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Key Words

*Small and Medium-size
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FACTORS AFFECTING THE PERFORMANCE OF RETAIL STORES AMONG SMEs IN LEBANON: AN EMPIRICAL ANALYSIS

Abstract

In Lebanon, despite the fact that some Small and Medium Enterprises (SMEs) have been declining or stagnant, some others have been successful and growing. This paper investigates the main factors affecting the performance of SME retailers in Lebanon. It is an empirical study based on a survey of 296 small and medium sized companies operating in different regions within Lebanon. We focus on the factors affecting the financial performance of the enterprises at a retail level and attempt to identify those significant using econometric model based on cross-sectional data. Our main findings shows evidence that managers' characteristics matter. The other predominate determinants such as the enterprise attributes and environmental variables have been identified as being of significant importance to enhancing the performance of Lebanese firms in the retailing sector. We used 17 explanatory variables for this purpose. Using Ordinary least squares method, only 9 variables have been found to be statistically significant and have an impact on the performance factor.

Introduction

Small - and medium-sized enterprises (SMEs) have long been assumed to be significantly influential in supporting economic development within a country (Akhtar, 1997; CDASED, 1999; Mazzarol, volery,

Doss, and Thein, 1999). The main contribution of the SMEs in this context is job creation which enhances poverty alleviation. For instance, in the Netherlands, SMEs make up 98.8% of the private sector and their

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share of the Gross Domestic Product (GDP) is 31.6%. In Italy SMEs assure 2.2 million of the national labors (EIM Business & Policy Research, 1999). In 2003, Indonesian SMEs contribute to 56.7% of GDP and employ 79 millions of the work force (BPS & KUKM, 2003). In Finland, according to 2002 statistics, more than 99% of all firms are SMEs and hire 61% of the personnel⁽¹⁾. In Lebanon, according to 2003 statistics, the SMEs contribute to around 40% of the employment, and 70% of the output⁽²⁾.

With the continuously increasing competition, in particular against large and modern enterprises, the SMEs are found to be in a vulnerable situation. In Lebanon, most of these SMEs operate along traditional lines in production and marketing. Most of them are family businesses and rely on limited capital and skills, among others. Mead & Liedholm, 1998; Swierczek, and Ha, (2003) argued that the main problem of SMEs in developing countries is not due to their small size but to their isolation. Moreover, Kementerian KUKM and BPS (2004) stipulate that the essential problem of Indonesian SMEs lack of capital and skills. In addition, Swier-

zek and Ha, (2003) found that Vietnamese SMEs suffer from the same factors; capital shortage, old equipment and outdated technology which are all factors that hamper the development of these SMEs.

SMEs in Lebanon suffer from the same factors that involve internal limitation, lack of skills, capital shortage, outdated equipment, and management style. Most of these enterprises suffer from isolation that hinders their access to markets, as well as to information and institutional support. It seems that SME performance can be affected by a variety of interrelated factors which should be taken into consideration.

The objective of this study is to identify factors affecting the performance of small- and medium-sized businesses in Lebanon, focusing on the retail trade rather than manufacturing enterprise. To tackle this issue, an econometric model was constructed for this purpose. Using Ordinary Least Squares (OLS) method, a set of data that encompasses 296 Lebanese enterprises, is employed to estimate the statistical model. This paper will illustrate a number of determinants that will affect the performance of retailers.

(1) Statistics Finland 2002: cited by Federation of Finish Enterprises 2003.

(2) ESCWA 2003: Trade and Environment Challenges and Opportunities. METAP High Level Meeting on Economic Tools for Environmental Sustainability.

The remaining part of this paper is organized as follows: the next section exposes the theoretical framework. The third section presents the study methodology. In the fourth section a description of the data is provided. The results and main remarks are provided in section five. A general conclusion that encloses the main findings and policy recommendation is presented in the final section.

Literature Review

Many companies are trying to find tools for enhancing performance measures in response to turbulent business markets and for efficiently controlling their business activities.

A huge majority of firms worldwide are SMEs, and they play a significant role in the economy. Consequently, the performance of the SME sector is closely associated with the performance of the nation. Most studies investigating factors affecting the performance of enterprises have focused on large companies rather than SMEs.

