

The Factors Affecting the Different Management Accounting Practices in Small and Medium Sized Enterprises in Jordan

Eman AL-Hawari

Head of Accounting Department in Private Company
Email: aman_spic@yahoo.com

Mahmoud Nassar

Associate Professor, Applied Science Private University
Email: m_nassar@asu.edu.jo

DOI: 10.6007/IJARBSS/v7-i12/3727 URL: <http://dx.doi.org/10.6007/IJARBSS/v7-i12/3727>

ABSTRACT

The aim of this study is to identify the effect of some factors such as (the Size of the enterprise, age of enterprise and the degree of competition faced) on the use of different practices of MASs measured in both (cost systems and budget systems) in small and medium sized enterprises (SME). In addition, outlining if these enterprises face difficulties in the adoption of MASs. In order to achieve these objectives, a questionnaire was designed to collect data. The questionnaire was distributed to the accountants and financial managers of the Jordanian small and medium sized enterprises. The study sample consisted 100 financial managers and accountants whom were selected according to the random sample method. The results of the study showed that the factors (size of enterprise, age of enterprise and degree of competition faced) individually and collectively adopt the MASs measuring both (cost systems and budget systems) in the small and medium sized enterprises in Jordan. The results of the study also showed that there were difficulties in adopting the MASs by SME industrial enterprises in Jordan.

Keywords: Small and Medium Sized Enterprises, Size of Enterprise, Age of Enterprise, Degree of competition, Managerial Accounting Systems MASs.

1. Introduction

Small and medium sized enterprises play an important role in the economic and social development process in Jordan, for their effective role in maximising GDP and their contribution to solving the unemployment issue. It is crucial to pay attention to the practice of managerial accounting in which provide accounting information for these enterprises, where information, tools and methods are of great contribution to the achievement of their objectives. This is reflected by the owner of the enterprise and on the general level of the economy, through the provision of data and information necessary for the development and continuity. The burden is put on the accountant to provide a very large role in the tabbing and

classification of enterprises trends beginning from the feasible economic study and the completion of preparation of financial statements or performance evaluation of the project. In addition to, what is the added value presented by the enterprise to its owner and to the economy. In accordance to the latest statistics of the Amman Chamber of Industry and Trade in Jordan, 98% of Jordanian companies are classified as small and medium sized enterprises, in which are the first and main contributors to the local economy. With the knowledge that small and medium sized enterprises are defined as those enterprises whose shares are not traded in the financial markets, and do not publish their financial statements to the beneficiary parties outside the enterprise (Amman Chamber of Industry and Trade).

Through the fast review of the previous studies, this study is considered to be one of the few studies that is aimed at studying the factors influencing the difference in managerial accounting practices between small and medium sized enterprises in Jordan. Where all the previous studies were limited to the study of the use of modern management methods in the Jordanian joint stock companies, current studies differentiate with previous studies in this area. This study is considered to be one of the few studies that will study the impact of size, age and degree of competition in small and medium sized enterprises in Jordan within the industrial sector in contrast to the practice of accounting systems of management of cost systems and performance evaluation and budget systems. This study will focus on the reasons that limit the ability of industrial SMEs in Jordan to adopt managerial accounting practices.

The problem of the research can be precisely portrayed by the following sub-questions:

- 1- Is there an impact on the size of the enterprise in the adoption of managerial accounting practices, such as cost systems and budget systems?
- 2- Is there an impact on the age of SMEs in adopting managerial accounting practices, such as cost systems and budget systems?
- 3- Is there an impact on the degree of competition faced by small and medium sized enterprise among them in the industrial companies in Jordan in the adoption of managerial accounting practices, represented by cost systems and budget systems?
- 4- What are the most important obstacles that prevent the adoption of managerial accounting practices in the management of small and medium sized industrial enterprises in Jordan?

