



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: D
ACCOUNTING AND AUDITING
Volume 23 Issue 1 Version 1.0 Year 2023
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Managerial Skills in the Face of Full Costing in SMEs: The Case of Senegal

By Diouf Moussa

Catholic University of West Africa

Abstract- The influence of the managerial competencies of the manager on the practice of full costs remains very little addressed in the management control literature, especially in the context of SMEs.

This contribution aims to reinforce the existing work by examining the following question: what are the managerial competences of the SME manager that explain the practice of full costs within SMEs?

Using the behavioural approach of contingency theory, a quantitative study was conducted with 140 SME managers.

The analysis of the empirical data shows that the human capital of the manager, materialized by a managerial training and a proven professional experience in business, significantly explains the practice of full costs in Senegalese SMEs. Our results also confirm a normative isomorphism, but suggest a fashion effect in the practice of full costs within SMEs.

Keywords: *managerial skills; full costing practices; SMEs; management control; human capital.*

GJMBR-D Classification: *DDC Code: 658.575 LCC Code: T56.8*



MANAGERIAL SKILLS IN THE FACE OF FULL COSTING IN SMEs THE CASE OF SENEGAL

Strictly as per the compliance and regulations of:



RESEARCH | DIVERSITY | ETHICS

Managerial Skills in the Face of Full Costing in SMEs: The Case of Senegal

Diouf Moussa

Abstract- The influence of the managerial competencies of the manager on the practice of full costs remains very little addressed in the management control literature, especially in the context of SMEs.

This contribution aims to reinforce the existing work by examining the following question: what are the managerial competences of the SME manager that explain the practice of full costs within SMEs?

Using the behavioural approach of contingency theory, a quantitative study was conducted with 140 SME managers.

The analysis of the empirical data shows that the human capital of the manager, materialized by a managerial training and a proven professional experience in business, significantly explains the practice of full costs in Senegalese SMEs. Our results also confirm a normative isomorphism, but suggest a fashion effect in the practice of full costs within SMEs.

Keywords: managerial skills; full costing practices; SMEs; management control; human capital.

I. INTRODUCTION

Small and medium-sized enterprises (SMEs) in Senegal are generally confronted with a number of constraints (lack of technical and human resources, access to financing and public contracts, and poor use of management tools). Among the difficulties noted, the poor use of management tools remains for us essential because it can cause a lack of competitiveness without delay. Competitiveness is the capacity of a company to face competition through a balanced cost structure.

Moreover, Porter (1980) had adopted this thought by estimating that competitiveness is based on a strategy of domination by costs. In a context marked by increasing globalisation of trade and increased competition, knowledge of production or service costs is becoming an imperative for steering the performance of companies, especially SMEs. This requires decision-making tools such as management accounting.

Some authors specify in this regard that management accounting practices are a variety of methods specifically taken into consideration by companies in order to support the organisational

infrastructure (Ittner and Larcker, 2002a) or a set of cost methods deployed by companies to measure the expenses they incur, to set acceptable prices, to know the results (overall and partial) achieved on the various products (Wade and Dieng, 2019b).

Moreover, two types of costing practices are identified in the literature: traditional costing practices (full costing, direct costing, rational allocation method, etc.) and modern costing methods [Activity Based Costing (ABC), target costing, value-added unit method, among others].

In this contribution, we wish to focus on the practice of full costing, understood here as the adoption or use of full costing by SME managers, with a view to knowing the costs of products, goods or services, in order to set appropriate prices in the light of the competitive dynamics of markets.

In Africa, research has been carried out in this field to further support the management of enterprises in general and SMEs in particular.

In this sense, the study of Lassoued and Abdelmoula (2006), in the Tunisian context, reveals that most of the SMEs in the sample (76.2%) have a system of cost calculation (full costs, direct costs, variable costs, marginal costs) with, however, a predominance of the full cost method. This idea is confirmed in the Cameroonian context where Ngongang (2010) finds that more than half of the companies in his sample (66.3%) apply the full costing method at a time when modern costing methods (ABC method) are very little developed.

Still analysing the specificities of the accounting information system of Cameroonian SMEs, Ngongang (2013) also noted that the most used costing method is full costing. In the same context, a recent contribution by Foka Tagne et al (2021) shows that industrial SMEs (78.6%) use full costs as the majority costing method in their management practices.

