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## ARTICLE INFO

Mohd Noor Mohd Shariff and Chea Peou (2008). The relationship of entrepreneurial values, firm financing and the management and growth performance of small-medium enterprises in Cambodia. *Problems and Perspectives in Management*, 6(4)

## RELEASED ON

Thursday, 18 December 2008

## JOURNAL

"Problems and Perspectives in Management"

## FOUNDER

LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

0



NUMBER OF FIGURES

0



NUMBER OF TABLES

0

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## The relationship of entrepreneurial values, firm financing and the management and growth performance of small-medium enterprises in Cambodia

### Abstract

This study was conducted to examine the relationship between entrepreneurial values, firm financing and management and the growth performance of small-medium enterprises (SMEs) in Cambodia using 220 usable questionnaires that were collected from owners/managers of the firms. The outcomes of hierarchical multiple regression analysis showed that the inclusion of market environment and government policy in the analysis had increased the effect of the relationship between the values of entrepreneurs, firm financing and management and the growth performance of SMEs in Cambodia. Additionally, we also discuss the implications of this study to SME growth performance theory and practice, conceptual and methodological limitations, and directions for future research.

**Keywords:** SME growth performance, entrepreneurial values, firm financing, management, market environment, government policy.

**JEL Classification:** M1, M19.

### Introduction

Small and Medium Enterprise (SME) sector development is one of the recent key issues in developing countries (Davidsson, 2004; Gibb & Ritchie, 1982). As a developing country, the development of the SME sector in Cambodia is important. The assistance of SME as a support industry helps to strengthen the large industries (LIs). SME development is the future candidate of LI because every large enterprise (LE) has had the experience of starting their business as an SME. The future of the LE is dependent on the development of SME.

SME development is also an important issue for the labor market because it employs the labor force and offers wages to workers (Kirchhoff, 1994). In Cambodia, the development of the SME sector is not only a key issue for the industry development, but also for the socio-economic development of the country.

The role of SMEs has been recognized as important by every nation around the world. It is considered an engine for growth and poverty reduction for the country through the creation of jobs and incomes for the people (Morris, May, Godden & Nicholson, 2001; World Bank Group, 2004; Ngasongwa, 2002; Hashim, 2004); domestic production and export (Hisrich & Szirmai, 1993; McMillan & Woodruff, 2002); entrepreneurial skills and industrial linkages (Chee, 1986; Wyer, 1999; Goh & Chew, 1996; Mohd Shariff, 2003); and individual collective initiative and social values (Clapham, 1985).

SME development is also considered as a tool for economic survival during the country's crises (Tambunan, 1992; Goh & Chew, 1996; Frank & Landstrom, 1997). Moreover, SMEs are increasingly

becoming more important for poor and developing countries (Chico, 1983; Khan, 2002). It would be fair to say that this role has achieved a consensus by all parties involved. According to the President of the World Bank Group, James D. Wolfensohn: "SMEs are the private sectors for employment generation and sustainable growth" (World Bank Group, 2004, p. 19). The concern of transitional economies from the former Soviet Union to Central and Eastern Europe to China and Vietnam are similar in one important aspect: SMEs help to improve and sustain the health of the market economy in terms of job creation, domestic production, and exports (Hisrich & Szirmai, 1993; McMillan & Woodruff, 2002).

This is true especially when the surplus of labor, scarcity of capital within the rapidly growing population in the poor and developing countries are high (Chico, 1983; Khan, 2002). Clapham (1985) also indicated that SMEs help to promote individual collective initiative, basic social values, and are highly viewed as a crucial tool towards achieving a social and regional integration.

Evidence from the World Bank Group (2004) shows that SMEs in China helped nearly 200 million people escape from extreme poverty as a result of the economic reform in 1979. As in the case of Taiwan, SMEs dominated 97.81 percent of total industrial establishments and contributed 69.27 percent of total employment; 32.11 percent of total sale values; and 48 percent of total exports for the country's economy (Ministry of Economic Affairs, 1997).

SMEs not only helped during the period of economic growth but also in economic recession. It also becomes the engine for growth of Multinational Companies (MNCs) in Singapore (Goh & Chew, 1996). The strong turbulence in the world economy in 1970s had made many large firms in developed

countries lay off their employees. SMEs then were regarded as the problem solver to these structural changes (Frank & Landstrom, 1997).

