Determinants of MSMEs Growth and its Impact on Income and Unemployment: Cases of Indonesia and Malaysia

Mohammad Noor Salim, Eri Marlapa, Shafinar Ismail, Nur Hayati Abd Rahman, Harniyati Hussin, Darwati Susilastuti and Wahyu Murti

To Link this Article: http://dx.doi.org/10.6007/IJAREMS/v11-i1/12305 DOI:10.6007/IJAREMS/v11-i1/12305

Received: 07 January 2022, Revised: 10 February 2022, Accepted: 26 February 2022

Published Online: 14 March 2022

In-Text Citation: (Salim et al., 2022)
To Cite this Article: Salim, M. N., Marlapa, E., Ismail, S., Rahman, N. H. A., Hussin, H., Susilastuti, D., & Murti, W. (2022). Determinants of MSMEs Growth and its Impact on Income and Unemployment: Cases of Indonesia and Malaysia. International Journal of Academic Research in Economics and Management and Sciences, 11(1), 223–239.

Copyright: © 2022 The Author(s)
Published by Human Resource Management Academic Research Society (www.hrmars.com)
This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: http://creativecommons.org/licences/by/4.0/legalcode

Full Terms & Conditions of access and use can be found at http://hrmars.com/index.php/pages/detail/publication-ethics
Determinants of MSMEs Growth and its Impact on Income and Unemployment: Cases of Indonesia and Malaysia

Mohammad Noor Salim¹, Eri Marlapa¹, Shafinar Ismail², Nur Hayati Abd Rahman², Harniyati Hussin², Darwati Susilastuti³ and Wahyu Murti³

¹Department of Management, Mercubuana University, Jalan Raya Meruya Selatan, Kembangan Jakarta, 11650 Jakarta SCR Indonesia, ²Faculty of Business and Management, Universiti Teknologi MARA Melaka, Kampus Bandaraya Melaka, 110 Jalan Hang Tuah, 75300 Melaka, Malaysia, ³Department of Management, Borobudur University, Jalan Raya Kalimalang No. 1 Jakarta, 13620 Jakarta SCR Indonesia.

Email: 1975801189@mercubuana.ac.id, erimarlapa@gmail.com, shafinar138@gmail.com, nurhayati.uitmt@gmail.com, harniyati@uitm.edu.my, darwatisusi@borobudur.ac.id, wahyumurti@borobudur.ac.id

Abstract

The growth of MSMEs is not consistent and fluctuates over time. Thus, this study aims to analyze the factors that contribute to MSMEs growth in Indonesia and Malaysia. It is also meant to investigate how MSMEs contribute to the national economy, and how the national economy influences the level of unemployment in both countries. Using quarterly data from 2010 to 2018, ordinary least squares were conducted with proper examinations on unit root and classical assumption tests to ensure unbiased estimators. The findings show that the MSMEs growth in Malaysia is adversely influenced by credit. However, MSMEs growth in Indonesia is influenced positively by credit, investment, and technology. Besides, the MSMEs growth helps to increase national income, which ultimately assists in reducing the unemployment level in Indonesia, but not in Malaysia. This study contributes to how governments in both countries can boost the MSME’s growth, thus improving the employment rate. The Indonesian government can use credit expansion to increase MSMEs growth, but the same move cannot be implemented by the Malaysian government as it will adversely impact the MSMEs growth. For future research, it is suggested to comprehend these findings with qualitative study, thus improving the model of MSMEs growth in both countries.