The same observation was made in the Moroccan context with El Bakirdi and Radi (2017) who note that some managers establish a real cost accounting system based on a rigorous and detailed calculation of the different costs such as the full cost and partial cost methods, but the full cost method generally seems to be the most practiced in SMEs.

In Senegal, existing work (Diop, 2016, Wade and Dieng, 2019b, Wade and Diouf, 2021; Diouf, 2022) has shown the diversity of costing practices (full costing,

Author: Lecturer in Management Sciences at the Catholic University of West Africa (UCAO/St Michel-Dakar) Member of the Finance Organisation Accounting-Control Strategy (FOCS) laboratory- Cheikh Anta Diop University of Dakar (UCAD).
e-mail: moussa.diouf@ucao.edu.sn

partial costing, rational allocation, pre-set costs and ABC) within SMEs.

However, an in-depth examination of the empirical results reveals, as do the other studies, a low level of instrumentation of the full cost method in companies, despite the fact that it remains the salient method in management practices to the detriment of the ABC method.

This situation is described by Gosselin (2007) as the paradox of the ABC method, which is unable to supplant traditional cost analysis systems (full costing, among others) because of its cumbersome nature and the cost and time required to update it (Kaplan and Anderson, 2004). It is also worth recalling that the studies carried out in our context have mainly focused on the contingency of activity-based costing systems in firms (Diop, 2016), costing practices in industrial SMEs (Wade and Dieng, 2019b), the determinants of management control tools in SMEs (Wade and Diouf, 2021) or the contingency of costing tool adoption in SMEs (Diouf, 2022). As a result, none of these studies has sought to specifically apprehend the personal characteristics of the manager that could explain the practice of full costs within SMEs.

The originality of the present study therefore remains the taking into account of this aspect in order to better understand the managerial competences of the manager which make it possible to explain the adoption or not of a particular management instrument such as the full cost method. If we start from the general observation that in the SME, the manager is involved in almost all aspects relating to management (Julien and Marchesnay, 1988; Mamboundou, 2003) and is often confused with the company (Julien, 1990), then the choice of a tool or a method should integrate his personal characteristics.

With all these considerations in mind, it now seems relevant to analyse the managerial skills of the SME manager, which argues in favour of a more advanced full-cost practice within SMEs. Based on the theory of behavioural contingency, this research builds on previous work by examining in depth the following questions:

- What is the level of adoption of the full cost method in Senegalese SMEs?
- What are the managerial skills of the manager that explain the practice of the method in Senegalese SMEs?
- Among these skills, which is the most decisive in the practice of full costs in Senegalese SMEs?

The objective of this study is twofold. On the one hand, it is a question of showing the level of use of the full cost method within SMEs and, on the other hand, testing the personal characteristics of the SME manager that can significantly explain the practice of full costs in order to highlight the most decisive one. This

will serve as a lever for more effective cost management in SMEs.

To achieve this, the theoretical and methodological aspects are first presented before the empirical results of the research are presented and discussed to lead to managerial recommendations.

II. THEORETICAL CONSIDERATIONS OF THE RESEARCH

The theoretical aspects of the research concern the definition of concepts and the review of the literature.

a) *Conceptual Framework of the Research*

Our conceptual analysis focuses first on the notion of method, then on competence and finally on managerial competence.

Concerning the method, the literature distinguishes it from the management tool. Indeed, Nobre (2001) notes that the method is a procedural construct which defines the operational steps leading to the management tool, whereas the latter is a conceptual construct which is materialised by an accounting, financial, quantitative or qualitative formalisation.

For the author, management instruments therefore include tools and methods. In this article, we invoke the notion of full cost practice to see the personal characteristics of the manager that influence it.

In this sense, the concept of adoption that we often mobilise is understood here as the practice or use of the full cost method within SMEs.

With regard to competence, it explains the effectiveness of behaviours (Lorrain et al. 1998) and materialises, as it were, what a person is capable of doing through components such as knowledge, know-how and know-how (Ngongang, 2014).

Indeed, according to Rouby and Solle, (2002), knowledge is the basic knowledge essential to maintaining competence. It is derived from training, which, according to Beamish and Dhanaraj (2003), is a series of planned learning activities aimed at acquiring knowledge to encourage individuals and groups to adapt to their social and professional environment.

As for know-how, it refers to the practical dimension of the skill expressed under the fire of action. Thus, from basic knowledge, know-how is developed to stimulate its maintenance or implementation (Rouby and Solle, 2002). This notion is therefore supported by professional experience. As such, it refers to what the person acquires through practice, i.e. through the performance of tasks in a professional field, over a more or less long period of time (Rogalski and Leplat, 2011). The authors argue that experience involves dimensions other than cognitive and necessarily exceeds the knowledge acquired in training.

