The contribution of entrepreneurship and innovation to Thai SME manufacturing performance

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Abstract
Small and Medium Enterprises (SMEs) play a pivotal role in accelerating Thai economic development. SMEs provide backward linkages for large enterprises through supply of goods, services, information and knowledge. Despite SMEs obvious significance, they face several severe difficulties that act as obstacles to their further development. The primary motivation of this study is to upon identifying: 1) the role, significance and contribution of Thai manufacturing SMEs to the Thai economy; 2) entrepreneur characteristics (age, gender, education, work experience); and (3) innovation (new products, processes, organization structure).

Keywords
performance, contribution, manufacturing, sme, thai, innovation, entrepreneurship

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The Contribution of Entrepreneurship and Innovation to Thai SME Manufacturing Performance

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Abstract: Small and Medium Enterprises (SMEs) play a pivotal role in accelerating Thai economic development. SMEs provide backward linkages for large enterprises through supply of goods, services, information and knowledge. Despite SMEs obvious significance, they face several severe difficulties that act as obstacles to their further development. The primary motivation of this study is to upon identifying: 1) the role, significance and contribution of Thai manufacturing SMEs to the Thai economy; 2) entrepreneur characteristics (age, gender, education, work experience); and 3) innovation (new products, processes, organization structure).

Keywords: entrepreneurship; innovation; SMEs, manufacturing, Thailand

1. Introduction

SMEs are the backbone of the Thai economy, and contribute significantly to the country's social and economic development. (Brimble et al., 2002; Mephokee, 2003; Sahakijpicharn, 2007; OECD, 2011). It is also generally recognized that SMEs are, presently, the most significant enterprises for accelerating Thai economic development (Dhanani and Scholtes, 2002; Wiboonchutikula, 2002; Ha, 2006; Sahakijpicharn, 2007; OSMEP, 2009). The average number of Thai SMEs was 1,835,873 enterprises, representing 99 percent of all enterprises in the country and employ more than seven million workers, accounting for 73 percent of total employment during the period 1994 to 2009. The value of exports by SMEs was THB 1,311,493 million or 33.02 percent of total exports on average over the period 2000 to 2009 (Office of Small and Medium Enterprises Promotion (OSMEP), 2009). The contribution of SMEs to GDP, at current prices, was approximately 38.84 percent of total GDP over the period 1999-2009. The average real output growth of SMEs was 3.91 percent of total SME GDP during 1999-2009 (OSMEP, 2009).

Focusing on Thai manufacturing SMEs, it can be observed that the average number of manufacturing SMEs was approximately 450,002, or 27.14 per cent of total SMEs over the period 1994 to 2009. The employment contribution of manufacturing SMEs is around 2,530,800 workers during 1994 to 2009 which, on average, is equivalent to about 27.13 per cent of total employment in the private sector in this period. The contribution of manufacturing SMEs to total SME GDP is about THB 748,749 million, or 28.58 per cent of total SME output in 1994 – 2009 (OSMEP, 2009).

While SMEs represent the main element of Thailand's economy, they face a number of severe problems that act as key barriers to their further development. These include access to finance, marketing, information technology (IT), entrepreneurship, innovation, management and/or administration skills (Brimble et al., 2002; Harvie and Lee, 2002; OSMEP, 2003).

However, there is a dearth of evidence on Thai manufacturing SMEs particularly in terms of their entrepreneur and innovation, technical efficiency and their determinants. The primary motivation of this study is to upon identifying: (1) key factors contributing to the technical (in) efficiency of these SMEs such as entrepreneur characteristics (age, gender, education, work experience) and innovation, (2) the technical efficiency performance of Thai manufacturing SMEs, and (3) policy measures aimed at improving the technical efficiency of Thai manufacturing SMEs.

In doing so this study will facilitate: (1) identification of entrepreneur characteristics and innovation impacting upon the technical (in)efficiency of overall manufacturing SMEs, (2) a clearer understanding of the technical efficiency performance of Thai manufacturing SMEs, utilising the most substantive and most recently available cross-sectional firm-level data from the World Bank Enterprise Survey, (3) identifying the role, significance and
The contribution of Thai manufacturing SMEs, (4) identification policy measures likely to be most effective in enhancing SME technical efficiency performance.

The structure of the paper is as follows. Section 2 presents the issue of entrepreneurship in Thailand. Section 3 discusses about innovation. Finally, conclusions are presented in Section 4.

