

The Factors Affecting the Performance of Small and Medium Enterprises (SMEs) in Laos

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The study on the factors affecting the performance of small and medium enterprises (SMEs) in Lao PDR aims at firstly investigating the general characteristics of SMEs in Lao PDR, and secondly defining the factors affecting business performance of small and medium enterprises in Lao PDR. The secondary data (2018) surveyed by World Bank enterprises were employed. The descriptive statistics were employed in order to see whether independent and dependent variables have impacts on SMEs' business performance. It was found that all small and medium enterprises were from family-based enterprises with no competition and no application of science and technology. It also revealed that the experiences of managers, services, duration of business implementation, number of laborers, number of trainings, export, access to finance, and innovation have significant relationship with SMEs' business performance. Whereas, it was found that gender of managers, size of SMEs, location, type of enterprises: manufacturing and retail, have no significant relationship with SMEs' business performance in Lao PDR.

Keywords: SMEs, performance, multiple regression model, Lao PDR

Introduction

Small and medium enterprises (SMEs) play essential roles in economic improvement in Lao PDR (Kyophilavong, 2007; 2019; Kyophilavong & Toyoda, 2008). In the 10th national congress, the government of Laos has supported the development of small and medium enterprises (SMEs) of Lao PDR as to enhance the private sector as well as to improve vocational education and training for small and medium enterprises in Lao PDR since a number of SMEs were incapable to compete. This major risk can lead to long-term economic risk competition, especially when international entrepreneurs come to open their enterprises in Lao PDR, which affects the domestic enterprises in coping with difficulties in the implementation in ASEAN Free Trade Area (AFTA) and World Trade Organization (WTO).

The implementation of business is crucial as it is evidence for each period as indicators of success or failure of the implementation. Hence, if the organization or any business cannot evaluate their own implementation, they are more likely to properly manage themselves or effectively manage other businesses. If

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the management is well-managed, it will recognize its own status and/or their competitors as well as its business environment.

There several academics have done research on business performance (Braun, 2011) on defining the business performance on the growing rate of gross sales and size of business using multiple regression. Blackburn, Hart, and Wainwright (2013) and Leitner and Güldenbergl (2010) studied on business performance based on the growth of the products, rate of growth on entrepreneurship, and growth of profits.

As it was seen the importance of small and medium enterprises for socio-economic development for their characteristics, obstacles, and challenges through the promotion by policy formulation as well as for the government to support small and medium enterprises including people who would like to apply the knowledge to operate and enhance their business performance contributing to national economic development and eradication of poverty in Lao PDR, thus, I personally am interested in studying the factors affecting small and medium enterprises' business performance.

Objectives

This study aims at investigating general characteristics of small and medium enterprises and factors affecting small and medium enterprises' business performance in Lao PDR.

Literature and Research Related

Literature Review on Small and Medium Enterprises

Woodliff, Watson, Newby, and McDowell (1999) mentioned that small and medium enterprises play important roles in ownership development of enterprises, specifically on objective and goal settings relevant to their concepts. Watson, Hogarth-Scott, and Wilson (1998) said that the start-up of small business leads to success which depends upon training and provision of enterprise consultation from enterprise council, support from government. At the same time, Westhead and Storey (1996) also stated that training management was crucial for capacity building of small business' performance. In addition, Storey (1994) defined small firm in terms of number of employees, sales turnover, profitability, and net worth. Al-Kadasi (2019) described small and medium enterprises as essential economic system, i.e., entrepreneurs create new businesses, national income addition and social changes, community development, which aims at entrepreneurs' training for effective strategic management expertise (Al-Awlaqi, Aamer, & Habtoor, 2018).

Policy for SMEs' Development Plan in Lao PDR

The government has policies available on supporting productivity, technology and innovation, access to finance, access to consultant service on business development, access to markets and market extension, entrepreneurial development and conditions furnishing the development and investment of SMEs including tax and financial availability. However, the policies on supporting SMEs have short- and long-term impact on business operation (Hansen, Rand, & Tarp, 2018; Hansen, Rand, Tarp, & Trifkovic, 2019) while financial access, managerial skills, and government support are crucial for SMEs' development and promotion (Abrar-ul-Haq, Jali, & Islam, 2015).