With regard to "savoir-être", it represents the individual and collective attitude that enables the

development of knowledge and know-how (Rouby and Solle, 2002). This notion therefore covers the social aspects of competence. However, in this research, the emphasis is shifted to knowledge and know-how as a dimension of competence. This refers to the idea of some authors (McCormick and Tiffin, 1974; Pettersen and Jacob, 1992) who state that competence refers to the ability of individuals to learn (knowledge) and to perform tasks (know-how). These abilities are acquired through training or the accumulation of experience (Szilagyi and Schweiger, 1984).

Competencies are divided in the literature into four groups: entrepreneurial competencies, management skills, relational competencies and managerial competencies (Lorrain et al. 1998). As the latter were the subject of this study, we define them as the ability of managers to make their knowledge actionable in order to enable the company to achieve a certain level of competitiveness.

From the above, it is clear that managerial skills refer to the manager's training and professional experience, described as cognitive resources (Wade and Dieng, 2019b) or human capital (Drucker, 1993). The latter dimension is valued in this research.

b) *Review of Previous Work*

This contribution is in line with the behavioural approach of contingency theory (Chapellier, 1994; Lavigne, 1999). According to this approach, the behavioural characteristics of each organisational actor are likely to influence management practices within companies. In reality, it is a subjective approach that complements the objective approach (structural contingency). It focuses on the human construct in which the central actor (the SME manager) plays a very particular role (Chapellier and Ben Hamadi, 2012). The managerial skills of the leader could have a significant effect on the practice of full costs and as such, deserve to be studied.

According to the work carried out, the profile of the manager retained as managerial skills to explain the adoption or practice of full costs are the type of training, the level of training and the professional experience.

Studies that have mobilised the theory of behavioural contingency have made it possible to test the existence of significant relations between the profile of the actors and the accounting information system of SMEs (full cost method, among others).

Indeed, the work of Mayimbi Ekuli Ngokana et al (2021) emphasised the fact that managers who have received managerial training generally have proven knowledge of management control tools and their role in steering performance. This opinion is shared by other authors (Chapellier, 1997; Nobre, 2001; Lavigne, 2002; Affes and Chabchoub, 2007) who believe that the most complex management control practices are identified in companies where managers have management training.

In the same vein, the research of Chapellier (1994) and Ngongang (2007) demonstrates the existence of links between accounting practices and behavioural determinants such as the training of the manager. Recently, in our context, the empirical results of Diouf (2022) maintain that the degree of use of costing tools (full costs, among others) is higher in SMEs where the manager has a managerial background.

On the other hand, other empirical works have detected the opposite relationship. At this level, the results of Foka Tagne et al (2021) reveal a negative relationship between the type of training of the manager and the choice of the full cost method. This means that the chances of choosing the full cost method decrease with managers who have received management training. This result suggests that management training is not a panacea for the adoption of full costing.

Despite a rather mixed literature, we follow the view of most authors by posing the following hypothesis:

H1: Full costing is more prevalent in SMEs where the manager has a management background Research has attempted to examine the link between the level of training of the manager and the adoption of accounting information systems, analysed here from the angle of the use of management tools (full costing, among others).

Indeed, authors such as Chapellier and Mohammed (2010), as well as Lacombe-Saboly, (1994) have shown, through their research, that managers with a high level of training most often have more complex accounting information systems.

In the same vein, other authors (Lassoued and Abdelmoula, 2006; Chapellier and Ben Hamadi, 2012) reveal that managers with higher education have more complex accounting data systems than others. Foka Tagne et al (2021), in a recent contribution, support this thought by estimating that the manager's level of education significantly influences the probability of choosing the full cost method.

In contrast, the empirical study by Diouf (2022), in the Senegalese context, shows that the level of education of the management control manager has no effect on the degree of use of costing tools (full costing, among others).

In view of the contrasting results found in various contexts, we pose the following hypothesis:

H2: The practice of full costing increases with the level of education of the SME manager. The relationship between professional experience and the adoption of costing tools or the use of accounting information has also been the subject of some scientific production.