2. Theoretical Framework

The classification of enterprises differs from one country to another; the variation in the classification of enterprises contributes to the existence of multiple definitions for both small and medium sized enterprises. The differences in purpose and objectives of enterprises come in the terms of financial or statistical objectives being one of the reasons that lead to multiple enterprise definitions. Therefore, companies can be classified as large sized enterprises in a developing country and could be classified as a small or medium sized enterprise in developed countries.

The International Labour Organisation (ILO) defined the small enterprise as an enterprise consisted of 10-50 employees and having total assets of less than \$350,000. The United Nations

Industrial Development Organisations (UNIDO) defines the small enterprise as having no more than 100 employees and a fixed capital of less than \$250,000. The Central Bank of Jordan provides through its website instructions explaining to SMEs that small enterprises should not be insurance companies, brokerage firms or public shareholding companies. This definition was provided by the Central Bank to be used to develop these companies through financing procedures (www.cbj.gov.jo). Therefore, the classification criteria of enterprises in Jordan are identified by the number of workers in the enterprise. The industrial enterprises were considered from 1-9, whilst small sized enterprises were considered between 10-49 and the medium sized enterprises employ between 50-250 workers.

From the first studies we review the study of Adler et al. (2000), conducted by 165 industrial companies in New Zealand to assess the extent to which these companies have adopted the tools of advanced management accounting and the methods used to compare to traditional methods. The study concluded that the majority of companies use many modern methods without abandoning the use of traditional management accounting methods.

The study also found that the most important obstacle faced by the adoption of modern methods is due to human resources determinants of the companies. In a field study for Mufti and Al-Khayal (2002), the study aimed at demonstrating the weaknesses and strengths of methods of management accounting applied in industrial companies in Saudi Arabia. The study of Baas and Schorten (2005) aimed at analysing bank lending behaviour towards small and medium sized enterprises, and its impact on cost control. The study therefore investigated the opinion of several financing banks for small and medium sized enterprises on one hand, and the opinion of the enterprises administration on the other hand. The study of Ahmad (2012) aimed at examining the degree of management accounting practices acceptance in Malaysian small and medium sized enterprises. In addition, to find out the factors affecting the use of management accounting practices in small and medium sized enterprises, the examination of the relationship between the users of management accounting practices in small and medium sized enterprises and the performance of these companies.

The Lucas & Lowth (2013) study aimed at assessing the quality of managerial accounting in small and medium sized enterprises, identifying the tools used in the application of management accounting practices in SMEs and tools that are not used and reasons for non-use, and identifying the area in which managerial accounting can be further developed in these companies. The study of Ayadi (2014) aimed to identify the differences in the adoption of management accounting practices between SMEs. In addition to the application of emergency theory, aiming to improve the understanding of the factors that explain the adoption of three-management accounting practices, thus the impact of emergency factors on the use of activity based and balanced performance based checks. In a study in Kenya, Kariuki & Kamau (2016) investigated the impact of regulatory emergencies upon the adoption of managerial accounting practices in Kenya's industrial SMEs.

3. Methodology

3.1 Study Population

The study's population consists of all the Jordanian small and medium sized industrial enterprises. According to the records of the Amman Chamber of Industry and Commerce, the researcher found that the majority of these enterprises operate in industrial areas in the city of Sahab. The researchers distributed (100) questionnaires to accountants and financial managers in those Jordanian small and medium sized industrial enterprises in the industrial city of Sahab as the study sample. The researchers were able to recover (86) questionnaires answered, (7) questionnaires were excluded from the study sample due to the lack respondents seriousness. The final study sample consisted of (79) questionnaires.

4. Statistical Analysis

4.1 Descriptive Statistics

The researcher was able to recover (79) questionnaires representing the final study sample. Based on the design of the study tool (questionnaire), the number of items that answered the first three sections was (39), due to their application of managerial accounting practices. The number of study items that responded to the fourth section regarding the obstacles and difficulties faced by the application of managerial accounting practices were (79) representing the whole study sample.

