The Cost and Information Management Effect in SMEs: An Empirical Analysis

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Abstract:

Purpose: *The purpose of the study is to analyse costs and information management as determinants of the final price strategy, the cost components and to identify the impact of factors affecting the performance of SMEs.*

Design/Methodology/Approach: *The methodology is based on the comparative analysis of data using both primary and secondary sources. The data collected are analyzed using the regression method. The results show that cost and information management contributes to determinate the company's price of goods and services.*

Findings: *The research for SMEs shows that company performance depends on managerial decision taking into account cost management and accounting information. Decision-making in this context is determined by making a choice between alternatives and it is based on objectives. Cost and information management has a key goal, to organize costs by creating products and services, so company managers can use cost information as a guide to setting sales prices and inventory estimates by determining profits.*

Practical Implications: *This work will be useful to the people in the academic field, readers, and knowledge seekers and will be of great relevance in the area of managerial decisions and performance appraisal.*

Originality/Value: *It contributes to the knowledge of financial managers and other accountants as it will assist them in effective planning and control.*

Keywords*: Management cost, strategic planning, information system, accounting.*

JEL Codes: *F12, R11, R58.*

Article Type: *Research article.*

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1. Introduction

The concept of cost management in SME pricing decision making is a key issue in studying the Kosovar market. Since businesses cannot produce without cost, they need to recognize the structure, classification and cost-sharing of the activities they perform, so that they can determine prices on the products and services of the enterprise (Ahmeti *et al.,* 2013). The concepts of cost and pricing are the key factors for any management accounting study (Lati, 2006). Cost is a notion that we use whenever we discuss buying something. It is also defined as a kind of sacrifice to providing resources for specific purposes. On the other hand, the notion of prices represents the monetary value of products or services for sale. Generally, businesses that exist in Kosovo have a structure of small businesses that often do not know the costs and price in economic and professional aspects (ECK, 2009). The Kosovo private economic sector requires cost management studies to be serious, meaning that information should be trustworthy because a wrong decision may lead to failure of the planned course of the company (Mustafa *et al.,* 2006). Based on this, companies face several tasks not only to maximize the profit, but also to survive in the market, always adapting to external factors such as legal, economic, social, technological, and environmental ones (Asllani & Statovci, 2018). The negligent attitudes of many managers or the lack of professionalism in cost and information management affect the profitability of enterprises. This attitude leads to the decline of small businesses and the quality of their products (Asllanaj, 2011).

Some of the problems/barriers to small and medium-sized businesses in Kosovo are: a) entrepreneurial concerns over financing of business activities, b) lack of experience in cost management and effective price setting, c) definition of long-term pricing strategies, d) barriers to the rule of law, e) fiscal and financial barriers, f) lack of financial means for purchasing a cost management system, h) bureaucratic and information barriers, g) response to demand flux, i) barriers (workers' skills, labour regulations and production standards). These are considered as harmless in comparison to barriers to the rule of law and fiscal and financial issues (Institute Riinvest, 2009).

Our aim is to lay out the findings in this article on whether cost management and information (dependent variables) has an effect on the determination of price in small and medium enterprises and the effect that specific independent variables such as management (M), performance (P), strategies (S), assets (A), expenditure (E), external factor (EF), completion (C) and technology (T) has on the former by testing the following research hypothesis:

H0: Cost management and information affects and helps in controlling and determining prices.
H1: Cost management and information do not affect and help in controlling and determining prices.

2. Literature Review

Various empirical studies have been conducted in order to explain the impact of costs and information management and give an answer for their effects on the determination of SMEs pricing (Cassar & Holmes, 2003). The concept of cost management refers to the economic use of work, material, services and fixed assets. This is a way to survive and obtain a return on the invested assets (Cook, 2001). Profitability ratios measure the earning ability of a firm (Gibson, 2011). Profitability analysis measures the income of the firm relative to its revenues and invested capital (Krasniqi & Mustafa, 2011; Arvanitis *et al.,* 2017: Havlicek *et al.,* 2013).

Taking decisions, as most know from personal experience is a burdensome task (Ajibola, 2013). The manner in which information is provided by the accounting system affects the decision-making costs (Vokshi, 2018). In financial reporting, it is important, that the cost of goods, as well as management functions, are reported accurately. According to Adesina (2015), planning may usually be called budgets or targets, which provide an objective/aim, a meaning and a direction to any operations during a defined period. Auditing functions provide the checks and verifications for validity and accountability (Macintosh & Daft, 1987; Kambey *et al.,* 2018). Warren, Reeve & Fess (2005) defined "accounting as an information system that produces reports to the interested parties about economic activities and the company's condition". Accounting is the process of "identifying, measuring, recording and communicating economic information to permit informed judgments and economic decisions" (Solomon, 1987).