However, SMEs face many problems in their growth performance (Kirby, 2003). These problems can be due to the lack of entrepreneurial values, financing and markets (Barber, Metcalfe & Porteous, 1989; Allal, 1999; Kirby, 2003). Other external factors such as the macroeconomic environment, government policies and regulations, and the availability of physical infrastructures also affect the growth performance of SMEs. Szegedi (1989) found that the potential factors that influence SMEs' growth performance in Hungary are economic, political, and the social infrastructure. Therefore, the strategies that will best promote SMEs' growth performance are still being discussed among the theorists, economists, policy makers, and entrepreneurs.

Previous studies have examined the forces limiting SME growth (Austin, 1988; Arbaugh & Sexton, 1996; Das, 1996; Hull, 1990; Petrakis, 1997; Barber et al., 1989; Mohamad, Rashid & Sidin, 1998; Kirby, 2003). Others have suggested creating more business-friendly environments through government policies, which has been shown to be another influential factor on SME growth performance (Fabella, 1987; Islam, 1987; MPDF, 1997; Mannan, 1993; Pilgrim, 1994; Dijk, 1997; Czinkota & Ricks, 1981; World Bank Group, 2004).

There have been only limited attempts at studying SME growth performance in Cambodia using empirical data. As stated by IFC, World Bank Group-SME (2002, p. 22): "as in so many countries, emerging local entrepreneurs hold the key to job creation and rising incomes in Cambodia but they are blocked from building the successful companies to their economy needs by weak financial market and support institutions, dilapidated infrastructure, ineffective legal system, and corruption".

## 1. Review of literature

**1.1. SME growth performance.** Penrose (1995) defines performance as a measure of how well the firm achieves its goals (organizational and financial goals). In this study we specifically measure the performance of SMEs as profitability, growth, and survival. It depends on how firms determine their goals and achievement, i.e. what are the goals of a firm and how to reach them.

The outcomes of a firm's performance depend on whether the firm has achieved its goals or not (Barney, 1991; Davidsson, 2004; McMahon, 2001). The merits of the measures used in this study are that they are widely understood, brief, and able to be verified and replicated. The most common objective measures of organizational performance are return

on equity (ROE), return on assets (ROA), sales growth, and total return to stakeholders. Several studies use more than one measure of firm performance. Performance is generally associated with expectations for success (Penrose, 1995).

**1.2. Factors influencing the growth performance of SMEs in Cambodia.** Tambunan (1999) found that small business owner-managers having entrepreneurial values such as creativity, integrity, achievement, among others, were more likely to have superior performance in managing organizations than owner-managers without these values. McMahon's (1998) findings left open the question of generalizability and whether or not personal characteristics and values might be used to predict an individual's position on an 'entrepreneurial-conservative' values continuum. The question of the degree to which an individual owner-manager could be characterized as "entrepreneurial" might be used to predict the performance of the organization they own has also been studied by Turner (1997).

The role of individual characteristics, values and expectations in determining the subsequent actions of those who start and run their own businesses has been explored in the academic literature and linked to business performance by a number of researchers (Fitzsimmons, Steffens & Douglas, 2005; McMahon, 2001). However, the literature disagrees on how the individual's 'characteristics' affect management practices.

Kyambalesa (1994) defines firms' financing as the total amount of money invested to SMEs owners. It is one of the major factors that relate to the growth performance of SMEs. Firm financing means that SME owners have to support the running of their businesses by obtaining financing from various sources. The lack of sufficient firm financing will create a significant problems for SME business activities, particularly their ability to grow (Mannan, 1993).

Moreover, Kam (1994) indicated that the ability to generate ideas, the ability to solve problems and the level of technical sophistication of SME owners have a major influence on SMEs' growth performance. Ferdows (1980) added that SME owners' ability to use their employees' skills and utilize their resources fruitfully would lead to expansion of their business and does not hurt their chances to be successful. However, according to Penrose (1995), the conduct of management also plays an important role in SMEs' growth performance.

Research conducted by Olsen & Johannessen (1994) cited that the experiences and competence levels of SME owners are also an important factor influencing SMEs' growth performance. However, Johnson (1993) stated that the working style of owner-

managers — particularly the speed with which they can produce high quality work that meets the needs and requirements of customers and suppliers — was another important determinant of SMEs' growth performance. Owner-managers also need to persevere when appropriate and to think and act creatively — these are additional prerequisite skills that contribute to the growth performance of SMEs.