Table (1) shows the demographic distribution of the study sample:

Item	Repeats	Percentage
Academic Qualification		
- Diploma	4	7.1%
- Bachelor Degree	56	70.8%
- Master Degree	11	13.9%
- PhD Degree	8	8.2%
Career Level in Accounting Department		
- Manager	4	5.1%
- Deputy Manager	9	11.4%
- Head of Accounting Department	38	48.1%
- Head of Cost Department	28	35.4
Years of Accounting Experience		
- 5 years or less	16	20.3%
- Between 5 – 10 years	48	60.8%
- More than 10 years	15	18.9%
Under which of the following sectors does your companies nature fall into		
- Chemical Industry	6	7.6%
- Electrical Appliances	5	6.3%
- Engineering and Construction Industry	9	11.4%
- Food and Nutrition Industry	15	19%
- Glass and Porcelain Industry	6	7.6%
- Tobacco and Cigarettes	1	1.3%

- Mining	4	5.1%
- Printing, Paper and Cardboard	14	17.7%
- Therapeutic Products& Medical Supplies	12	15.1%
- Packaging	3	3.8%
- Textile & Shoes Industry	4	5.1%
- Other (please specify)	0	0%
Total	79	100%
	Repeats	Percentage
No. of Current Company Employees		
- 1 – 9	4	5%
- 10 – 49	11	14%
- 50 – 149	27	34%
- 150 – 199	31	39%
- 200 – 250	6	8%
Annual Sales Volume		
- Less than 250 thousand	7	8%
- Between 250 – 500 thousand	15	19%
- Between 500 thousand and One million	13	17%
- Between One and Two million	24	30%
- More than Two million	20	26%
Age of Current Company		
- 1 – 3 years	2	3%
- 4 – 6 years	18	22%
- 7 – 9 years	13	16%
- 10 – 12 years	31	40%
- More than 12 years	15	19%
Size of competition on the company's main product lines		
- Very Weak	2	2%
- Weak	4	5%
- Medium	19	24%
- Strong	29	37%
- Very Strong	25	32%
TOTAL	79	100%

4.2 Testing the Study Hypotheses

The First Main Hypothesis Ho1: The following variables (size of establishment, degree of competition) do not affect the adoption of managerial accounting practices (measured by cost systems) in small and medium sized industrial enterprises in Jordan.

Table (2) – Test results of the multiple regressions for the first main hypothesis

CS= $\beta_0 + \beta_1 * size + \beta_2 * Age + \beta_3 * CL + e$				
Model	B	Coefficients	T	Sig
Constant	2.006			
size	0.206	0.289	2.225	0.033
Age	0.132	0.332	2.396	0.022
CL	0.161	0.325	2.443	0.020
F test Model= 21.919		Sig F= 0.000		
F Distribution Table = 4.084		T Distribution Table = 1.686		
Adjusted R Square= 0.623		R= 0.808		

Where (CS) refers to cost systems, (Size) refers to the size of the enterprise, (Age) refers to the age of the enterprise and (CL) indicates the degree of competition.

According to the above data, the main null hypothesis was rejected and the alternative hypothesis was accepted. This means that the variables (size of enterprise, age of enterprise and the degree of competition) affect the adoption of managerial accounting practices (measured by cost systems) in the small and medium sized industrial enterprises in Jordan.

As shown by the results of the multiple regression test, the value of the **Adjusted R Square** parameter reached (0.623). This indicates to the degree of accuracy in the interpretation of the dependent variable (cost systems) through the independent variables (size of enterprise, age of enterprise and the degree of competition) collectively.

Furthermore, for the purposes of either accepting or rejecting the sub-hypotheses of the first main hypothesis, the researcher depended on the multiple regression test outcomes as follows:

- **Ho1.1:** There is NO impact implied by the size of the enterprise on the adoption of managerial accounting practices (measured by cost systems) in small and medium sized industrial enterprises in Jordan.