It is unfortunate that businesses are not managed in the same way in different areas (see e.g. Lussier & Pfeifer, 2000; Yusuf, 1995). The context often has a critical role where what works in one context will not necessarily work in another. This means that factors that lead to success

in one context may lead to failure in another (Low & Abrahamson 1997).

Firm performance is a focal phenomenon in business studies. Performance can be defined as the ability to insure acceptable outcomes and actions (Pfeffer and Salancik 1978). Strategically, firm performance is often referred to as firm success or failure (see Dess & Robinson 1984; Ostgaard & Birley 1995). Performance can be measured in several ways (see Foley and Green, 1989; Morel d'Arleux, 1997). It has been measured by growth (turnover, number of employees, market share) or profitability (profit, return on investment), of survival (see Storey 1994; Kauranen 1993; Smith *et al.* 1988; Robinson *et al.* 1984; Dess & Robinson 1984). However, few studies attempted to determine the factors that enhance one of the two latter measures of performance (Cooper, 1993; Storey 1994). In our study, the financial performance will be taken into consideration.

The determinants of the performance of SMEs are enormous. They encompass human capital, firm level attributes, and business environment. The results of a number of studies indicated that human capital measured by work experience, education and other skills that enhance knowledge are not only significant features of entrepreneurial performance (Sexton

and Upton, 1985) but have a positive effect on both firm survival, growth, (cooper *et al.* 1994) and business performance (Cooper and Gimeno-Gascon (1992), Chandler and Hanks (1998)). Moreover, Aidis and Mickiewicz (2004), and Watson *et al.* (2003) provide evidence that characteristics of owners matter. The former study found that individuals with higher education and previous work experience are more likely to expand their businesses. In the latter study, education seems to provide the knowledge base, and analytical and problem-solving skills to more performing businesses. However, the relationship between business owners' age and business performance has shown conflicting results. Wiklund *et al.* (2003) found that younger business owners with fewer employees were more likely to grow their businesses. Similarly, Sinha (1996) disclosed in his study in India that successful entrepreneurs were relatively younger in age. Burns (2001) indicated that middle aged entrepreneurs are the more likely to grow their businesses. Kristiansen *et al.* (2003) found a significant and positive link between the age of the entrepreneur and business success. The older entrepreneurs were more successful than the younger ones.

Work experience is another factor that can further supplement an entrepreneur's education and age. Even pre-

vious entrepreneurial experience that is not related to the current business is considered, in many studies, to be beneficial and has positive effect on the current performance. One of the most recent findings are Lazear's (2004) results which stipulate that previous experience and higher education may be more conducive to business success. This can be considered as a result of 'learning by doing' in which the entrepreneur improves his skills by building up his entrepreneurial experience.

A number of studies from Western countries have indicated that gender has an effect on business performance. The main findings assume that female businesses tend to be smaller and are less likely to grow than male owned businesses (Cooper *et al.* (1994)). Similar results are found by Cliff (1998) and Koskinen (1996) who found that male entrepreneurs dominate particularly in growth firms. On the other hand, some studies such as Pasanen (2003), give evidence that success is not related to the gender of entrepreneurs.

Firm level attributes, such as size and age of the business, are the second main determinant of the SME performance. Conflicting results are noticed concerning the link between the firm size and the business success. In a study concerning five transition countries, Faggio and Konings (2003) show a negative relationship between

firm size and firm growth. This indicates that the smaller enterprises are likely to grow faster than larger enterprises. Becchetti and Trovato (2000) also found a negative link between size and growth, and a positive relationship with the age of business. Other studies indicated the presence of a positive link between size and performance (Fries *et al.*, 2003; Batra *et al.*, 2003). However, the empirical results presented by Holzmuller and Kasper (1991), Bonaccorsi (1992) and Calof (1993) did not identify any significant relationship between firm size and export performance.

Mixed results are also obtained concerning the relationship between firm age and performance. Previous research has shown that age does not distinguish high-growth firms from others (Smallbone *et al.* (1993b). Other empirical studies provide evidence that younger firms have a higher growth rate than older ones (Variyam and Kraybill (1992). However, many studies have found that duration in operation and performance may be related by a positively significant relationship. For instance, Kristiansen, Furuholt, and Wahid (2003) and Pasanen (2003) found that duration in operation is positively and significantly linked to success.

