Entrepreneurship, Human and Social Capital, and Government Policy in Small and Medium Enterprise Development in Laos

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ABSTRACT
Considering the contribution of entrepreneurship to economic development in Laos through small and medium enterprises, the paper addresses the relationship between entrepreneurial human and social capital, and successful entrepreneurship – business turnover and job creation. The analysis applies data extracted from the Enterprise Survey 2009 conducted by GIZ. The study finds that human and social capital enhances successful entrepreneurship in SMEs. The impact of entrepreneur’s education on business success is largely limited to a relatively small firm size. The implementation of government policies needs an extensive improvement, if the government aims to achieve its target in promoting SME development. The findings pertain to the importance of government commitment and human resource development in the context of Laos.

KEYWORDS: Entrepreneurship, Human capital, Social capital, SME, Laos
JEL CLASSIFICATION: C25, L25, R30

1. INTRODUCTION

Along with the adoption of an open-door policy in the late 1980s, the Government of Laos¹ (GOL) has explicitly recognized the role and promoted the development of the private sector. In the National Growth and Poverty Eradication Strategies² private sector development, trade development and foreign direct investment (FDI) were given priority attention and expected to be the driving factors of growth. Policy measures and action plans for SME development were also outlined in the government strategies (Lao PDR, 2005). In particular, the Action Plan for SME Promotion encompasses establishment of enabling environment, enhancement of competitiveness, improvement of access to finance and markets, promotion of entrepreneurship (entrepreneurial attitude) and the like (Onphanhdala and Suruga, 2010).

The Lao economy is characterized by the dependency on the agricultural and resource sectors, and the dominance of SMEs in the non-agricultural sectors. A decade ago, there were records of merely 25,271 small and 772 medium firms, and a total of about 60,000 jobs generated by those enterprises (Kyophilavong, 2007). To date, achieving a share of more than 96% in number and 54% in employment (GIZ, 2012, p. 47), SMEs have proved their significant contribution to economic development and industrialization of the country. They tend to concentrate in food processing, trade, production of apparels; construction materials; and wooden furniture, and providing services in tourism; education; transportation; and information and communication technology (ICT). Nearly

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¹ The official name of the country is Lao People’s Democratic Republic (Lao PDR).
² It is the localized version of the Poverty Reduction Strategy Paper (PRSP).
three-thirds are family-owned enterprises (Southiseng and Walsh, 2010).

Notwithstanding the importance of SMEs in the economy, studies on the development of entrepreneurship and performance of SMEs in Laos are by far inadequate, especially quantitative assessment of impacts of entrepreneur’s skills and experience, firm- and business-related factors, and government policies on firm performance are very limited in both number and scope. As the private sector is relatively young and SME promotion is at its early stage, efforts made to examine the development of SMEs and to evaluate government promotion policies are rather restricted, while many of the published studies are of qualitative nature or based on field surveys with a small sample size (Southiseng et al., 2007; Souksavath et al., 2012). Kyophilavong (2007) addresses issues of SME development in Laos as a consequence of trade liberalization and FDI in four aspects (innovativeness, market expansion, competitiveness and networking) with an emphasis on the garment industry. It is suggested that the government would need specific support programs to make its policies more effective and that reliable statistical information on SMEs is indispensable for the formulation and management of sound policies. Similarly, in a cross-country study of six ASEAN economies’ international trade appears to contribute to job creation in micro and small enterprises (MSEs), and hence, policies promoting the participation of MSEs in external trade are deemed beneficial for economic development (Krüger, 2013).

On the other hand, owing to increased availability of statistical data the recent period has seen an increase in empirical studies on SME development and entrepreneurship for developing economies, such as Pakistan (Kurosaki and Khan, 2004), Laos (Onphanhdala and Suruga, 2010), Vietnam (King-Kauanui et al., 2006; Santarelli and Tran, 2013; Vixathep, 2013), and Bangladesh (Vixathep and Matsunaga, 2015). In such studies, entrepreneur’s ‘human capital’ is often represented by education or experience/skills of the owner/manager, while the ‘performance’ of an entrepreneur is evaluated indirectly by the success of the firm she manages. It is common to find a positive relationship between education and firm performance, while the degree of success and the appropriateness of education levels may vary across firm sizes and countries.

Turning to Laos, in view of deepening the understanding about the role of the private sector in the economy, the present paper intends to (i) evaluate the impact of entrepreneurial human and social capital on enhancing successful entrepreneurship in SMEs, and (ii) provide some discussion on SME development and policy issues based on a quantitative analysis using data from the 2009 enterprise survey of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ4). In line with the mainstream entrepreneurship studies, in this paper an ‘entrepreneur’ is understood as someone who establishes any business or manages the day-to-day activities of a business, i.e. the owner or manager of an enterprise.

The paper is organized in five sections. Following a brief introduction and literature review in the first section, Section 2 discusses the role and reviews recent development of SMEs in Laos. Conceptual consideration, an econometric model and data for analysis are described in Section 3. Section 4 discusses the empirical results and findings. Finally, conclusions and policy implications are provided in Section 5.

2. SMALL AND MEDIUM ENTERPRISES IN THE LAO ECONOMY

2.1 Promotion and Support for SME Development

Upon the independence in 1975 and the adoption of a centrally planned economic system the word “SME” was not explicitly used until the implementation of the transition policy, widely known as the

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3 The six countries included in the analysis are Indonesia, Malaysia, Laos, Thailand, the Philippines, and Vietnam.
4 GIZ is the German abbreviation for the Gesellschaft für Internationale Zusammenarbeit (formerly known as Deutsche Gesellschaft für Technische Zusammenarbeit or GTZ).
New Economic Mechanism (NEM or Chintanakanmai). In the first half of the 1990s, GOL enacted and promulgated a series of economic laws and administrative decrees aimed at making private enterprises the engine of growth. In particular, the Enterprise Law promulgated in 1994 made the establishment of a private SME a legal entity. In order to reduce business barriers and administrative costs, this law was replaced by the Business Law in 2006 (Uchikawa and Keola, 2008; Souksavath et al., 2012).

The promotion of SME development received more legal support when the “Decree on the Promotion and Development of Small and Medium Sized Enterprises,” the Decree No. 42/PM, was enacted on 20 April 2004. Subsequently, the Small and Medium Sized Enterprise Promotion and Development Office (SMEPDO) was established in the Ministry of Industry and Commerce5. In addition, the Small and Medium Sized Enterprise Promotion and Development Committee (SMEPDC) was established based on the Prime Minister’s Decision No. 23/PM, dated 8 March 2005. The SMEPDC, chaired by the Minister of Industry and Commerce, consists of 25 members representing both the public and private sectors. The Committee represents the government body, which is responsible for SME-related tasks at the central level and directly provides advice on issues related to promotion and development of SMEs to the GOL.