Firm Financing Capability

Do et al. (2019) mentioned that financial management could be measured from managerial experience, the owner-manager's financial literacy, business plan, financial management regulations, characteristics of

enterprises, and enterprise owners and SMEs' accessibility to finance. Whereas, small business enterprises face difficulty in accessing to finance which has direct impact on cash flow in business performance (Abor & Biekpe, 2006).

Entrepreneurship

O. C. Ferrell, Hirt, and L. Ferrell (2008) defined entrepreneur as the rich persons, time, and their endeavour to take risks to create profits from innovation or to do business. Kuratko and Hodgetts (2004) defined entrepreneur as the person making the world business towards progress leading economic success mainly from power and huge creation of entrepreneurs. Wimpertiwi and Pangaribuan (2018) emphasized on low-cost strategy while differentiation strategy is focused (Galbreath, Lucianetti, Thomas, & Tisch, 2020).

Business Performance

Business performance is the evaluation of business managers in performing the management by searching new direction and innovation including new technology in evaluating its effectiveness and efficiency of actions (Bititici, Carrie, & McDevitt, 1997). This can be evaluated from financial and non-financial performance. Financial efficiency measures can be assessed on return on investment, return on equity and profit while non-financial performance can be evaluated through customers' satisfaction, sale growth, employee's growth, market share, and share growth (Sidik, 2012). In addition to this, small and medium enterprises' business performance can also be evaluated from the turnover growth and employment growth.

Research Related

From the review of research, it was found that a number of scholars and researchers were interested in SMEs' business performance. Harash, Al-Tamimi, and Al-Timimi (2014) studied on government policy and financial performance of small and medium enterprises. Their study revealed that government policy has greater impact on competitiveness and profitability of SMEs. The study of Obaji and Olugu (2014) also revealed that the government policy plays an essential role in SMEs' entrepreneurship development; especially it is important part in economic development. Apart from this, there is interesting research on innovativeness affecting business performance by Paudel (2019). His study illustrated that entrepreneurial leadership had direct impact on business performance since leadership is central factor influencing the innovation and business performance (Abdullah, Armanu, Margono, & Djumahir, 2018).

Research Methodology

The descriptive statistics were employed in this study as to analyze factors affecting business performance by ordinary least squares (OLS). Variables and definition of variables for using on model are shown in Table 1. In order to show the effects of factors, the hypotheses among independent and dependent variables were as follows:

$$\ln y_i = \alpha + \beta EC_i + \delta FC_i + u_i$$

Where:

$\ln y_i$ is measures of gross sale of enterprise at i .

EC_i means the characteristics of entrepreneur such as gender and experiences of managers.

FC_i refers to the characteristics of business, which include age of business, location, type of business: manufacture, retail, service, nuber of labourers, training, indirect export, direct export, website, accessibility to finance, and innovation.

α is a fixed number.

β or δ is vector of coefficient of independent and dependent variables of entrepreneurs respectively.

u_i is variance.

Table 1

Variables and Definition of Variables for Using on Model

Variable	Definition of variables	Expected sign
Dependent variables		
Revenue	Business performance	Unit measure of gross sale of business enterprise in LAK
Independent variables		
Gen	Female	Male = 0 Female = 1
Exper	Manager's experience	Year
Year	Age of enterprise	Year
Vte	Location	Vientiane Capital = 1 Others (Luang Prabang, Khammouane, Savannakhet, Champasak) = 0
TB	Type of business	
Manuf	Manufacture	Reference
Ret	Retail	Yes = 1 Others = 0
Serv	Service	Yes = 1 Others = 0
Labor	Number of labourers	Person
Train	Number of training	Yes = 1 Others = 0
Inex	Indirect export	Yes = 1 Others = 0
Dex	Direct export	Yes = 1 Others = 0
Web	Website	Yes = 1 No = 0
AFC	Access to finance	Yes = 1 No = 0
Inn	Innovation	Yes = 1 No = 0

Note. Source: World Bank (2018) enterprises survey in Lao PDR.

Sample Selection

1,892 enterprises were selected from the World Bank survey (2018) in five provinces as representatives of region and sectors by random sample of 208 enterprises were selected from Vientiane Capital, Luang Prabang, Khammouane, Savannakhet, and Champasak, 87, 36, 28, 25, and 32 respectively (see Table 2).

Table 2

Number of Enterprises Selected

Location	Number	Percentage (%)
Vientiane Capital	87	41.83
Luang Prabang	36	17.31
Khammouane	28	13.46

Table 2 to be continued

Savannakhet	25	12.02
Champasak	32	15.38
Total	208	100.00

Note. Source: World Bank (2018) enterprises survey in Lao PDR.

