DETERMINANTS OF FIRM PERFORMANCE IN MYANMAR: A CASE STUDY OF MANUFACTURING SMEs IN NORTH YANGON INDUSTRIAL ZONE

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Abstract
There have been several studies investigating the determinants of SMEs performance utilizing three key organizational orientations: market orientation (MO), entrepreneurial orientation (EO) and learning orientation (LO), as well as innovativeness. Since there are no previous studies that have analyzed general SMEs in developing countries within a comprehensive framework, this study attempted to fill the gap in understanding the effect of organizational orientations and innovativeness on firm performance. The measures were drawn from previous literatures. In this study, eight hypotheses showing the direct relations among variables were developed. The sample size is 170 SMEs from the north Yangon industrial zone. Consistent with the findings reported in the existing literature, all the hypotheses were validated, except the hypothesis which states that learning orientation positively influence innovativeness. The results indicated that entrepreneurial orientation and market orientation positively influence learning orientation, innovativeness and firm performance. Again, innovativeness also positively influences firm performance.

Key Words: Market Orientation, Entrepreneurial Orientation, Learning Orientation, Innovativeness, performance.

Introduction
One of the significant characteristics of a flourishing and growing economy is a booming and blooming small and medium enterprises (SMEs) sector (Jasra et al., 2011). SMEs have various roles in economic development (Bannock, 2005). They make significant contributions in the transition of agriculture-led economies to industrial ones (Jasra et al., 2011).

In Myanmar, an agricultural-based country, SMEs are considered an important element in the national economy. It is estimated that the number of SMEs in Myanmar was around 36,000 in 2002 and around 38,000 in 2011. According to the Ministry of Industry, in 2011, there were 43,221 registered enterprises in Myanmar, of which 72% were small, 17% medium, and 11% large enterprises. Therefore, the combined SMEs represented 89% of total...
registered enterprises. Further, SMEs accounted for 70% of overall employment (Southiseng, 2012) and SMEs contributed 69% of output and 68% of investment value in the country (AungKyaw, 2008). These figures show that the performance of this enormous sector is crucial to the health of Myanmar’s economy as a whole.

Understanding the determinants of small firms’ performance is one of the notable areas in small business literature (Audretch, 2001; Kimura, 2002). A growing number of studies have been conducted concerning these determinants of firm performance. For instance, Hurley and Hult (1998) pointed out market and learning orientations and innovativeness as drivers of performance. Kreiser et al. (2013) tends to approach this firm performance study by considering the impact of entrepreneurial orientation, etc.

Identification of the determinants of SMEs’ performance is meaningful in several ways; it provides knowledge about the present characteristics of SMEs and enables firms to track their position and verify priorities, as well as communicate and improve performance (Neely, 2002). In line with the above discussion, since SMEs play an important role in the development of Myanmar’s economy, it is important to confirm their present characteristics in order to recommend a better policy and to improve their performance. Therefore, this study investigates the determinants of firm performance of manufacturing SMEs in Myanmar with two objectives, i.e., to examine the determinants of performance of manufacturing SMEs in the North Yangon industrial zones and to recommend policy for improving the performance of the manufacturing SMEs.

Hypotheses and Methodology

The effect of market orientation and entrepreneurial orientation on learning orientation

Market orientation (MO) is the organization culture that most effectively and efficiently creates the necessary behaviors for the formation of superior value for buyers and thus continuous superior performance for the business. It is composed of three components: customer orientation, competitor orientation and interfunctional coordination (Narver and Slater, 1990). The present study partly applies the definition of Never and Slater (1990) and adopts two components of MO, customer orientation and competitor
orientation because interfunctional coordination is not applicable for small firms (Rhee et al., 2010).

Entrepreneurial Orientation (EO) is an attitude toward a particular kind of behavior (Rhee et al. 2010). Some authors discuss EO with three dimensions. For instance, Kreiser et al. (2013) point out that EO consists of innovativeness, proactiveness and risk-taking. However, Avlonis and Salavou (2007) show that if innovativeness and the other two are stated differently, industry experts can imply that lower product innovativeness comes from weaker EO, whereas higher product innovativeness comes from stronger EO. The other literature also discuss these three separately. For instance, Hult et al. (2004) and Rhee et al. (2010) state that EO consists of two remaining elements, i.e. proactiveness and risk-taking, and is positively related to innovativeness, regardless of the level of market turbulence. In these aspects, this study discusses EO and innovativeness separately. Learning Orientation (LO) is the orientation toward the development of new knowledge or insights that have the potential to influence behavior through its values and beliefs within the culture of the organization (Huber, 1991).

