THE IMPACT OF ENTREPRENEURSHIP TOWARDS ECONOMIC GROWTH OF STATE IN MALAYSIA

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APPROVAL

'I/We hereby to declare that I/we had read through this thesis and in my/our opinion that this thesis is acceptable in terms of scope and quality which fulfil the requirements for the award of Bachelor of Technopreneurship with Honours.

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The report submitted in partial fulfilment of the requirements of the Bachelor of Technopreneurship with (Honour)

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DECLARATION

I declare that the work I am submitting for assessment contains no section copied in whole or in part from any other source unless explicitly identified in quotation marks and with detailed, complete and accurate referencing.

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DEDICATION

Firstly, I would like to dedicate to my parents in the journey of conducting my thesis in this moment. My parents have a strong and gentle soul who have taught me to believe in hard work and that will prepare me towards the goal of my live. They have contributed their support to me especially in the form of knowledge and experience which is inspiration source for my thesis. Furthermore, I would like to dedicate to my parents who have earning an honest living for us and for supporting and encouraging me to believe in myself.

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ABSTRACT

Entrepreneurship is the vital player in modern economic and dynamic force to drive the economic growth currently. Among the numerous studies, technological progress has indirectly influence and does not promote the economic growth alone. While, the entrepreneur is the person who drive the economic growth and generate innovation in new market nowadays. Thus, the present study is to explore the significance of entrepreneurship in developing economic growth of Malaysia at state level. To completely understand the impact of entrepreneurial activity on economic growth, Kauffman Index of Entrepreneurial Activity (KIEA) used to measure the entrepreneurial activity. Based on standard regressions using GDP per Capita at current price, personal income per capita and employment growth, the role of entrepreneurial activity has been tested on the state of economic growth in Malaysia. The key finding shows that increase in entrepreneurial activity associate with an increase in economic growth even though some variables is negative significant impact on economic growth of the state. The study has been conducted based on 3 years panel data and the longer data set is preferable. The category of entrepreneurship will not be attempted in this study. The key findings encourage the government must strengthen the policy of state to encourage more entrepreneurial activities.

Key Words: Entrepreneurship, Economic Growth, KIEA index

ABSTRAK

Keusahawanan adalah pemain penting dalam kuasa ekonomi dan dinamik moden untuk memacu pertumbuhan ekonomi pada masa ini. Banyak kajian, telah memaparkan kemajuan teknologi tidak mempengaruhi dan tidak menggalakkan pertumbuhan ekonomi. Walaupun, usahawan adalah orang yang memacu pertumbuhan ekonomi dan menjana inovasi di pasaran baru pada masa kini. Oleh itu, kajian ini adalah untuk meneroka kepentingan keusahawanan dalam membangunkan pertumbuhan ekonomi Malaysia di peringkat negeri. Untuk memahami sepenuhnya kesan keusahawanan terhadap pertumbuhan ekonomi, Kauffman Index of Entrepreneurial Activity (KIEA) digunakan untuk mengukur aktiviti keusahawanan. Berdasarkan regresi standard yang menggunakan KDNK per Kapita pada harga semasa, pendapatan per kapita dan pertumbuhan pekerjaan, peranan aktiviti keusahawanan telah diuji terhadap pertumbuhan ekonomi di Malaysia. Tinjauan utama menunjukkan peningkatan dalam aktiviti keusahawanan telah menumbuhkanpertumbuhan ekonomi walaupun beberapa pemboleh ubah adalah kesan negatif negatif terhadap pertumbuhan ekonomi negara. Kajian ini telah dijalankan berdasarkan data panel 3 tahun dan set data yang panjang adalah digalakkan. Kategori keusahawanan tidak akan diuji dalam kajian ini. Penemuan utama menggalakkan kerajaan mengukuhkan dasar negara untuk menggalakkan lebih banyak aktiviti keusahawanan.