Data Analysis and Interpretation

The secondary data were from World Bank (2018) survey on enterprises in five provinces in Lao PDR. The descriptive statistics were employed, with the use of Stata seeking for affected factors, relationships, and P-value of independent variables and dependent variables whether they are significant as well as to define the goals to support and promote small and medium enterprises.

Findings

General Information on SMEs in Lao PDR

The majority of SMEs' managers were males, 136 persons, 65.38% while female managers were 82 persons, 39.42% from the selected sample. About 44 enterprises, 21.15% had opportunity for training. There were fewer number of enterprises using websites. Around 54 businesses, 25.96% sold in domestic markets. Indirect export accounted for 2.62% and direct export accounted for 4.32%. The accessibility of finance was relatively fewer, around 47 enterprises, 22.60%. 37 enterprises, 17.79% used innovation in their business performance.

Factors Affecting SMEs' Performance in Lao PDR

Table 3 illustrated the variables analysis. It was found that the mean for gross sale was 20.5408 million LAK, with the standard deviation of 1.7214. The mean for female manager equaled 0.3461, with standard deviation of 0.4768. The mean for managerial experience was 16.1105 years, with standard deviation of 9.8883. The mean for the age of enterprise was 13.8894 years, with standard deviation of 9.7357. The mean for Vientiane Capital was 0.4182, with standard deviation of 0.4944. The mean for retail was 0.2548, with standard deviation of 0.4368 while the mean for services was 0.3509, with standard deviation of 0.4784. It is interesting to see that the mean for number of labourers was 15.4134 persons, with the standard deviation of 14.6535. The number of times for training had mean at 0.2115, with standard deviation of 0.4093. The mean for indirect export, that is other entrepreneurs export the products/intermediaries, was 2.5240, with standard deviation of 12.4333 whereas the mean for the direct export, entrepreneur himself or herself, was 4.3269 with standard deviation of 16.9049. The mean for website application was 0.2596, with standard deviation of 0.4394. The mean for accessibility to finance was 0.2259, with standard deviation of 0.4192. The mean for innovation was 0.1778, with standard deviation of 0.3833.

Table 3

Summary Statistics of Variables to Use for Model

Variable	Obs	Mean	Std. Dev.	Min	Max
Gross sale (million LAK)	208	20.5408	1.7214	15.7614	27.4229
Female managers	208	0.3461	0.4768	0	1
Managers' experiences	208	16.1105	9.8883	1	51
Age of enterprises	208	13.8894	9.7357	1	58

Table 3 to be continued

Vientiane Capital	208	0.4182	0.4944	0	1
Retail	208	0.2548	0.4368	0	1
Service	208	0.3509	0.4784	0	1
Number of labourers	208	15.4134	14.6535	1	90
Times of training	208	0.2115	0.4093	0	1
Indirect export	208	2.5240	12.4333	0	100
Direct export	208	4.3269	16.9049	0	100
Website	208	0.2596	0.4394	0	1
Accessibility to finance	208	0.2259	0.4192	0	1
Innovation	208	0.1778	0.3833	0	1

Note. Source: Stata 14 analysis, 2022.

Test for Multicollinearity

Table 4 shows that the independent variable values have not exceeded ∓ 0.6 . In accordance to Grewal, Cote, and Baumgartner (2004), the variables below can be effectively analyzed. There are no problems on independent variables to have their own relationship among themselves (multicollinearity).

