# A Study on Small and Medium Enterprises (SME'S) Growth Domestic Product (GDP) Contribution From Malaysian Economic Perspective

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Abstract: The aim of this study was to determine the factors that influence in Growth Domestic Product (GDP) contribution by Small and Medium Enterprises (SME) in Malaysia. This research has looked at the various factors which contribute on SME's such as labour wages, unemployment rates, net exports and inflation rate. The entire population 3292 SME's in Malaysia. The research used convenience sampling method to choose the samples. In addition, the research instrument utilized in this research was a secondary data and the results obtained were analyzed using regression anlaysis. The result indicates that labour wages and net export are the key factors highly contribute SME'S performance. The study recommends how the Malaysian SME's can improve their performance and contribute to the national production furthermore SME's concern to this factors and enhance their performance towards the Malaysian 2020 vision.

**Keywords** – Inflation rate, Labour wages, Unemployment rates, Net Exports, SME's Performance.

#### I. Introduction

Malaysia has adopted a common definition of SMEs to facilitate identification of SMEs in the various sectors and the subsectors. Generally, an enterprise is considered an SME in each of the respective sectors based on the Annual Sales Turnover or Number of Full-Time Employees. Normah (2007) [1] stated that, the SMEs have been the backbone of economic growth of an economy in driving industrial development. Their role in the Malaysian economy will strengthen the resilience of the country to face a competitive and challenging global environment. In Malaysia SME's corporation classified into two major categories. One is manufacturing sector and other one is service sector. In each category also classified in to subcategory base on annual sales turnover. The table below explains into details.

Table 1.1: Source: SME Corp Malaysia, official website.

T.		Micro	Small	Medium Enterprise
Type		Enterprise	Enterprise	
Manufacturing	Manufacturing-Related Services Agro-based industries	Annual sales turnover less than RM 250000 and full time employee less than 5.	Annual sales turnover from RM250, 000 to less than RM10 million and full time employees from 5 to less than 50.	Annual sales turnover from RM10 million to less than RM25 million and full time employees between 51 and 150.
Services	Primary Agriculture Information and Communication Technology (ICT)	Sales turnover of less than RM200,000 and full time employees less than 5	Sales turnover from RM200,000 to less than RM1 millionand full time employees between 5 and 19	Sales turnover from RM1 million to less than RM5 million and full time employees between 20 and 50

# 1.1 Problem Statement

There is a large and growing body of evidence that demonstrates a positive linkage between the development of SME's in Malaysia and country rise in revenue. The emphasis of SME performance in countries reflects the view that economic value depends on the revenue that are derived from SME. The rapid economic recession on the developed and developing countries may affect the domestic, global markets also the country's generated national income (GNI). Relating to this matter, government has raise concern on economic issues on their respective countries to renew their economic policies to survive against economic slope and poverty. They have to be more concern on their human capital resource to merge with on economic policy as to achieve high levels of GNI.

In many developed countries (such as the United States of America, Greece, Canada and some other EU countries) and developing countries had faced microeconomic and macroeconomic problems in past 7 years. Although, Malaysia has had one of the best economic records in Asia and been the third largest economy in

DOI: 10.9790/487X-17636269 www.iosrjournals.org 62 | Page

ASEAN and 29th largest in the world, there are still some issues pertaining to having stable economic conditions. The problem occurred May due to lack priority and concentration given to the human capital on their economic policies. A systematic economic policy should be renewed to the basis of the current environmental economic sustainability. Therefore, there is a need for on-going commitment and determination from all sectors of scarcity resource concerned to improve economic performance in a country.

### 1.2 Significant of Study

The significance of this study is the ideas of expanding Performance of SME from the perspectives of Malaysia. Besides that, this research will also give additional information to the Malaysian Ministry of Economic Development on the awareness of the performance of SMEs and also may be useful for the SMEs to understand the approaches to be taken in order to enhance the level of country revenue. These ideas suggested are hopefully useful as a source of information for the future related researches in this topic. Furthermore, this study will also motivate country's young economist to improve their knowledge on the government's supportive actions on performance of SME. This research may give additional information from various insights and raise awareness on the economic issues and improve the economic insights. In addition to that, the research may also contribute to society by being value added information.

