Factors Affecting the Performance of Commerce-Service Enterprises in Can Tho City, Vietnam

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Abstract- The objective of this study is to identify factors affecting the performance of commerce-service enterprises in Can Tho City. The sample size includes 272 active enterprises in the field of commerce and service. The study applied multivariate linear regression to analyze the data. The result showed that factors that have positive impacts on the performance of commerce-service enterprises are professional qualifications of enterprise owners, technology level, social capital, financial accessibility, and support policies. In contrast, the legal environment negatively influences the business performance of commerce-service enterprises. Especially, the technology level puts the strongest impact on the performance of commerce-service enterprises in Can Tho City.

Index Terms- business performance, enterprise, commerce-service.

I. INTRODUCTION

Currently, Vietnam is an official member of ASEAN, CPTPP, APEC, ASEM, and WTO. The integration of the international economy, as well as the expansion of relationships with nations and world economic organizations, is an opportunity for Vietnam to be a growing-economic country. Besides the favorable conditions for enterprises to expand the business and access to advanced technology, there is still a great challenge which is the increasingly competitive environment. To survive and develop, every enterprise owner has to pay attention to business performance, especially the factors affecting the enterprise’s performance. Studies conducted in many countries have pointed out that the access to finance (Chittithaworn et al., 2011; Kinyua, 2013), the management capacity of business owners (Chachar, 2013; Kamunge et al., 2014), operation years (Sørensen and Stuart, 2000; Zeitun and Tian, 2007), accessibility to information and support policies of the government (Kamunge et al., 2014; Joo and Suh (2017) influence the performance of enterprises. The business community plays an important role in the economy of each country, especially for developing countries, including Vietnam. Enterprises are considered to keep a key role in the economic growth of many countries (Beck et al., 2005; Omar et al., 2009). In a globally competitive environment, enterprises are always facing difficulties and challenges that affect their operational efficiency and sustainable development. The business community, especially commerce-service enterprises operating in Can Tho City are not out of trend. Therefore, this study was conducted to identify factors affecting the performance of commerce-service enterprises in Can Tho City. Indicating factors impacting the performance of an enterprise is essential. It may be a scientific basis for managers to find out appropriate strategies to improve future performance.

II. RESEARCH HYPOTHESES

The relationship between the business owner’s level of education and the enterprise’s performance. The study by Nghi & Nam (2011) has shown that the education level of business owners has a positive impact on the performance of businesses. With the same perspective, Blackburn et al. (2013) have demonstrated that the higher the education level of business owners, the better performance of businesses. Since then, the study proposes hypothesis H1: The professional qualifications of managers positively impact the performance of commerce-service enterprises.

The relationship between the management experience and the performance of the enterprise. According to Kamunge et al. (2014), Chachar (2013), there is a positive relationship between management experience of managers and their enterprises’ performance. Besides, Chittithaworn et al. (2011), Sitharam & Hoque (2016) have demonstrated that managerial skills and experience of business owners have a positive impact on firm performance. Thus, the study hypothesis H2 is as follows: The management experience positively affects the performance of commerce-service enterprises.

The relationship between operation years and the operational efficiency of enterprises. As reported by Sørensen & Stuart (2000), Zeitun & Tian (2007), years of operation affect the performance of an enterprise. In addition to this, Nghi & Nam (2011) pointed out that the number of operation years is a factor that positively affects production and business performance. Therefore, the hypothesis H3 is set out: Operation years positively influence the performance of commerce-service enterprises.

H4: The business size has a positive impact on the performance of commerce–service enterprises.

The relationship between asset structure and business performance. According to Nhut & Thao (2014), the ratio of fixed assets to total assets affects the performance of enterprises. Similarly, Zeitun & Tian (2007), Onaolapo & Kajola (2010) said that the ratio of fixed assets to total assets harms enterprises’ performance. Thus, the study hypothesizes H5: The asset structure negatively affects the performance of commerce–service enterprises.