2.2 Definition of SMEs

SME definitions typically differ across countries and industries6. In Laos, the SME definition was formulated and went through some modifications over the last decades. Around the mid-1990s the Ministry of Industry and Handicraft and the GTZ classified SMEs by the number of employees (1-9 workers: small, 10-29 workers: medium, and 30 and above: large). In 2000, these labor thresholds were modified and the horsepower was added to the definition (Kyophilavong, 2007).

Currently, small and medium enterprises are defined in Article 2 of the Prime Minister’s Decree No. 42/PM based on three criteria, namely number of employees; total assets; and annual turnover: (1) Small enterprises are those employing up to 19 employees, or having total assets not exceeding 250 million LAK7, or gaining an annual turnover not exceeding 450 million LAK; and (2) Medium enterprise are those employing 20 to 99 employees, or having total assets not exceeding 1,200 million LAK, or gaining an annual turnover not exceeding 1,000 million LAK (PMO, 20048).

2.3 Role and Development of SMEs

A firm’s development process passes through three different stages from idea stages to breakthrough stage and to growth stage, in which businesses develop from the initial stage of “will to start” to an intermediate stage of “will to prevail” and finally to a sustainable stage of “will to grow” (Agbeibor, 2006). Small and medium enterprises are recognized as one of the most important players in the economy regardless of the size of the economy. In a global context of developing countries, SMEs are considered as the backbone of the private sector that has potential for rapid growth in employment, income generation and poverty reduction (IFC, 2011). In discussion on the role of SMEs in economic growth, it is argued that the contribution of small firms to an economy is related

5 The former name of the Ministry is “The Ministry of Industry and Handicraft.”
6 If we confine ourselves to the definition using the number of workers the definition is diverse across sectors and countries. For example, in Japan SME is defined as the one with 300 workers or fewer in manufacturing, 100 or less in wholesale and service, and 50 or less in retail sector. In manufacturing, SME is defined as the enterprise with up to 500 workers in the US, less than 250 in the EU, up to 300 in South Korea, 200 or less in Thailand, 150 or less in Malaysia, not more than 300 in Vietnam, up to 2000 in China. Usually the value of sales and/or registered capital is added to define it.
7 LAK stands for Lao Kip (the currency of Laos). The official exchange rate of 2004 is 10,585 LAK per US$1.00.
8 As of the time of revision (January 2017), a Decree on the classification of SMEs has been recently enacted by the Lao Government “Decree No. 25/GOL (16 January 2017). According to this Decree an enterprise with 1-5 workers is considered micro, 5-50 workers small, and 51-99 workers medium enterprise. However, due to time limitation this new SME definition is not applied in the study.
to higher growth, but might not be pro-poor. Active and vibrant private enterprises can help enhance the effectiveness of aid projects in developing countries. Successful entrepreneurship development relies on sound business culture, education, skills and availability of capital.

In the Lao context, the majority of establishments, particularly in the industrial sector, belong to the SME category. According to the Ministry of Industry and Commerce, they account for more than 95% of enterprises in number and employ around 100,000 workers of about 2.7 million in the labor force in 2005. Many SMEs in supporting industries and export-oriented industries have developed as part of a transnational production network or have been established by means of FDI, such as garment firms. Many of the foreign owned SMEs (wholly or partly) could eventually grow and develop themselves to large enterprises (Souksavath et al., 2012).

The majority of domestic market-oriented establishments are SMEs which are often founded in cities having a relatively large population and sharing border with Thailand or Vietnam, such as the Vientiane Capital City, Savannakhet, Champasack, Khammuan, Xayabury, Xiengkhuang, and Vientiane Province. For instance, most of SMEs in cottage industries are family business and groups of villagers that produce and sell handicrafts to retail shops, and the like. The middlemen (shop owners) would directly resell the products, or modify the fashions, or distribute them to domestic and foreign markets. One remarkable development event of enterprises of this type was the “One Village One Product” movement initiated by the Japan International Cooperation Agency (JICA) in 2002. The Lao version of this movement is the “One District One Product” (ODOP) movement. One major problem faced by SMEs in this category is the lack of information and coordination (Uchikawa and Keola, 2008). In addition, challenges facing SMEs in Laos include business climates (tax issues, red tapes, etc.), limited access to financial sources, and lack of labor skills. Enabling broader access to sources of finance and strengthening education and skill training for workers would enhance firm performance, attract more FDI, accelerate economic growth and reduce poverty (Southiseng and Walsh, 2010; IFC, 2011; Souksavath et al., 2012).

3. THEORETICAL FRAMEWORK, EMPIRICAL MODEL, AND DATA

3.1 Entrepreneurship, Entrepreneurial Human and Social Capital

Since its introduction in Schumpeter (1912), the concept of ‘entrepreneurship’ has taken different definitions across time and disciplines. Entrepreneurship is understood as a phenomenon which is associated with entrepreneurial activity in pursuit of value generation through the creation or expansion of economic activity by identifying new products, processes and markets (OECD, 2010). Apart from economic profits and business successes (e.g. employment, survival), entrepreneurship is also considered as the broader characteristics of a society that is concerned with non-economic welfare and wellbeing. It is also viewed as an impetus for economic and institutional development (Naude, 2013, 2014). In empirical literature, entrepreneurs are often considered as enterprise owners, managers or self-employed, who operate the businesses and take associated risks. Successful entrepreneurship is commonly represented by survival ability, size of employment, job creation, firm performance (output; sales; productivity; profitability), and the like (Van Praag, 1999; Van Praag and Cramer, 2001; Audretsch, 2003). In this study entrepreneurship is represented by the levels of business turnover classified into five categories (ordinal variable, $y = 1, 2, 3, 4, 5$ ) and number of workers employed in individual SMEs (labor-related measure). For the former, the higher the value of y is, the higher is the degree of success ($y=1$ for least successful; $y=5$ for most successful). The intervals of business turnover for the five categories are presented in Note 1 in Table 3.

Human and social capital is viewed as underlying factors that enhance entrepreneurs’ performance and success. Human capital is the knowledge and personal skills that entrepreneurs have acquired and can apply for productive purposes, profit and income generation, etc. Human capital can help entrepreneur enhance her ability in management, business opportunity exploitation, accumulation of new knowledge and technology, and so on (Rooks et al., 2011). Derived from literature on
entrepreneurship, human capital tends to enhance the performance of both workers and firm owners. Some scholars maintain that human and social capital is substitutes. Proxy variables for human capital used in the analysis are dummy variables which indicate the highest level of education of owners/managers or the ability to use modern equipment (personal computers) in business operation (Pennings, Lee and Witteloostuijn, 1998; Bosma et al., 2004; Van Praag, Van Witteloostuijn, and Van der Sluis, 2013; Vixathep and Matsunaga, 2015).