The third determinant of the SME performance is business environment. Firm performance is bound with firm internal factors such as firm resources and strategic choices, and with firm external factors such as the carrying capacity of the environment, and competition. The firm interacts with its environment and its performance is based on the match between the firm and its environment. The general environment defines the political, economic, social, technological, ecological boundaries and location of the firm. These factors have an indirect connection with firms.

Hence, the firm operates in many environments simultaneously collaborating with other factors in the market and at the same time competing with others. It has been found that small firms that face an environment with increasing dynamism tend to grow faster than others (Wiklund, 1998). In our study, we are interested in the firm location and competition to take into account the business environment.

Recent technological innovations such as ICT and Internet technology are becoming more and more diffused amongst SMEs because of lower costs. It is believed that electronic business techniques could contribute to increasing the relative market power and competitiveness of SMEs.

In this regard, Abouzeedan and Busler (2002d) studied IT impact on SMEs performance.

The Business Environment in Lebanon

In Lebanon, private enterprise witnessed a prosperous period in the early 1990's. From 1992 to 1996 there was a steadily increasing trend in the number of enterprises in Lebanon in all sizes and categories of registered businesses. However the trend reversed after 1997. The period from 1999 to 2005 has seen a significant number of bankruptcies and declining businesses. The main factors influencing this rapid degradation is due to internal changes and external economic shocks. Internal changes included bureaucratic barriers, additional taxation, and increased competition from large chain stores (especially for trade related businesses), unstable political situation, and low consumer demand. The latter factor may be related to external shocks, which included the general recession in the international economies, an increasingly unfavorable euro-dollar exchange rate implied by the fixed regime combined with comparative nominal trends in Lebanon and the dollar area at that time.

Moreover, obstacles to doing business mainly stem from the complicated outdated regulations and

difficult economic conditions. It is important to note that the number of registered SMEs does not reflect the volume of SMEs in Lebanon since many are not registered. This becomes a real problem in retailing since the majority of SMEs are not registered and then it is not possible to have statistics on them. Thus the number in the register is only a crude indicator of the number of SMEs which are active. In addition, the absence of institutional aids is one of the key problems. However, a lot of small businesses are not legally registered. We focus our study on legally registered private enterprises. Though in doing so, we are probably underestimating the true size of Lebanon's private sector. Furthermore, SME's carry the burden of increasing tax and costly needed services (electricity, telephone).

Methodology

Investigating factors that affect the performance of SMEs is of great importance. Researchers have dealt with this issue using diverse analysis methods and a number of models are used to evaluate firm performance. These models have different capacities, input requirements, and output characteristics.

However, most empirical research in this field is confined to cross-sectional studies. Using the same approach, our study allows tracking a

sample group over different geographic areas in Lebanon.

Regression analysis was used to estimate the relationship between the 17 independent variables ($x_i, i = 1, \dots, 17$) and the performance factor (PF). Ordinary least squares (OLS) method was employed to estimate the regression coefficients β_i in the following equation (1):

$$PF = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_{17} x_{17} + \varepsilon \quad (1)$$

where ε is a random distribution term (error term). The regression coefficient β_i represents the expected change in the performance factor associated with one-unit change in the i^{th} independent variable. The values of three variables (sales, inventory, and assets) were expressed in logarithmic form to avoid any discrepancies in their original values. Our estimation strategy was to sort through the 17 variables to select the important predictors of the performance indicator. Stepwise regression analysis is the most commonly tool used for this kind of problem. It is designed to select an efficient model for predicting a dependent variable. Efficiency is defined here as explaining as much variance in the dependent variable with the fewest predictors. Fisher test is used to decide among various models. Hence, backward and forward stepwise regression was used to determine which of the 17 independent variables

to include in the final regression equation for the performance indicator. Forward stepwise procedure develops a model by first selecting the one best predictor of the dependent variable and then at each step it adds the most statistically significant term (the one with the highest F statistic or lowest p-value) until there are none left. Backward stepwise regression starts with all the explanatory variables in the model and removes the least significant terms until all the remaining terms are statistically significant. It is also possible to start with a subset of all the terms and then add significant terms or remove insignificant terms.

An important assumption behind the method is that some input variables in a multiple regression do not have an important explanatory effect on the response. If this assumption is true, then it is a convenient simplification to keep only the statistically significant terms in the model.

A Wald test was used to test for the collective explanatory power of the independent variables deleted from the performance equation.

