The Role of SME_s in Employment and Export to Economic Growth of Thailand

Tuangporn Pinudom¹, James V. Johnson² International College¹, Burapha Univesity² tuangporn.pin@gmail.com¹

Abstract

Small and Medium Sized Enterprises (SMEs) are a key contributor to the economic progress of many countries around the world. Thailand is one of the developing countries where SMEs play a crucial role in the economic stabilization of the country. This paper analyzes the relationship of employment and exports to Thailand's GDP for both SMEs and large enterprises to determine the extent that SMEs impact to Thailand's GDP. Multiple regression has been applied as part of the methodology to analyze the data from 2002-2017. The research results show that both SMEs and large enterprises have a significant impact on the total GDP of Thailand. However, the analysis for the employment and exports of these two types of enterprises shows that the employment and exports of SMEs have a significant impact on GDP whereas only the exports of large enterprises have significant impact on GDP.

Keywords: Small and medium sized enterprises, economic growth, employment, exports

บทคัดย่อ

ธุรกิจขนาดกลางและขนาดย่อมมีบทบาทสำคัญต่อการพัฒนาเศรษฐกิจของหลายประเทศทั่วโลก ประเทศไทยเป็น ประเทศหนึ่งที่ธุรกิจขนาดกลางและขนาดย่อมมีความสำคัญต่อเสถียรภาพทางเศรษฐกิจ งานวิจัยครั้งนี้มีวัตถุประสงค์เพื่อทดสอบ ความสัมพันธ์ระหว่างการจ้างงานและการส่งออกของธุรกิจขนาดกลางและขนาดย่อม และธุรกิจขนาดใหญ่ต่อการเติบโตทาง เศรษฐกิจ เพื่อศึกษาผลกระทบของธุรกิจขนาดกลางและขนาดย่อมต่อเศรษฐกิจไทย งานวิจัยนี้ใช้การวิเคราะห์การถดถอยพหุคูณใน การวิเคราะห์ห้อมูลปี 2002-2017 ผลการวิจัยยืนยันความสัมพันธ์อย่างมีนัยสำคัญของธุรกิจขนาดกลางและขนาดย่อม และธุรกิจ ขนาดใหญ่ต่อการเติบโตทางเศรษฐกิจของประเทศไทย อย่างไรก็ตามเมื่อวิเคราะห์การจ้างงานและการส่งออก ผลการวิจัยแสดงให้ เห็นว่า การจ้างงานและการส่งออกของธุรกิจขนาดกลางและขนาดย่อมมีความสัมพันธ์อย่างมีนัยสำคัญต่อการเติบโตของเศรษฐกิจ ไทย แต่ธุรกิจขนาดใหญ่นั้น มีเพียงการส่งออกที่มีความสัมพันธ์อย่างมีนัยสำคัญต่อการเติบโตของเศรษฐกิจ

คำสำคัญ: ธุรกิจขนาดกลางและขนาดย่อม, การเติบโตทางเศรษฐกิจ, การจ้างงาน, การส่งออก

Introduction

Small and medium enterprises (SMEs) in many developed and developing countries have been recognized to play an important role in economic development. Kongolo (2010) specified that SMEs are a key contributor to the economic progress of many countries around the world. SMEs have a role in promoting economic growth through many channels including job creation, income distribution, poverty reduction, and economic stabilization (Beck, Demirguc-Kunt, and Levine, 2005). SMEs are considered as the main source of employment and national income in many countries of the Third World, especially Thailand. It can be observed that the growth rate of SMEs will contribute the economic growth, unemployment rate, and poverty reduction (lam-aram, 2017).

Thailand is one of the developing countries where SMEs play a crucial role in the economic stabilization of the country, as observed from the gross domestic product (GDP). The GDP represents the total market value of all final goods and services produced by a factor of production located in a country within a period of time (Landerfeld, Seskin & Fraumeni, 2008).

In 2017, the GDP of SMEs in Thailand was 6,551,718 million Thai Baht, an increase of 5.1 percent over the previous year. SMEs provided 42.4 percent of the nation's total GDP. The GDP of just small enterprises in 2017 was 4,637,330 million baht, which is equal to 30 percent of the total GDP for Thailand. The GDP of just medium-sized enterprises in 2017 was 1,914,388 million Baht, which is around 12.4 percent of Thailand's total GDP. There were a total of 3,046,793 SMEs in Thailand in 2017, an increase of 1.30 percent over the previous year (Office of Small and Medium Enterprises Promotion, 2018).