Based upon this, the first sub-null hypothesis was rejected and therefore the alternative hypothesis was accepted. In other words meaning that there is an effect by the size of the enterprise on the adoption of managerial accounting practices (measured by cost systems) in small and medium industrial enterprises in Jordan.

- **Ho1.2:** There is NO impact implied by the age of enterprise on the adoption of managerial accounting practices (measured by cost systems) in the small and medium sized industrial enterprises in Jordan.

Thus, the age of the enterprise affects the cost systems. Based on this, the second sub-hypothesis is rejected and the alternative hypothesis is accepted. In other words, the age of an enterprise has an effect on the adoption of managerial accounting practices (measured by cost systems) in small and medium sized industrial enterprises in Jordan.

- **Ho1.3:** There is NO impact implied by the degree of competition faced by enterprises on the adoption of managerial accounting practices (measured by cost systems) in small and medium sized industrial enterprises in Jordan.

Noticed in Table (2), the coefficients have a value of (0.325) indicating a strong positive correlation with statistical significance between the independent and sequel variables which means that the application of cost systems increases due to increased competition.

The Second Main Hypothesis Ho2: The following variables (size of enterprise, age of enterprise and the degree of competition faced) do not affect the adoption of managerial accounting practices (measured by budget systems) in small and medium sized industrial enterprises in Jordan.

Table (3) - Test results of the multiple regression for the second main hypothesis

$BS = \beta_0 + \beta_1 * size + \beta_2 * Age + \beta_3 * CL + e$				
Model	B	Coefficients	T	Sig
Constant	1.363			
size	0.268	0.300	2.426	0.021
Age	0.191	0.384	2.906	0.006
CL	0.175	0.283	2.227	0.032
F test Model= 25.295		Sig F= 0.000		
F Distribution Table = 4.084		T Distribution Table = 1.686		
Adjusted R Square= 0.657		R= 0.827		

As shown by the results of the multiple regression test, the value of the **Adjusted R Square** parameter reached (0.657). This indicates to the degree of accuracy in the interpretation of the dependent variable (budget systems) through the independent variables (size of enterprise, age of enterprise and the degree of competition) collectively.

Furthermore, for the purposes of either accepting or rejecting the sub-hypotheses of the second main hypothesis, the researcher depended on the multiple regression test outcomes as follows:

- **Ho2.1:** There is NO impact implied by the size of the enterprise on the adoption of managerial accounting practices (measured by budget systems) in small and medium sized industrial enterprises in Jordan.
- **Ho2.2:** There is NO impact implied by the age of enterprise on the adoption of managerial accounting practices (measured by budget systems) in the small and medium sized industrial enterprises in Jordan.

In accordance to the decision rule that rejects the null hypothesis (Ho) if the calculated absolute value (T) is higher than its recorded tabular value at the value of Sig T (less than 5%). Therefore, the age of the enterprise affects the budget systems. Based upon this, the second sub-hypothesis is rejected and the alternative hypothesis is accepted. In other words, the age of an enterprise effects the adoption of managerial accounting practices (measured by budget systems) in small and medium sized industrial enterprises in Jordan.

- **Ho2.3:** There is NO impact implied by the degree of competition faced on the adoption of managerial accounting practices (measured by budget systems) in small and medium sized industrial enterprises in Jordan.

The third sub null hypothesis was rejected and the alternative hypothesis was accepted. Therefore, meaning the degree of competition creates an impact on the adoption of managerial accounting practices (measured by cost systems) in small and medium sized industrial enterprises in Jordan. Based on the discussion of study test hypotheses.

