

Small and medium size enterprise: Access the financial and non-financial factors

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CHRONICLE

Article history:

Received: December 16, 2018

Received in revised format: February 10, 2019

Accepted: February 12, 2019

Available online:

February 12, 2019

Keywords:

SMEs

Strategic Factors

Performance

Management Factors

Financing Factors

ABSTRACT

The aim of this study is to investigate the factors influencing the performance of the industrial small and medium enterprises (SMEs) in Jordan. The factors include financial, management, marketing, technological and government policy and regulations. A qualitative method is employed by adopting a descriptive questionnaire research design. The data of the study are gathered from the employees who work at the industrial SMEs in Jordan. The results show that there were positive and significant relationships between all mentioned factors and the performance of SMEs, which indicate that when these factors are improved, the performance will also be improved. However, the economic factors have negative effects on the performance of SMEs.

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1. Introduction

Small medium sized enterprises (SMEs) play an important role for the development of the countries. In other words, SMEs represent important economic sector that concern to all countries of the world specially the developing countries including Jordan. SMEs form the backbone of the economic and global changes and transformations (Margaretha & Supartika, 2016; Farrokh et al., 2016). SMEs are vital areas in the exploitation of the primary resources and the redistribution of the income in addition to rapid response with a small percentage of risks. The economic, social, and political environment surrounding the SMEs impact on the quality and the qualitative performance (Bouazza et al., 2015). The future development of the SMEs is connected with the policies and procedures that insure dependability and supporting the industrial sector. SMEs are accounted for 90% of the worlds enterprises and provide employment opportunities of about 50% of the organized employment (Word Bank Group, 2017). Researchers concentrated on investigating different factors influencing the performance of SMEs in developed and developing countries (Margaretha & Supartika, 2016; Farrokh et al., 2016; Abotsi et al., 2014; Kinyua, 2014; Amwele, 2013). In Jordan, SMEs form a pivotal role in production and operation, employment, income generation and innovation to achieve the economic goals for which they were created.

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According to Jordanian general statistics department (2017), about 95% of total public institutions are considered as SMEs. In other words, around 164,000 of 18,000 of the businesses in industries are SMEs. Jordan's industrial sector contributes to the provision of 18% of the work force and 65% of Jordan's total investment in the industrial sector, also contributes more than 55% of the country's budget through taxes. In the context of SMEs in Jordan, very scant investigations have been carried out in this area. This study therefore attempts to identify the factors that influence performance of the SMEs in Jordan. The factors include financial, management, marketing, technological as well as government policy and regulations. Based on the authors' knowledge, there is no study on exploring the factors that influence SMEs performance in Jordan. The results of this study may help the decisions maker concentrate on the factors that significantly affect their SMEs performance.

2. Literature Review

Bouazza et al. (2015) examined the key factors that affect the growth of SMEs in Algeria and classified them into two groups of internal and external factors. Quantitative and qualitative methods were employed in this study to reach the research objectives. The qualitative approach was applied to review the literature in an exploratory nature and to explain and comprehend the research findings. The quantitative method was employed to measure the factors affecting the development of SMEs. They found that legal and regulatory framework, access to external financing, and human resources capacities, entrepreneur characteristics, management capacities, marketing skills, and technological capacities had a significant effect on SMEs performance. Moreover, Farrokh et al. (2016) stated that SMEs could be influenced by several factors depending on their growing from a smaller company to a larger one.

Margaretha and Supartika (2016) examined different factors affecting profitability such as firm size, firm age, growth, lagged profitability, productivity, and industry affiliation of SMEs firm listed in Indonesia Stock Exchange. They gathered their data from the general stock market index PEFINDO 25. The data was collected in this research included 132 observations and the sample included 22 companies multiplied by 6 years. The results show that firm size, growth, lagged profitability, productivity and industry affiliation had significant effects on profitability. While firm did not show a significant effect on profitability. The results of the regression coefficient also indicated that the firm size, growth and lagged profitability had negative effects on profitability, while productivity and industry affiliation had a positive impact on profitability.

Amwele (2013) investigated the factors that affect the performance of SMEs in the retail sector in Namibia and reported that resources and finance, external environment, competitions and corruption were the most important factors adversely affected the performance of SMEs in the Namibian retail sector. They reported that access to finance positively influenced the performance of SMEs; management skills also positively and significantly affect performance of SMEs but macro environment factors did not significantly influence on the performance of SMEs. The results also reported that as number of years in operations increased the performance also increased.