Keywords: Credit, Economic Growth, Investment, MSMEs Growth, Technology, Unemployment.
Abstrak
Pertumbuhan PKS tidak konsisten dan turun naik mengikut peredaran masa. Justeru, kajian ini bertujuan untuk menganalisis faktor-faktor yang menyumbang kepada pertumbuhan IKS di Indonesia dan Malaysia. Ia juga bertujuan untuk menyiaskan bagaimana MSME menyumbang kepada ekonomi negara, dan bagaimana ekonomi negara mempengaruhi tahap pengangguran di kedua-dua negara. Menggunakan data suku tahunan dari 2010 hingga 2018, kuasa dua terkecil biasa telah dijalankan dengan pemeriksaan yang betul pada punca unit dan ujian andai klasik untuk memastikan penganggar tidak berat sebelah. Dapatan kajian menunjukkan bahawa pertumbuhan PKS di Malaysia dipengaruhi oleh kredit. Walau bagaimanapun, pertumbuhan PKS di Indonesia dipengaruhi secara positif oleh kredit, pelaburan dan teknologi. Selain itu, pertumbuhan PKS membantu meningkatkan pendapatan negara, yang akhirnya membantu dalam mengurangkan tahap pengangguran di Indonesia, tetapi tidak di Malaysia. Kajian ini menyumbang kepada bagaimana kerajaan di kedua-dua negara dapat meningkatkan lagi pertumbuhan PKS, tetapi langkah yang sama tidak boleh dilaksanakan oleh kerajaan Malaysia kerana ia akan memberi kesan buruk kepada pertumbuhan PKS. Untuk penyelidikan di masa hadapan, adalah dicadangkan untuk memahami penemuan ini dengan kajian kualitatif, sekali gus menambah baik model pertumbuhan MSME di kedua-dua negara.

Katakunci: Kredit, Perkembangan Ekonomi, Pelaburan, Pertumbuhan PKS, Teknologi, Pengangguran.

Introduction
Micro, Small, and Medium Enterprises (MSMEs) are productive business units carried out by individuals or business entities in all economic sectors. The economic growth of a country is strongly supported by small and medium-scale economic activities (Tambunan, 2021). There are fundamental differences in MSMEs development between Indonesia and Malaysia. Although the form of policy is relatively the same, however, the vision is different. In Malaysia, the vision of MSMEs development is to increase competitiveness and ability to deal with foreign MSMEs products. Meanwhile, in Indonesia, the vision of MSMEs development is to increase productivity to enter foreign markets (ADB, 2020). It is from this point of view that all policies are based.

MSMEs are a formidable business in the midst of an economic crisis (Salim et al., 2020; Tambunan, 2021). Currently, around 90 percent of economic actors are MSMEs in both Indonesia and Malaysia, which continue to grow significantly and become a business sector capable of supporting the country’s economic stability. In addition, MSMEs business growth in Indonesia is considered important because it absorbs labor and increases economic growth (Pusparisa, 2020). The establishment of cooperatives, technology, investment, lending is some of the conditions for success in MSMEs development so that they can produce highly competitive products (Tange, 2015; Rudianto & Susilastuti, 2019).

MSMEs in Indonesia from 2011 to 2015 had a decline in their growth, while in 2016 it increased to 4 percent, and starting in 2017, it decreased again until 2018 (Santia, 2020). Meanwhile, the number of MSMEs in Malaysia is more than 90 percent of the total manufacturing companies. According to SMIDEC, MSMEs’ contribution is 27.3 percent of total manufacturing output, 25.8 percent of value-added production, and 38.9 percent of...
employment. Meanwhile, MSMEs’ output has grown by 9.7 percent annually with value-added production growing by 11.8 percent and employment by 3.7 percent. This positive development is due to the increase in labor productivity (ADB, 2020). The number of MSMEs in Malaysia constitutes 99.2 percent of the total business in the country. Most MSMEs (87 percent) are in the service sector, followed by manufacturing (7 percent) and agriculture (6 percent). Micro enterprises constitute the majority (79 percent) of MSMEs. By location, most MSMEs operate in the Klang Valley (35.7 percent), followed by Johor (10.3 percent), Perak (8 percent), and Kedah (6.8 percent). Companies that are not big companies actually contribute the most to the economy. There was a very rapid growth of 70 percent for additional GDP and 46 percent for additional labor from 2000 to 2005. Then the development of the informal sector shows that this sector accounts for about 31 percent of Gross National Income (GNI) and these are usually micro-enterprises where the owner is self-employed with very few partners (Amalia, 2014).

In 2018, Indonesian workers absorbed from MSMEs were 117 million people. This figure increased from the previous year which was 116.4 million people. The details were 107.4 million from micro-enterprises, 5.8 million small businesses, and 3.7 million medium enterprises. Meanwhile, the total MSMEs in Indonesia in 2018 was 64.2 million, an increase from the previous year which was 62.9 million. MSMEs also contributed up to IDR 8,573.9 trillion to the Indonesian economy, higher than large businesses which amounted to IDR 5,464.7 trillion (Pusparisa, 2020). This shows the importance of MSMEs sustainability both in its contribution to the economy and no less important, namely the large number of workers absorbed, especially in micro-enterprises (87 percent). Meanwhile, large businesses can only absorb 3.3 percent.