Social capital is understood as social relationships in a society and human actions that are affected by societal factors. It encompasses civic engagement and social networks, including associational membership; business associations; family relationship/kinship; and community-based relationship (high trust, reliability). Social capital helps entrepreneurs gain access to scarce financial resources, credibility and information, and establish her reputation (Cooke and Wills, 1999; Santarelli and Tran, 2013; Vixathep and Matsunaga, 2015). In empirical literature, social capital is widely represented by membership in societal or business organizations or social networks, family relationship and kinship, etc. It appears to enhance entrepreneur’s performance (survival, profit, employment) because it helps entrepreneurs gather information about business opportunities, new technologies, markets, establish business networks, and the like (Bosma et al., 2004; Santarelli and Tran, 2013). Given the available information, in this study social capital is represented by membership and participation in a business organization, namely the Provincial Public Private Dialogue and Lao Business Forum. The proxy variables are dummies that indicate the membership or participation in such organizations or forums. Definitions of variables for human and social capital are presented in Table 2.

3.2 The Ordered Probit Model

Given the characteristic nature of enterprise survey data, the econometric analysis applies approaches of productivity analysis discussed in Dollar et al. (2005), Escribano and Guasch (2005) and Van Praag and Stel (2013). In their studies the authors evaluate the impact of investment climate (IC) variables (infrastructure, bureaucracy, crime, finance, etc.) and other firms’ characteristic variables (C) on productivity measures using the following equations:

\[ Y_i = F(L_i, K_i, M_i)P_i \] (1)
\[ P_i = G(I_{C_i, r} G_i) \exp(u_i) \] (2)

where the index \( i \) denotes the \( i \)-th firm, \( Y_i \) denotes the output, \( L_i \) labor, \( K_i \) capital services, \( M_i \) materials/intermediate inputs, \( P_i \) productivity, and \( u_i \) the error term. The productivity \( P \) is referred to as the contribution of any variables different from the production inputs \( (L, K, M) \) that influence output.

A number of measures of productivity have been developed in the afore-mentioned studies based on the level and first difference (growth rate) of output variables. Out of the various models the following extended Cobb-Douglas-type production function\(^9\) is considered most appropriate for our purpose.

\[ \log Y_i = \alpha_p + \alpha_L \log L_i + \alpha_K \log K_i + \alpha_M \log M_i + \sum a_{IC_{r,j}} \log IC_{r,j} + \sum a_{C_{r,j}} \log C_{r,j} + u_i \] (3)

For our purpose, the investment climate variables \( \{IC_{r,j}\} \) would be represented by measures of entrepreneurial human and social capital as well as government facilitation. Unfortunately, the 2009 GIZ enterprise dataset does not contain information on the firm’s output \( Y_i \), capital services

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\(^9\) This is a simplified expression of equation (34) without the time-index (t) and industry-index (J) in Escribano and Guasch (2005) (p. 31).
(\( K_i \)) and intermediate inputs (\( M_i \)). Hence, the above equation cannot be estimated without modification. For individual sample firms the dataset contains information on the interval of turnover and assets and liabilities. These data are ordinal numbers and classified into five categories (ordinal variables) as describe in previous section. Therefore, an ordered probabilistic model (or ordered logit model) would present the best possible estimation method for the empirical analysis.

Ordered probit models are widely applied for analysis of impact of determinants on certain ordinal variables of interest in various sectors and industries, such as the insurance industry (Ogurtsov et al., 2009); the health sector (Weiss, 1992); the education sector (Du Bois et al., 2009); the business sector (Wood, 2006); etc.

The standard ordered probit model for this analysis could be expressed as:

\[
y_i^* = \beta_i' x_i + \varepsilon_i
\]

where \( y_i^* \) is an unobservable variable, \( x_i \) is a vector of independent variables (including owner’s human and social capital measures; firm characteristics; perception of government facilitation program; and industrial subsectors), \( \beta_i \) is an array of parameters to be estimated, and \( \varepsilon_i \) represents the random error which is assumed to follow a standard normal distribution, and the index \( i \) denotes the \( i \)-th firm. Instead of \( y_i^* \) we observe \( y \) which is classified into various categories with \( \delta_i(i = 1, \ldots, 4) \) being the cut-off point, which divides firms’ business turnover into five categories.

\[
y = 1 \quad \text{if} \quad y^* \leq \delta_1 \\
y = 2 \quad \text{if} \quad \delta_1 < y^* \leq \delta_2 \\
\vdots \\
y = 5 \quad \text{if} \quad \delta_4 < y^*
\]

In addition, with some modifications, Equation (3) can be applied to examine the labor-related measure of entrepreneurship (Vixathep and Matsunaga, 2015).

\[
\ln(labor) = \alpha_0 + \beta_j C_{ij} + \gamma_j X_{ij} + v_i
\]

where \( C_{ij} \) is a vector of entrepreneur’s characteristics (owner’s age, gender, human and social capital measures), \( X_{ij} \) denotes a vector of explanatory variables describing the enterprise (firm characteristics, perception about government facilitation program, and industrial sectors), and \( v_i \) denotes the error term. The dependent variable indicating successful entrepreneurship is the number of workers in logarithm (\( \ln(labor) \)).

### 3.3 The Enterprise Survey of GIZ and Data

#### 3.3.1 Enterprise Survey Series

In supporting the ongoing private sector development and enterprise development some donors have made efforts to collect data and established databases of enterprises. The GIZ of Germany and the World Bank have conducted several enterprise surveys in Laos. Although the data have some shortcoming for quantitative analysis in many aspects, they are, to our knowledge, among the most comprehensive databases on enterprises in Laos. Data for the empirical analysis are extracted from
The 2009 enterprise survey (ES2009) conducted by the GTZ in the Lao-German Programme on Human Resource Development for a Market Economy (GTZ HRDME). Hence, statistical data are of the year of 2008. It is the third survey in the so-called “Enterprise (Baseline) Survey” series.

The first enterprise survey, conducted in 2005 (ES2005), covered 390 enterprises in four major provinces in Laos (Vientiane Capital, Luang Prabang, Luang Namtha, and Champasack Province), of which 21% were Micro-Enterprises\(^\text{10}\) and 74% were SMEs. In the second survey (ES2007) conducted in 2007, one more province (Savannakhet Province) was added to expand the geographical coverage. This survey covered 490 enterprises (about 5.9% of the 8,290 registered enterprises in the five sample princes), of which 19% were micro enterprises and 77% were SMEs (GTZ HRDME, 2010).

| Province          | Registered enterprises | % share in total | Sample size | % share in samples | % share in individual provinces |
|-------------------|------------------------|------------------|-------------|--------------------|-------------------------------|
| Vientiane Capital | 2,614                  | 20.5             | 177         | 24.3               | 6.8                           |
| Luang Namtha      | 1,678                  | 13.1             | 76          | 10.4               | 4.5                           |
| Luang Prabang     | 2,835                  | 22.2             | 154         | 21.2               | 5.4                           |
| Savannakhet       | 2,156                  | 16.9             | 157         | 21.6               | 7.3                           |
| Champasack        | 3,480                  | 27.3             | 164         | 22.5               | 4.7                           |
| Total             | 12,763                 | 100              | 728         | 100                | 5.7                           |

Source: Final report of Enterprise Survey 2009 (GTZ, 2010), p. 40.