"The types of accounting information that a company develops vary with such factors as the size of the organization, whether it is publicly owned, and the information needs of management" (Krasniqi & Pula, 2008). *"Decision making is the study of identifying and choosing alternatives based on the values and preferences of the decision maker"* (Laqi & Manjola, 2006). *"Making a decision implies that there are alternative choices to be considered, and in such a case we need to identify as many of these alternatives as possible and choose the one that best fits with our goals, objectives, desires, values, and so on"* (Azize, 2016).

Decision making is the process of sufficiently reducing uncertainty and doubts about alternatives to allow a reasonable choice to be made from among them (Siyanbola, 2012). Okoli (2012) argues that the usage of accounting information depends on the quality of information by the user. Quality of information depends on the reliability of reporting, timeliness and relevance to the decision (Chong, 1996). Pat (2002), observes that the time factor in accounting information is very important in the case of periodicity concept which defines a specific interval of time for which an entity's report is prepared. This can be a fiscal year, natural year, quarterly or even monthly. Moreover, "decision making is the process by which managers respond to opportunities and threats that confront them by analyzing options and making

determinations about specific organizational goals and courses of action" (Ittner & Larcker, 1995).

The goals of SMEs are to try at minimal cost to reach the best quality (Murdick, 1970). Cost control is an essential part of management, this function should be triggered by the execution of plans or operational tasks involving the production, sale and storage of the raw material (Kamal, 2015). Costs must also be measured at all stages and comparisons between current and standard costs should be carried out, to have a cost-effective approach to cost control. Managers, supervisors and department heads should understand that they are responsible for the expenses that have been incurred as a result of their decisions. Each employee should understand his/her role in the organization so as to have a successful performance and expenditure management.

3. Data and Research Methodology

The analysis and interpretation of the findings relating to this research topic is based on the data generated from the field survey questionnaires distributed to 70 respondents. Once received this data was coded and inputted into an excel spreadsheet for further analysis. The data was then exported into a Statistical Package for Social Scientists (SPSS) software version 16.0.

To this end, an econometric model (linear regression model) was used to analyse and identify the impact of specific variables, specifically, management (M), performance (P), strategies (S), assets (A), expenditure (E), external factor (EF), completion (C) and technology (T), on cost management and information.

4. Empirical Analysis

Through the simple linear regression method and through the log-log method application, the effects of variables on cost management and information are tested. The nine –dimensional regression model is as follow:

$Y = B1 + B2X1 + B3 + B4 + B5 + B6 + B7 + B8 + ui$ or

$Y (cost) = B1 + B2 (M) + B3 (P) + B4 (S) + B5 (E) + B6 (A) + B7 (EF) + B8 (C) + B9 (T) + ui$

Y- represents the dependent variables (variables that are clarified, regresant, endogenous, predicted thirst), and as dependent variables we can estimate the cost.
X- represents the independent variable (regressor, exogenous, predicting, etc.) in our case as independent variables we have B2, B4, B5, B6, B7, B8 and B9 as parameters or coefficients of estimation where B1 is the constant parameter, while B2, B3, B4, B5, B6, B7, B8 and B9 are independent variable evaluation parameters.

Ui- is an error term variable, contains all the factors or variables that are not foreseen in the model and is usually an unobserved variable and receives positive and negative values.

a. Ordinary least squares (OLS)

We use this method because it is one of the useful methods for calculating the regression of eight variables. The model has simplicity because the error term is normally distributed (ui). In other words, the model analysed does not clearly define all variables that can affect the independent variable. Therefore, observations are not correlated with each other. This model has a more efficient estimate than the other example model of maximum likelihood (ML) so all collected data will be evaluated via (OLS) in our empirical analysis:

Y- log on management cost and information (MCI);
B1- the constant;
B2-(M) - resents the log of management / (MCI);
B3-(P) – represents the log of performance /CI;
B4-(S) - represents the log of strategy / MCI;
B5-(E) - represents the log of expenditure / MCI;
B6-(A) - represents the log of assets / MCI;
B7-(EF) – represents the log of external factor/M CI;
B8-(C) – represents the log of competition/ MCI;
B9- (T) - represent the log of technology/ MCI;
Ui- represents the error term.

The calculation of the evaluation coefficients in the regression sample function equation is done through the SPSS 16.0 software program. With their choice, we get the coefficients B1, B2, B4, B5, B6, B7, B8, and B9 that are known as small square evaluators. After calculating the evaluation coefficients B1, B2, B4 ... B9, we can rewrite the regression equation by also making the corresponding values substitutions:

Y (cost) = 0,077+ (management) 0,110 + (performance) 0,068+ (strategy) 0,068 + (expenditure) 0,056 + (assets) 0,002 + (Ex. factor) 0,135 + (competition) 0,132 + (technology) 0.443.