**1.3. The importance of market environment and government policy.** There is little disagreement on the fact that Cambodia failed to maximize the benefits derived from the SME sector. SMEs in the future will play a pivotal role in promoting and sustaining its industrial sector as well as growth (World Bank Group, 2004). Numerous reforms and trade liberalization measures squeezed the entrepreneur, the market and government's activity in business. It is now the role of the private sector such as SMEs to lead the economy on a dynamic growth path. SMEs are considered to be the seedbed for the development of entrepreneurial skills and innovation due to the flexible nature of their operations.

Small capital requirements make it possible for SMEs to enter exit easily from their industry. It is also believed that private sector entrepreneurial activities have many important spillover and positive externality effects (Haswell & Holmes, 1989). However, liberalization of the economy along with rapid globalization have posed severe challenges to SMEs, not only in international markets but also in the domestic economy. Since SMEs are based on relatively small investment, their survival depends on readily available markets with an easy access to entry. The development of the market is much more challenging in Cambodia, especially in the city of Phnom Penh, which requires coordinated efforts by individual enterprises and the government to promote businesses in the city.

Through its agencies, the government should promote a series of efficient policies affecting competitiveness, such as monetary, financial, budgetary, fiscal, labor and trade. The government could also reduce corrupt practices and punitive tax evasion through its policies. The political stability in the country will help to improve the administration of

justice and bureaucracy in the country (Barney, 1991; Dovaldson, 1995; McMahon, 2001). Business is supported by increasing and promoting entrepreneurship, skilled labor, investments in technology, and sound management practices, among others. Infrastructure is enhanced by the provision of quality education, health, environment, water, energy, roads, and of the creation of science and technology institutions.

Sound government policies support competitiveness (Dovaldson, 1995). A dynamic national system of technological innovation, a globally integrated financial sector, a well-developed infrastructure and a skilled labor force support a country's international competitiveness. Reducing factor inhibiting competitiveness is thus the way forward.

**1.4. SME definition.** An enterprise is considered to be any entity engaged in an economic activity irrespective of its legal form (Robinson, 1982; Young, 1985). This includes, in particular, sole proprietorships and family businesses engaged in craft or other activity and partnerships and associations regularly engaged in economic activity. People in different countries tend to define SMEs in different ways. The category of SMEs in Europe is made up of enterprises which have fewer than 250 full-time employees and which have either an annual turnover not exceeding 50 million Euros, or an annual balance sheet total not exceeding 43 million Euros (Jensen, 2000; Penrose, 1995).

There is still no clear definition of SMEs. Different country uses different measurement techniques to determine SMEs and it depends on their purposes (Kirby, 2003; Ngasongwa, 2002). The quantitative and qualitative measurements can also be used to measure SMEs based on the characteristics of the firms (Hanchuan & Zhongqi, 2000; Ueda, 1995).

Based on the experiences of SMEs around the globe, the IFC and the World Bank Group-SME (2002) created their own SME definition for countries in the world. The intent is to define SMEs growth in terms of employment, income generation, social balance, country development, regional integration, and global development (Table 1).

Table 1. The common global SME definition of IFC and the World Bank Group-SME

| SMEs characteristics | No. of employees | Capital investment       | Annual turnover          |
|----------------------|------------------|--------------------------|--------------------------|
| Micro-enterprise     | Less than 10     | Less than US\$100,000    | Less than US\$100,000    |
| Small enterprise     | 10-50            | \$100,000-\$300,000      | \$100,000-\$300,000      |
| Medium enterprise    | 51-300           | \$3,000,000-\$15,000,000 | \$3,000,000-\$15,000,000 |

Source: IFC, World Bank Group-SME, (2002). Review of small business activities. Washington DC: Jarboe Printing Company.

The IFC's Royal Government of Cambodia & SMEs Sub-Committee (2005) defined SMEs in Cambodia according to the number of employees and financing required. Micro-enterprises were defined as having

less than 10 employees with capital less than US\$50,000; small enterprises as having 11-50 employees with capital from US\$50,000 to less than US\$250,000; and medium enterprise as having

51-100 employees with capital from US\$250,000 to less than US\$500,000.