MO provides strong norms for learning from customers and competitors and it is the principal cultural foundation of the learning organization (Slater and Narver, 1995). On the other hand, LO is a sort of organizational culture associated with the potential to affect behaviors, like processing information about markets that manifest themselves in internal and external organizational actions (Sinkula et al., 1997; Rhee et al., 2010). Taken together, it seems that the extent of LO relies on MO. Many literatures also show that MO significantly influences LO. For instance, Rhee et al. (2010) and Slater and Narver (1995) point out that MO is positively related to LO.

EO constitutes an organizational phenomenon that reflects a managerial capability by which firms embark on proactive and aggressive initiatives to alter the competitive scene to their advantage (Avlonitis and Salavou, 2007). Acting proactively and aggressively can promote the facilitated leadership and decentralized strategic planning which are the components of LO (Rhee at al., 2010) and they point out that EO positively and significantly affects LO. From these literature, we can hypothesize the following:

**H1:** Market orientation positively influences learning orientation.

**H2:** Entrepreneurial orientation positively influences learning orientation.
The effect of learning orientation on innovativeness and that of innovativeness on performance

Innovativeness is the notion of openness to new ideas as an aspect of a firm’s culture (Hurley and Hult, 1998). Innovativeness is the capacity to engage in innovation, that is, the introduction of new processes, products, or ideas into the organization (Hult et al., 2004). Being oriented toward learning indicates an appreciation for and desire to assimilate new ideas and therefore higher levels of innovativeness are associated with cultures that emphasize learning (Hurley & Hult, 1998). Rhee et al. (2010) and Hult et al. (2004) state that LO positively influences innovativeness regardless of the level of market turbulence.

Kreiser et al. (2013) shows that innovativeness is beneficial for SMEs’ performance. Verhees et al. (2004) investigate the role of innovativeness and the capacity to engage in innovation in small firms in the Netherlands and find that innovativeness has a positive influence on firm performance. Many other literature also take into account the role of innovativeness in firm performance. For instance, Gima (1996), Hult et al. (2004), Olavarrieta and Friedmann (2008), and Rhee et al. (2010) point out that innovativeness improves firm performance. The above ideas and empirical findings point out the relations of LO, innovativeness and performance. Thus, we further hypothesize the following:

H3: Learning orientation positively influences innovativeness.

H4: Innovativeness positively influences performance.

The effect of market orientation and entrepreneurial orientation on innovativeness

Organizations with strong MO stress innovativeness towards customers, competitors, and the external market environment (Huang and Wang, 2011). Being oriented towards markets provides a source for change and improvement (Hurley and Hult, 1998). This MO culture seems to direct innovativeness (Hurley and Hult, 1998). Moreover, much empirical evidence confirms that a market-orientated culture develops and fosters innovativeness (Olavarrieta and Friedmann, 2008; Hurley and Hult, 2004; Rahab, 2012).

The entrepreneurial attitude enables SMEs to escape the myopia of me-too-ism, and instead deliver new highly unique products (Avlonitis and Salavou, 2007). EO is an attitude toward a particular kind of behavior, while
innovativeness is a behavior-based construct toward outcomes (Rhee et al., 2010). According to this literature, it seems that an attitude like EO fosters innovativeness towards a particular kind of behavior through which firms can attain better outcomes. Empirical findings of Hurley and Hult (2004) also show that EO is positively related to innovativeness, regardless of the level of market turbulence. Based on the above discussion, we hypothesize the following:

H5: Market orientation positively influences innovativeness.

H6: Entrepreneurial orientation positively influences innovativeness.

The effect of market orientation, and entrepreneurial orientation on performance

The extent of MO has a greater impact on small manufacturing firm performance than the direct and indirect impact of the particular industry environment and strategy selection (Pelham, 1999). Olavarrieta et al. (2008) point out that the MO literature provides evidence that a MO culture can be an important determinant of business performance. They show that MO has a significant impact on firm performance. Again, Kaynak and Kara (2004) prove that higher levels of MO lead to better organizational performance. Many other literatures (e.g. Tse et al., 2003, Becherer et al., 2003, Kara et al., 2005, Subramanian and Gopalakrishna, 2001) find a direct positive relationship between MO and performance in SMEs.

In the modern business environment where the pace of change is fast and product and business model lifecycles are shortened, the future profit streams from existing operations are uncertain and businesses need to constantly seek out new opportunities. Therefore, firms may benefit from adopting an EO, i.e. being risk-taking and proactive (Soininen et al., 2012). They indicate that EO positively affects the performance of SMEs. Several studies have found that there is a positive relation between EO and performance. For instance, Zahra and Garvis (2000), as well as Wiklund and Shepherd (2003), show that companies achieve higher overall performance through EO. Wiklund (1999) discusses the importance of the direct effect of EO on performance and indicates the positive direct relationship between EO and performance. Thus, we hypothesize the following:

H7: Market orientation positively influences performance.