Kata Kunci: Keusahawanan, Pertumbuhan Ekonomi, indeks KIEA

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

Nowadays, macro-economic issues such as employment or unemployment, inflation, economic growth as well as stagflation has been paid attention by each country. Economic growth is a significant issue for a country especially to the policy maker and economist. Steady economic growth would help the country toward the globalization and high-income level among the nation. During the first oil crisis in 1970s, high unemployment rate and stagflation which combined price rise and slow economic growth. While, some countries revival from the economic crisis in mid-1980s. This is essential period to re-establish supply side in economic and new determinant factor of the economic growth. Free enterprise economic system implemented in the entire world after the collapse of socialist economy system during the period of 1990s. This will benefit all the economy system of each country and forge a closer relationship of trading activities (Afolabi and Zaria, 2015). The collapse of world economy in 2008 was the severe of economic crisis which originated in America. This economic depression accompanied by the bad practice in financial sector. However, some of the country still did not attacked by this depression. On the other hand, the "opportunity entrepreneur" has been created in this depression period (Zamberi Ahmad and Xavier, 2012).

After independence from United Kingdom in 1957, Malaysia has been qualified as middle- income country by World Bank. Malaysia has been the commodity exporter such as rubber, palm oil and petroleum with total income which rise at 6% to 7% from 1970 until 2000 (Ferro *et al.*, 2013). This reduce the social inequality among the nation which constitute by different ethnic. In the last 20 years, Malaysia has transformed from low income per capita to middle income level among the economy market which constitute by 90% of export. Malaysia now evolve as a developing multi-sector country which has a significant impressive among the world. This has led Malaysia toward vision of high income country in 2020 and ensure the growth is stable in each year. According to World Bank (2017), Malaysia was hit by Asian Financial Crisis during the period of 1997 to 1998 and Global Financial Crisis 2009. However, Malaysia has displayed a stable growth rate of 5.5% per year and 5.7% in respectively (World Bank, 2017). As to Malaysia Prime Minister Tun Dr. Mahathir bin Mohamad, Southeast Asia nation confident to attain developed and advanced country by 2020.

Connection between entrepreneurial activity with economic growth is not surprising. Research based on Wennekers et. al., (1999) observed that the performance and firm size on the regional economic development as well as economic growth of the country level. Nowadays, entrepreneur is the most vital player in modern economic. In last two decades, entrepreneur start to replace the old job and become new engine of the macroeconomic. Entrepreneur not only bring the prosperity but rise the standard of living of the country, hence, European Union (EU) has promised to become world's entrepreneurship leader by 2020 to attain high income level as well as high living standard around the European country.

Entrepreneurship is dynamic force which drive the economic activity grow. It can turn the economic around by increasing productivity of economic system and create high employment rate (Sander Wennekers, Andr'e van Stel, Martin Carree, 2010). As to Carree and Thurik, (2010), higher rate of entrepreneurial activity gives the positive impact on the local economic growth. In Germany, the engine of economic growth has been changed or shifted. This change shifted to depend on the entrepreneurial activity level in country which has positive association with the higher rate of economic growth. This is evidence showed that Germany become world leader and the economic leader among Europe country. Entrepreneurship is playing vital role in increasing the productivity through the introduction of innovation and new technical progress. There is ample evidence to show that entrepreneur as an essential role in the early stage of the industry evolution (Carree and Thurik, 2005). Furthermore, entrepreneurial activity has determined that wealth distribution is equal through the innovation and competition. On the other hand, some of the literatures have suggested that the income gap become wider in advanced economy system but opposite condition in developing economy (Kam and Ping, 2016).