## 2. Research methodology

Data for this study were gathered through survey questionnaires. After refining, categorizing and comparing the information with relevant theoretical and empirical evidence, this was used as a guideline to develop the content of survey questionnaires for a pilot study. Next, a pilot study was conducted on 2 experienced academic staffs who have worked in higher education. Their feedback was used to verify the content and format of questionnaires developed for an actual survey. Back translation technique was used to translate the content of questionnaires in Khmer and English in order to increase the validity and reliability of the instrument (Baker, 1994; Romano & Ratnatunga, 1995). The survey questionnaire had two sections. First, it consists of questions on the demographic profile of the respondents. Second, there are questions on factors that influence the growth performance of SMEs. The values of entrepreneurs consist of 15 items that were modified from the entrepreneur behavior theory literature (see Schumpeter, 1934; Kirchoff, 1994). Questions regarding firm financing had 11 items that were developed based on resource base theory literature (Barney, 1997). Management ability was measured using 14 items that were developed from Barney (1997). The market environment and government policy were measured using 15 items each that were developed from contingency theory (Dovaldson, 1995). Finally, SME growth performance was measured using 5 items that were developed by Penrose (1995). These items were measured using a 5-item scale ranging from “Strongly disagree” (1) to “Strongly agree” (5).

The unit of analysis for this study is owners/managers from SMEs in Phnom Penh, Cambodia. A convenient sampling technique was used to gather data from SME firms. Based on the combined list created from the Ministry of Commerce, yellow pages from the telephone directory and business cards in the area of Phnom Penh (Webster & Boring, 2000), 1078 SMEs were contacted (out of the total of 3064) to obtain official permission to conduct a survey. Only two hundred and fifty-three (253) firms agreed to participate in this study. Of that total, 220 usable questionnaires were returned to the researchers, yielding a 20.4 percent response rate. The survey questionnaires were answered by participants on a voluntarily basis. The names of owners/managers of the SME firms were made anonymous in order to avoid intrusiveness. We used the Statistical Package for Social Science (SPSS) version 15.0 to analyze the validity and reliability of measurement scales and test our research hypotheses.

**2.1. Hypotheses.** Four hypotheses were tested for this study:

*H1: There is a positive relationship between entrepreneurial values, firm financing, and the management and the growth performance of SMEs in Cambodia.*

*H2: Market environment positively moderates the relationship between entrepreneurial values, firm financing, and management and the growth performance of SMEs in Cambodia.*

*H3: Government policy positively moderates the relationship between entrepreneurial values, firm financing, and management and the growth performance of SMEs in Cambodia.*

*H4: Government policy and the market environment positively moderate the relationship between entrepreneurial values, firm financing, and management and the growth performance of SMEs in Cambodia.*

## 3. Findings

Table 2 shows that sales/service and trading (85.4%) firms outnumber their manufacturing (14.6%) counterparts. Over one-half (52.3%) of the sample firms are from medium-sized enterprises. However, 99% of the firms have less than 100 employees. The majority of respondents (85.5%) derived their sources of capital from personal savings, family and friends. The majority (70%) of the amount of capital invested by the firms are below US\$20,000.

Table 2. Sample profile

|  |              |
|--|--------------|
| <i>Types of businesses (%)</i>           |              |
| Sales/service = 61.8                     |              |
| Trading firm = 23.6                      |              |
| Manufacturing = 14.6                     |              |
| <i>Number of employees (%)</i>           |              |
| <5 = 51.4                                |              |
| 6-20 = 33.6                              |              |
| 21-50=9.5                                |              |
| 51-100=4.5                               |              |
| 101-200=0.9                              |              |
| <i>Amount of capital investment (%)</i>  |              |
| <= \$5,000 =19.5                         |              |
| >\$5,000-\$10,000 = 30.0                 |              |
| >\$10,000-\$20,000 = 20.5                |              |
| >\$20,000-\$50,000 = 15.5                |              |
| >\$50,000-\$100,000 = 7.7                |              |
| >\$100,000-\$200,000 = 4.1               |              |
| >\$200,000-\$500,000 = 2.3               |              |
| >\$500,000-\$1,000,000= 0.5              |              |
| <i>Size of business (%)</i>              |              |
| Micro business = 5.0                     |              |
| Small business = 42.7                    |              |
| Medium business = 52.3                   |              |
| <i>Sources of capital investment (%)</i> |              |
| Personal Savings = 48.6                  |              |
| Family = 35.5                            |              |
| Partnership = 14.5                       |              |
| Friends = 1.4                            |              |
|  | <u>100.0</u> |