With the same geographical coverage of five provinces (Vientiane Capital, Luang Prabang, Luang Namtha, Champasack, and Savannakhet Province) the 2009 edition of the series contains 728 samples, which cover about 5.7% of the 12,763 registered enterprises in the five sample provinces in 2008/2009. With respect to the size of enterprise, 145 firms (19.9%) are micro enterprises with 1-2 full-time workers, 552 firms (75.8%) are SMEs with 3-99 full-time workers and 31 firms (4.3%) are large enterprises with 100 full-time workers or more. The field work was conducted within the month of August 2009 (5-28 August 2009) (GTZ HRDME, 2010). Table 1 gives a brief summary of the samples in ES2009.

### 3.3.2 Data from the 2009 Enterprise Survey

From the initial data of 728 observations, 613 samples (84.2%) are used in the empirical analysis. These are firms with 1-99 employees with complete information on variables of interest and at least one year of operation (firm age of one year). Since information on total assets and turnover is not available, the selection of small and medium enterprises, using the SME definition in the Decree No. 42/PM, is solely based on the number of employees hired by individual firms. The description of variables and the summary statistics of the samples are presented in Table 2.

#### Table 1: Summary of the Samples in the Enterprise Survey 2009

| Province          | Registered enterprises | % share in total | Sample size | % share in samples | % share in individual provinces |
|-------------------|------------------------|------------------|-------------|--------------------|-------------------------------|
| Vientiane Capital | 2,614                  | 20.5             | 177         | 24.3               | 6.8                           |
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| Savannakhet       | 2,156                  | 16.9             | 157         | 21.6               | 7.3                           |
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| Total             | 12,763                 | 100              | 728         | 100                | 5.7                           |

Source: Final report of Enterprise Survey 2009 (GTZ, 2010), p. 40.

### Table 2: Definition of Variables and Summary Statistics of the Samples

| Variable | Definition/Description | Mean  | SE    | Min  | Max  |
|----------|------------------------|-------|-------|------|------|
| \(t_{labor}\) | Total number of paid and unpaid labor (including owner) | 11.22 | 14.05 | 1.00 | 98.00 |
| \(ownerage\) | Owner’s age [years] | 45.12 | 10.99 | 18.00 | 89.00 |
| \(labor0\) | Number of labor at the time of start-up (306 samples) | 6.79 | 10.89 | 1.00 | 110.00 |
| \(maleowner\) | Male owner (1 if true) | 0.58 | 0.49 | 0.00 | 1.00 |

\(^{10}\) In the reports of ES2006, ES2007 and ES2009, enterprises with 1-2 employees are defined as micro enterprises, 3-19 employees small, and 20-99 medium.
Table 2: Definition of Variables and Summary Statistics of the Samples (continued)

| Variable       | Definition/Description                        | Mean  | SE   | Min  | Max  |
|----------------|----------------------------------------------|-------|------|------|------|
| own_eduref     | Owner's education (no and primary edu.) (reference) | 0.20  | 0.40 | 0.00 | 1.00 |
| own_lsec      | Owner's education (lower secondary)          | 0.15  | 0.36 | 0.00 | 1.00 |
| own_hsec      | Owner's education (upper secondary)          | 0.22  | 0.42 | 0.00 | 1.00 |
| own_votec      | Owner's education (vocational and technical) | 0.11  | 0.31 | 0.00 | 1.00 |
| own_higher    | Owner's education (higher education)         | 0.31  | 0.46 | 0.00 | 1.00 |
| lseeu20       | Interaction terms own_lsec*fsupto20          | 0.14  | 0.34 | 0.00 | 1.00 |
| hsecfs20      | Interaction terms own_hsec*fsupto20          | 0.20  | 0.40 | 0.00 | 1.00 |
| voteufs20     | Interaction terms own_votec*fsupto20         | 0.09  | 0.29 | 0.00 | 1.00 |
| higherfs20    | Interaction terms own_higher*fsupto20        | 0.23  | 0.42 | 0.00 | 1.00 |
| lseeu99       | Interaction terms own_lsec*fsupto99          | 0.02  | 0.13 | 0.00 | 1.00 |
| hsecfs99      | Interaction terms own_hsec*fsupto99          | 0.03  | 0.16 | 0.00 | 1.00 |
| voteufs99     | Interaction terms own_votec*fsupto99         | 0.02  | 0.13 | 0.00 | 1.00 |
| higherfs99    | Interaction terms own_higher*fsupto99        | 0.08  | 0.27 | 0.00 | 1.00 |
| pc_use        | Use of personal computer in business         | 0.46  | 0.50 | 0.00 | 1.00 |
| buslaw        | Know about any laws related to your business | 0.60  | 0.49 | 0.00 | 1.00 |
| fsupto20      | Firm size of 1 to 20 workers                 | 0.85  | 0.35 | 0.00 | 1.00 |
| fsupto99      | Firm size of 21 to 99 workers                | 0.15  | 0.35 | 0.00 | 1.00 |
| busorg        | Participation in PPPD or LBF process         | 0.23  | 0.42 | 0.00 | 1.00 |
| busmem        | Membership in any business forum and organization | 0.38  | 0.48 | 0.00 | 1.00 |
| cgo108        | Usefulness of assistance of central government in 2008 | 0.63  | 0.48 | 0.00 | 1.00 |
| cgo106        | Usefulness of assistance of central government in 2006 | 0.60  | 0.49 | 0.00 | 1.00 |
| lgol108       | Usefulness of assistance of local authorities in 2008 | 0.72  | 0.45 | 0.00 | 1.00 |
| lgol06        | Usefulness of assistance of local authorities in 2006 | 0.71  | 0.45 | 0.00 | 1.00 |
| firmage       | Years of operation (2008 – establishment year) [years] | 8.74  | 6.15 | 1.00 | 38.00 |
| indf          | Individual proprietorship enterprise (reference) | 0.81  | 0.39 | 0.00 | 1.00 |
| ltdf          | Sole limited and limited enterprise          | 0.13  | 0.33 | 0.00 | 1.00 |
| soe           | State-owned enterprise                       | 0.03  | 0.18 | 0.00 | 1.00 |
| misf          | Mixed, public, ordinary and limited partnership | 0.03  | 0.18 | 0.00 | 1.00 |
| lao           | Lao or domestic enterprise                   | 0.95  | 0.23 | 0.00 | 1.00 |
| jve           | Joint venture (JV) enterprise                | 0.03  | 0.16 | 0.00 | 1.00 |
| foe           | Foreign owned enterprise (FOE) (reference)   | 0.03  | 0.16 | 0.00 | 1.00 |
| agri          | Business belongs to agriculture (4digit-ISIC) (ref.) | 0.02  | 0.13 | 0.00 | 1.00 |
| foodbev       | Business belongs to food and beverage (4digit-ISIC) | 0.07  | 0.26 | 0.00 | 1.00 |
| manuf         | Business belongs to manufacturing (4digit-ISIC) | 0.09  | 0.29 | 0.00 | 1.00 |
| constr        | Business belongs to construction (4digit-ISIC) | 0.06  | 0.23 | 0.00 | 1.00 |
| service       | Business belongs to services (4digit-ISIC)    | 0.34  | 0.47 | 0.00 | 1.00 |
| commerce      | Business belongs to commerce & trading (4digit-ISIC) | 0.42  | 0.49 | 0.00 | 1.00 |
| vte           | Firm location in Vientiane Capital (reference) | 0.23  | 0.42 | 0.00 | 1.00 |
| lnt           | Firm location in Luang Namtha Province        | 0.10  | 0.31 | 0.00 | 1.00 |
| lph           | Firm location in Luang Prabang Province       | 0.20  | 0.40 | 0.00 | 1.00 |
| svn           | Firm location in Savannakhet Province         | 0.23  | 0.42 | 0.00 | 1.00 |
| chp           | Firm location Champasack Province            | 0.23  | 0.42 | 0.00 | 1.00 |