Partial correlation coefficients are frequently used in comparing the impact of independent variables on the dependent variable in multiple-regression equations. These measures are independent of the units of measurement and show the net correlation

between the performance factor and each independent variable after excluding (i.e. holding constant) the common influence of the other independent variables in the model. These coefficients must be between 1 and -1.

One common problem which can occur in this type of data is multicollinearity of the independent variables. In such a situation two or more of the explanatory variables in the regression model are highly correlated, making it difficult and nearly impossible to isolate their individual effects on the dependent variable. The multicollinearity problem is a question of degree and not of kind. The meaningful distinction is not between the presence and the absence of multicollinearity, but between its various degrees. Therefore we do not test for multicollinearity but can measure its degree in any particular sample. Three multicollinearity diagnostics are used for this purpose: Tolerance (*TOL*), Variance Inflation Factor (*VIF*), and Condition Index (*CI*).

Data description

Our analysis is based on empirical data that was collected from 296 independent SMEs located in different regions in Lebanon. From September - December 2005, managers of 350 Lebanese enterprises were interviewed. A total of 320 out of 350

responded to the questionnaire. Some of the data on performance variable and managers' characteristics contained missing or unusable data and as a result, 54 enterprises were dropped from the analysis. The usable sample was 296 SMEs, out of which 126 were business owners.

Enterprises constituent of the study sample were selected randomly. Personal interviews were conducted with managers of SMEs operating in the sector of retailing. The interview survey was chosen as a data collection method because it made it possible to obtain large amounts of data that capture different types of retailers. A mail survey was out of the question since most of entrepreneurs do not respond to such a method. The study focused on retailers because of their high societal relevance and their distinctive features in the SMEs. An SME was defined in terms of the number of personnel, so that firms with fewer than 50 employees were considered to be SMEs.

The variables used in this study relate to the store manager characteristics, store factors, the nature of their environment, and the performance factor. Data collection was based on a questionnaire containing all the required questions.

The characteristics of store managers consist of variables relating to

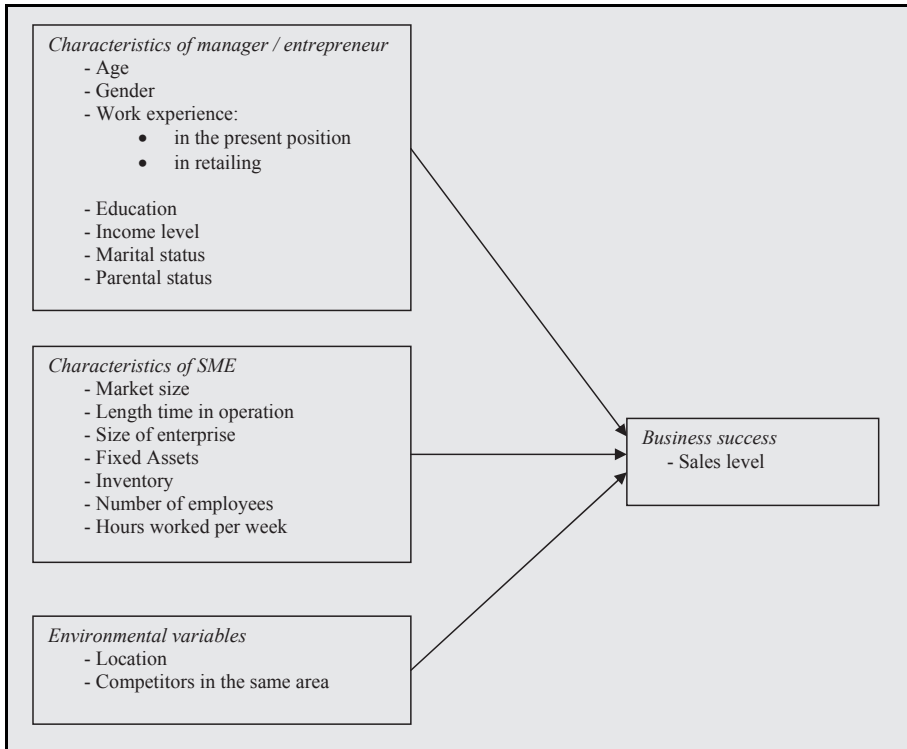


Figure 1: Research model

the managers' education, experience in retailing and in present position, age, gender, marital status, number of children, and annual income. For the characteristics of enterprises, the focus is on the size, market share, inventory level, fixed assets, number of employees, and the number of years since the enterprise establishment (Years of Operation). As to business environment, the emphasis was on the location, number of competitors (similar retailer stores in the same location), and geographical location in capital or city. Performance variable

involves annual sales (turnover) that each enterprise generates per year. Figure (1) presents the different variables in this study.