While some authors (Chapellier and Mohammed, 2010; Lacombe-Saboly, 1994; Wade and Diouf, 2021) argue that the use of accounting information increases with the level of experience of the manager, others (Chapellier, 1994; Nadeau et al. 1988) take the

opposite view. However, Diouf (2022), in a recent study, notes that the degree of use of costing tools (full costing, among others) increases with the professional experience of the management controller. This opinion is also shared by Wade and Diouf (2021) where the authors consider that the experience of the management control officer is an explanatory factor of the degree of use of costing tools in the context of Senegalese SMEs.

What then is the practice of full costing in our context? Therefore, we pose the following hypothesis:

H3: The practice of full costing increases with the professional experience of the SME manager to refute these hypotheses, we use binary logistic regression. Indeed, it is recommended when the dependent variable is categorical (full cost practice) and the explanatory variables are either qualitative or categorical (type of training, level of training), or quantitative or metric (professional experience).

Thus the research model is as follows:

$$PCC(0, 1) = \alpha_0 + \alpha_1(TF) + \alpha_2(NF) + \alpha_3(EXPR)$$

With: PCC = Full cost practice: it takes the value 1 if the SME uses full costing, 0 otherwise TF= type of training; NF= level of training; EXPR= work experience; α_0 : constant; $\alpha_1, \alpha_2, \alpha_3, \alpha_4$: regression coefficients.

III. METHODOLOGICAL APPROACHES

a) Selection and Characteristics of the Sample

A convenience sampling resulted in a final survey of 140 SMEs with between 10 and 250

employees. Very small enterprises (VSEs) are excluded because of a still embryonic costing system. The administration of the questionnaire, done by direct interviews (face to face), was made possible thanks to the assistance of three professional auditors of the Master in Accounting and Finance of the Catholic University of West Africa (UCAO/St Michel) trained for this purpose. Finally, the survey was conducted mainly among SMEs operating in the regions of Dakar and Diourbel which, according to data from the National Agency for Statistics and Demography (ANSD, 2016), concentrate a very large number of SMEs.

In addition, the sample is composed of 86 managers with managerial training (61.4%) compared to 54 managers whose training is purely technical (19.6%). Regarding the level of education, we find 111 managers with at least a bachelor's degree, i.e. 79.3% of the sample, while only 29 managers (20.7%) have not reached this level of education. The survey also shows that 96 managers (68.6%) have less than 10 years' experience, while the other 44 managers (31.4%) have more experience in business management (more than 10 years).

b) Operationalisation of Variables and Data Analysis Method

Two types of variables are considered in this research: the dependent variable and the independent variables. The dependent variable is "full cost practice" and the independent variables are type of training, level of training and work experience.

The following table summarises their operationalisation.

Table 1: Measurement of Research Variables

Independent variables	Measurement criteria	Nature of the variable
Type Of Training	Value 1 if management training and 0 if not	Categorical Variable
Level Of Education	Value 1 if high level of education(Bac +2 or more) and 0 otherwise (level below Bac +2)	Categorical Variable
Work Experience	Years of experience in the job	Variable Metric
Dependent Variable	Measurement criteria	Nature of the Variable
Full Cost Practice	Value 1 if the SME adopts full costing and 0 otherwise	Binary Variable

Source: inspired by Diouf (2022)

IV. RESEARCH FINDINGS AND DISCUSSIONS

This section focuses on the results related to the adoption rate of full cost accounting, but also those related to the different research assumptions. It is dedicated to the results related to the adoption rate of the full cost method, but also to those related to the different research assumptions. It is dedicated to the results related to the adoption rate of the full cost method, but also to those related to the different research assumptions.

a) Full Costing Practice Less Available in SMEs

Our ambition in this section is to answer the following question: What is the level of adoption of the full cost method in Senegalese SMEs?

This will allow us to differentiate between SMEs that use the method and those that do not (see Table 2).

Table 2: Level of Adoption of Full Costing

Senegalese SMEs	Small Enterprises (SEs)	%	Medium Enterprises (MEs)	%	Total	%
Adopters	18	13%	21	15%	39	28%
Non-Adopters	60	43%	41	29%	101	72%

Source: Survey Data

The results in the table above show that the majority of SMEs in the sample do not use full costing (72%). This situation is much more prevalent in small companies (43%) than in medium-sized companies (29%).

On the other hand, the situation is reversed when it comes to the adoption of the method. Indeed, out of 39 SMEs surveyed, 21 medium-sized companies use the full cost method, i.e. 15% of the sample, compared with 18 small companies representing only 13% of the sample.