Since 15th century, Malaysia involved in entrepreneurial activity when Malacca was the trade centre of the world due to its strategic geography position. During this period, there are many trading activities between Malaysia with Portugal, China, India and others and hence aggregate the entrepreneurial activity in Malaysia. Malaysia government implement variety of policy and physical infrastructure in the development of trading. Hence, the entrepreneurial activity has emerged in ancient history which is significant impact on the economic development. Malaysia entrepreneurship have been rising steadily and can be investigated in previous century. There are several evidences showing that the relationship between entrepreneurial activity, economic growth and reduction of social inequality (Zamberi Ahmad and Xavier, 2012). Mohammad Nor, (2015) stated that the country which is more focus in entrepreneurship displays higher economic growth. Hence, Malaysia government has paid attention and paid efforts to encourage entrepreneurial activity to drive the economic growth by implementing policies. Nowadays, Malaysia is on the right track to develop and encourage the entrepreneurship among the nation by creating various programmes, policies and infrastructures. This initiative will ultimately leading Malaysia towards high income country in 2020.

Malaysia government realized the significant of entrepreneurship development and hence, established Satu Daerah Satu Industry programme (SDSI) through the Ministry of International Trade and Industry (MITI) in 2013 to rise the income level of rural area. This will increase the job creation and encourage the personal income level as well as local economic growth indirectly. At the same time, Malaysia government also encourage the involvement of woman and youth in entrepreneurship which can lead Malaysia transform into entrepreneurial nation. For youth entrepreneur, Malaysia has established Malaysia Global Innovation and Creative centre (MaGIC) and 1 Malaysia Entrepreneurs (1MeT) and Graduate Entrepreneurship Fund to build the ability of the entrepreneurship among youth, access to the financial area and etc. While, Ministry of Women, Family and Community has organized programme Skills Training for Single Mother (I-KIT) to the single mother in helping them to generate income with their ability and skill.

There is similarity in New Economic Model (NEM), Economic Transformation Programme (ETP), Tenth and Eleventh Malaysia plans which is focusing on entrepreneurship to boost the economic growth and achieve high income country. Introduction of SME Masterplan brought the new dimension and phenomenon to the development of SMEs. Its aimed at leading the transformation of SMEs and increase the contribution level to GDP to 41% in 2020. This establishment support and critical pathway to success in boosting economic growth of Malaysia.

In achieving Vision 2020, Malaysia has identified entrepreneurship as a significant element of the policy to drive the economic growth in pursuing high income country and sustainability economy system. Hence, specific measurement has been released such as Creating an Environment for Unleashing Economic Growth and Moving Towards Socio-Economic Development to cultivate or promote more entrepreneurial activities in Malaysia (UNCTAD 2012).

1.2 Problem Statement

Technology or innovation process has played a significant role in boosting the economic performance in every country. Many countries implement the technology infrastructure to promote economic growth. R&D investment has boost the productivity of Singapore and insert positive impact on economic growth. R&D investment does not promote the economic growth alone while the public sector should support the private R&D sector in capability to obtain the output value of R&D (Kam and Ping, 2016). A strong relationship between technological process and economic growth has been studied by many scholars. There is a positive impact between technological progress and economic growth. Activity that encourage the innovation process would impact on economic growth indirectly (Me'ndez-Picazo, 2013). However, according to R.W. Hafer, (2013), the entrepreneurship is a key engine of economic growth which explicit show that technological process and human capital not the engine growth of economic. This can be proved by Ghura, Li and Harraf,

(2017), the innovation and most research and development (R&D) process always generated by the entrepreneur to exploit the new creation in new market. Hence, entrepreneur is the person who drive the economic growth nowadays and technological progress. R&D is the process that need the huge capital in developing new product and enhancing the existing product. These activities need to be supported by the entrepreneur who lead the positive impact on economic development.

The evolution of industrial change the ecosystem of the manufacturing from water and steam power to automation in assembly line. There are many manufacturing industries in Asia such as Taiwan, Korea, China and India have seeking to adapt automation solution in manufacturing industry. Industry 5.0 has been introduced by Michael Rada which was published in the article. As to Rada, (2017), Industry 5.0 is future, but it has been penetrated in the industry. The process is more toward to the cooperation between man and machine. Industry 4.0 more to the automation of the machine which is called "smart factory" in the manufacturing industry to produce high quantity product and mass production to spur economy growth. While Industry 5.0 is more focus on the human touch which is collaboration of the human and machine and more toward the life standard, creativity and quality of customization product. Industry 5.0 has potential effect on economy, it is mean that the waste prevention project has been connected to the logistic cost. Zero waste environment reduce the cost of management and good effect on environmental. Hence, the entrepreneur has the priority responsibility to boost the cooperation between human workforce and machine (Rada, 2017).