Source: Author’s calculations from the dataset for GTZ (ES2009).

Notes:
1. The dataset consists of 613 observations. For “labor0” the number of observation is 306.
2. “lnlabor0” is the logarithm of “labor0” (lnlabor0=ln(labor0)). “lnlabor02” is the squared term of “labor0”. Initial labor and labor enter the regressions in natural logarithmic form.
3. All variables without unit of measurement are binary (dummy) variables, which are defined 1 if true and 0 otherwise.
4. For the dummy “busorg”, PPPD is the abbreviation of Provincial Public Private Dialogue, and LBF stands for Lao Business Forum.
At the first glance, the short history of SME development of the country is quite clearly reflected, as the average firm age is less than 9 years. The average age of entrepreneurs (owners) in Laos (45 years old) is comparable to that of SME owners in Vietnam (46 years old) (Vixathep et al., 2016, p. 8, Table 4). In addition, SMEs in Laos tends to be small, as a representative SME would hire 11 employees including the owner, who often manages the enterprise (Table 2).

In regard to firm characteristics, individual proprietorship enterprises dominate the SME sector with nearly 81% share in number, followed by sole limited and limited enterprises with 13%, while state owned enterprises comprise 3%. Domestic firms are the majority (95%) of SMEs operating in the economy, whereas foreign owned enterprises and joint ventures collectively share 5%. With a share of about 76% of the samples, enterprises providing services or doing trade constitute the largest portion of the samples.

With respect to owner’s characteristics, most of the entrepreneurs have relatively high education: secondary education 37%, higher education 31%, followed by primary education 20% and vocational and technical education 11%. It is deemed that partly owing to this favorable educational background, nearly 60% of business owners are familiar with or have knowledge about laws and regulations related to their businesses and about 46% have applied personal computers for business purposes. About 60-70% of the owners believe that the business facilitation of the government, both at the central and provincial levels, is helpful. However, this point should be empirically investigated.

Further observation on firm location, business performance and capital accumulation that has been drawn from the dataset of ES2009 is summarized in the following paragraphs. Observing the location of the enterprises reveals that as many as 86% of SMEs are located either at home or on the road side. This is a reasonable aspect, because most of the SMEs covered in the survey are involved in trade business or provide some types of services. Hence, many of such shops are just set up at home or along the road side as family business. In addition, the sampling is relatively balanced with all the provinces having a comparable share, except for the more remote province in the samples (Luang Namtha Province).

Turning to business performance, 390 (64%) out of 613 firms had a business turnover of less than US$23,000 and 13% of the samples could made between US$23,000 and US$46,000, while some large SMEs earned more than US$114,000. As has been mentioned in Section 3.1 and 3.2, the data set of ES2009 does not contain information on business turnover or sales of individual firms. The data on business turnover, defined in equation (5), represents a measure of firm performance and is used as the dependent variable in the regression (Equation (4)). Other information on firm performance available in the dataset includes the 2007-2008 change in output, turnover, profit and labor. Roughly two-thirds of SMEs in Laos have maintained the business level of 2007 or archived some positive development in output, turnover and profit. With respect to labor, as many as nine SMEs out of ten increased employment in 2008 as compared to 2007.

With respect to capital accumulation, roughly half (49%) of SMEs own some assets of less than US$11,436 in value, while nearly one out of five enterprises (18%) have accumulated capital (in terms of assets) of more than US$137,236 in value. In sum, it can reasonably be argued that the business of SMEs in Laos is rather small as compared to the neighboring countries, such as Vietnam or Thailand.

4. EMPIRICAL RESULTS AND DISCUSSIONS

Equation (4) and the dependent variable defined in Equation (5) are employed for the estimation of a

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11 This statistic is derived from the 613 samples included in the analysis. However, it is not reported in Table 2 due to space limitation.
standard ordered probit model to evaluate the relationship between entrepreneurial human and social capital and the levels of business turnover (output model). In view of ensuring consistency of the empirical results, equation (4) is estimated using the ordered probit model and ordered logit model. The two models yield very consistent results. However, due to space limitation the following presentations and discussions refer to the estimates from the ordered probit model. The analysis of impact of human and social capital on successful entrepreneurship (labor employed) is based on Ordinary Least Squared (OLS) estimations (labor model). The explanatory variables are grouped into three categories, which describe (1) entrepreneur’s human and social capital; (2) government policies (facilitation programs); and (3) firm characteristics (type of firms, industrial sectors, location). The results are summarized in Table 3 and Table 4. A correlation matrix of independent variables is used to ascertain the absence of the collinearity problem.  

### 4.1 Entrepreneurial Human and Social Capital

Entrepreneurial human capital is represented by four educational levels (lower secondary; upper secondary; vocational and technical; higher and post-graduate), experience (indicated by owner’s age), ability to use modern tools for business planning and operation, and knowledge on laws related to business. Membership and participation in business forums and organizations are applied as proxies for social capital. Gender of the owner, firm characteristics, and industrial sectors are also controlled for in the regressions.

First, it is plausible to observe that labor input has a direct impact on business turnover (Table 3) because manpower is the main input of production. Most of SMEs in Laos use traditional techniques for production in agriculture, manufacturing, and construction, which require a large amount of manpower. Similarly, the service industry and trade are relatively labor-demanding. From the labor model (Table 4), the positive coefficient of ‘\( \ln \text{labor}_0 \)’ implies that firms with a larger number of workers at the time of start-up tend to grow larger and increase employment, and vice versa.