Table 3 shows that the factor analysis with direct oblimin rotation was done for six variables with 75 items. The Kaiser-Mayer-Olkin test (KMO), which

is a measure of sampling adequacy, was conducted for each variable, and the results indicated that it was acceptable. Specifically, these statistical results showed that (1) all research variables exceeded the acceptable standard of Kaiser-Meyer-Olkin's value of 0.6, (2) all research variables were significant in Bartlett's test of sphericity, (3) all research variables had eigenvalues larger than 1, (4) the items for each research variable exceeded factor loadings of 0.50 (Hair, Anderson, Tatham & Black, 1998), and (5) all research variables ex-

ceeded the acceptable standard of reliability analysis of 0.70. This result demonstrates the goodness of fit for the data used in this study (Nunnally & Bernstein, 1994). These statistical results support the notion of performance growth theories (see Gibb & Davies, 1990; Kovereid & Bullvage, 1996; Petrakis, 1990) and findings of previous studies (see Gartner, 1997; Kirby, 2003; Churchill & Lewis, 1983; Tambunan, 1994; Kam, 1994). Results for the goodness of fit tests for the data used in this study are shown in Table 3.

Table 3. Goodness of data

| Measure               | Items | Factor loadings | KMO   | Bartlett's test of sphericity | Eigen value | Variance explained | Cronbach Alpha |
|-----------------------|-------|-----------------|-------|-------------------------------|-------------|--------------------|----------------|
| Value of entrepreneur | 15    | 0.86 to .93     | 0.930 | 5359.67; p=.000               | 12.258      | 81.721             | 0.984          |
| Firm financing        | 11    | 0.73 to .92     | 0.946 | 2680.71; p=.000               | 8.144       | 74.034             | 0.964          |
| Management            | 14    | 0.80 to .92     | 0.946 | 4094.65; p=.000               | 10.589      | 75.639             | 0.975          |
| Market environment    | 15    | 0.78 to .95     | 0.948 | 5173.15; p=.000               | 12.026      | 80.175             | 0.982          |
| Government policy     | 15    | 0.64 to .98     | 0.904 | 8718.09; p=.000               | 13.190      | 87.930             | 0.990          |
| Growth performance    | 5     | 0.86 to .91     | 0.871 | 421.34; p=.000                | 3.820       | 76.407             | 0.922          |

Table 4 shows Pearson correlation analysis and descriptive statistics. The means for the variables range from 2.49 to 3.59, signifying that entrepreneurial values, firm financing, management, market environment, government policy and growth performance range from medium (2) to high (3). The correlation coefficients for the relationship between the independent variables (i.e., entrepre-

neurial values, firm financing and management) and the moderating variables (i.e., market environment and government policy), and the relationship between the independent variables and the dependent variable (i.e., growth performance) were less than 0.90, indicating the data were not affected by a serious collinearity problem (Hair et al., 1998).

Table 4. Correlation matrix result for the research variable

| Variable               | Mean   | Standard deviation | Pearson correlation analysis |        |       |       |       |   |
|------------------------|--------|--------------------|------------------------------|--------|-------|-------|-------|---|
|                        |        |                    | 1                            | 2      | 3     | 4     | 5     | 6 |
| Value of entrepreneurs | 3.4336 | .79278             | 1                            |        |       |       |       |   |
| Firm financing         | 3.5934 | .81374             | .498*                        | 1      |       |       |       |   |
| Management             | 3.2458 | .81063             | .237*                        | .265*  | 1     |       |       |   |
| Market environment     | 3.2667 | .84103             | .251*                        | .180** | .132  | 1     |       |   |
| Government policy      | 3.1900 | .81833             | .270*                        | .147*  | .242* | .225* | 1     |   |
| Growth performance     | 2.4936 | .60057             | .311*                        | .219*  | .248* | .239* | .624* | 1 |

Note: \* level of significance – 0.05. Reliability estimation in the parenthesis (1).