The relationship between technology application and operational efficiency of enterprises. Arinaitwe (2006), Sitharam & Hoque (2016), Nhut (2014) have suggested that the application of advanced technologies into business production helps enterprises improve productivity, reduce costs, and increase efficiency. Therefore, the hypothesis H6 is proposed as follows: The application of technology has a positive impact on the performance of commerce–service enterprises.

The relationship between the revenue growth rate and operational efficiency of enterprises. The study by Nghi & Nam (2011) has found out the positive impact of revenue growth rate on enterprises’ performance and development. Also, Zeitun & Tian (2007) argued that the revenue growth rate favorably affects the performance of enterprises. From the above discussion, hypothesis H7 is as follows: The revenue growth rate has a beneficial impact on the performance of commerce–service enterprises.

The relationship between social capital and performance of enterprises. According to Acquah & Table 1: Interpretation of observed variables in the research model

<table>
<thead>
<tr>
<th>No.</th>
<th>Observed variable</th>
<th>Interpretation</th>
<th>Expectation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The manager’s level of education</td>
<td>Get value corresponding to the manager’s education level: 1 = Intermediate or lower, 2 = College, 3 = University, 4 = Postgraduate</td>
<td>+</td>
</tr>
<tr>
<td>2</td>
<td>Management experience</td>
<td>Measured by the number of years directly involved in the management of the manager (year)</td>
<td>+</td>
</tr>
<tr>
<td>3</td>
<td>Operation time</td>
<td>Measured by the number of operation years of the enterprise up to the time of the study (year)</td>
<td>+</td>
</tr>
<tr>
<td>4</td>
<td>Business size</td>
<td>Get the value corresponding to the size of the enterprise: 1 = micro, 2 = small, 3 = medium, 4 = large.</td>
<td>+</td>
</tr>
<tr>
<td>5</td>
<td>Asset structure</td>
<td>Fixed asset/total asset of the enterprise at the time of the study (%)</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>Technology level</td>
<td>Get the value corresponding to the level of technology application into the operation. Measured by the 5-level Likert scale.</td>
<td>+</td>
</tr>
<tr>
<td>7</td>
<td>Revenue growth rate</td>
<td>Measured by revenue growth of the following year compared to the previous year (%)</td>
<td>+</td>
</tr>
<tr>
<td>8</td>
<td>Social capital</td>
<td>The relationship between the enterprise and regulatory agencies or associations. Measured by 5-level Likert scale,</td>
<td>+</td>
</tr>
</tbody>
</table>


The relationship between support policies and the performance of enterprises. According to Thuong & Chung (2015), Hung & Thuy (2015), the government’s support policies have a great influence on the performance of enterprises, thereby motivating enterprises to make investment expansion decisions. In agreement with the above findings, Kamunge et al. (2014), Joo & Suh (2017) showed that the support from the government is one of the factors affecting the performance and the ability to expand the scale of businesses. Therefore, the study offers the hypothesis H10: Support policies positively impact the performance of commerce–service enterprises.

The relationship between the legal environment and the performance of enterprises. Mwangi et al. (2013), Kamunge et al. (2014), Sitharam & Hoque (2016) confirmed that the legal environment plays an important role, affecting the performance of enterprises. Negative issues in the legal environment adversely affect the performance and development of the business community. Hence, the hypothesis H11 is given: The legal environment has a negative influence on the performance of commerce–service enterprises.

To identify factors affecting the performance of commerce–service enterprises, the research model is set up as follows:

\[
Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_8 + \beta_9X_9 + \beta_{10}X_{10} + \beta_{11}X_{11}
\]

In which: Dependent variable (Y) is the business performance (measured by ROA, ROE, ROS). X_i are independent variables (explanatory variable).
The manager’s level of education affects the fluctuation of ROE, and 3 factors affect the change of ROA, 6 factors affect the change of ROS. The impact degree of each factor is presented below.