Thus, we can point to a low level of full costing in Senegalese SMEs, which is not specific to small companies.

This result can be related to the one found by Wade and Dieng (2019b) in the same context where the authors argue that "tools related to costing are weakly used and the weak instrumentation is not specific to small SMEs" (p 54).

This puts into perspective the view that the management model of African SMEs in general and Senegalese SMEs in particular is based exclusively on

intuition and the production of mandatory accounting data (financial accounting) to comply with tax obligations.

However, in view of this low level of instrumentation (only 28%), SME managers would benefit from an in-depth understanding of the levers that allow for a more sustained practice of full costing in order to be able to face competition both nationally and internationally.

This is the subject of the next sub-section, which aims to answer the following question: what are the managerial skills that explain the practice of full costs within SMEs?

b) Human Capital Explains the Practice of Full Costing in SMEs

We recall that the variables retained in this research to explain the practice of full costs are the type of training, the level of training and the professional experience. But before testing the hypotheses, let us first check the overall significance of the model (Table 3).

Table 3: Model Specification Elements

Elements		Chi-Square	Ddl	Sig.	Hosm and Lemeshow Test (P-Value)	Cox & Snell R-Two	Nagelkerke R-Two	Percentage Ranking
Stage 1	Step	27,487	3	000	0,434	0,178	0,255	77,1%
	Block	27,487	3	000				
	Model	27,487	3	000				

Source: Survey Data

Table 3 shows that the model correctly explains the dependent variable (full cost practice): Nagelkerke's R2 (0.255) is greater than 0.20, which is considered satisfactory with regard to Chesneau's (2015) criterion which allows an R2 coefficient greater than this threshold. Similarly, the Chi-square specification test is significant (P-value=0.000) and the model's classification percentage (77.1%) is above the Gillet (2010) threshold estimated at 50%. The Hosmer and Lemeshow test, also significant at the 5% threshold (P-value =0.434>0.05), shows that the model is compatible with the data used.

In the end, we argue that the model is globally robust and allows us to retain two managerial competences that explain the practice of full costs within SMEs (Table 4).

Table 4: Logistic Regression Result

Statistiques	A	E.S.	Wald	Ddl	Sig.	Exp (α)
TF	-1,683	,616	7,467	1	,006***	0,186
NF	-,272	,802	,115	1	,735 NS	,762
EXPR	,133	,039	11,351	1	,001***	1,142
Constant	-1,574	,413	14,522	1	,000	,207

Significance level: *(P-value < 0.1); **(P-value < 0.05); ***(P-value < 0.01); NS: not significant

Source: Survey Data

Examination of the data in Table 4 shows that two managerial competences are identified to explain the practice of full costing: precisely the type of training (TF) and work experience (EXPR).

An analysis of the odds ratio of the type of training (TF) indicates that the use of full costing has a lower chance (18.6%) of being practised by a non-

managerial trained manager than by a manager trained in management.

To confirm this result, we used the Student's t test which shows a significant difference (P-value = 0.000 < 0.01) between the practice of full costing by managerial executives (0.40) and non-managerial or purely technically trained executives (0.11) (Table 5).

Table 5: Full Costing Practice by Managerial Background

	Type Of Training	Means	T-Test	P-Value
Full Cost Practice (FCP)	Manager	0,40	14,284	0,000
	Non-manager	0,11		

Source: Survey Data

The various tests carried out allow us to conclude that managers with a management background have a greater propensity to adopt the full cost method than others. This does not refute hypothesis H1, which anticipated that the practice of full costing is more prevalent in SMEs where the manager has a management background. This result is in line with previous work in various contexts (Chapellier, 1997; Nobre, 2001; Ngongang, 2007; Diouf, 2022) where the authors conclude that the most complex management control practices are identified in companies where the managers have a management background. This means that managers with a management background have a greater ability to understand and model the

SME's costing system than other managers with a purely technical background.

The Odds Ratio for the professional experience variable (EXPR) shows that when using the full costing method in SMEs, there is a high chance (114.2%) that it is done by a more experienced manager (more than 10 years) than a less experienced manager (less than 10 years).

Furthermore, the comparison of means via Student's t test indicates a significant difference (P-value = 0.000 < 0.01) between the full costing practice of more experienced managers (0.50) and less experienced managers (0.19) (Table 6).