	2013	2014	2015	2016	2017	
Gross Domestic Product (GDP) of Thailand using current 2018 prices (Million Baht)						
Overall Country	12,915,162	13,230,301	13,747,007	14,533,475	15,452,882	
Agriculture Sector	1,462,625	1,335,153	1,236,237	1,236,038	1,337,284	
Other Sectors	11,452,537	11,895,148	12,510,770	13,297,437	14,115,598	
Large Enterprises	5,557,401	5,772,970	5,991,616	6,304,808	6,647,993	
SMEs	5,129,152	5,319,388	5,678,957	6,115,402	6,551,718	
Small Enterprises	3,582,849	3,719,183	3,987,010	4,308,573	4,637,330	
Medium Enterprises	1,546,303	1,600,205	1,691,947	1,806,829	1,914,388	
Other Enterprises	765,984	802,790	840,197	877,227	915,887	

 Table 1: Gross Domestic Product Data for Thailand (2013-2017)

Note: adopted from http://www.sme.go.th/upload/mod_download/download-20180912113024.pdf. Copyright 2018 by Office of Small and Medium Enterprises Promotion.

The data in table 1 shows the GDP of Thailand from 2013 to 2017. The GDP of the country has increased every year over the period shown in the table. The numbers come from agriculture sector, which is the

fundamental sector of the country, and other sectors such as mining, manufacturing, construction, trading, services, and electricity and water supply. SMEs in these other sectors have contributed almost 50 percent of the total GDP.

Employment is a common economic indicator used by most countries. SMEs in Thailand are the largest source of employment. The total employment for Thailand in 2017 was 14,785,172 people. This number includes employment by large enterprises at 2,629,525 people and by SMEs at 12,155,647 people. Employment by SMEs is around 82.22 percent of Thailand's total national employment. The employment of small enterprises was the largest proportion at 72.57 percent of total employment. The employment of SMEs in 2017 was mostly in the service sector at 5,796,000 people, which represents 86.70 percent of the employment in the service sector, Employment in the service sector was followed by employment in the trading sector, manufacturing sector, and agriculture sector (Office of Small and Medium Enterprises Promotion, 2018).

Another indicator for economic development is exports. SMEs play an important role in Thailand's exports. In 2017, exports from Thailand generated 8,006,265.18 million Thai Baht, an increase of 6.30 percent over the previous year. Exports from SMEs were 1,990,419.71 million Thai Baht which is 24.86 percent of the country's total exports. Exports from small enterprises in 2017 were 1,345,474.80 million Thai Baht which is 16.81 percent of Thailand's total exports. Exports from medium-size enterprises were 644,944.91 million Thai Baht which is 8.06 percent of all Thai exports. However, exports from large enterprises were 5,882,946.64 million Thai Baht which is 73.48 percent of the nation's exports.

The purpose of this research is to investigate the role of SMEs exports and SMEs employment on the economic growth of Thailand compared with the role of large enterprises.

Literature Review

Definition of SMEs

There is no uniform definition of an SME. There are no standard measurements for amount of capital, number of employees, turnover, investment in fixed capital, or market share (Ogechukwu, 2011). Many countries define SMEs in terms of the number of employees, the management structure, or the amount of capital investment. Therefore, the definition of an SME varies from country to country and industry to industry (Arowomole, 2000).

According to the United Nations Environment Programme (UNEP) (2003), some countries have three groups of small enterprises. They are micro-, small-, and medium-size enterprises. Other countries have only two groups of them. Different countries have adopted different definitions of SMEs based on the classification used in their own country and the guidelines of their own government.

According to the Bank of Thailand (n.d), SMEs are defined by the number of employees in the company or by the company's value of fixed assets not including land. Normally SMEs are also usually considered for the lower value to define company size – as shown in Table 2 below. If the value of fixed assets is used, then the total fixed assets must have been evaluated by a creditable financial institution.