Second, for all educational levels under study, except for lower secondary, vocational and technical education in the labor model with initial labor (Table 4, column 1), the coefficient has a positive sign regardless of model, albeit the significance level varies across the education levels and models. The result implies that entrepreneur’s education would contribute to increasing business turnover or employment. Overall, the contribution of education to firm performance is consistent with the findings in previous studies for developing countries, such as Pakistan (Kurosaki and Khan, 2004), Lao (Onphanhdala and Suruga, 2010), and Vietnam (Santarelli and Tran, 2013; Vixathep, 2013).

The differences in significance levels reveal some interesting issues and deserve further discussion. Entrepreneurs with lower secondary education, vocational and technical education appear to capitalize on their education in increasing business turnover, whereas upper secondary and higher/graduate-level education appear to be more important for employment expansion. Indeed, many of the business colleges in Laos are privately owned and have developed a curriculum that would better reflect the need of the market. This result could also imply that the regression analysis might not comprehensively capture the relationship between education and successful entrepreneurship in the case of SMEs in Laos, most probably due to the quality of data on business turnover. Absence of impact of education on entrepreneurial performance is not uncommon for developing economies, such as Bangladesh’s ready-made-garment industry (Vixathep and Matsunaga, 2015), Vietnam’s manufacturing industries (Vixathep, 2013) and Laos (Onphanhdala and Suruga, 2010). The seemingly contradicting sign of the coefficient for lower secondary, vocational and technical education on employment is attributable to the inclusion of initial labor (\( \ln \text{labor}_0 \)) and a large difference in the samples (Table 4).

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12 Due to space limitation, the correlation matrix is not reported.
13 In this paper, the terms business turnover and firm/enterprise performance are understood to measure the success of an enterprise and are used interchangeably to imply successful entrepreneurship.
Table 3: Factors Influencing Output-related Successful Entrepreneurship in SMEs

| Variables       | Ordered Probit Model for Levels of Business Turnover (five categories) |
|-----------------|------------------------------------------------------------------------|
|                 | Coefficient | Std-err | P>|z|  | Coefficient | Std-err | P>|z| |
| lnllabor        | 0.501***    | 0.098    | 0.000 | 0.526*** | 0.097    | 0.000 |
| maleowner       | 0.064       | 0.126    | 0.610 | 0.065     | 0.127    | 0.607 |
| Inownerage      | 3.413       | 5.622    | 0.544 | 3.398     | 5.675    | 0.549 |
| Inownerage2     | -0.377      | 0.747    | 0.614 | -0.375    | 0.754    | 0.619 |
| own_lsec        | 0.402*      | 0.228    | 0.077 | -         | -        | -     |
| own_hsec        | 0.157       | 0.214    | 0.462 | -         | -        | -     |
| own_votec       | 0.653***    | 0.232    | 0.005 | -         | -        | -     |
| own_higher      | 0.340       | 0.209    | 0.104 | -         | -        | -     |
| lsecfs20        | -           | -        | -     | -0.402*   | 0.238    | 0.091 |
| hsecfs20        | -           | -        | -     | 0.141     | 0.223    | 0.527 |
| votecfs20       | -           | -        | -     | 0.670***  | 0.241    | 0.005 |
| higherfs20      | -           | -        | -     | 0.357*    | 0.215    | 0.097 |
| lsecfs99        | -           | -        | -     | 0.426     | 0.434    | 0.327 |
| hsecfs99        | -           | -        | -     | 0.220     | 0.363    | 0.544 |
| votecfs99       | -           | -        | -     | 0.570     | 0.455    | 0.210 |
| higherfs99      | -           | -        | -     | 0.290     | 0.293    | 0.322 |
| fsupto20        | -0.051      | 0.203    | 0.802 | -         | -        | -     |
| pc_use          | 0.490***    | 0.145    | 0.001 | 0.483***  | 0.145    | 0.001 |
| buslaw          | 0.356***    | 0.136    | 0.009 | 0.351**   | 0.136    | 0.010 |
| busorg          | 0.212       | 0.138    | 0.124 | 0.213     | 0.139    | 0.124 |
| busmem          | 0.197       | 0.130    | 0.130 | 0.197     | 0.130    | 0.131 |
| cgol08          | -0.055      | 0.155    | 0.724 | -0.060    | 0.156    | 0.702 |
| lgol08          | 0.068       | 0.163    | 0.675 | 0.073     | 0.163    | 0.657 |
| ltdf            | 0.381**     | 0.162    | 0.019 | 0.377**   | 0.162    | 0.020 |
| soe             | 0.448       | 0.285    | 0.116 | 0.459     | 0.285    | 0.108 |
| mixf            | 0.102       | 0.338    | 0.762 | 0.098     | 0.339    | 0.772 |
| lao             | -0.579**    | 0.316    | 0.067 | -0.585*   | 0.318    | 0.066 |
| jve             | -0.517      | 0.428    | 0.227 | -0.492    | 0.428    | 0.251 |
| foodbev         | -1.053**    | 0.436    | 0.016 | -1.056**  | 0.438    | 0.016 |
| manuf           | -0.912**    | 0.409    | 0.026 | -0.908**  | 0.412    | 0.027 |
| constr          | -0.321      | 0.429    | 0.455 | -0.319    | 0.432    | 0.461 |
| service         | -1.253***   | 0.389    | 0.001 | -1.246*** | 0.391    | 0.001 |
| commerce        | -0.888**    | 0.387    | 0.022 | -0.878**  | 0.389    | 0.024 |
| ln              | 0.135       | 0.270    | 0.618 | 0.146     | 0.271    | 0.590 |
| lpb             | -0.022      | 0.183    | 0.905 | -0.019    | 0.184    | 0.916 |
| svin            | 0.136       | 0.171    | 0.426 | 0.143     | 0.171    | 0.405 |
| chp             | 0.369**     | 0.165    | 0.026 | 0.371**   | 0.165    | 0.025 |

Observations 613 - - 613 - -
Log-likelihood -509.188 - - -509.111 - -
Pseudo-R² 0.257 - - 0.257 - -

Source: Author’s calculations.