H8: Entrepreneurial orientation positively influences performance.
The conceptual framework

From the above discussion, the hypothesized casual relationships are illustrated in the conceptual framework, as shown in Fig. 1. Firm age, which might affect the result, is controlled.

![Conceptual Framework Diagram]

Fig. 1. Conceptual Framework

Sample and data collection

In this study, the north Yangon industrial zones (HlaingTharyar, Shwepyithar, Mingalardon, and Myaunghakar industrial zones) was chosen as the study area. We employed a questionnaire survey approach to collect the data for this study. The population of the study was the SMEs operating in the north Yangon industrial zones with number of employees less than 150 and investment amount less than 1,000 million kyats.

A total of 181 structured questionnaires were prepared. In order to increase the response rate, we established face-to-face contact with the respondents from all the participating firms. Of the 181 questionnaires, 11 questionnaires were not utilised in the analysis because key data were missing, and some of the firms did not accept our request to participate in the survey. Thus, the final sample comprised 170 firms.
Measures and Methodology

All items for the constructs used in this study were assessed on 5-point Likert scales, ranging from 1= ‘strongly disagree’ to 5= ‘strongly agree’. These measures were drawn from the extant literature. Drawing upon previous literature (Rhee et al., 2010), MO was measured with two dimensions, customer orientation (5 items) and competitor orientation (4 items). EO is composed of two sub-dimensions, risk-taking (3 items) and proactiveness (3 items) (Hult et al., 2004). With the focus on the aspect of LO as the basis of organizational culture, this study used the scale developed by Narver and Slater (1995). The scale of LO is composed of two dimensions, facilitated leadership (3 items) and decentralized strategic planning (3 items). Innovativeness was measured using Rhee et al.’s (2010) measurements, which were originally developed by Hurley and Hult (1988). A total of 5 items, the use of research results for technical innovation, seeking innovative ideas, the use of innovation in program/project management, rewarding people for new ideas, and considering innovation as constructive, were utilized to assess innovativeness. This study was based on the work of Rhee et al. (2010) to measure performance with three subjective indicators: market share, sales growth rate and profitability. In order to reduce bias, one variable was controlled: firm age. Firm age was measured by instructing respondents to indicate the number of years since the firm was founded. It was used IBM SPSS Amos 21 as the statistical package for analysis.

Results and Discussion

The descriptive information related to the variables is shown in Table 1. All the constructs (MO, EO, innovativeness, LO, and performance) were assumed to be normally distributed because the mean values close to the midpoints of the scale (Soininen et al. 2012).
Table 1: Mean, standard deviation, medium, maximum, minimum and correlation among all observed variables (N=170)

<table>
<thead>
<tr>
<th>Constructs</th>
<th>M</th>
<th>SD</th>
<th>Medium</th>
<th>Min</th>
<th>Max</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MO</td>
<td>3.77</td>
<td>.421</td>
<td>3.78</td>
<td>2.67</td>
<td>4.67</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Inno</td>
<td>3.58</td>
<td>.549</td>
<td>3.60</td>
<td>2.20</td>
<td>4.80</td>
<td>.750**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. LO</td>
<td>3.72</td>
<td>.493</td>
<td>3.67</td>
<td>2.50</td>
<td>4.83</td>
<td>.716**</td>
<td>.777**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. EO</td>
<td>3.64</td>
<td>.489</td>
<td>3.67</td>
<td>2.50</td>
<td>4.83</td>
<td>.760**</td>
<td>.796**</td>
<td>.745**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Per</td>
<td>3.49</td>
<td>.677</td>
<td>3.50</td>
<td>2.00</td>
<td>5.00</td>
<td>.786**</td>
<td>.692**</td>
<td>.807**</td>
<td>.760**</td>
<td></td>
</tr>
</tbody>
</table>

Note: **. Correlation is significant at the 0.05 level (2-tailed). MO= market orientation, Inno = innovativeness, LO = learning orientation, EO = entrepreneurial orientation, Per = performance

Reliability and validity

The reliability of the multi-item scale for each dimension was measured using Cronbach’s alpha. The measures of reliability were above the recommended minimum standard of 0.70. Convergent validity was assessed using the t-statistics for the path coefficients from the latent constructs to the corresponding items (Li, Huang, and Tsai2009). All indicators were statistically significant (p<0.01), thereby suggesting convergent validity. To assess the discriminant validity, the confidence interval for each pairwise correlation estimate plus or minus two standard errors should not include the value of one (Rhee et al. 2010). None of the two standard error intervals included the value of one; therefore, this provides evidence for discriminant validity. The test of the variance inflation factors (VIF) provides a good result; the results were found to be below the recommended maximum value of 10. Thus, there was no serious multicollinearity problem.