Size	Small Enterprise		Medium Enterprise		Large Enterprise	
Туре	No. of employees	Fixed Assets (Million Baht)	No. of employees	Fixed Assets (Million Baht)	No. of employees	Fixed Assets (Million Baht)
Manufacturing	Not over 50	Not over 50	Over 50 to 200	Over 50 to 200	Over 200	Over 200
Services	Not over 50	Not over 50	Over 50 to 200	Over 50 to 200	Over 200	Over 200
Wholesale	Not over 25	Not over 50	Over 25 to 50	Over 50 to 100	Over 50	Over 100
Retail	Not over 15	Not over 30	Over 15 to 30	Over 30 to 60	Over 30	Over 60

Table 2: Criteria to Determine the Size of Small, Medium, and Large Businesses in Thailand

Note: Retrieved from https://www.bot.or.th/Thai/Statistics/Articles/Doc_Lib_StatinFocus/SMEs.pdf. Copyright by the Bank of Thailand.

Role of SMEs

Many studies have assessed the role of SMEs in the economic development of various countries. Nagaya (2017) examined the impact of SMEs on the economic growth of India. The results showed that SMEs in India enhanced economic development through employment and poverty reduction. Bello, Jibir, and Ahmed (2018) examined the relationship of SMEs and the economic growth of Nigeria by using time series data. The study revealed the positive and significant relationship between SMEs and the economic development of the country.

According to Katua (2014), SMEs can enhance competition in the market. In addition, SMEs also help to create new jobs, expand the tax base, and drive innovation. SMEs impact the world economy in terms of employment and the number of companies doing business.

According to Myslimi, Krisdela, and Kaçani (2016), SMEs have an important role in promoting employment, innovation, and economic growth. SMEs contribute to a country's employment potential at a low cost of capital. SMEs also had 65% business turnover in the European Union and provided around 90 million new jobs. SMEs in America are known for creating new jobs, providing competition to businesses, improving product quality, and using innovation to develop new products and services.

For OECD member countries, SMEs provided the main source of employment – about 70% of the jobs on average. SMEs were also major contributors to value creation; they generated between 50% and 60% of value added (OECD, 2016).

In addition, SMEs have gained more attention in the international business market due to the removal of trade restrictions as well as the development of trade agreements between countries. Trade liberalization provides trade integration and trade connection for different countries. (Apec, 2011). Growing internationalization encourages more export activity, and the result is that exporting has become one of the primary aims for many SMEs.

SMEs in several countries have significant roles in the country's export market. The total value of exports from SMEs in the United States exceeded the total value of all companies' exports in many other

countries. SMEs accounted for about 30 percent of U.S. merchandise exported between 1997 and 2007. Many reports also show that SMEs created nearly 36 percent of the total merchandise exported from Canada, 29 percent in Thailand, 18 percent in Indonesia, and 16 percent in Singapore (USITC, 2010).

Further, SMEs make indirect contributions to larger companies' exports since SME suppliers provide materials to larger exporting companies or multinational companies (MNCs). SMEs in the OECD countries generated more than half of the total exports in value-added terms (OECD, 2017).

Conceptual Framework

This paper analyzes the relationship of SME employment and SME exports to the GDP of the country. It also analyzes the relationship of large enterprise employment and large enterprise exports to the GDP of the country. Both relationships are analyzed in the time period between 2002 and 2017.

For this research, multiple regressions were run over the data using an SPSS statistics program. The multiple regression is considered to be a multivariate regression analysis because there is more than one independent variable (Tabachnick, 1996).

Hypotheses for SME Analysis

H1: There is no significant relationship between SME employment and SME exports with the country's economic growth.

H2: There is a significant relationship between SME employment and SME exports with the economic growth.

Hypotheses for Large Enterprise Analysis

H3: There is no significant relationship between large enterprise employment and large enterprise exports with the country's economic growth.

H4: There is a significant relationship between large employment and large exports with the economic growth.

Methodology

The form of empirical model used for this paper is:

 $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2$

SME Analysis

The model for analysis of the SMEs is given as:

GDP t = β 0 + β 1 (SME EMPt) + β 2 (SME EXt)

For the SME analysis, the dependent variable is the GDP of Thailand. The independent variables are SME employment and SME exports.