**3.1. Empirical results: tests of moderating factors.** Stepwise regression analysis was used to assess the magnitude and direction of each independent variable, and vary the moderating variable in the relationship between many independent variables and one dependent variable (Foster, Stine & Waterman, 1998). Baron and Kenny (1986) suggest that a moderating variable can be considered when it meets three conditions: first, the predictor variables are significantly correlated with the hypothesized moderating variable. Second, the predictor and moderating variables are all significantly correlated with the dependent variable. Third, a previously significant effect of predictor variables is reduced to non-significance or reduced in terms of effect size after the inclusion of moderating variables into the analy-

sis (Wong, Hui & Law, 1995). In this regression analysis, standardized coefficients (standardized beta) were used for all analyses (Jaccard, Turrissi & Wan, 1990). Table 5 and Table 6 show the outcomes of testing the research hypotheses.

As can be seen from Table 5, multiple regression analysis was used to investigate whether there are relationships between entrepreneurial values, firm financing and management and the growth performance of SMEs in Cambodia. The results indicate a statistically significant relationship between the independent variables and the growth performance of SMEs; we could therefore not reject Hypothesis 1. The adjusted R squared value was 0.119. The result indicates that 11.9% of the variance in the

growth performance of SMEs has been significantly explained by the three factors. Although the three factors are positively related to growth

performance, only entrepreneurial values and management are significant in enhancing the growth performance of SMEs in Cambodia.

Table 5. Regression analysis between value of entrepreneurs, firm financing, management and the growth performance of SMEs in Cambodia

| Parameter               | B      | Std. error        | Beta | t      | Sig   |
|-------------------------|--------|-------------------|------|--------|-------|
| Constant                | 1.299  | 0.221             |      | 5.887  | 0.000 |
| Value of entrepreneur   | 1.684  | .172              | .244 | 3.313* | 0.001 |
| Firm financing          | 1.913  | .180              | .050 | .676   | 0.500 |
| Management              | 1.897  | .163              | .177 | 2.669* | 0.008 |
| F                       | 10.849 | (p-value = 0.008) |      |        |       |
| Adjusted R <sup>2</sup> | .119   |                   |      |        |       |

Note: \* p < 0.05.

Table 6 reports the results from tests employing a hierarchical multiple regression model. At the first stage, the independent variables are input in a block. At the second stage, the moderator — for instance, market environment — is inserted in as the new block. At the final stage the interaction factor between the independent variables and the moderator (entrepreneurial values, firm financing and management market environment) are included in the third block. The same steps are applied for moderating effects of government policy on the independent variables. The results show that market environment does moderate the relationship between entrepreneurial values, firm financing, and management and the

growth performance of SMEs. We therefore fail to reject Hypothesis 2 ( $\beta = .156, p = .000$ ). Furthermore, government policy was also found to moderate the relationship between entrepreneurial values, firm financing and management and the growth performance of SMEs. These results therefore provide support for Hypothesis 3 ( $\beta = .568, p = .000$ ), with an adjusted R squared value of 0.409. Finally, the same steps are applied for the moderating effects of market environment and government policy on the independent variables. The results provide support for Hypothesis 4, as government policy was also found to be a significant moderator ( $\beta = .557, p = .000$ ). The adjusted R squared value was 0.410.

Table 6. Hierarchical regression analysis between values of entrepreneurs, firm financing, management and the moderating effect of market environment and government policy on the growth performance of SMEs in Cambodia

| Parameter               | B      | Std. error        | Beta  | t      | Sig    |
|-------------------------|--------|-------------------|-------|--------|--------|
| Constant                | 1.074  | .238              |       | 4.514  | 0.000* |
| Value of entrepreneur   | .162   | .056              | .214* | 2.895  | .004   |
| Firm financing          | .027   | .054              | .036  | .495   | .621   |
| Management              | .124   | .049              | .167* | 2.544  | .012   |
| * Market environment    | .111   | .047              | .156* | 2.391  | .018   |
| F                       | 9.743  | (p-value = 0.000) |       |        |        |
| Adjusted R <sup>2</sup> | .138   |                   |       |        |        |
| Constant                | .546   | .195              |       | 2.804  | .0006* |
| Value of entrepreneur   | .084   | .047              | .111  | 1.797  | .074   |
| Firm financing          | .046   | .045              | .062  | 1.020  | .309   |
| Management              | .050   | .041              | .068  | 1.226  | .221   |
| * Government policy     | .417   | .040              | .568* | 10.338 | .000   |
| F                       | 38.841 | (p-value = 0.000) |       |        |        |
| Adjusted R <sup>2</sup> | 0.409  |                   |       |        |        |
| Constant                | .462   | .206              |       | 2.241  | .026*  |
| Value of entrepreneur   | .076   | .047              | .100  | 1.612  | .108   |
| Firm financing          | .041   | .045              | .056  | .915   | .361   |
| Management              | .049   | .041              | .066  | 1.188  | .236   |
| * Market environment    | .049   | .039              | .069  | 1.260  | .209   |
| * Government policy     | .409   | .041              | .557* | 10.019 | .000   |
| F                       | 31.475 | (p-value = 0.000) |       |        |        |
| Adjusted R <sup>2</sup> | 0.410  |                   |       |        |        |