The nine store manager variables were included as independent variables in order to reveal the characteristics of more productive managers that enhance the success of the enterprises under their management. Moreover, the other factors considered in this study can be viewed in terms of their reversibility, the control that management can exert, and their time duration.

Table 1
Descriptive Statistics for the Variables Used in the Study of Retail Performance

Variables	Minimum	Maximum	Mean	Std. Deviation	Units of measure
age	18	55	35.95	9.53	Years
Income level	60	700	191.30	167.88	Dollars (00)
gender	0	1	0.69	0.46	0 = female, 1 = male
Marital status	1	4	1.41	0.55	1 = single, 2 = married, 3 = divorced, 4 = widow
Parental status	0	5	0.8	1.24	Number
Educational level	9	18	12.50	2.80	Years: High school graduate = 12
Number of hours worked Per week	12	90	66.38	12.81	Hours
Experience in retailing	1	26	10.72	5.78	Years
Experience in present Position	1	23	7.01	5.04	Years
Size of store	32	2000	325.79	376.02	Square meter
Fixed assets	3	2000	139	181.99	Dollars (000)
Inventory level	3	860	108.60	131.03	Dollars (000)
Number of years since the opening of the store	1	28	9.22	5.86	Years
Number of employees in the store	1	35	8.49	7.19	Number
Competitors (similar area)	0	11	4.73	2.59	Number
Market size	1	2	1.53	0.50	1 = small, 2 = medium
Location	0	1	0.39	0.49	0 = city, 1 = capital
Sales	20	4000	524.70	557	Dollars (000)

While store location and store size are considered to be irreversible factors, inventory levels and number of employees are relatively reversible. Whereas, factors such as store manager characteristics and number of employees are factors over which management can exert a good deal of control. Market share and various actions by competitors are largely beyond their control.

Thus, this study reports the results of an analysis of the impact of 17 indepen-

dent variables - controllable / uncontrollable, short-run / long-run, and reversible / irreversible - on the performance factor of 300 retailer stores.

Hence, The 17 independent variables used to predict the performance of retailers are grouped into three major areas. These variables are identified with their mean, minimum, maximum, and standard deviation in table 1. The performance factor (or dependent variable) was sales volume.

Average annual sales volume for these enterprises was approximately \$524,700; their average size was 325.79 square meter, and the average of employees included in the enterprise was about 8.49. The average number of years the enterprise had been open was approximately 9.22.

Results

The run of stepwise regressions on the performance factor model resulted in 9 independent variables in the final model. The agreement was very similar in the forward and backward regressions and the equation with the largest adjusted R^2 was selected. All the estimation results of the model are presented in table 2. This latter encompasses the parameters, standard deviation, t statistics and partial correlation, along with multicollinearity diagnostics. An additional test statistics relative to collective explanatory power of the six excluded variables is also reported at the end of this table. The estimated regression relationship for sales volume is:

$$\ln(\text{sales}) =$$

$$\begin{aligned} &2.5766 + .2380(\ln(\text{fixed assets})) \\ &+ .3591 (\ln(\text{inventory}) + .0362 \\ &(\text{employees}) + .0008 (\text{income}) + \\ &.0073 (\text{hours}) + .1972 (\text{location}) \\ &+ .0414 (\text{experience in the present} \\ &\text{position}) - .0236 (\text{years since the} \\ &\text{opening of the store}) - .1481 (\text{age}). \end{aligned}$$