Table 6: Full Costing Practice by Manager's Experience

	Professional Experience	Means	T-Test	P-Value
Full cost practice (FCP)	More than 10 years	0,50	15,868	0,000
	Less than 10 years	0,19		

Source: Survey Data

Considering the results of the two tests, we can conclude that the adoption of full costs is more sustained in SMEs where the managers have some management experience than in other SMEs. This gives the opportunity not to refute the hypothesis H3 according to which the practice of full costs increases with the professional experience of the SME manager.

In relation to the literature, this result perfectly matches the conclusions of certain empirical works in the field (Chapellier and Mohammed, 2010; Lacombe-Saboly, 1994; Wade and Diouf, 2021; Diouf, 2022) where

the authors maintain that the degree of use of management tools (full cost method, among others) increases with the experience of the manager or the person in charge of management control within the SME.

Against all expectations, the level of training of the manager has no effect on the adoption of the full cost method: this refutes the hypothesis H2 (favoured in the literature) which anticipated that the practice of full costing increases with the level of training of the SME manager.

However, this result found in the Senegalese context reopens the debate on the relationship between the level of education of the manager and management accounting practices such as the full cost method. Given that the sample contains a large number of managers (79.3%) with a high level of education (Bac+2), this debate naturally raises the issue of the adequacy between the level of education (obtained in universities and business schools) and the ability to set up a reliable costing system in a company.

The various results allow us to stabilise the research model as follows: $(FCP) (0.1) = - 1.683 (TF) + 0.133 (EXPR) - 1.574$

In the end, the model shows that the human capital of the manager, in the form of his or her education and professional experience, explains a much more extensive use of the full cost method. However, the professional experience in business management proves to be the most determining skill in the practice of full costs in the context of Senegalese SMEs.

c) *Managerial Implications of the Research*

The results show that, on the one hand, there is a low level of instrumentation of the full cost method and, on the other hand, that management training and, above all, professional experience are the managerial competences that explain a more sustained practice of full costing in SMEs.

From this point of view, SME managers, especially the smallest ones, must immediately make use of the knowledge economy to incorporate the practice of full costing more into the management universe of their structures in order to be in phase with the process of cost control, which is a guarantee of competitiveness.

To understand and seize these opportunities, they must have in-depth knowledge of management based on their initial training or acquired later through their professional experience in business management. As these elements are components of human capital, managers are called upon to continuously improve their skills in order to make SMEs more efficient and to be able to cope with the uncertainty of competitive markets.

On the other hand, the results show that the purely technical training, but also the lack of experience of some managers are factors that limit the practice of full costs in SMEs.

Considering these aspects, we recommend them to use external competences, in this case accountants (fashion effect). This idea is all the more justified if we consider the specificity of some SMEs where all operational tasks are concentrated in the hands of the managers; this raises the obligation, in the current context, to collaborate with accounting experts to favour the production of new knowledge useful for the practice of full costs.

However, as the SME becomes more complex, the manager must think about having an internal competence (an accountant, an administrative and financial director or a management controller) and the expert will be responsible for transferring the skills through the phenomenon of organisational learning.

This vision that we advocate is close to that of Penrose's (1959) resource theory. According to this approach, it is the skills held internally by the company that enable it to develop a competitive advantage over its competitors. These skills are materialised here by a solid managerial education and proven professional experience in business management and especially in SMEs.

In addition, apart from the behavioural dimension which has just been developed, we can also have another reading of our results under the prism of the neo-institutionalist approach (Meyer and Rowan, 1977; Di-Maggio and Powell, 1983). Like these authors, we consider the adoption of the full cost method by certain managers as the result of a normative type of isomorphism (Ben Hamadi et al, 2014) insofar as the 'rules' and 'codes' acquired during their management training could largely explain their tendency to adopt the same full cost practices within SMEs.

V. CONCLUSION

The objective of this paper was to study the managerial competences that could explain the use of full costing in SMEs.

Considering the theory of behavioural contingency, our results show that the practice of full costing is more noticed in SMEs where managers have a management background and proven professional experience in business.

Through these results, we sought to theoretically enrich previous research in the Senegalese context (Diop, 2016; Wade and Dieng, 2019b; Wade and Diouf, 2021; Diouf, 2022) by contributing other concepts that are not sufficiently explored. These include the practice of full costs and managerial skills that reflect the human capital of the SME manager.

From a managerial point of view, beyond the recommendations, we have noted that managers with identical profiles have identical behaviours. This can be interpreted as the result of isomorphic practices, in particular a normative isomorphism linked to managerial training which explains, in part, the adoption of management accounting practices (full cost method) taught in universities and management schools.

