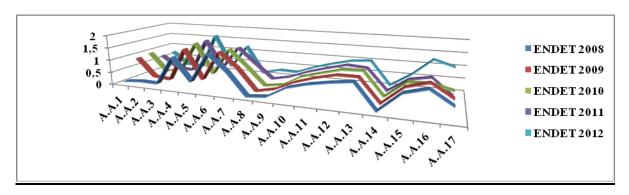
The "Wood & Paper" sector recorded a positive commercial profitability during the five study periods [2008-2009-2010-2011-2012], ie 0.13, 0.12, 0.12, 0.12, and 0.21, as realized averages, of which all the companies surveyed reported positive ratios and this during the five years taken into account, this is what reflects net profit and loss results.

The "Textile" sector reported negative ratios in 2008 and 2009, respectively (-0.28), and (-0.15) as calculated averages. Indeed, these results are thus expressed by the loss-making results reported by the company (A.F.1.) In 2008, and 2009. This performance indicator increased, or 0.37 in 2010, as a calculated average. Thus, the Leather, skins & shoes sector recorded a positive commercial profitability during the five fiscal years studied [2008-2009-2010-2011-2012], ie respectively 0.40, 0.38, 0.26, 0.021, and 0.023., as calculated averages. Indeed, this clear decrease is explained by the successive reduction of the net profit of the company (A.G.2.), Realizing a level of sales nil in 2011, and 2012.

2.3. Debt ratio analysis

A. The Food Sector

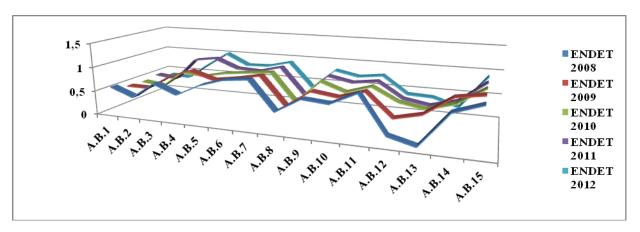
Figure (15.): Evolution of the debt ratio of SME activating in the food sector (A.A.)



Source: Our calculations from the balance sheets of companies.

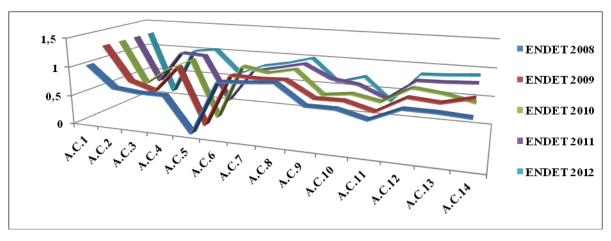
B. The "Building Materials" Sector

Figure (16.): Evolution of the debt ratio of SME activating in the sector of "Building Materials (A.B.)"



C. The sector "Chemistry, Plastics & Pharmacy"

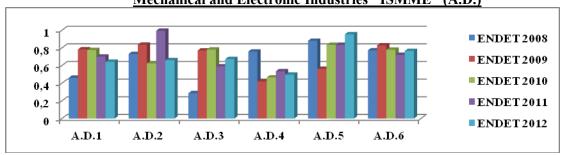
Figure (24.): Evolution of the debt ratio of SMEs activating in the sector "Chemicals, Plastics & Pharmaceuticals (A.C.)"



Source: Our calculations from the balance sheets of companies.

D. The sector "Steel, Metallic, Mechanical and Electronic Industries (ISMME)"

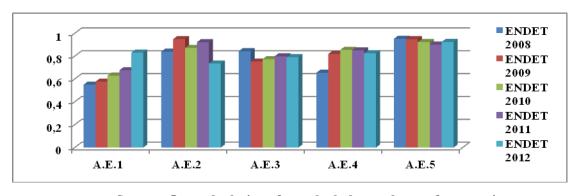
Figure (17.): Evolution of the debt ratio of SMEs activating in the sector of Steel, Metallic, Mechanical and Electronic Industries "ISMME" (A.D.)



Source: Our calculations from the balance sheets of companies.

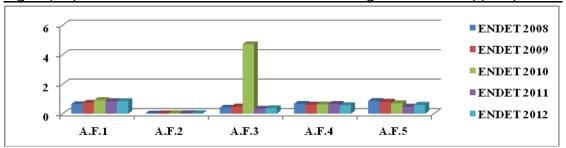
E. The Wood & Paper Sector

Figure (18.): Evolution of the debt ratio of activating SMEs in the "Wood & Paper (A.E.)" sector



F. The Textile Sector

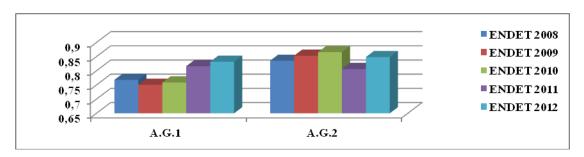
Figure (19.): Evolution of the debt ratio of SMEs activating in the "Textile ((A.F.)" sector



Source: Our calculations from the balance sheets of companies.

G. The sector "Cook, Skin & Shoes"

Figure (20.): Evolution of the debt ratio of SME activating in the sector "Cook, Skins & Shoes (A.G.)"



Source: Our calculations from the balance sheets of companies.

A negative note concerns the evolution of the level of indebtedness during the period [2008-2010], since an increase is observed for the two measures of indebtedness, namely the debt ratio, recording respectively "0.657" in 2008, and "0.730" in 2010 as the average of the 80 SMEs surveyed. Indeed, the level of debt represents more than 66% of the total assets and this during the period studied, recording an average of almost 74% in 2009. Concerning the sector of agro-food industries, this ratio presented an average of 60 87% during the five fiscal years studied, recording 58.56% and 62.99% respectively in 2008 and 2012.

The Building Materials, Import-Export and the Steel, Metallic, Mechanical and Electronic Industries (ISMME) sectors recorded 64.95%, 60.04% and 69.83% respectively. %. Thus, the Chemicals, Plastics and Pharmaceuticals sector recorded 73.29% and 75.82% as averages calculated during the five years studied [2008 - 2012]. Indeed, the Leather, skins & shoes and Wood & Paper sectors reported the highest rates, at nearly 82% and 81% respectively. On the other hand, the textile sector recorded an average of 68.07%, and exceeded 140% in 2010, and this is explained by the loss-making results reported by the company (AF3.), Realizing a total of debts greater than the total of balance sheet, with a negative equity balance. Indeed, this observation needs to be reinforced by other studies to better understand the degree of resistance of firms to future shocks.

Conclusion

Concerning industrial companies, which remain the weakest (with all branches combined) during the two years analyzed, suffer despite multiple attempts by the public authorities of the current industrial zones which are in a state of quasi-abandonment. And "for many reasons, they offer none of the services expected of them, and remain, in practice, empty shells delivered to themselves and without real means (neither legal nor financial) to facilitate the daily management companies located in their precincts and, even less, to serve as a basis for an effective industrial promotion policy "(IFPE, [2011]).

These companies represent 80% of the weak SMEs for the year 2008, and 87.5% for the year 2012. They are characterized by low financial returns "RFP", and low commercial, average value added rates, and productivities technical, commercial and low value, and very high debt ratios that exceed 70% for the majority, and up to 98% for a few companies including those of the branch "Chemistry, Plastic & Pharmaceutical" and "Materials of construction".

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