Experience in the present position is significant at 1% which indicate 'learning by doing' through present job experience does have a positive effect. However, age and number of years since the store opened, are both negatively significant. This implies that younger managers are more productive, and newer stores are performing better than the old ones. This is may be due to keeping on outdated methods in marketing and sales in the old stores and expressing little interest in developing their business. This result is very much in line with a number of previous studies (for instance, Kristiansen, Furuholt and Wahid (2003), and Sinha (1996). As to negative effect of the age of the store, it can be attributed to the fact that assimilating new knowledge and innovations then, adapting it at the firm-level can pose challenges for small businesses with limited human resources, particularly for family-owned businesses that have used traditional processes over generations. The number of employees in the store is found to be positively statistically significant. The influence of the income level is clear and positively significant at 1% level of significant which can be considered as a stimulus for more performance in sales. Moreover, we can see a clear positive and significant effect of business being located in the capital. We find that fixed assets and inventory

levels are both positively significant. Maintaining adequate inventory levels in the stores should result in greater sales figures. This result is very much in line with previous studies on the performance of SMEs.

As a result, we find that some of the independent variables have a positive effect on the sales volume, while others have negative effects. The variables with positive effects are fixed assets, inventory, number of employees, income, number of hours worked per week, location, and experience. An increase in any of these variables is expected to increase the sales volumes. The amount of expected increase may differ for each variable on the basis of the regression coefficient. For instance, a \$100 increase in the inventory would produce an expected increase of \$395.1 (see table (2) for units of measurement for each independent variable).

Since two of the significant variables are related to the store manager, the selection of this latter with certain characteristics can have a positive effect on a retail store's sales volume. This suggests that proper attention should be given to the recruiting and employee selection process. Although store variables, such as inventory le-

vels, fixed assets, and number of employees in the store, have a positive effect on sales, they are often the same areas where controls are established to minimize their costs or reduce the investment in inventory, employees' work schedules, and dollars invested in fixed assets.

According to the results of this study, SME performance may not be gender owner/ manager issue. No performance differences were found between male-led and female-led SMEs. However, business goals may differ between firms owned or managed by women and men (See Brush (1992)). Surprisingly, education had no significant effect on determining the business performance. This may be due to the fact that most SMEs might be considered as family enterprises⁽³⁾, and individuals with elementary and high school education have been in the business. Another possible explanation is that the educational background of those with university education did not have applicable skills for running the business. The effect of education on performance is therefore more likely to be found in firms operating in industries where higher levels of education are required. In both cases, self learning is considered to be as a source of skills.

(3) As defined by Duh (2003) "the owner or family members of the owner manage the enterprise and in which exists the wish that the enterprise remains in the ownership and in the management of the family in the future".

Table 2
Regression Estimates of Sales Relationship

Variable	Order entered	Coefficient	Standard Error (H ₀ : β _i = 0)	t-Statistic relation	Multicollinearity diagnostics		
					Tolerance (T)	Variance Inflation Factors (VIF)	Condition Index (CI)
(Constant)	2.5766***	.2748	9.3751				1 1.0000
Ln(Fixed assets)	1	.2380***	.0406	5.8559	.3272	.4513	2 2.2156 3.4980
Ln(inventory)	2	.3591***	.0323	11.1319	.5498	.7588	3 1.3178 4.0122
Number of employees in the store	3	.0362***	.0063	5.7806	.3234	.5295	4 1.8886 5.0777
Income level	4	0.0008***	.0002	3.4853	.2019	.6632	5 1.5078 5.5482
Number of hours worked per week	5	0.0073***	.0027	2.6902	.1571	.8913	6 1.1220 10.7147
Location	6	.1972***	.0114	2.7045	.1579	.8466	7 1.1811 12.6678
Experience in the present position	7	.0414***	.0113	3.6414	.2105	.3282	8 3.0469 15.5028
Number of years since the opening of The store	8	-.0236**	.0093	-2.5321	-.1481	.3619	9 2.7633 17.0576
Age	9	-.1481**	.0725	-2.0429	-.1199	.6464	10 1.5469 28.0839
R ² = .6894 F = 70.5453 Adjusted R ² = .6797							

Dependent Variable: Ln(Sales).
(***) and (**) indicate significance at 1% and 5% level of significance.
Wald Test: F-statistic; 1.3075 and Chi-square: 10.4601.
Multicollinearity is a problem if Tolerance is less than 0.1, Variance Inflation Factor is greater than 10, and Condition Index is greater than 30.