Another study conducted in Ghana in 2014 examined factors that enhance or preclude owners of SMEs in Ghana in making risk management decisions. Stratified and simple random sampling techniques were used to select the sample units. The Probit model was used in the analysis of data. The results show that the demographic factors had a positive influence on the likelihood that managers would take risk management decisions. All of the business related demographic factors were significant at various levels and positive, except for risk-loving. The economical related factors, such as the estimated amount at risk, the estimated cost of risk management and the estimated total monthly income after tax all had a positive influence on risk management decision making. However, government and tax policies were perceived to negatively influence risk management decisions by managers. Noreen and Junaid (2015) identified the perceived critical internal factors affecting the growth of SMEs in Pakistan. The results indicated that there was a significant relationship between identified factors and the growth of SMEs. Abdel-Jalil

(2014) examined the effect of the capital structure on the performance of the Jordanian joint stock companies registered in the Amman Stock Exchange from 2008 to 2012. The analysis of the regression coefficient did not find a statistically significant effect at the level of 10% of the ratio of debt to equity over return on investment. There was a statistically significant adverse effect at 1% level of debt to equity ratio on return on equity. The analysis of regression coefficients did not find a statistically significant effect at a significant level of 10% for the ratio of debt to return on equity.

To analyse the effects of the factors influencing SMEs performance, this study differs from other studies on the following points. First, the study focuses on the SMEs in Jordan. To the authors' knowledge, there is no study has been conducted by taking all influencing factors that affect SMEs and this is considered as the first comprehensive study in exploring the influential factors. Second, the review of the past documented literature on the factors that influence SMEs performance shows that apart from inconsistency in measuring the performance. Third, there are also inconsistency results in SMEs performance in the previous conducted studies. Finally, this study is important in understanding factors influencing the performance of the SMEs in Jordan.

3. Research Methodology

3.1 Hypothesis Development and Theoretical Framework

Based on the discussion, the following five hypotheses are developed to investigate the factors affecting the SMEs performance in Jordan.

3.1.1. Financial Factors

According to Mwarari and Ngugi (2013) financial based factors influence on the performance of the SMEs in general, this result is confirmed by other researchers who studied the impact of factors affecting SMEs performance (e.g. Kinyua, 2014; Afande, 2015; Eniola & Entebang). This leads to the following hypothesis which is developed to investigate the effect of financial factors on SMEs performance in Jordan.

H₁: Financial factors influence on the performance of SMEs in Jordan.

3.1.2. Management Factors

Management based factors play an important role in affecting the performance of SMEs, a good management can improve performance significantly (Bouazza et al., 2015; Kordnaeij et al., 2016; Margaretha et al., 2016). This leads to the following hypothesis developed to investigate the effect of management factors on the performance of SMEs in Jordan.

H₂: Management factors influence on the performance of SMEs in Jordan.

3.1.3. Marketing Factors

The connection between marketing factors and the performance of SMEs is derived from the interaction between institutions strategies with marketing mechanisms. According to Wijewardena and Zoysa (2005), Lin (1998) and Sen and Taylor (2007) who documented that there is a significant impact of marketing factors on the performance of SMEs. This leads to the following hypothesis developed to investigate the effect of marketing factors on the performance of SMEs in Jordan.

H₃: Marketing factors influence on SMEs performance in Jordan.

3.14. Technological Factors

Since the advancement of technological features facilitate business operations as well as it saves more time, therefore, it ultimately reflects successful performance of SMEs. Sun and Zhang (2006); Talukder and Quazi (2010) and Kim et al. (2007) stated that technological factors play an important role in improving performance. This leads to the following hypothesis developed to investigate the effect of technological factors on SMEs performance in Jordan.

H4: Technological factors influence on SMEs performance in Jordan.

3.1.5 Government Policy and Regulations Factors

Government regulates and modify existing regulations to suite its economy conditions. Hence, government policy is considered as an external factor that affects SMEs performance negatively if it comes out of sudden with restrictions (Longenecker et al., 2006). This leads to the following hypothesis which is developed to investigate the effect of government policy and regulations factors on the performance of SMEs in Jordan.

H5: Government policy and regulations factors influence on SMEs performance in Jordan.

Based on the above discussion, the research framework is depicted in Fig. 1 and identifies the factors affecting the performance of the SMEs in Jordan. The aim of this study is to identify the factors influencing the SMEs in Jordan. Therefore, the following theoretical model has been used in this study.