Large Enterprise Analysis

The model for analysis of the large enterprises is given as

GDP t =
$$\beta$$
0 + β 1 (LE EMPt) + β 2 (LE EXt)

For the large enterprise analysis, the dependent variable is the GDP of Thailand. The independent variables are large enterprise employment, and large enterprise exports.

Research Findings

SME Analysis

Table 3: Multiple Regression Analysis for SMEs

Variable	В	SE	Beta	t	Sig
Constant	-5655847.231	1869961.654		-3.025	.010
Employment of SMEs	.646	.290	.417	2.228	.044
Exports of SMEs	5.670	1.926	.550	2.944	.011
R Square = 0.855 SE = 1304301.875 F = 38.240 Sig = 0.000					

GDP = -5655847.231 + 0.646 (SME EMPt) + 5.670 (SME EXt)

Table 3 above shows R square is 0.855. This value means that 85.5% of the dependent variable GDP is explained by the independent variables SME employment and SME export. The F significance is 0.00 which shows that the model is significant.

The value of the standardized coefficient beta for SME employment is 0.417, and the significant value is 0.044, which shows that SME employment is significant to the value of GDP. The value of the standardized coefficient beta for SME exports is 0.550, and the significant value is 0.011. These values also reveal that SME exports is significant to the value of GDP.

If the beta value from table 3 is observed, it shows that SME export has more impact on GDP than does SME employment. However, the value of beta for SME exports is little higher than the value of beta for SME employment.

Large Enterprise Analysis

Variable	В	SE	Beta	t	Sig
Constant	-230613.989	2071923.246		111	.913
Employment of Large	239	.652	.024	366	.720
Enterprises					
Exports of Large	2.681	.184	.966	14.540	.000
Enterprises					
R Square = 0.946 SE = 793374.7246 F = 114.420 Sig = 0.000					

Table 4: Multiple Regression Analysis for Large Enterprises

GDP = -230613.989 -.239 (LE EMPt) + 2.681 (LE EXt)

Table 4 shows R square is 0.946. This value means that 94.6% of the dependent variable GDP is explained by the independent variables large enterprise employment and large enterprise exports. The F significance is 0.00 which shows that the model is significant.

The value of the standardized coefficient beta for large enterprise employment is 0.024, and the significant value is 0.720, which shows that large enterprise employment is not significant to the value of GDP. The value of the standardized coefficient beta for large enterprise exports is 0.966, and the significant value is 0.000. These values reveal that large enterprise exports is significant to the value of GDP.

If the beta value from table 4 is observed, it shows that large enterprise export has more impact on GDP than does large enterprise employment.

In addition, the beta coefficient of large enterprise employment is negative. The value of -0.239 shows the negative relationship between GDP and the employment of large enterprises.

Conclusions and Discussion

By looking at the economic indicators of employment and exports, both SMEs and large enterprises have a significant impact on the total GDP of Thailand. Therefore, hypotheses H2 and H4 were verified as correct. For SMEs, employment and exports have significant and positive relationships with GDP. This supports the previous empirical studies from Nagaya (2017), Bello, Jibir, and Ahmed (2018), Katua (2014), and Myslimi, Krisdela, and Kaçani (2016), concluded the role of SMEs in promoting employment, innovation, competition, and economic growth.

For large enterprises, only export has a significant and positive relationship with GDP. Surprisingly, the employment of large enterprises has no significant relationship on the country's GDP. The slight relationship between large enterprise employment and GDP that does exist is a negative relationship.

This is interesting from the study that SMEs employment has a significant impact to total GDP of Thailand, compared with large enterprises employment. It can be concluded that most of the SMEs still focus on labor basis to operate the business. This leads to the economic development of Thailand. However, large enterprises, with more investment may need technology or automation to run the business, rather than focusing on labor.

In order to promote the economic growth of the country, especially for boosting employment, the supporting of SMEs shall be focused.

Recommendations

Based on the analysis in this paper, the SMEs in Thailand can positively impact Thailand's economic development. SMEs export and employment have the role to GDP contribution, while only export of large enterprise has the significant role to GDP contribution.

However, SMEs in several countries, including SMEs in Thailand still are faced with many challenges to develop the businesses. Low capitalization and external financing requirements can be the major barriers to grow

the businesses. The low level of technology, innovations, R&D, and inadequate marketing activities can also limit SMEs growth and competitiveness in the global market (Karadag, 2016).