The regression equation characteristics of sales volume indicate an R^2 of .6894. This means that 68.94% of the variation in sales volume is explained by the predictor variables in this equation. The partial correlation coefficient is used to investigate the impact of each variable on the sales volume. The variable with the greatest impact is inventory levels (.5498), followed by fixed assets (.3272), number of employees in the store (.3234), experience in the present position (.2105), income level (.2019), and so on. The Wald test which is a way of testing the significance of particular explanatory variables in a statistical model is used to examine the collective power of the six excluded independent variables. The result shows that, at 5% level of significance, we cannot reject the null hypothesis which states that the parameters associated with the eight particular variables are zero. Thus, these variables should not be included in the model. Finally, three multicollinearity diagnostics are used to test for the presence of collinear variables in the model: tolerance, variance inflation factors, and condition index. Multicollinearity is a problem when tolerance is less than .1, variance inflation factor is greater than 10, and condition index is greater than 30. The results of these three measures show that multicollinearity is not a problem in this sample.

The presented results focused on the level of performance variation explained by the regression equation. However, the explanatory variables involved in this regression are not able to explain about 31% in the variation of sales. This is due to the exclusion of essential variables such as publicity, promotion budgets, product assortments, prices, and media which have important influence on the sales levels.

Conclusion and Implications

The importance of SMEs in economic development has received increasing attention from many researchers. This study focused on identifying the main factors affecting the performance of small and medium sized retailing stores, which is measured by their sales levels. 17 independent variables were used to identify their influence on the performance of 296 small and medium sized enterprises in Lebanon. The target firms in this study are retailers located in different Lebanese regions. The cross sectional data was collected during 2005.

In our analysis, we incorporate a set of explanatory variables including human capital, firm level attributes and environmental variables. These variables can be seen from another point of view which classifies them as internally controllable variables (such

as sales and inventory), long-run and irreversible variables (such as location), and uncontrollable variables (such as competitors).

The empirical research was based on an econometric model that encompassed the sales as dependent variable (performance indicator) and the 17 independent variables.

Education, gender, previous experience in retailing, market size, store size, number of competitors, and marital and parental status of the managers were discarded from the regression as a result of the stepwise regression. Regression analysis was focused on the remaining eleven variables. Using Ordinary least squares method, the results showed that 9 explanatory variables had significant affect on performance factor. We especially find that inventory levels and fixed assets and the number of employees in the store as being the three most important variables in explaining the variability in sales

Surprisingly, the manager's age and years since the opening of the store appear to have an inverse relationship with the performance measure. This implies that younger managers and newer stores are performing better than older ones. This result may be referred to the fact that newer stores use innovative tools in their business, while the older ones

remain in their outdated tools. Rapid changes or innovations should be responded to by the SMEs to find alternative ways to sustain their competitive advantage by deploying new process and new promotional methods.

Although independent variables explained 68.84% of the total variance, still other factors can be added to the regression model (such as marketing, internet access or information access, etc) to get a more complete picture of determinants of business performance among Lebanese retailer SMEs. The results, then, would be beneficial to develop Lebanese SMEs.

Therefore, this research is expected to make two contributions: (1) no previous research has been conducted on the determinants of performance for retail stores in Lebanon; (2) this research will extend our understanding of what factors have impact on retail store performance. The stronger variables in this regard are fixed assets, inventory level, and number of employees. These store variables have three important characteristics in common:

1. They are short-run in their scope.
2. They are controllable by managers.
3. They are reversible.

Based on the presented evidence, the business characteristics have a

crucial effect on performance. Managers should be aware of the tremendous impact of their stores stocking an adequate product assortment, and any unbalanced situations are handled as quickly as possible. Moreover, carrying product assortments is likely to be helpful in stores where stock outs occur frequently. In fact, customers are predisposed to purchase certain products and will do so if they are available in this store. If these items are not available, it is highly unlikely that a substitute will be purchased. Rather, other stores will be visited in search of the desired item. Therefore, inventory levels need to be controlled in order to face unpredictable demand and to avoid shortage and interruption of sales. As to fixed assets which are used in the operation of business, the higher these assets the more performance is assured. The location decisions of firms in the retailing sector often favor bigger centers of population because such firms are usually more dependent on local demand.

This study's findings indicate that the number of employees has an important positive effect on the performance of retail stores. This suggests that management needs to consider whether the store is employing, in general, a sufficient number of employees available to handle customer checkout, to accommodate peak per-

iods, and to maintain adequate inventory levels.