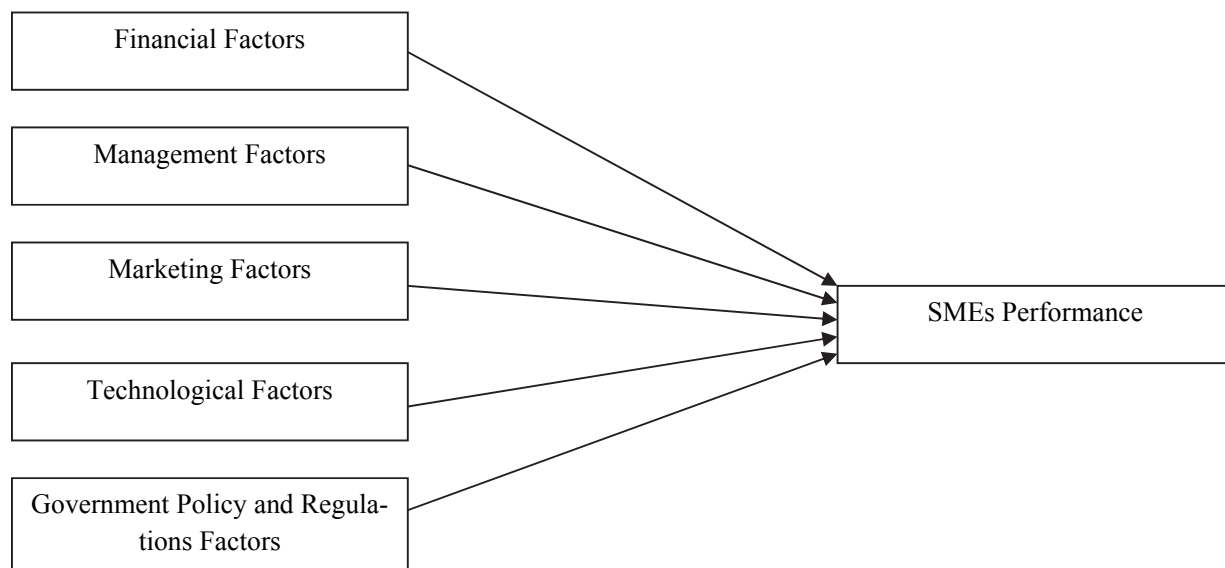


Fig. 1. Conceptual Framework Used in this Study

3.2 Population and Sampling

The main objective of the study is to investigate the factors influencing industrial SMEs performance in Jordan. According to Jordanian general statics department (2017) there were 18,000 industrial SMEs. Based on the previous studies, a questionnaire was constructed (Amwele, 2013; Noreen et al., 2015). The researchers employed simple random sampling method in selecting the respondents, 200 questionnaires were distributed to the employees who work at industrial SMEs in Jordan. In all, a total of 189 questionnaires were acceptable for statistical analysis.

3.3. Statistical Tools and Research Model

The aim of this study is to identify the factors that influence industrial SMEs performance in Jordan. Therefore, the econometrics model has been employed in this study based on Ordinary Least Squared (OLS) to examine the association between the factors and SMEs performance. The general OLS equation is as follows:

$$Pefr_i = \beta_0 + \beta_1 Fin_1 + \beta_2 Man_2 + \beta_3 Mark_3 + \beta_4 Tech_4 + \beta_5 Gove_5 + \varepsilon_i$$

where,

<i>Fin</i>	Financial Factors	<i>Gove</i>	Government Policy and Regulations
<i>Man</i>	Management Factors	<i>Pefr</i>	Performance of SMEs
<i>Mark</i>	Marketing Factors	<i>e</i>	Error
<i>Tech</i>	Technological Factors	<i>B₀</i>	Constant

4. Empirical Results and Hypothesis Testing

4.1. Respondent Profile

Table 1 shows the respondents' profile. As it seen from the table, based on the gender factor the males' percentage reached 78%, and the females' percentage reached 22%, this could be because of the nature of the works and the tasks performed by the SMEs required in performing the works which needed physical efforts and this is more available among the males than in the females.

Table 1

Respondents' Profile

Criteria		n	%
Gender	Male	148	78%
	Female	41	22%
Total		189	100%
Age	less than 30 years	23	12%
	From 30 - 40	85	45%
	From 40 - 50	66	35%
	More than 50 years	15	8%
Total		189	100%
Education Level	Secondary School	30	16%
	Bachelor Degree	114	60%
	Master Degree	41	22%
	PhD Degree	4	2%
Total		189	100%
Experience	less than 5 years	109	58%
	From 5 - less than 15 years	70	37%
	From 15 - less than 25 years	10	5%
Total		189	100%
Number of Training Taken	One training	26	14%
	Two trainings	137	72%
	More than 2 trainings	26	14%
Total		189	100%

Regarding to the age factor, the category or the segment between 30-40 years old was the highest and occupied 45% followed by the age category between 40-50 years old since it reached 35%, which indicates that the workers in the SMEs were from the youths with short, middle and long experience, this is clearly consistent by looking at the experience factor. Concerning the educational level, the majority of the workers were from those who hold the bachelor degree, their percentage reached 60%, followed by those who hold the Master's degree which record a percentage of 22%. This may explain that the Jordanian society orientation and motivation were toward the education and higher education. Finally, regarding the training courses that the workers have attended, the greatest number of them have received to

training courses which records a value of 72%, while those who have received more than two training courses preserved a percentage reached 14%. This may indicate at developing and enhancing the working individuals' abilities skills and attitudes for these SMEs.