2. Entrepreneurship

Thailand’s SMEs is recognized as one of the highest levels of entrepreneurship in the world as measured by GEM’s total entrepreneurial activity rate at around 20 percent. An entrepreneurial activity indicator measures the proportion of firms engaged in starting up a business in the previous 3 years. Thai SMEs appear to have been growing increasingly, with the number of SMEs increasing more than threefold to 2.8 million firms during the period 1997 to 2008, even though much of this increase is likely to result from improved monitoring of SMEs (OECD, 2011). Moreover, as the global standards, Thai SMEs has high proportions of female entrepreneurs and business owners and managers, who made up around 50 percent of starting-up and operating businesses (OECD, 2011).

The GEM survey shows that Thailand has a relatively high of necessity entrepreneurship. It classifies Thai entrepreneurs who start-up a business as a result of opportunity or necessity. Opportunity entrepreneurs are those who seek to exploit a perceived business to produce income or wealth in their life. Necessity entrepreneurs are those who start-up a business due to lack realistic options for generating income or wealth. Thailand has very high level of necessity entrepreneurship, even though the majority (70 percent) of early stage entrepreneurial activity is opportunity driven, but a minority (30 percent) is necessity driven (OECD, 2011, p34). By comparison, the GEM survey presents an average for the period 2001 to 2008 of less than 4 percent for the necessity driven total entrepreneurial activity for efficiency driven economies such Thailand and less than 2 percent for innovation driven economies. However, a gender factor does not have much effect, but other factors do. This necessity entrepreneurship of Thailand is predominate amongst those with only limited education; both male and female with only some secondary education are about twice as likely to pursue entrepreneurship due to the necessity rather than opportunity (OECD, 2011, p34). Necessity driven entrepreneurship is more predominate among older entrepreneurs, aged above 35 years old. However, around 30 percent of people starting-up businesses in Thailand are not well equipped to be entrepreneurs and do not want to be entrepreneurs, but they do not have a better choice (OECD, 2011).

3. Innovation

Innovation is related to creative thinking, improvement and innovative usage of technology to increase the economic value of products and services (Cooke, 2001; OECD, 2011). SMEs are considered a significant seedbed for innovation and entrepreneurship, providing the foundation for the transition towards large firms and the long-run growth of the economy (Luetkenhorst, 2005; Audretsch et al., 2009). They play an important role by being the breeding ground for new and large firms. They are likely to promote new products due to flexibility, affordability and proximity to the market (Audretsch et al., 2009). With respect to entrepreneurship, a number of studies have specified that an entrepreneur is an innovator who can bring about change through new products, new processes, and new management techniques (OECD, 2005). SMEs are most innovative in the development of new products (Schumpeter, 1942; Audretsch et al., 2009). SMEs can provide a better incubator environment for fostering the growth of entrepreneurial desires and learning than larger firms.

According to the 2007 Global Entrepreneurship Monitor (GEM) Thailand survey (OECD, 2011), there is about 56 percent of firms that prefer the same product as the existing businesses, around 54 percent of firms do not offer customers a new product and about 45 percent of firms do not make any use of new technology and process. This information is quite common for Thai firms because a large number of firms are replicating goods and services. This is consistent with many countries such as in USA, China and Japan. The challenge is that Thai SMEs encounter a high turbulent and dynamic business environment in the international market. Hence, innovation is the only way to survive and continually adapt in such business environment. Surprisingly, Thai SMEs rank very high when it comes to adopt the latest technology, which is around 24 percent compared to 13 percent in USA, and 9 percent in China and Japan. However, the technology normally comes from outside Thailand and probably through foreign direct investment (FDI) channels (OECD, 2011). Furthermore, Intarakamnerd et al. (2002) emphasizes that the innovation system in Thailand is not well-organised in many areas, such as in the macro-environment, innovation infrastructure, R&D and technology capabilities. Thus,
SMEs in Thailand pay insufficient attention to innovation. This is as a consequence of the low level of education of employees in the SME sector that contributes to a lack of creative activity.

4. Conclusions

Thai SMEs have played a crucial role in the Thai economy in terms of numbers, employment and economic growth over the period 1994 to 2009 (OSMEP, 2009). They contribute a great distribution to social and economic development of the country (Sahakijicharn, 2007; Thassanabanjong et al., 2009; OECD, 2011). Despite their obvious significance Thai SMEs face a number of disadvantages that act as barriers to their development. These barriers comprise: financial constraints, lack of technical and innovation skills, management and/or administration skills, inadequate skilled labour (Sarapaivanich, 2003; Punyasavatsut, 2007; OECD, 2008). Therefore, it is suggested that Government agencies should play a more effective role in assisting and promoting SMEs performance in terms of entrepreneurship and innovation to enable them to be more competitive in the domestic and international market place. The government should also play an important role in promoting market-oriented SME interventions for improving SME development and the elimination of policy biases.

References