Fit of the hypothesized model

For estimating the relationships, the two dimensions of MO, those of LO, and those of EO were individually summed and used as indicators of the three latent constructs (Hult et al. 2004; Rhee et al. 2010). Before assessing the model, we assessed the model fit. Table 2 shows the model fit of path analysis.
Table 2: Model fitness of path analysis

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Hypothesized Model</th>
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<tr>
<td>GFI</td>
<td>&gt;0.90</td>
</tr>
<tr>
<td>RMSEA</td>
<td>&lt;0.08</td>
</tr>
<tr>
<td>AGFI</td>
<td>&gt;0.90</td>
</tr>
<tr>
<td>NFI</td>
<td>&gt;0.90</td>
</tr>
<tr>
<td>CFI</td>
<td>&gt;0.90</td>
</tr>
<tr>
<td>Chi-square</td>
<td>2.260</td>
</tr>
<tr>
<td>P-value</td>
<td>0.520</td>
</tr>
</tbody>
</table>

According to Table 2, the hypothesized model meets all the criteria for close fit (Chi-square test: non-significant; GFI and AGFI > 0.90; RMSEA < 0.08; CFI and NFI > 0.90). Therefore, it can be said that the hypothesized model yields good fit to the data.

Hypotheses testing

In this study, we proposed eight hypotheses. The hypothetical results are presented in Table 4. As shown in Table 4, H1 was supported (β = .472, p<0.01). In accordance with hypothesis H2, EO exerted a significant effect on LO (β = .408, p<0.01). However, in terms of hypothesis H3, LO did not influence innovativeness (β = .115, p>0.10). The result supported hypothesis H4 (β = .433, p<0.01). In accordance with hypothesis H5, MO positively influences innovativeness (β = .298, p<0.01). With regard to hypothesis H6, EO exerted a significant effect on innovativeness (β = .486, p<0.01).

Further, in terms of hypothesis H7, MO significantly influences performance (β = .155, p<0.05). Similarly, EO positively and significantly affects performance (β = .328, p<0.01). Thus, the results supported hypotheses H7 and H8. Additionally, it was analysed the effect of the control variable on all the endogenous variables, although no related hypotheses were proposed in this study. The results showed that firm age does not significantly affect LO and innovativeness; however, it negatively affects performance (β = -0.108, p<0.05).
Table 4: Standardized estimates of the hypothesized model

<table>
<thead>
<tr>
<th></th>
<th>Estimates</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LearningOrientation &lt;-- MarketOrientation</td>
<td>.472</td>
<td>***</td>
</tr>
<tr>
<td>LearningOrientation &lt;-- EntrepreneurialOrientation</td>
<td>.408</td>
<td>***</td>
</tr>
<tr>
<td>LearningOrientation &lt;-- Firm age</td>
<td>.026</td>
<td>.554</td>
</tr>
<tr>
<td>Innovativeness &lt;-- MarketOrientation</td>
<td>.298</td>
<td>***</td>
</tr>
<tr>
<td>Innovativeness &lt;-- EntrepreneurialOrientation</td>
<td>.486</td>
<td>***</td>
</tr>
<tr>
<td>Innovativeness &lt;-- Firm age</td>
<td>.016</td>
<td>.706</td>
</tr>
<tr>
<td>Innovativeness &lt;-- LearningOrientation</td>
<td>.115</td>
<td>.126</td>
</tr>
<tr>
<td>Performance &lt;-- MarketOrientation</td>
<td>.155</td>
<td>.016**</td>
</tr>
<tr>
<td>Performance &lt;-- EntrepreneurialOrientation</td>
<td>.328</td>
<td>***</td>
</tr>
<tr>
<td>Performance &lt;-- Firm age</td>
<td>-.108</td>
<td>.006**</td>
</tr>
<tr>
<td>Performance &lt;-- Innovativeness</td>
<td>.433</td>
<td>***</td>
</tr>
</tbody>
</table>

Note: ***p<0.01, **p<0.05, *p<0.10

In the following table 5, we compare the total effects of exogenous variables on endogenous variables. It can be seen that for performance, EO is the most influential variable followed by innovativeness and MO. Therefore, it can be concluded that MO, EO and innovativeness are determinants of firm performance of SMEs in the north Yangon industrial zones and EO is the most important organizational orientation for firm performance. There are also indirect effects from EO and MO on performance through innovativeness and means that innovativeness acts as a mediator for these two orientation variables.