Table (4) – Descriptive Analysis of Obstacles and Difficulties Section Questions

Obstacles & Difficulties faced in applying managerial accounting practices	Mean	S – Deviation	Results
High System Costs	4.46	0.66	Strongly Agree
Weak Support from Senior Management	4.48	0.60	Strongly Agree
Other company priorities present	4.35	0.48	Strongly Agree
Lack of appropriate software to adopt systems	4.48	0.57	Strongly Agree
Weak coordination and cooperation between company departments	4.39	0.69	Strongly Agree
Systems requires time management	4.04	0.47	Agree
Systems requires time with programmers in the company	4.03	0.60	Agree
Consultants and experts increased hire costs	4.06	0.65	Agree
Poor knowledge of system data and requirements	4.00	0.58	Agree
Resistance to change by some of the staff	4.10	0.73	Agree
Total Section Result	4.22	0.35	Strongly Agree
Kurtosis = -0.326		Skewness = -0.237	

Table (4) presents the overall results obtained by the questionnaire concerning the obstacles and difficulties in applying managerial accounting systems. It is noticed in the table that the highest obstacle faced by the companies in the study sample were the ‘weak support from the senior management’ and ‘the lack of suitable software for adopting systems’ obstacles.

5. Discussion of Study Result

Based on the statistical tests and the hypothesis tests carried, the results can be summarised as the following: the variables (size of enterprise, age of enterprise and the degree of competition faced) individually and collectively affect the adoption of managerial accounting practices (measured by cost systems) in small and medium sized industrial enterprises in Jordan. The researcher believes that the reason may be due to the face that the larger the size of the enterprise and the older the enterprise the better-grasped management, the greater knowledge on the importance of the application of cost systems and the sufficient experience gained in using these systems, this is achieved by separating direct and indirect costs. Furthermore, to determine activity costs and dividing activities to those activities that add value to the product and activities that do not add value to the product. This conclusion was in correlation to the study of (Ahmad, 2012) which found an impact created by the size of the enterprise and the intensity of competition on the application of managerial accounting

practices. The study of (Kariuki & Kamau, 2016) which found an impact created by the intensity of competition on the adoption of managerial accounting practices in small and medium sized industrial enterprises. In addition to (Ayadi, 2014) study, that found an impact caused by the size of the company on the managerial accounting practices usage level. All of the variables (size of enterprise, age of enterprise and degree of competition faced) individually and collectively affect the adoption of managerial accounting practices (measured by budget systems) in small and medium sized industrial enterprises in Jordan.

Small and medium sized industrial enterprises in Jordan face difficulties in the adoption of managerial accounting practices; the researcher believes the reason is that the managerial accounting practices may not be suitable for all companies, specifically SMEs.

Based on the findings of the study, the following recommendations can be made: to work on developing awareness, desire and the ability to use managerial methods and their applications. To improve the awareness of managers of Jordanian small and medium sized industrial enterprises on the importance of the role of managerial accounting in multiple and diverse methods, in providing appropriate information that helps managers to perform their tasks such as planning, monitoring, performance evaluation and decision making. Furthermore, companies are able to provide data and specific information about costs and information related to the company's performance, by applying different managerial accounting methods. Finally, many other studies were conducted with the focus on enhancing the use of modern managerial accounting methods. In addition, the other studies focused on the factors affecting the managerial accounting methods in the various economic sectors, in order to face the rapidly changing economic environment and to achieve the competitive advantage in spite of the challenges of globalization.

References:

1. Adler, R., Everett, A. & Waldron, M. (2000). "Advanced Management Techniques in Manufacturing Utilization Benefits and Barriers to Implementation" *Accounting Forum*, PP. 131-150.
2. Ahmad, K. (2012). **The use of management accounting practices in Malaysian SMEs.** Unpublished PhD thesis, University of Exeter.
3. Ayadi, F., & Affes, H., (2014) Contextual factors impact on the use of management accounting practices: An empirical analysis in the Tunisian SME's. *Journal of Research in International Business and Management* (ISSN: 2251-0028) Vol. 4(3) pp. 45-55.
4. Baas, T., & Schorten, M. (2005), **Relationship Banking &SME's: A Theoretical, Analysis**, Potsdam University, DIW Berlin, (On_line), available: http://www.diw.de/documents/dokumentenarchiv/17/43500/baas-schrooten_EEA_2005.pdf