The presence of a positive relationship between the store managers' duration in that position, and their store performance, suggests that management should pay attention to promotion, transfer, and retention policies. An explanation for the positive effect is managers with the best performance are those that have remained longer in the same position.

Hiring policies should also be implemented to focus upon perspective employees with younger age since this was found to be associated with higher store performance factors. An explanation of the inverse relationship between the manager's age and the performance is that younger managers could be more enthusiastic and motivated than older ones, and are ready to work for longer schedules. This finding was associated with a positive effect of income on store performance. Hence, providing the appropriate income will be considered as an incentive for these managers to enhance their store sales.

The final set of variables that need to be taken into account in assessing the potential performance of stores is the store age and the location. These are irreversible and long-run variables. Since a negative relationship between the length of time since the

opening of the store, managers should investigate whether their stores need innovations and development to be in line with well performed stores. However, those keeping the same policies in management and marketing without taking into account the latest developments will remain performing at constant and satisfactory levels and can even deteriorate. Although the decision of location, once made, is a fairly long-run and irreversible in nature, management can have an influence on location decisions before they are made. Results of this study indicated that locating in the capital is more advantageous than in a city. This suggested the selection of well populated areas. However, this factor can be extended in future studies to incorporate locations in a mall, on a main street, near a supermarket, etc.

As a result, well-performing firms can have an important role in the economy in terms of maintaining existing jobs and enhancing their growth. This study provides some insights for business performance in the developing country context. It helps retail managers to identify the main factors that have an effect on the performance levels of their stores, and then to make appropriate adjustments to maximize each store's performance. However, further research in this area would be useful in order to

model the interactions between the characteristics of entrepreneurs, business attributes, and contextual variables (such as taxes, marketing, technology, social network, legality, capital access, government support, etc) in more detail. Government regulations are found by Reynolds, Day, and Lancaster (2001) to be among the biggest problems facing UK SMEs.

In Lebanon, legality has been a burden on business success. As a result, a huge number of SMEs do not have a legal aspect. Complicated bureaucracy and legal aspect that take too many resources of the SMEs to deal with are part of the explanation. Simplification of bureaucracy and deregulation of legal aspects are recommended to foster the development of SMEs in Lebanese contexts.

Furthermore, recent technological innovations such as ICT and Internet technology are becoming more and more diffused amongst SMEs. It is believed that electronic business techniques could contribute to increasing relative market power and competitiveness of SMEs.

Thus, the inclusion of the above-mentioned variables in future studies would help the government and the SMEs to set up the policies that help increasing the performance of these enterprises.

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الملخص

العوامل المؤثرة في أداء المؤسسات الصغرى والمتوسطة في مجال البيع بالتجزئة في لبنان: دراسة ميدانية

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يهدف هذا البحث إلى تقييم أداء المؤسسات الصغرى والمتوسطة في مجال البيع بالمفرق والعاملة في لبنان، وذلك من خلال نموذج اقتصادي قياسي غير خطي، آخذاً بعين الاعتبار عدداً من المتغيرات المتعلقة بثلاثة أنواع من التصنيفات: خصائص المدير / المالك، وخصائص المؤسسة، بالإضافة إلى بعض المتغيرات المتعلقة بالمحيط والبيئة. تم قياس الأداء بمستوى المبيعات العائد لكل مؤسسة. وارتكزت هذه الدراسة على استمارات وزعت على عدد من المؤسسات الصغرى والمتوسطة، العاملة في مجال البيع بالمفرق في العام ٢٠٠٥. وقد تم تجميع المعطيات لهذا البحث من ٢٩٦ مؤسسة موزعة على مختلف المناطق اللبنانية. استخدمت طريقة المربعات الجذرية الصغرى؛ لمعرفة المحددات والعوامل المؤثرة في أداء هذه المؤسسات. وأظهرت النتائج التي توصل إليها البحث وجود أهمية لبعض الخصائص (المدير / المالك)، كذلك تبين أن بعض خصائص المؤسسات لها تأثير مهم على تحسين أداء هذا النوع من المؤسسات. وأخيراً، من أصل ١٧ متغيراً، استخدمت في هذه الدراسة، أظهرت النتائج الإحصائية وجود علاقة جوهرية معنوية بين الأداء وتسعة من هذه المتغيرات موزعة بين مختلف التصنيفات المعتمدة في الدراسة.

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