Moving ahead, human-robot collaboration will be the next revolution in the industry. Industry 5.0 will be the ideal transformation of manufacturing industry which increase the collaboration of human and machine and precision as well as innovation culture implanted among the worker. The human workforce takes charge of the programming and installation of robot on the production floor to enhance the production efficiency and develop advanced economy system. By doing this, Industry 5.0 drive the future of the country toward unlimited of the possibilities and advanced (Gotfredsen, 2016). Following to Atwell, (2017), auto manufacturer Mercedes' has provided more space to human in production line due to the significant of customization to the modern consumers in the market. This can be proved by Rendall, (2017), state that machine would not replace the human workforce in future.

Manufacturing factory in Toronto has added human counterpart due to the increased in production efficiency by 50%. There are 85% of the manufacturing factory over the world foresee the collaborative of human and robots in their plant by 2020. Thus, entrepreneur should make decision on the future of the industry to ensure the collaboration of the human and machine to enhance economic growth of the country (Atwell, 2017). To understanding the relationship of entrepreneurship and economic growth, further deep understanding is needed (Currie-Alder, 2014). Thus, the purpose of this study is to identify the significance of entrepreneurship toward economic growth at state level of Malaysia.

1.3 Research Questions

- 1) What are the factors affect the economic growth in Malaysia by state?
- 2) How to measure the entrepreneurship rate in Malaysia by state?
- 3) What is the impact of entrepreneurial activity, population, life expectancy and education attainment of labour force on GDP, household income and employment in Malaysia by state?

1.4 Research Objectives

- To determine the factors that affect the economic growth in Malaysia by state level.
- To develop KIEA index in measuring entrepreneurship rate in Malaysia by state.
- To identify the impact of entrepreneurial activity, population, life expectancy and education attainment of labour force on GDP, household income and employment in Malaysia by state.

1.5 Significance of Study

Entrepreneurship is one of the essential elements to boost the economic growth by stimulating investment opportunity and creating job opportunity. Entrepreneurial activity promotes goods and services penetrate into the international market and increase the economic growth rate and GDP as well. Moving ahead, entrepreneurship as a push factor of social tools which lead Malaysia out of the middle-income trap and toward high-income level country. Hence, entrepreneurship to be famed as "life force" of SMEs who drives the GDP growth in Malaysia (SME Corp. Malaysia, 2015). According to (World Bank, 2016), SMEs contribute 36% of GDP Malaysia, 65% of employment and 18% of Malaysia export. Therefore, the study uses the state level measurement on entrepreneurial activity which is superior arguably to explain the economic growth in state level. This result explicit the significance to the policy implementation by government Malaysia.

1.6 Scope and Limitation

The main source of the data utilized in this study from Department of Statistic Malaysia (Dosm.gov.my, 2017) and SME Corporation Malaysia (Smecorp.gov.my, 2017). The findings are based on the data source from 2012 until 2016 over 13 states and 2 federal territories in Malaysia. The annual data for each of the variable will be used in this study. This study used to investigate the impact of entrepreneurship, population growth and life expectancy on GDP, personal income and employment in the state of Malaysia.

The result based on the data source over a short period. The longer period of data is preferred to obtain more accurate findings if the data is available. Moreover, the entrepreneurship in this study has no diversified into the category such as productive and unproductive entrepreneurship (R.W. Hafer, 2013).