### Table 2: Research hypotheses test result

<table>
<thead>
<tr>
<th>No.</th>
<th>Observed variable</th>
<th>Interpretation</th>
<th>Expectation</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Financial access</td>
<td>The total amount that the enterprise can borrow from credit institutions (billion VND).</td>
<td>+</td>
</tr>
<tr>
<td>10</td>
<td>Support policy</td>
<td>Get the value corresponding to the accessibility to support policies. Measured by the 5-level Likert scale.</td>
<td>+</td>
</tr>
<tr>
<td>11</td>
<td>Legal environment</td>
<td>Get the value corresponding to the favorable level of the legal environment. Measured by the 5-level Likert scale.</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Authors’ proposal, 2019

### III. RESEARCH METHODOLOGY

To test the research hypotheses, the multivariate linear regression was used to determine affecting factors and the impact degree of each factor on the performance of commerce-service enterprises.

According to Green (1991), Tabachnick & Fidell (1996), the minimum sample size in the regression analysis is calculated using the formula 50 + 8m (where m is the number of independent variables). The research model is established with 11 independent variables which means the minimum sample size should be 138 observations. The quota sampling was applied to collect primary data with a sample size of 272 enterprises. Enterprises were surveyed about basic information, employment situation, fixed asset, capital, revenue, profit, operation time, accessibility to support policies.

### IV. RESEARCH RESULTS AND DISCUSSIONS

Based on Table 2, the research model has a significance level of Sig. F = 0.000 which means that there is a linear relationship between the performance of enterprises (measured by ROA, ROE, ROS) with at least one of the independent variables. The multicollinearity test result shows that VIF values are all less than 10. Therefore, the research model does not reach multicollinearity. The Durbin Watson coefficient is in the allowed range (between 1 and 3). It is possible to conclude that the research model does not violate autocorrelation.

<table>
<thead>
<tr>
<th>Factor</th>
<th>ROA Unstandardized (B)</th>
<th>ROA Significance level</th>
<th>ROE Unstandardized (B)</th>
<th>ROE Significance level</th>
<th>ROS Unstandardized (B)</th>
<th>ROS Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.315</td>
<td>0.000</td>
<td>-0.372</td>
<td>0.000</td>
<td>-0.392</td>
<td>0.000</td>
</tr>
<tr>
<td>The manager’s level of education</td>
<td>0.030</td>
<td>0.002***</td>
<td>0.030</td>
<td>0.004***</td>
<td>0.054</td>
<td>0.002***</td>
</tr>
<tr>
<td>Management experience</td>
<td>0.001</td>
<td>0.388ns</td>
<td>-6.968E-006</td>
<td>0.997ns</td>
<td>0.000</td>
<td>0.879ns</td>
</tr>
<tr>
<td>Operation years</td>
<td>-0.002</td>
<td>0.303ns</td>
<td>-0.001</td>
<td>0.571ns</td>
<td>-0.003</td>
<td>0.439ns</td>
</tr>
<tr>
<td>Business size</td>
<td>-3.534E-005</td>
<td>0.998ns</td>
<td>0.002</td>
<td>0.886ns</td>
<td>0.018</td>
<td>0.452ns</td>
</tr>
<tr>
<td>Asset structure</td>
<td>-0.001</td>
<td>0.864ns</td>
<td>0.004</td>
<td>0.622ns</td>
<td>0.001</td>
<td>0.939ns</td>
</tr>
<tr>
<td>Financial access</td>
<td>-6.718E-005</td>
<td>0.904ns</td>
<td>0.001</td>
<td>0.036*</td>
<td>0.001</td>
<td>0.497ns</td>
</tr>
<tr>
<td>Revenue growth rate</td>
<td>-0.001</td>
<td>0.616ns</td>
<td>0.000</td>
<td>0.859ns</td>
<td>0.003</td>
<td>0.342ns</td>
</tr>
<tr>
<td>Social capital</td>
<td>0.017</td>
<td>0.059*</td>
<td>0.022</td>
<td>0.034**</td>
<td>-0.008</td>
<td>0.633ns</td>
</tr>
<tr>
<td>Technology level</td>
<td>0.038</td>
<td>0.000***</td>
<td>0.040</td>
<td>0.000***</td>
<td>0.052</td>
<td>0.003***</td>
</tr>
<tr>
<td>Support policy</td>
<td>0.045</td>
<td>0.001***</td>
<td>0.057</td>
<td>0.000***</td>
<td>0.047</td>
<td>0.065*</td>
</tr>
<tr>
<td>Legal environment</td>
<td>-0.031</td>
<td>0.005***</td>
<td>-0.032</td>
<td>0.009***</td>
<td>-0.030</td>
<td>0.146ns</td>
</tr>
</tbody>
</table>