Table 5: Summary of Effects

<table>
<thead>
<tr>
<th>Performance</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>EO</td>
<td>0.328***</td>
<td>0.231*</td>
<td>0.559***</td>
</tr>
<tr>
<td>LO</td>
<td>-</td>
<td>0.050</td>
<td>0.050</td>
</tr>
<tr>
<td>MO</td>
<td>0.115**</td>
<td>0.152*</td>
<td>0.267**</td>
</tr>
<tr>
<td>Inno</td>
<td>0.433***</td>
<td>-</td>
<td>0.433***</td>
</tr>
</tbody>
</table>

Note: ***p<0.01, **p<0.05, *p<0.10
Discussion

Consistent with the literatures (Sinkula et al., 1997; Rhee et al., 2010; Slater and Narver, 1995), Hypothesis 1 and Hypothesis 2 were supported. In accordance with these two hypotheses, it can be said that the more MO and EO, the more LO culture.

However, Hypothesis 3 was not supported, which shows that LO does not influence the innovativeness of SMEs in the north Yangon industrial zones. Even though top management favored and successfully facilitated leadership and decentralized strategic planning, it did not lead to innovativeness. It was not surprising that employees in most of the SMEs are uneducated and low-skilled labors who are not able to come up with innovative ideas or provide feedback to the top management even though top management creates LO culture, facilitated leadership and decentralized strategic planning.

Hypothesis 4 was supported and consistent with the previous literatures (Kreiser et al., 2013; Hult et al., 2004; and Rhee et al., 2010). That is to say that the more innovativeness, the better the performance in the organization is. The result indicates that innovativeness is a crucial factor to improve the performance of SMEs in the north Yangon industrial zones. Again, with regards to Hypothesis 5 and 6, these MO and EO also exerted positive effects on innovativeness. This condition is consistent with the literatures (Rahab, 2012; Olavarrieta and Friedmann, 2008; Hurley and Hult, 2004). These four hypotheses, H1, H2, H5 and H6, confirmed that MO and EO contribute to both LO and innovativeness of SMEs.

Consistent with the literatures (e.g., Kaynak and Kara, 2004; Kara et al., 2005; Becherer et al., 2001; Wiklund, 1999), Hypotheses 7 and 8 were also supported. That is to say that MO and EO are determinants of performance of SMEs in the north Yangon industrial zones.

Conclusions

The result showed that MO, EO and innovativeness are significant determinants of firm performance and among them, EO is the most influential organizational orientation for performance. However, innovativeness did not mediate the link between LO and performance and, therefore, based on the analytical framework of the present study, LO cannot contribute to the
business performance of the manufacturing SMEs in the north Yangon industrial zones.

Our study contributes to the theoretical development. First, integrated studies on SMEs in developing countries are very few and thus this study contributes to a theoretical extension of antecedents regarding MO, EO, LO and innovativeness, moving forward the empirical findings. Secondly, by focusing on SMEs, the findings of the study provide new insights in small business research concerning the widely acknowledged value of the key orientations and innovativeness.

MO helps managers to be more connected to the business environment, managers need to strengthen their effort to continue transforming firms and more fully embrace MO. EO was found to have a significant and positive effect on innovativeness and also appears to be the most important overall determinant of business performance. Therefore, the organization should consider this and support EO. Innovativeness is central to incorporating all key factors which influence firm performance. It implies that emphasis must be placed on establishing an innovative culture. Top managers of small firms are advised to pay full attention to improvements in innovativeness.

MO and EO are positive antecedents of firm performance. Policy should create a sound environment for access to information. Within this environment, SMEs can be better focus on the right customer and competitor orientations. They can make decisions more quickly and take risks more effectively, which leads to higher performance. One thing to consider when devising innovation incentives, policy makers need to think about making the application process easy and enterprise-friendly apart from designing effective incentives.

Limitations and further research

We relied on the perceptions of individual respondents for measuring the variables, which could lead to misrepresentation of the real situation. Further, in this study, cross-sectional data are used. The cross-sectional design of the data restricts the conclusions to those of association, not causation.

To measure the performance of the SMEs, only subjective data was used in this study. Although the subjective and objective measures of performance are positively correlated (Song, et al., 2005), both types of
measurements are generally used to increase the confidence level. Future research could include several possible factors to the construct, such as the external environment and types of industry, etc.

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References