CHAPTER 2

LITERATURE REVIEW

2.1 Economic Growth in Malaysia

Economic growth in Malaysia has a sustainable and rapid growth after gaining the independence from Britain in 1957. Malaysia economic showed enormous potential in export sector and its primary commodities focus on natural resources such as tin ore and rubber. It primarily over 75% of the export and third of Malaysia's GDP in 1970s. However, this condition tends to be changed and diversification in 1980s. Introduction of new national policies which change the social structure among Malay ethnic. The Promotion of Investment Act (1986) has release the restriction on FDI regulation and provide incentive for the private investor which open the gate of Malaysia toward globalization and succeed in electronic sector. This can be proved by 12% of GDP in 1970s to 30% of GDP in mid of 1990s in manufacturing sector (Ng, 2015).

This showed that Malaysia economic has transformed from low income of raw material supplier to middle income of multi sector which drive by manufactured export. The previous study has displayed that tourism and Electrical and Electronic (E&E) exports influenced the economic development of developing country such as Malaysia. According to Tang, Cheam and Ong, (2017), four major export components such as tourism, E&E, palm oil and rubber influence economic growth of Malaysia. Cointegration, Granger Causality and the variance decomposition test has been used and found that only tourism, E&E and palm oil affect the economic development of Malaysia in long run.

On the other hand, the gap of the income level wider even though various policies have been introduced to decrease difference. This can be proved by only 25% of the workers are in the range of higher skill job. The remainder explain the workers not in the right position to boost the economic growth rate due to the performance does not go beyond the school educational level. After global fiscal crisis in 2008, Malaysia take the initiative immediately to transform into high income status and advanced country. However, the competitive rate of Malaysia has fell from 9% in 1980s to 5% in 2000s. Thus, New Economic Model (NEM) introduced by Malaysia government to lead Malaysia into high income country and advanced economic. Greater FDI will be attracted and as much as Singapore and Indonesia via the channel of NEM (Antony Xavier and Ahmad, 2012).

2.2 Entrepreneurship and Economic Growth

Entrepreneur always thought of as a country asset which will be trained and encouraged to the possible greatest range. There is a belief about that the relationship between entrepreneurship and economic growth. Entrepreneur is the backbone and to be the dynamic of modern economies. Entrepreneurship has brought the greatest benefit to the society since it is important to the economic growth of the state (Kritikos, 2014). Entrepreneurial activity of the state includes various measurement on the economic growth. According to OECD, entrepreneurial activity would not impact on economy development alone. There are significant social and cultural of entrepreneurial activity on economic development of the regional state. Hence, several groups such as owners, managers, policymakers, general population and academic plays the key role in society in linking entrepreneurship spirit with the social wellbeing and economic development (Singer, Amorós and Moska, 2015). According to Isidoro Romero (2011), different dimensions of SME entrepreneurial orientation such as innovation, cooperation, proactivity and quality orientation has been used to measure the regional economic development.

The entrepreneurial activity has significant effect on economic development of the state. There are three different measures of economic activity has been used such as real per capita gross state product (GSP), personal income and employment real per capita. Entrepreneurship increases the personal income and GDP per state as well as reduce unemployment rate of the state because of higher level of entrepreneurship experience positive impact on economic success by using Kauffman Foundation's index of Entrepreneurial activity (KIEA) Model (R.W. Hafer, 2013). Re-emergence of entrepreneurship is worth to the economic development of the state. The study in Nigeria also state that the growth in entrepreneurship rate increase the GDP growth rate and wealth creation through the secondary data and primary data generation in Warri and Ughelli in Delta state (Korez-vide and Tominc, 2016).

Rising in entrepreneurial activity associated with the increase in productivity of economy, higher level of employment rate and economic growth as well as reduction in social inequality (Sander Wennekers, Andr'e van Stel, Martin Carree, 2010). Regional development indicators and approximate measure of entrepreneurial activity through the panel data for the period of 2006 to 2012 have showed that higher economic growth associated with lower entrepreneurial activity growth rate. This is because of the necessity of the job and business operation once the low level of economic growth. Hence, entry of entrepreneur creates the job and income to the development of the country or state (Korent, Vuković and Brčić, 2015). According to González-Sánchez, (2013), the research documented that the effect of entrepreneurial activity emerges positive repercussion on the economic growth rate of Europe region. From the above, it shows that entrepreneur become core factor and contributor to the economic development (Singer, Amorós and Moska, 2015).