4.2 Descriptive Statistics

Table 2 illustrates the descriptive statistics such as the results of means and standard deviations for both independent variables and dependent variable. The factors influencing performance include financial, management, marketing, economic, technology and government factors. It can be seen that the performance has recorded a mean value of 3.57, and this number forms 71.4% from the total performance, which indicates that the effect of the financial, management, marketing, economic, technology and government factors have influenced on the performance of SMEs. The standard deviation for performance records a value of 0.373, which is small and indicates that there was a harmonious attitude of the sample individuals' answers. By looking at the financial factors, management factors, marketing factors, economic factors, technology factors and government factors, it can be seen that the management factor records a value of 3.56, the financial factors records a value of 3.52, and the lowest recorded value is 3.33 for the government factors since its percentage reached 66%. The range of the standard deviation for all factors recorded values from 0.45 to 0.538, which indicate that there was no dispersion.

Table 2
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Performance	189	2.53	4.53	3.57	.373
Financing Factors	189	2.20	5.00	3.52	.514
Management Factors	189	2.40	4.80	3.56	.501
Marketing Factors	189	2.40	4.60	3.45	.471
Economic Factors	189	2.50	4.50	3.44	.459
Technology Factors	189	2.33	4.67	3.48	.538
Government Factors	189	2.25	4.50	3.33	.459

4.3. Factors Influencing SMEs Performance

Table 3 shows the results of the factors influencing on the performance of SMEs. It can be seen that the R^2 records a value of 79% which means that 79% of variation of SMEs performance can be estimated using the selected independent factors. However, 21% are external factors that could affect the predictable model. The development of the prediction model is applied by using the coefficient for each explanatory independent variables which can be observed in Table 3. The results show that all independent factors have statistically significant level since all of their results are less than 5%. Furthermore, it can be seen that there were positive relationship between all factors and SMEs except the economic factors (inflation) since it had a negative effect on the performance of the SMEs. This means that the financial factors, management factors, marketing factors, technology factors and government factors have direct association with performance because the effective management improvement and administrative management are of the modern marketing methods, and following the contemporary marketing strategies leads to raising performance level and increasing productivity. Concerning the financial factors and analysing them in a scientific form based on theories and principles such as financial prediction leads to increase on the financial monitoring leading to control the expenditures and improving the performance, and the framework used by those SMEs. Regarding the economic factors and its negative effect on performance, this is in harmony with the logic, since the higher inflation rates will indicate a confusion state which leads to low SMEs productivity, and sometimes to stop operating because of the lack of price stability in that environment.

Table 3
Factors Influencing SMEs Performance

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta				Tolerance	VIF
1	(Constant)	.229	.104		2.197	.029		
	Financing Factors	.430	.031	.591	13.852	.000	.234	4.271
	Management Factors	.394	.033	.528	11.958	.000	.219	4.568
	Marketing Factors	.055	.017	.070	3.231	.001	.915	1.092
	Technology Factors	.654	.037	.942	17.573	.000	.148	6.737
	Economic Factors	-.656	.045	-.807	-14.55	.000	.139	7.209
	Government Factors	.066	.017	.081	3.891	.000	.974	1.027
	R ²	79%						
	Durbin-Watson	1.70						

5. Conclusion

This aim of this study was to investigate the factors influencing the performance by looking at the Jordanian SMEs. Questionnaires were distributed among the employees who worked at SMEs in Jordan. This research employed Ordinary Least Squared (OLS) to examine the association between the independent variables; including financial, management, marketing, technological, and government policy and regulations and the dependent variables; namely SMEs performance. The results show that all independent factors had statistically significant effect on SMEs performance, this results is consistent with previous studies results (Bouazza et al., 2015; Amwele, 2013; Abotsi et al., 2014). In general, it can be concluded that the financial factors, management factors, marketing factors, technological factors, and government policy and regulations have maintained positive statistically significant effect on SMEs performance. However, the economic factors have had negative impacts on SMEs performance which are in line with macroeconomic theories. It is suggested that future research should consider investigating the ability of influential factors in forecasting the future SMEs performance by adding additional factors. Furthermore, interested parties may study the factors influencing the SMEs performance in different sectors rather than industrial sector. Finally, future researches may investigate factors derived from the social media marketing adoption in SMEs and organization.

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