Note: \* p < 0.05.

## Discussion and conclusions

The findings of this study confirm that government policy does act as a full moderating variable in the growth performance of SMEs in Cambodia. The choice of the government policy options for dealing with the growth performance of SMEs needs to be based on good diagnostics and a broad view of the policy options.

Regarding the robustness of research methodology, the data gathered from SME growth performance literature, the pilot study and the survey questionnaire have satisfactorily met the requirements of validity and reliability, which enhances the accuracy and reliability of our findings.

With respect to practical contributions, the findings of this study may be used as guidelines by SMEs, especially with regards to the market forces that apparently constrain their growth performance. The implementation of the growth performance model is the best measurement model and strategy for entrepreneurs in Cambodia who desire to run their businesses well. The growth performance of SMEs captures the ability of entrepreneur to set up and align the company by managing and adapting to change. Processes will only succeed if adequately skilled and motivated employees are being provided with accurate and timely information. The study confirmed that in SMEs, entrepreneurs who are skilled and adequately trained are able to improve the quality and reduce cycle time. The present study suggests that the government policy will be best served if the regulatory, cognitive and normative environments are strengthened. Public policies targeting the regulatory environment can improve the opportunities available to entrepreneurs by offering SMEs financial incentives or preferential treatment in government procurement. Governments can strengthen the cognitive environment by offering government-sponsored training programs or consulting services, thus increasing the ability of entrepreneurs to conduct businesses.

The conclusion drawn from the results of this study should consider the limitations below. First, there may be regional bias in our sample, which consists of SMEs based in Phnom Penh City, Cambodia. Phnom Penh City consists of 3,064 SMEs from which the sample is drawn, which may not necessarily be representative of the population. Barkham et al. (1996) found that regional studies may suffer from bias if differences in the characteristics of firms and owner-managers exist

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between regions. However, evidence from previous studies has refuted regional and locational factors as being important in the study of SMEs (e.g., Mahmud, 1981; Hakim, 1989; Storey et al., 1989; and Keasey & Watson, 1994). Furthermore, the focus on Phnom Penh City, as opposed to a national sample for Cambodia, is justified on the basis of convenience (proximity to the researcher), and time and cost constraints. Second, sector bias may exist, as the major business activities in the Phnom Penh City include sale/service firms, trading firms and manufacturing firms. A sample drawn randomly from the underlying population of SMEs would tend to favor general business firms, a sector in which the growth performance will be lower. This outcome would have prevented the researcher from exploring the growth performance of the manufacturing sector. To reduce the sector bias, the number of manufacturing firms in the sample must be increased to offset the composition of the population. Third, there remain a number of unexplained but important factors that should be incorporated to identify the causal relationships among variables and their relative explanatory power (Tabachnick & Fidell, 2001). Finally, this research uses a mail questionnaire survey. The biggest administrative drawback of mail questionnaires is that the researcher runs the risk of the questionnaire being completed by those assigned by the owner-manager but not involved in decision making. Therefore, the researcher has to: "... accept the completed questionnaires on faith" (Wahab, 1996, p. 13). However, the researcher has reasonable confidence in the accuracy of the data collected using this method.

Directions for future research should consider the conceptual and methodological limitations of this study. First, SME characteristics (sizes, types of business, innovativeness) should be further explored; this may provide meaningful perspectives for understanding how individual similarities and differences affect the growth performance of SMEs. Second, the limitations of a cross-sectional research method may be overcome if longitudinal studies are used to collect data and describe the patterns of change and the direction and magnitude of causal relationships between variables of interest. Third, future studies could examine whether variables such as organizational structure and organizational culture influence the growth performance of SMEs.

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