2.2.1 Entrepreneurship on Employment Rate

Job creation through the entrepreneurial activity indirectly motivate economic growth and development. Skills and labour of many hands required by the entrepreneurial activity to increase productivity of the business especially in new business operation to improve the productivity and gain higher profit (Trenchard, 2015). Employment growth through the entrepreneurial activity has been study for previous year.

Moving ahead, employment rate will experience higher level through the positive effect of entrepreneurship which mentioned by (Hafer, 2013). By being an entrepreneur, the income not only generated for themselves but also create job to the others for their business operation and hence reduce unemployment levels. According to Badal, (2010), entrepreneur act as an agent between social and economic activity. Entrepreneurial activity has contributed to economic growth by creating job, motivating innovation as well as social inequality reduction. In doing so, entrepreneurship has well explained the phenomenon of economic growth and development. Hence, entrepreneurship emerged as an essential instrument by the policy maker to improve macroeconomic or microeconomic of the state and creating the employment. This initiative by the policy maker to reduce social inequality by facilitating job creation among the nation. Whatever analytic method has been used, this has illustrated that entrepreneur create the job and reduce unemployment issue which is critical and severe issue to the economic development.

Following to Doran, McCarthy and O'Connor, (2016), there is positive relationship between entrepreneurship and employment rate. Dataset which cover 90 European countries from 2008 until 2010 and fixed effects model to control the data. This unique method has showed that the region with higher establishment of new firm associate with higher employment rate. Higher establishment of industry and positive growth of GDP indicate the positive impact on employment rate in Europe countries. However, higher rate of existing firm has low employment rate in the region. Thus, the result explicates that the fostering entrepreneurship boost the job opportunity in the relevant region.

There is evidence showed that new firm and establishment will decline the employment rate in regional. Total employment rate from Bureau of Labour Statistics (BLS) and Census Bureau's Business Dynamic Series of United State of America depicted a declined trend in new firm and establishment. BLS measured that employment rate at new establishment less than 2.5 million jobs in 2010 compare with 4.65 million of jobs in 2000. According to Census data, the total employment rate in 2006 is 7 million of jobs and reduce until less than 4.5 million in 2010 in new firm and establishment. The plummet in total employment rate is due to the shrinking of employment in new firm and establishment and the business owner believe that starting in smaller will develop more rapidly (Reedy and Litan, 2011). In truth,

different pattern of the employment rate and entrepreneurship in Europe and United State region will be debate and will be discussed continuously. At the same time, aggregate employment rate always associated with the entrepreneurship or entrepreneurial activity which affect the economic development in most of the countries.

2.2.2 Entrepreneurship on Household Income per Capita

There have been numerous studies on the entrepreneurial activity on household income level. The policymaker has paid attention on the entrepreneurship which drive the economic growth by increasing the income level in rural and urban area. As to Wong, the relationship between entrepreneurial activity and household income display a U shape, non-linear relationship in the study. This shows that increasing in new firm entry associated with widening of the income gap in developing countries compare with developed countries. In developed or advanced country, the employee always equipped with the updated knowledge and skill which make them more competency to grab new opportunity created by the new firm. However, insufficient of knowledge transfer and innovation system in developing country incur the labour always lack skill and experience in their performance. Therefore, the increase of entrepreneurial activity associated of greater income inequality in developing country.

Furthermore, there are many studies on the entrepreneurship and income level in developing countries. The economic process or achieve high income level always depend on the economic transformation from primary-based sector (agriculture) to secondary-based sector (manufacturing) and to tertiary-based sector (service sector). It is confirming that the economic structure of country is essential to generate the entrepreneurs. However, the result has showed that the reduction of entrepreneur associated with increase of GDP. It is mean that increase of income level will reduce "survival entrepreneur" but this effect will turn to generate "opportunity entrepreneur" when the income falls within upper middle income of World Bank's standard (Nkurunziza, 2012).