As with all scientific research, this is not without its limitations. Beyond the size of the sample (140 SMEs) which remains very limited, the convenience sampling does not allow for a generalisation of the results.

Moreover, certain behavioural factors related to soft skills, notably the family culture of the manager

(Ngongang, 2014), were not taken into account in this study.

In terms of perspectives, our ambition is to continue this research by exploiting more the cultural dimension of the leader. This seems to be an interesting perspective because, to our knowledge, it has never been the subject of a formal study in Senegal. Such research will make it possible to understand how certain managers, because of their family cultures, use management tools more than others to make their structures more efficient and competitive.

BIBLIOGRAPHIC

1. AFFES H. and CHABCHOUB A. (2007), "The accounting information system: the determinants of its characteristics and its impact on the financial performance of SMEs in Tunisia", *Journal of Management Sciences*, Direction and management n° 224-225, p. 59-67. ANSD (2016), « Global report on the general business census in Senegal».
2. BEAMISH P. and DHANARAJ C. A. (2003), « Resource-based approach to the study of export performance», *Journal of Small Business Management*, Vol. 29, N°3, 242-261.
3. BEN HAMADI Z., CHAPPELLIER P. and VILLESEQUE-DUBUS F. (2014), « Budgetary innovations in SMEs: the influence of the sector of activity and the profile of the manager». *Innovations - Journal of Economics and Management of Innovation*, De Boeck Supérieur, vol 43 (1), pp.223. 10.3917/inno.043.0223ff. fffal-02010369.
4. CHAPPELLIER P. (1994), « *Accounting and information system of the SME manager: attempt to observe and interpret practices*», Doctoral thesis in Management Sciences, University of Montpellier2.
5. CHAPPELLIER P. (1997), « Management profiles and management accounting data in SMEs», *International SME Review*, vol. 10, n°1, pp. 9-41.
6. CHAPPELLIER P. and BEN HAMADI Z. (2012), « The accounting data system of Tunisian SME managers: complexity and determinants», *International Management Review*, vol. 16, n°4, pp151-167.
7. CHAPPELLIER P. and MOHAMMED A. (2010), « Accounting practices of Syrian SMEs in a context of economic liberation», *Congress of the French Accounting Association*, Nice.
8. CHESNEAU C. (2015), « Regression models», <http://www.math.unicaen.fr/~chesneau/CHRIT> Y. and KHATORI Y. (2021), « Managerial skills, national culture linked to the performance of Moroccan companies: Case of the Casablanca-Settat region », *International Journal of Accounting, Finance, Auditing, Management and Economics*, 2 (1), 415-445.
9. DI MAGGIO P. J. and POWELL W. W. (1983), «The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields», *American Sociological Review*, 48, p147-160.
10. DIOP, S. (2016), The contingency of the adoption of activity-based costing systems in Senegal, *African Management Review*, vol.1 (1) 2016, pp.85-101.
11. DIOUF M. (2022), « The contingency of the adoption of costing tools in SMEs: an empirical study in Senegal», *Journal of Management & Organisational Finance Studies*, Vol. 6 (1), PP:1-19.
12. DRUCKER P. (1993), « Beyond capitalism », Paris, Dunod.
13. EL BAKIRDI Y. and RADI S. (2017), «The accounting information system of Moroccan SMEs: observation of practices», *European Scientific Journal edition*, vol. 13, n°31.
14. FOKA TAGNE A. G., TALEKENZE NANFACK W., TAKOUDJOU NIMPA A. and TSIAZE MELA O. (2021), « The Choice of the Full Cost Method in Industrial Enterprises in Cameroon», *Management review and culture*, Vol. 6, PP: 2-27.
15. GILLET C. (2010), « *The study of the determinants of the verification of societal information in the French context*», Thesis in Management. University of Social Sciences- Toulouse I. GOSSELIN M. (2007), « A review of activity based costing: Technique, implementation and consequences », *Handbook of Management Accounting Research*, vol. 2, pp. 647-670.
16. ITTNER C D. and LARCKER D F. (2002a), « Empirical Managerial Accounting Research: Are We Just Describing Management Consulting Practice? », *European Accounting Review*, Vol 11, Iss 4, pp 787-794.
17. JULIEN P. A. (1990), « Towards a multi-criteria typology of SMEs », *SME International Review*, vol. 3, n°3-4, pp.411-425.
18. JULIEN P.A. and MARCHESNAY M. (1988), « *The small business*», Paris, Edition Vuibert. KAPLAN R.S. and ANDERSON S.R. (2004), « Time-Driven Activity Based Costing », *Harvard Business Review*, 82 (11): pp.131-138.
19. LACOMBE-SABOLY M. (1994), *The determinants of the quality of corporate accounting products: The role of the manager*, Doctoral thesis in Management Sciences, University of Poitiers.
20. LASSOUED, K. E. and ABDELMOULA I. (2006), «Determinants of accounting information systems in SMEs: an empirical research in the Tunisian context», *27th Congress of the French Accounting Association, Tunisia*.
21. LAVIGNE B. (1999), « *Contribution to the study of the genesis of SME financial statements*», Thesis in Management Sciences, University of Paris IX – Dauphine.