Notes:
1. In the questionnaire, the level of business turnover of 2008 is defined as follows: (1) = less than 200 mil LAK; (2) = 200-400 mil LAK; (3) = 401-700 mil LAK; (4) = 701-1,000 mil LAK; and (5) = more than 1,000 mil LAK. The independent variable in Equation (5) is defined accordingly $y = 1, 2, 3, 4, 5$.
2. The asterisks *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.
3. The marginal effects of the ordered probit model have five cases, because the independent variable is defined from 1 to 5. The result reported in the table is from the original regression (the levels of turnover). Marginal effects for $y = 1, 2, 3, 4, 5$ are very close to the result reported here.
4. The results with the variables for government assistance in 2006, i.e. ‘cgol06’ and ‘lgol06’, are similar to these results and are not reported here.
5. Controlling for more variables (investment in 2008, owner’s training, enterprise location in a city such as at a main road; commercial center; etc.) does not show significant difference. The results are not reported due to space limitation.
Third, a unique feature of this study is to examine returns to human capital in relation to firm size for Laos. Eight interaction terms between education level and firm size are created for the output model (Table 3, Column 4). The dummy variables of firm size (fsupto20, fsupto99), which are a component of the interaction terms, are defined based on the number of workers. However, the number of workers is used as the dependent variable (Intlabor) in the labor model as well. Hence, it is not appropriate to include these interaction terms in the labor model (Table 4). The estimation of the output model reveals some interesting issues. Regardless of education level, owners of small business with 20 workers or fewer appear to perform well, while successful management of medium enterprises (21-99 workers) would be a challenge for Lao entrepreneurs. To some extent, while revealing a positive impact of human capital on enhancing successful entrepreneurship in SMEs, this

| Variables     | Coefficient | Std-err | P>|t| | Coefficient | Std-err | P>|t| |
|---------------|-------------|---------|------|-------------|---------|------|
| Intlabor0     | 0.495***    | 0.139   | 0.000 | -           | -       | -    |
| Intlabor02    | 0.020       | 0.032   | 0.533 | -           | -       | -    |
| maleowner     | 0.085       | 0.072   | 0.244 | 0.084       | 0.071   | 0.239|
| Inownerage    | 2.398       | 2.962   | 0.419 | 2.140       | 2.396   | 0.372|
| Inownerage2   | -0.319      | 0.399   | 0.426 | -0.273      | 0.320   | 0.395|
| own_lsec      | -0.062      | 0.096   | 0.520 | 0.016       | 0.102   | 0.873|
| own_hsec      | 0.138       | 0.099   | 0.164 | 0.175*      | 0.095   | 0.066|
| own_votec     | -0.114      | 0.108   | 0.292 | 0.130       | 0.119   | 0.272|
| own_higher    | 0.024       | 0.106   | 0.818 | 0.191*      | 0.105   | 0.069|
| pc_use        | 0.412***    | 0.099   | 0.000 | 0.633***    | 0.082   | 0.000|
| buslaw        | 0.028       | 0.073   | 0.701 | 0.251***    | 0.067   | 0.000|
| busorg        | 0.231*      | 0.124   | 0.063 | 0.254***    | 0.096   | 0.009|
| busmem        | 0.130       | 0.089   | 0.146 | 0.155*      | 0.084   | 0.067|
| cgol08        | 0.021       | 0.089   | 0.811 | 0.082       | 0.079   | 0.297|
| lgol08        | 0.019       | 0.093   | 0.842 | -0.031      | 0.082   | 0.708|
| ltdf          | 0.270**     | 0.129   | 0.038 | 0.121       | 0.113   | 0.282|
| soe           | 0.074       | 0.407   | 0.856 | 0.361       | 0.259   | 0.165|
| mixf          | -0.453*     | 0.256   | 0.078 | -0.084      | 0.201   | 0.677|
| lao           | -0.148      | 0.117   | 0.207 | -0.428**    | 0.187   | 0.023|
| jve           | -0.043      | 0.289   | 0.881 | -0.017      | 0.270   | 0.950|
| foodbrev      | -0.213      | 0.178   | 0.234 | -0.023      | 0.205   | 0.909|
| manuf         | 0.009       | 0.153   | 0.952 | 0.296       | 0.184   | 0.109|
| constr        | 0.079       | 0.248   | 0.749 | 0.208       | 0.241   | 0.389|
| service       | -0.259*     | 0.139   | 0.063 | -0.245      | 0.179   | 0.171|
| commerce      | -0.274**    | 0.133   | 0.040 | -0.457**    | 0.177   | 0.010|
| lntr          | -0.466***   | 0.155   | 0.003 | -0.608***   | 0.109   | 0.000|
| lpb           | -0.211*     | 0.123   | 0.087 | -0.258**    | 0.099   | 0.010|
| svn           | -0.326***   | 0.121   | 0.007 | -0.147      | 0.098   | 0.135|
| chp           | -0.224*     | 0.116   | 0.055 | -0.053      | 0.098   | 0.587|
| constant      | -3.292      | 5.498   | 0.550 | -2.295      | 4.499   | 0.610|

Observations 306
R-squared 0.699

Source: Author’s calculations.

Notes:
1. The asterisks *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.
2. Robust standard error is reported.
3. ‘Intlabor0’ and ‘Intlabor02’ are number of labor at the start-up and the squared term, respectively. Since this variable is only available for first-time interviewee in ES2009, the number of observations is 306.
4. The results with the variables for government assistance in 2006, i.e. ‘cgol06’ and ‘lgol06’, are similar to these results and are not reported here.
5. Controlling for more variables (investment in 2008, owner’s training, enterprise location in a city such as at a main road; commercial center; etc.) does not show significant difference. The results are not reported due to space limitation.
result implies that formal education in Laos is appropriate for small firm size. A combination of entrepreneur’s education and an appropriate firm size that enhances firm performance (value added and productivity) is found among micro and small enterprises in Vietnam (Vixathep, 2013).

Fourth, the significant contribution of modern ICT equipment in business planning and operation would lend further support to the relevance of vocational/technical training and higher education. Apparently, the use of computers for business operation, such as using a personal computer for producing own advertisement; conducting market research; and maintaining customer relations, would significantly enhance successful entrepreneurship as revealed in both output and labor models. Moreover, entrepreneur’s experience (represented by owner’s age) and knowledge on legal aspects of business (business laws) would contribute in one or other way to successful entrepreneurship, although the significance of impact of experience cannot be statistically confirmed. This result implies that entrepreneur’s human capital in terms of education and knowledge would be more relevant for managing SMEs, whereas the period of operating business is of less relevance.

Finally, regarding contribution of social capital to successful entrepreneurship, the membership in business associations and participation in the provincial public-private dialogue would contribute to expanding employment. It is widely known that the purpose of forming a business organization is (not limited to) protecting the interest of the members, sharing business information, exchanging ideas, etc. These activities in Lao businesses seem to be fruitful for the member enterprises. Currently, there are about 25 professional business associations led by the Lao Chamber of Commerce and Industry (LNCCI), which support the members by sharing information, helping in negotiations, and issuing certificates and licenses for export (Southiseng and Walsh, 2010). Social capital in the Lao business context represented by business networks would, in some way, help Lao entrepreneurs receive updated information on markets, technology and enhance entrepreneurial success. This type of capital should also be further promoted to foster enterprise development.