# 1.3 Research Objectives

The objectives of the research are:

- 1. To examine the factors that contributes to the Growth Domestic Product (GDP) contribution by SME.
- 2. To determine whether there is significant relationship between labor wages, unemployed rate, net export and inflation rate with the effect of Growth Domestic Product (GDP) contribution by SME.

# 1.4 Research Questions

This research seeks to answer the following questions:

- 1. What are the factors that contribute to the Growth Domestic Product (GDP) contribution by SME?
- 2. Is there significant relationship between labor wages, unemployed rate, net export and inflation rate with the effect of Growth Domestic Product (GDP) contribution by SME in Malaysia?

# 1.5 Scope of Study

The scope of the study is limited to time frame of 2005 to 2013 in GDP contribution by SME in Malaysia. Due to lack of information we focus on several areas which is directly influence with SME's profitability. We assume these factors are closely influence with SME performance. If it will help for SME's consider this factors in future to develop new policies and procedures to enhance their profitability in high level.

# II. Literature Review

#### 2.1 Performance of SME's

Firm performance refers to the firm's success in the market, which may have different results. In business life, success is a key term in the field of management, although it is not always stated. Success and failure can be interpreted as measures of good or indifferent management. In business studies, the concept of success is often used to refer to a firm's financial performance. According to Mohd Aris. N(2006) [2] and MohdAsri and Mohd Isa (2000) [3] considered Small and Medium Enterprises (SMEs) have been the backbone of economic growth of an economy in driving industrial development. In line to that, Surienty, Hong and Hung(2011) [4]. Omar, Arokiasamy and Ismail(2009) [5], Smolarski and Kut (2009) [6], Saleh and Ndubisi(2006) [7] mentioned that there are many statements of which deal with the role, importance and contribution of SME existence towards the nation growth . In Malaysia, SMEs account for about 99% of total business establishments and contribute 31% to the nation's Gross Domestic Product (GDP).

Furthermore, in Malaysian Budget(2009/2010) explained, SME's employs 56% of the total workforce and generates 19% of the total export, in order for the vision 2020 to be fully realized in Malaysia. Omar, Arokiasamy and Ismail(2009) [5] also discussed on the future progress seems to depend greatly upon development of SMEs. As such, it is essentially explains the reason why policy makers and governments have given high policy agenda on the development of SMEs, this was mentioned by Mohd Asri A. and Mohd Isa B (2000) [3].

# 2.2 Labour Wage and Unemployment Rate

According to Fuchs (2011) [8] point of view, most of these studies have found that raising the minimum wage is associated with a reduction in the employment of low-skilled workers, including teenagers, restoring a general consensus among labor economists that minimum wage hikes have adverse employment effects. Besides, the impact of turnover on firms is mostly based on wages in which firms choose wages so as to

minimize the marginal cost of labor, balancing the marginal effect of higher wages against the marginal reduction in training costs induced by higher wages.

Furthermore, Burdett and Mortensen (1998) [9], pointed on their research, when Firms paying high wages and making low profits per worker experience low turnover, while firms paying low wages and making high profits have high turnover. According to Garino and Martin (2008) [10] view of this issue, when firms do not unilaterally choose the wage for example when the wage is negotiated with a union or set nationally the productivity is expected to increase the profit. When the firm chooses the wage unilaterally, the impact of turnover on profits is negative.

Apart from that, Jae Kap Lee (2005) [11] did a research on Wage subsidies and unemployment. He found two main functions, which are dampening the pace of job destruction in the formal sector and avoiding the depreciation of skills and secondly, stimulating hiring and facilitating reemployment. In the first case, the subsidies allow employers to keep workers who would otherwise fill the ranks of the unemployed or move to lower productivity jobs in the informal sector in both cases risking losing their skills. In the second case, the focus is to increase exit rates from the unemployment pool, particularly among vulnerable workers, thus reducing the destructive persistence of long term unemployment

## 2.3 Net Export Performances:

According to Dhanaraj and Beamish (2003) [12] the export success and strategy come from the resources and capabilities of the firm. Besides that, Bonaccorsi(1992) [13] and Calof (1994) [14] mentioned experience and the changes implied by the experience influence favorably the net export performance. Regarding the export experience, it is logical that the more a firm is used to export transactions, methods and techniques, the more it will be able to improve its performance and contribute to the country national production.