22. LAVIGNE B. (2002), « Accounting information system of SMEs: an empirical research », *R. C. F.*, n° 348, Octobre.
23. LORRAIN J., BELLEY A., and DUSSAULT L. (1998), « Entrepreneurs' skills: development and validation of a questionnaire », IVth International Francophone Congress on SMEs, University of Metz and Nancy, 22- 24 octobre.
24. MAMBOUNDOU J. P. (2003), « Owner-manager profile and performance of African SMEs: an illustration through the Gabonese case ». *Management Review 2000*, mai-juin, pp.35-59.
25. MAYIMBI EKULI NGOKANA P., BOLILA L. and KANGELA V. (2021), « Determinants of the nature of management control in African SMEs: the case of the Democratic Republic of Congo », *French Journal of Economics and Management*, Volume 2, Number 1, pp: 131-155. MCCORMICK E. J. and TIFFIN J. (1974), « *Industrial psychology* », 6th Ed. Engle woodCliffs: Prentice-Hall.
26. MEYER J. W., ROWAN B. (1977), « Institutional organizations: formal structure as myth and ceremony », *American Journal of Sociology*, 83: 340-363.
27. NADEAU R., MARTEL J. J. and ZALI B. M (1988), « The use of quantitative methods for management decisions in Quebec SMEs: an empirical study ». In *Papier de recherche*. Québec: University of Laval, GRADE RR 88.
28. NGONGANG D. (2007), « Analysis of the determining factors of the accounting information system and accounting practices of Chadian SMEs », *The Journal of Management Sciences*, n°224-225, 49-57.
29. NGONGANG D. (2010), « Analysis of costing practices in Cameroonian SMEs », *Lebanese Journal of Management and Economics*, N°5, Electronic journal, 23 pages.
30. NGONGANG D. (2013), « Accounting information system and management control in Cameroonian companies », *The Management and Organisation Review*, pp. 113-120.
31. NGONGANG, D. (2014), « Analysis of the competence of owners-managers of SMEs in the North of Cameroon », *Congolese Journal of Management*, Vol.1 (19), p. 9 – 42.
32. NOBRE T. (2001), « Methods and tools for management control in SMEs », *Finance Control Strategy*, Vol. 4, n° 2, Juin, pp. 119-148.
33. PETERSE N. and JACOB R. (1992), « *Understanding the individual's behaviour at work: a pattern of integration* », Ottawa, Agence d'Arc Publishing.
34. PORTER M. E. (1980), « *Competitive Strategy: Techniques for Analyzing Industries and Competitors* », New York: Free Press.
35. PENROSE E. (1959), « *Theory of the growth of the firm* », John Wiley & Sons, 296 p., New York.
36. ROGALSKI J. and LEPLAT J. (2011), « Work experience: sedimented and episodic experiences », <http://journals.openedition.org/activites/2556>.
37. ROUBY E. et SOLLE G. (2002), « Competency-based management and the positioning of management control », Skills and Knowledge Management Conference, ESC Rouen, mars 2002.
38. SZILAGYI A. D. and SCHWEIGER D. M. (1984), « Matching managers to strategies: a review and suggested framework ». *Academy of Management Review*, 9, pp. 626-637
39. WADE M. B. and DIENG O. T. (2019b), « Analysis of cost practices in industrial enterprises in Senegal », *African Management Review*, Vol. 4 (PP. 78-102).
40. WADE M. and DIOUF M. (2021), « Analysis of the determinants of the degree of use of management control tools in an SME context: an empirical validation in Senegal », *Review of control, accounting and auditing*, Vol. 5 (2), pp: 37- 66.