In the following Tables 1-4, we will specify the model as multiple and logarithmic regression as follows:

Table 1. *Entered Variables*

Variables Entered/Removed[b]			
Model	Variables Entered	Variables Removed	Method
1	P11, P10, P2, P4, P6, P7, P8, P1[a]		Enter
a. All requested variables entered.			
b. Dependent Variable: P3			

Source: SPSS 16.0. Output, field survey 2018.

Table 2. *Model Summary*

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.865[a]	.748	.261	.339
a. Predictors: (Constant), P11, P10, P2, P4, P6, P7, P8, P1				

Source: SPSS 16.0. Output, field survey 2018.

Table 3. *Model Summary*

ANOVA[b]						
Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	59.680	8	11.085	90.741	.000[a]
	Residual	90.229	2	.115		
	Total	149.909	10			
a. Predictors: (Constant), P11, P10, P2, P4, P6, P7, P8, P1						
b. Dependent Variable: P3						

Source: SPSS 16.0. Output, field survey 2018.

Table 4. *The gained coefficients*

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant-Cost)	.077	2.606		.029	.000
	P1- Management	.11.0	.233	.572	.473	0.68
	P2- Performance	.068	.314	.106	.218	0.84

P4- Strategy	.068	.190	.272	.358	0.75
P6- Expenditure	.056	.236	.208	.237	0.83
P7- Assets	.002	.151	.008	.014	0.90
P8- Ext.factor	.135	.876	.181	.154	.000
P10- Competition	.132	.267	.547	.494	0.67
P11- Technology	.443	.573	.687	.774	0.52
a. Dependent Variable: P3(Cost)					

Source: SPSS 16.0. Output, field survey 2018.

The P- value is less than 0.10 ($p<0.010$); therefore we can conclude that there is a statistically significant effect of the use of management cost and information as a useful tool for management decision making.

5. Discussion of Results

For statistical interpretation, we will refer to the table "coefficients". From the statistical point of view, it appears that under the 10% level, the variables have a statistical significance on cost, therefore, they are important.

✓- Keeping all other constant factors if business management grows for a year then we see that costs will increase by an average of 0.11%. This is statistically unimportant because it has a mean of 6.8% or F-value of 0.68, which is within the confidence interval of 10%.

✓- If price performance increased by 1%, the cost would increase by 0.68% or F-value 0.84, keeping constant the other variables.

✓- If costs increased by 1%, the cost would increase by 0.56% or F-value 0.83 by keeping constant the other variables.

✓- If the strategy increased by 1%, the cost would increase by 0.68% or F-value 0.75 while keeping constant the other variables.

✓- Keeping all the other constant factors if assets increased by 1%, the costs would increase on average by 0.02% or F-value 0.90 (this really has no significance-so it is insignificant).

✓- Keeping all the other constituents constant if political, economic, social and technological factors affect 1% cost, this would increase costs by 0.135% or F-value 0.00.

✓- If competition increases by 1% on average, the cost will increase to 0.132% or F-Value 0.13 by keeping constant the other variables.

✓- If technology increases by 1% on average, the cost will increase to 0.443% or F-value 0.52, keeping constant the other variables.

The empirical results from the econometric model show that performance, management, assets, price strategies, pricing policies and technology affect cost management and control, while this empirical result confirms our hypothesis set out above.

Form the testing we conclude that H0 hypothesis was not rejected and H1 hypothesis was rejected. The study revealed that variables have a significant effect on cost management and information and decision making at a statistically significant level.

6.   Conclusion

The importance of cost and information analysis to small and medium enterprises cannot be ignored. Based on the statement of the problem, the objective of the study and the result of the findings, the following recommendations are made.

Price policy and cost control should be a continuous activity in order to improve and increase efficiency in small and medium enterprises in Kosovo. SMEs also need to invest in human resources especially in employee training towards accounting and cost.

Employees should be encouraged to develop their carreer futher by strengthening themselves in their professional career, which in turn will affect the company's positive growth. It is important to ensure effective communication and information flow and organizations should communicate objectives, long and short-term at all levels of management and discuss the practical problems of implementing those objectives. Efforts should be made to measure the effects of currently employed concepts on decision making. It is evident that the accounting information factor looms large among factors, which contribute to the overall corporate efficiency.

This research also verified the impact of environmental factors on cost management that helps in decision-making and positioning of the company in the market. Information on cost management affects business performance and protects enterprises from aggressive external conditions or environmental factors. Therefore, it is important first to have information about innovation in order to create price strategies.

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