According to Majocchi et.al (2005) [15], Innovation in SMEs enables companies to have higher performance than non-innovative companies and contributes to a good export performance. Beamish and Dhanaraj (2003) [12] discussed on the export success of an organization depends not only on management related determinants but also environment related determinants. The more the company acts in a concentrated industry, the less the company will be prone to improve its export performance. Anyway these results have to be used carefully and need to be taken into consideration in the case of SMEs as per finding by Zhao and Zou (2002) [16]. Furthermore, Beamish et. al (1993) [17] explained on the Relationship between the exporter and his business partners (intermediaries and customers) must not be neglected in the improvement of the export performance. Haahti et. al (2005) [18] mentioned, cooperative strategies represent an effective way for the smallest firms to expand their knowledge on the export markets and reinforce their resources.

#### 2.4 Inflation Rate

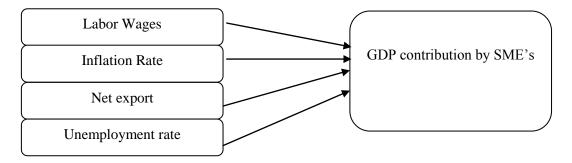
According to Dean et. al (1997) [19] mentioned that, inflation rate is now well accepted both among academicians and policy makers that small businesses play a vital role in contributing to overall economic performance of countries. Inflation rate do influence the health care costs, fuel costs and many raw material costs due to the many hurricanes of last season are pushing up prices on almost every item sell in the market. According to Jukna and Tvaronavičienė, (2004) [20], found that inflation rate is an important factor which contributes on SME performance. Furthermore, Ehlers and Lazenby (2007) [21] mentioned that Economic factors have a direct impact on the potential attractiveness of various strategies and consumption patterns in the economy and have significant and unequal effects on organizations in different industries and in different locations. The current economic environment is characterized not only by high interest rates but also by low growth rates, high inflation rates and declining exchange rates. All these factors can affect sales, revenues and market potential of new SMEs.

#### III. METHODOLOGY

#### 3.1 Research Framework

# **Independent Variables**

#### **Dependent Variable**



# 3.2 Null Hypothesis

- H<sub>10</sub>: There is no significant relationship between the labor wages and the GDP contribution by SME's.
- H2<sub>0</sub>: There is no significant relationship between the inflation rate and the GDP contribution by SME's.
- H<sub>30</sub>: There is no significant relationship between the net export and the GDP contribution by SME's.
- H<sub>0</sub>: There is no significant relationship between the unemployment rate and the GDP contribution by SME's.

# 3.3 Research Hypothesis

- H1: There is significant relationship between the labor wages and the GDP contribution by SME's.
- H2: There is significant relationship between the unemployed rate and the GDP contribution by SME's.
- H3: There is significant relationship between the inflation rate and the GDP contribution by SME's.
- H4: There is significant relationship between the net export and the GDP contribution by SME's.

#### 3.4 Population and Sample

Based on the SME Corporation Malaysia progress updates released at this time in the SME Corporation Malaysia's official website at <a href="http://www.smecorp.gov.my">http://www.smecorp.gov.my</a>, stated that there are 3292 total population companies in Johor that have been registered under SME Corporation Malaysia. The sampling method use in this study is convenience sampling as all the data's are collected by reviewing the data's from the official websites and financial data. Data are all secondary data's whereby all the data's will be extracted from the official SME's websites and other financial data's in order to gain information on behalf of the SME's.

# 3.5 Data Analysis and Techniques

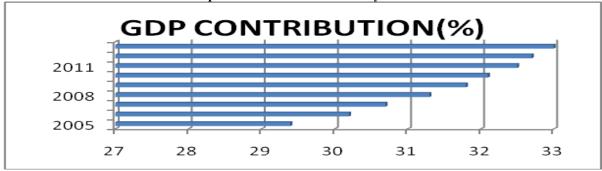
#### Linear regression

Regression analysis is widely used for prediction and forecasting, where its use has substantial overlap with the field of machine learning. Regression analysis is also used to understand which among the independent variables are related to the dependent variable, and to explore the forms of these relationships. In restricted circumstances, regression analysis can be used to infer causal relationships between the independent and dependent variables. SPSS will be used to analyze the data collected in this study