To support and address the SMEs growth, Thai government should continue to support the development of SMEs using a variety of government programs. Government policies should aim to develop the competitiveness of SMEs to operate the business in the country and international market. The program to support SMEs employment shall be focused. Government can create the environment to support the education improvement, innovation, and training to SMEs. Moreover, the financial supporting from government or financial institutions is the priority. Once SMEs are fully developed in Thailand, significant economic growth should be the result. However, to extend this study, further studies of role of government to support SMEs and economic growth might be needed.

References

- APEC. (2011). Study on SME Internationalization Best Practices Across Selected APEC Economies. Retrieved From https://www.apec.org/Publications/2011/06/Study-on-SME-Internationalisation-Best-Practices-Across-Selected-APEC-Economies
- Arowomole, K. A. (2000). Modern business management (Theory and Practice) (1st ed.). Sango-Ota, Ogun State: Ade-Oluyinka Commercial Press.
- Bank of Thailand. (n.d.). *Stat in Focus*. Retrieved fromhttps://www.bot.or.th/Thai/Statistics/Articles/Doc_Lib_Statin Focus/SMEs.pdf
- Beck T., Demirguc-Kunt, A. & Levine, R. (2005). SMEs, growth and poverty. NBER working paper No. 11224.
- Beck, T., Demirguc-Kunt, A. & Levine, R. J Econ Growth. (2005). SMEs, Growth, and Poverty: Cross-Country Evidence. Retrieved from https://link.springer.com/article/10.1007/s10887-005-3533-5
- Bello A., Jibir A., & Ahmed I. (2018). Impact of Small and Medium Scale Enterprises on Economic Growth: Evidence from Nigeria. *Global Journal of Economics and Business*, 4 (2): 236-244.
- Iam-aram, T. (2017). The Resource-Based View of Business Organization: Evaluating Value of Small and Medium Enterprises (SMEs). *Journal of Humanities and Social Sciences Thonburi University*, 11(24): 1-2.
- Karadag, H. (2016). The Role of SMEs and Entrepreneurship on Economic Growth in Emerging Economies within the Post-Crisis Era: an Analysis from Turkey. *Journal of Small Business and Entrepreneurship Development*. 4(1): 22-31.
- Katua, N. T. (2014). The Role of SMEs in Employment Creation and Economic Growth in Selected Countries. International Journal of Education and Research, 2: (12).
- Kongolo, M. (2010). Job creation versus job shedding and the role of SMEs in economic development, *African Journal of Business management*, 4 (11): 2288-2295.
- Landerfeld, J.S., Seskin, E.P. & Fraumeni, B.M. (2008). Taking the Pulse of the Economy: Measuring GDP. Retrieved from http://www.bea.gov/about/pdf/jep_spring2008.pdf

Myslimi G., Krisdela, & Kaçani (2016). Impact of SMEs in economic growth in Albania. *European Journal of Sustainable Development*, 5 (3), 151-158. Retrieved from https://www.ecsdev.org/ojs/index.php/ejsd/article/viewFile/ 341/338

Nagaya N. (2017). SME impact on output growth, case study of India. Palma Journal, 16(13): 11-170.

OECD (2016). Entrepreneurship at a Glance 2016. Paris: OECD Publishing.

- OECD (2017). Enhancing the Contributions of SMEs in a Global and Digitalised Economy. Retrieved from www.oecd.org
- Office of Small and Medium Enterprises Promotion. (2018). *Report of SMEs 2002 2018*. Retrieved from http://www.sme.go.th/ th/download.php?modulekey=215
- Ogechukwu, A.D. (2011). The Role of Small-Scale Industry in National Development in Nigeria. Universal *Journal of Management and Social Sciences*, 1: 23-41.
- Tabachnick. B.G. & Fidell S.L. (1996). Using multivariate statistics (3rd ed.). New York: Harper Collins College Publishers.
- United Nations Environmental Programme: (UNEP). (2003). Big Challenge for Small business sustainability and SMEs. Industry and Environment, 26(4).
- USITC. (2010). Small and Medium-sized Enterprises: U.S. and EU Export Activities, and Barriers and Opportunities Experienced by U.S. Firms. Retrieved from https://www.usitc.gov/publications/332/pub4169.pdf