In literature, the effects of social capital on successful entrepreneurship are somewhat mixed. For example, in Bosma et al. (2004) the empirical analysis shows a mixture of positive and negative impact of human and social capital on entrepreneurial performance, including employment. Similarly, in Bangladesh’s ready-made-garment industry social capital does not exhibit any clear trend of impact on entrepreneurship (Vixathep and Matsunaga, 2015). On the gender aspect, male-headed or female-headed businesses do not have any differences in performance, implying that business successes in Laos would rather depend on owner’s capability and entrepreneurship.

4.2 Government Policy for SME Promotion

In this study impact of government policy is understood as the perception of entrepreneurs toward the facilitation of the central government and local authorities in 2006 and 2008. The interviewees were asked to rate the business facilitation of the central government and local authorities using a five-level scale (very unhelpful; unhelpful; neutral; helpful; very helpful). The answers in ordinal numbers are summarized to a binary variable (0=very unhelpful, unhelpful; 1= neutral, helpful, very helpful).

It is revealed that government facilitation at both the central and provincial levels does not appear to bring about any satisfactory result for businesses, as enterprise owners and managers have not realized such assistance by the government. The empirical result for this part is extracted from the full results and presented in Table 5. The coefficient estimates show mixed signs, but none of them is statistically significant. This is a very important issue to be addressed because the SME promotion policies might be sound and good, but they would not yield positive results for business. However, it is equally worth noting that the statistical inference and interpretation on the government facilitation presented above is based on subjective perception of entrepreneurs. Given the complex nature of the issue, a more objective analysis would be necessary in order to draw any solid conclusion on the SME promotion of the government. This could be a relevant topic for future research.
Table 5: Sign and Significance Level of Government Facility Program (extracted from regressions)

| Variables | Ordered Probit Models without Interaction Terms | Ordered Probit Models with Interaction Terms | OLS Regressions without Initial Labor | OLS Regressions with Initial Labor |
|-----------|---------------------------------------------|------------------------------------------|-------------------------------------|----------------------------------|
| cgol08    | -0.055 (0.155)                              | -0.060 (0.156)                           | 0.082 (0.079)                      | 0.021 (0.089)                    |
| lgol08    | 0.068 (0.163)                               | 0.073 (0.163)                            | -0.031 (0.082)                     | 0.019 (0.093)                    |
| cgol06    | 0.035 (0.152)                               | 0.029 (0.152)                            | 0.040 (0.081)                      | 0.013 (0.090)                    |
| lgol06    | -0.002 (0.159)                              | 0.004 (0.160)                            | -0.014 (0.085)                     | 0.009 (0.099)                    |

Source: Author’s calculations.

Notes:
1. The figures reported in the table are extracted from the ordered probit estimations for ‘lgol06’ and cgol06’ (2006) and ‘lgol08’ and cgol08’ (2008), separately.
2. Due to space limitation the full tables for individual cases are not reported.
3. Standard errors are in parentheses. No single coefficient is statistically significant.

4.3. Enterprise Characteristics and Location, and Industrial Sectors

In this study enterprise characteristics include types of enterprises (limited, state-owned; mixed type; and individual proprietorship enterprises); firm ownership (Lao, Joint Venture, and foreign-owned enterprises (FOEs)); and industrial sectors of business (food and beverage, manufacturing, construction, services, commerce, and agriculture). The classification of business sectors is based on 4-digit ISIC\(^{14}\) code. First, except for the ‘mixed type’, the effect of type of enterprise on successful entrepreneurship appears to be consistent in the two models. Regardless of the regression model, limited enterprises achieved superior performance as compared to proprietorship enterprises. This result is attributable to the nature of the liability and number of owners in the enterprise, which would enable a division of responsibilities among the owners (in case of two or more partners) and lead to superior entrepreneurial performance. One surprised result is that the ‘mixed type’ is associated with significantly inferior performance in employment as compared to ‘individual proprietorship’. This result could refer to the fact that the observations for the labor model with initial labor are very different from that of other regressions and that this difference in sample size might have led to contradicting results.

Second, it is plausible that FOEs, which often possess superior production technologies, knowhow, managerial and other skills, outperform indigenous firms. Superior performance of foreign-owned and joint venture firms is not uncommon in literature on developing countries, such as efficiency performance in the garment industry in Cambodia (Vixathep and Matsunaga, 2012), and efficiency and productivity in the Lao garment industry (Vixathep, 2011).

Finally, firm locations are understood as province-level locations in five provinces (Luang Namtha, Luang Prabang, Savannakhet, and Champasack Province, and Vientiane Capital). Except for Champasack Province, the analysis reveals that inter-provincial enterprise locations are largely indifferent in terms of level of business turnover and that enterprises in Vientiane Capital tend to hire more workers than in other provinces. The only exception is that the location in Champasack Province is associated with superior turnover-based performance even compared to the Capital City, Vientiane. Similar to the case of industrial sectors, this somewhat surprised result might have some complex causes, such as erroneous records of data or in the process of the empirical analysis. Further in-depth research would be necessary to clarify any reason behind this result. However, such an analysis is not possible with the dataset and is beyond the scope of this study.

\(^{14}\) ISIC stands for the International Standard Industrial Classification of the United Nations.
5. CONCLUDING REMARKS

The Lao economy is characterized by the dominance of small and medium enterprises in the non-agricultural sectors. SMEs have played a significant role in industrial development and employment generation for the country, in particular, upon the adoption of the reform policy in the late 1980s. With the transition on the way, the private sector and SMEs have gradually gained more political recognition and policy support from the government over the last decade.

In view of extending the understanding on the contribution of entrepreneurship to economic development in Laos, the paper examines the relationship between human and social capital, and successful entrepreneurship. The analysis applies data of the Enterprise Survey 2009 of GIZ and makes use of the field survey on SMEs in Laos conducted by the author in 2014. The empirical analysis suffers from the lack of production data (output, capital) and has to rely on ordinal data for levels of business turnover, which would impose some limitation on statistical inference. Hence, one needs to bear in mind this data quality deficiency in interpreting the empirical results. Despite the shortcoming, the study reveals some important findings. First, it ascertains the contribution of entrepreneurial human and social capital to successful entrepreneurship in small and medium enterprises. Second, regarding firm size, formal education and professional education/training in Laos enhance entrepreneurs’ ability and successful entrepreneurship in small enterprises with up to 20 workers, whereas successful management of medium firms remains a challenging task for entrepreneurship and SME promotion in the country. Third, in spite of SME promotion/facilitation policy of the Lao government and assistance by development partners, the actual implementation of such policy has yet to satisfy entrepreneurs in the country and bring about a significant impact on SME development.

Finally, some policy implications for SME development and entrepreneurship promotion can be drawn from the findings. To promote the development of the private sector in general, and SMEs in particular, more efforts are needed for effective implementation of SME promotion policies, such as establishing an enabling environment for businesses; improving the dissemination and enforcement of laws and regulations related to business; and enhancing the capacity building for government officers in charge of enterprise development or related duties. Government policies targeting education and training should aim at quality enhancement and appropriateness for the market demand.

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