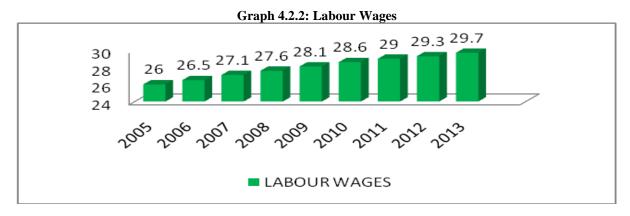
## IV. results and analysis

# **4.2 Descriptive Statistics**

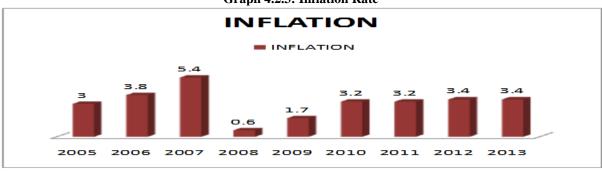
Graph 4.2.1: GDP contribution by SME's



The graph above shows the trend of GDP contribution by SME's in 2005 to 2013. Based on the graph past nine years the percentage of GDP contribution increasing positively. It's clearly explain the SME's performance highly improve in the right direction. According to business news (august 2013) The Government is targeting for small and medium enterprises (SMEs) to contribute 40% to the country's gross domestic product (GDP) by 2015 via more dynamic entrepreneurs. The contribution of small and medium enterprises (SMEs) to the gross domestic product (GDP) expanded further to 32.7 per cent last year, compared to the 32.5 per cent recorded in 2011, the Statistics Department said.



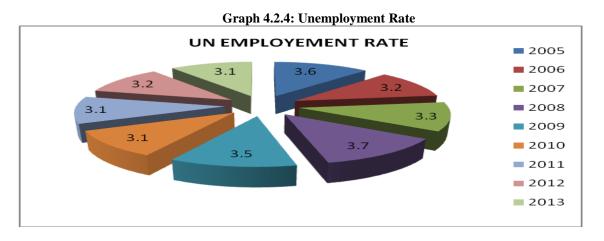
The graph above shows the level of wages increment in Malaysia in 2005 to 2013. The graph itself indicated labour wages rate of each year. It's clearly show the wage rate increase slowly. In addition, the rate percentage compare to 2005 and 2013,it's increase by 3.7%. Even though it's the small level of increase but it may influence in labour force and the performance.



**Graph 4.2.3: Inflation Rate** 

The graph below mentioned the inflation rate in Malaysia in 2005 to 2013. The graph indicate inflation rate of

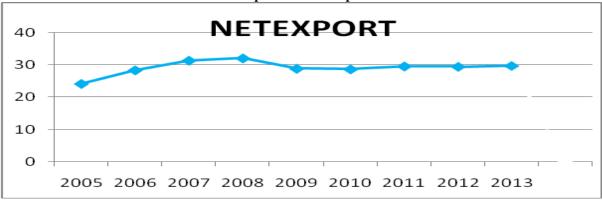
each year. Its show the rate almost the same level when compare to 2007. However inflation rate in Malaysia 2010 to 2013 time period closed to 3.2 between 3.4 %.



DOI: 10.9790/487X-17636269

The pie chart above shows the percentage of unemployment rate in Malaysia in 2005 to 2013. The chart indicate rate of each year. In 2005 the rate was 3.6% and in the year of 2013 the rate was 3.1% it's shows the unemployment rate reduce slowly in year by year. There are some ups and downs in between this nine years period but the rate still below 3.5% in past four years.

**Graph 4.2.5: Net Export** 



The graph above shows net export in Malaysia in 2005 to 2013. It's indicating the percentage of net export of each year. It's clearly indicating the rate increase slowly. When compare to year 2005and year 2013 its increase by 5%. Even though it's the small level of increase but it may influence in SME performance and contribution towards national production. The contribution of net exports (of goods and services) to real GDP was 5%.

#### 4.2 Simple Linear Regression Analysis

A linear regression model attempts to explain the relationship between two or more variables using a straight line. A linear regression line has an equation of the form Y = a + bX, where X is the explanatory variable and Y is the dependent variable. The slope of the line is b, and a is the intercept (the value of y when x = 0).