Adjusted R²: 0.480; Sig. F: 0.000; Durbin – Watson stat: 2.159

Note: *Significance level 10%; **: Significance level 5%; ***: Significance level 1%; ns: Not significant
Source: Survey data of 272 enterprises, 2019

According to the above table, out of 11 factors included in the research model, 5 factors explain the change of ROA, 6 factors explain the fluctuation of ROE, and 3 factors affect the change of ROS. The impact degree of each factor is presented below.

### The education level of the manager:
This factor positively affects the performance of commerce-service enterprises. If the owner has high professional qualifications, he or she has a better strategic vision and orientation for the development of the enterprise. Also, managers easily recognize opportunities and challenges. Therefore, the business performance will be improved. This result is consistent with the findings of Nghi & Nam (2011), Blackburn et al. (2013).

**Technology level:** The technology level has a beneficial impact on the performance of commerce-service enterprises. This is consistent with the proposed hypothesis in the model. A high level of technology is reflected by the application of modern technologies in the production, management, and sales activities. It helps enterprises save resources, reduce costs, and improve customer relationship management, thereby enhancing...
operational efficiency. This result is similar to the study of Arinaitwe (2006), Sitharam & Hoque (2016), Nhu (2014)

**Social capital:** This factor positively affects the performance of enterprises (ROA and ROE). Enterprises that have good relationships with regulatory bodies and associations will have more favorable conditions to access market information and support policies. This helps enterprises expand production activities and markets. The discovery corresponds to those of Fatoki (2011), Nghি & Nam (2011).

**Financial accessibility:** This factor influences the performance of commerce-service enterprises beneficially. If an enterprise has good accessibility to finance, the financial resources will be improved and the manager will be more proactive in expanding the production scale and investing in new technologies. Hence, it enhances the business scale and competitiveness of enterprises. This result is consistent with the studies of Chithithaworn et al. (2011), Kinyua (2013), Kamunge et al. (2014), Sitharam & Hoque (2016).

**Support policies:** These policies positively impact the performance of commerce-service enterprises. When the government offers support policies related to interest rate, technology, or tax, etc., it encourages enterprises to reduce costs, improve both resources and operational efficiency. Especially for small and micro-enterprises, support policies help them access the technology and expand the business. The research result is similar to those of Kamunge et al. (2014 Thuong & Chung (2015), Joo & Suh (2017).

**Legal environment:** The legal environment negatively affects the production efficiency and business activities of enterprises. The study confirms that many enterprises face difficulties in production activities due to administrative procedures are unreasonable, overlapping, and cumbersome. The more complicated the procedures are, the more negatively they affect the performance of enterprises. This finding agrees with the results of Mwangi et al. (2013), Kamunge et al. (2014), Sitharam & Hoque (2016).

V. CONCLUSION

Overall, the study has proved factors affecting the performance of commerce-service enterprises in Can Tho City. In particular, the qualifications of the manager, technology level, social capital, access to finance, and support policies positively affect the performance of commerce-service enterprises. Meanwhile, the legal environment negatively impacts the business performance of these enterprises. Most importantly, the technology level is the most powerful factor affecting the performance of commerce-service enterprises in Can Tho City.

REFERENCES


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