Table 4

Multicollinearity Detected for Independent Variables

	Gen	Lnexp	Loc	Manuf	Ret	Serv	Lnyear	Lnlab	Train	Inex	Dex	AFC	Web	Inn
Gen	1.0000													
Lnexp	0.0299	1.0000												
Loc	-0.0242	0.0024	1.0000											
Manuf	0.0395	0.1093	0.0510	1.0000										
Ret	0.0671	0.0524	0.0664	0.0384	1.0000									
Serv	-0.052	0.0084	0.0804	0.0474	0.0268	1.0000								
Lnyear	0.0276	0.6504	0.0573	0.0953	0.0636	0.0512	1.0000							
Lnlab	0.068	0.1191	0.1464	-0.0788	-0.0569	0.0311	0.0579	1.0000						
Train	0.0267	-0.045	-0.0372	0.0474	0.1090	-0.0867	0.0790	0.0160	1.0000					
Inex	-0.1273	-0.0129	0.0985	-0.0342	-0.0360	-0.1008	0.0104	-0.1178	-0.0812	1.0000				
Dex	-0.1124	0.0749	0.0502	0.0072	0.0152	-0.002	0.0253	0.0814	-0.0608	-0.1179	1.0000			
AFC	-0.0142	0.0244	0.0718	0.0315	-0.0784	0.0356	-0.0056	0.0155	-0.0424	-0.0356	0.083	1.0000		
Web	-0.0968	0.0779	-0.1999	0.0395	0.0262	-0.0914	0.0652	-0.1039	-0.0127	0.1842	0.0242	-0.1890	1.0000	
Inn	0.0549	0.0706	0.0304	0.0958	0.0339	-0.039	0.0791	-0.0340	0.0599	-0.0919	-0.1678	-0.3450	-0.0436	1.0000

Note. Source: Stata 14 analysis, 2022.

Table 5

Results of Estimation of the Factors Affect SMEs' Performance from Multiple Regression

LnRev	Coef	Robust Std. Err.	t	P > t	[95% Conf. Interval]
Gen	0.0622 ^{ns}	0.1992	0.31	0.755	-0.3307 0.4551
Lnexp	0.4155 ^{**}	0.1802	2.31	0.022	0.0600 0.7710
Loc	-0.0731 ^{ns}	0.2048	-0.36	0.721	-0.4770 0.3308
Manuf	0.2246 ^{ns}	0.1970	1.14	0.256	-0.1640 0.6131
Ret	0.3324 ^{ns}	0.2067	1.61	0.109	-0.0753 0.7400

Table 5 to be continued

Serv	0.4162**	0.1993	2.09	0.038	0.0231	0.8094
Lnyear	-0.3642**	0.1712	-2.13	0.035	-0.7018	-0.0266
Lnlab	1.1973***	0.1252	9.60	0.000	0.9503	1.4443
Train	0.3726*	0.2008	1.86	0.065	-0.0234	0.7686
Inex	0.0887 ^{ns}	0.2060	-0.43	0.667	-0.4951	0.3176
Dex	-0.3488*	0.2015	-1.73	0.085	-0.7461	0.0486
AFC	-0.3552*	0.2119	-1.68	0.095	-0.7732	0.0627
Web	0.0223 ^{ns}	0.2094	0.11	0.915	-0.3908	0.4354
Inn	-0.5362****	0.2162	-2.48	0.014	-0.963	-0.1097
_cons	3.7440***	0.5373	6.97	0.0000	2.6843	4.8037
Number of obs =			208			
F (14, 193) =			9.11			
Prob > F =			0.0000			
R-squared =			0.3979			
Adj R-squared =			0.3542			

Notes. Remarks: (*, **, ***) level of statistical significance at 10%, 5%, and 1% respectively. "ns" no statistical significance. Source: Stata 14 analysis, 2022.

Table 5 uses the method of ordinary least squares and examines the reliability by F-test and T-test from R-squared equivalent to 0.3979, which means that independent variables are 0.3979 or equal 39.79% with the significant statistic level of 1%.

Conclusion and Recommendation

The result of the test of 14 factors affecting SMEs' business performance by applying ordinary least squares (OLS) found that eight factors: managerial experience (Lnexp)), services (Serv), duration of business operation (Lnyear), number of labourers (Lnlab), training (Train), direct export (Dex), access to finance (AFC), innovation (Inn) have statistically significance on SMEs' business performance from 10%, 5%, and 1% respectively whereas six factors: gender of manager (Gen), location (Loc), manufacture (Manuf), retail (Ret), indirect export (Inex), and website (Web) have no statistically significance on SMEs' business performance.

For the government sector, it is recommended that the government continues supporting SMEs' entrepreneurs to enable them to access to formal financial credit by reducing procedures of loan; organizes consultant unit for SMEs' development, short- and long-term training for new SMEs' entrepreneurs to promote the SMEs' entrepreneurs in each sector, region, and types of SMEs' business; and it is essential to effectively localize SMEs.

For SMEs sector, it is recommended to cope with high competition; it is crucial to apply modern technology, innovation, and the use of media to upgrade the productivity, public accessibility in terms of products and effective services. Therefore, it is important to responsively, effectively, efficiently and sustainably operate their own business.

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