Hence, the simple linear regressions were performed between SME contribution as a dependent variable, unemployed rate, inflation rate, net export and wages rate as independent variables.

**4.2.1** Unemployed rate vs SME contribution:

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.569(a)	.323	.227	1.07319

# Y=a+bx

Based on the table, an unemployed result shown the  $R^2$  is 0.323. This means that approximately 32.3% of unemployed rate influence the SME contribution.

# 4.2.2 Inflation rate vs SME contribution:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.199(a)	.039	098	1.27870

#### Coefficients<sup>8</sup>

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	32.103	1.356		23.678	.000
	INFLATIONRATE	183	.405	168	452	.665

a. Dependent Variable: SMEGDPCONTRI

Based on the coefficient table, the inflation rate result shown B=-0.168and significant at 0.665 (p= <0.05) level. The Beta coefficient is -0.168 for an inflation rate not supports with SME performance. The  $R^2$  is 0.039 means that approximately 3.9% of inflation rate only influence the SME contribution.

# 4.2.3 Net export vs SME contribution:

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.755 <sup>a</sup>	.570	.509	.85546

a. Predictors: (Constant), NETEXPORT

#### Coefficients

		Unstand Coeffi		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	18.385	4.321		4.255	.004
	NETEXPORT	.468	.153	.755	3.047	.019

a. Dependent Variable: SMEGDPCONTRI

Based on the coefficient table, the net export result shown B=0.755and significant at 0.019 (p=<0.05) level. The Beta coefficient is 0.755 for net export supports with SME performance. The  $R^2$  is 0.570 means that approximately 57.0% of net exports influence the SME contribution.

## 4.2.4 Wages rate vs SME contribution:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.994(a)	.988	.986	.14192

#### Coefficients

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	5.057	1.096		4.615	.002
	WAGESRATE	.946	.039	.994	24.178	.000

a. Dependent Variable: SMEGDPCONTRI

Based on the coefficient table, the wages rate result shown B=0.994 and significant at 0.000 (p= <0.05) level. The Beta coefficient is 0.994 for net export supports with SME performance. The  $R^2$  is 0.988 means that approximately 98.8% of wages rate influence the SME contribution.

#### 4.3 Overall result in hypothesis:

Hypothesis	$\mathbb{R}^2$	Relationship	Result
		status	
H0:There is no significant relationship between the labor wages, inflation rate, net	-	-	Rejected
export, unemployed rate and the GDP contribution by SME's in Malaysia			
H <sub>1</sub> :There is significant relationship between the labor wages and the GDP contribution	0.998	Strong	Accepted
by SME's in Malaysia			
H <sub>2</sub> :There is significant relationship between the unemployed rate and the GDP	0.323	Moderate	Accepted
contribution by SME's in Malaysia			
H <sub>3</sub> : There is significant relationship between the inflation rate and the GDP	0.039	Weak	Rejected
contribution by SME's in Malaysia.			.,
H <sub>4</sub> : There is significant relationship between the net export and the GDP contribution	0.570	Good	Accepted
by SME's in Malaysia			

#### V. Conclusion

Finally, the research objective is achieved with the research that has been conducted, the effective factors on the SME contribution are wages rate followed by net export, and these two factors are highly contribute to the dependent variable. Unemployed rate is also influence in a positive way towards SME contribution on GDP. However one of the independent variable is not supporting the hypothesis in this research. It contribution towards SME contribution on GDP is only 3.7%. All the hypotheses for this study are significant at 0.000 which mean accept the hypothesis except for inflation rate and therefore it has to reject the null hypothesis. The relationship between dependent variable and independent variable are related with each other especially wages rate which is the main factor that influence on SME's performance and productivity.

Future research is required not only to confirm the results found on this research, but also to overcome the limitations previously mentioned. 
In order to gain more data and output about this study, a longitudinal study should be examined for the future research.

Future researcher may have a focus on SME contribution in different perspective. In the future, more surveys can be developed in SME contribution on GDP and narrow down the scope into manufacturing, service, mining and agriculture areas. These will help to identify more specific on each sectors dimension on SME contribution on GDP in a broader level.

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