MSMEs need assistance such as capital assistance, marketing support, access to production sources, increased knowledge/skills, risk management, and others (Pusparisa, 2020; Tambunan, 2021). Investment is the main determinant of economic growth (UMN, 2016). Investment is a driver of development, so it will also drive MSMEs performance. The two main sources of investment are a foreign investment and domestic investment, sourced from government or private funds for restructuring and loan interest subsidies (Pusparisa, 2020) and preventing the reduction of workers (Lidwina, 2020).

The advantages of MSMEs must be supported by technology, both production technology, and information technology for marketing and other networks so that it has an impact on efficiency and effectiveness (Munandar, 2016). The streaming shows as many as 54 percent of respondents are increasingly able to survive in times of crisis (Lidwina, 2020). Switching to digital marketing is a strategy to survive and even increase productivity taught by the crisis state (Juditha, 2017; Marlina, 2020).

Empowering MSMEs for real sector growth and job creation, the Indonesian government issued a policy package by providing credit guarantees for MSMEs through the People’s Business Credit (KUR). According to Rudianto & Susilastuti (2019), credit has a significant effect on improving MSMEs’ performance. MSMEs’ large contribution to the economy and high absorption of labor have not been accompanied by an increase in competitiveness. Many factors affect resilience and the rise and fall of the number of MSMEs, productivity, the welfare of actors and workers. A more in-depth study is needed to find out the factors that influence the performance of MSMEs. Therefore, this study aims to analyze the influence of credit, investment, and technology factors on the growth of MSMEs in Indonesia and Malaysia; to analyze the
contribution of MSMEs to the growth of the national economy, as well as the contribution of the national economy to the unemployment in Indonesia and Malaysia.

Literature Review

MSMEs consist of micro, small, and medium enterprises. Micro enterprises are productively owned by individuals who have micro business criteria. Meanwhile, small business is a productive economic business that stands alone, which is carried out by individuals or business entities that are not subsidiaries or branches that are owned, controlled, or become a part, either directly or indirectly, of a medium or large business that meets the criteria of a small business.

The growth of MSMEs can be influenced by credit, investment, and technological change. Firstly, credit is the provision of money or equivalent claims based on an agreement or loan agreement between banks and other parties that require the borrower to repay the debt after a period of time with interest (BPS, 2018). Banking credit is beneficial for MSMEs growth, which is allocated to carry out its intermediation function, plays an important role in reducing information search costs and transaction costs so as to produce efficient resource allocation in MSMEs growth. MSMEs do not need to specifically allocate funds (costs) for MSMEs’ growth (Rudianto & Susilastuti, 2019; Tambunan, 2021). KUR is a credit or financing service provided by the government through banks to Micro, Small, and Medium Enterprises that still have good business potential or prospects and can repay their loans. The purpose is for MSMEs, to create jobs and alleviate poverty (BI, 2016; Tambunan, 2021).

Secondly, investment is a commitment to a number of funds or other resources made with the aim of obtaining a number of benefits in the future. The term investment can be related to various kinds of activities (Hendriyani, 2016). Investing in the real sector as well as financial assets is a common activity (BI, 2016). Investment can come from within the country, namely the government and the private sector as well as foreign direct investment (UMN, 2016; ADB, 2020). Investments are expenditures aimed at increasing or maintaining MSMEs growth for stock of capital goods consisting of machinery, factories, offices, and other durable products used in the production process.

Thirdly, technological change is considered to be the most important factor in the growth of MSMEs. These changes are related to changes in MSMEs production methods which are the result of renewal or the result of production techniques. Information technology (ICT) is used to expand networks for various purposes including marketing (Simatupang et al., 2018; Juditha, 2019). Information communication technology, which includes all technical equipment to process and convey information and disseminate and publish it (Zakky, 2018). Information technology helps a person to access information quickly and accurately, which can be measured by the number of information technology or internet used by MSMEs represented by households (BPS, 2018).

The process of increasing the production of an economy is manifested in the form of an increase in national income (UMN, 2016). Economic growth is an increase in the production or income per capita of a country (Nafziger, 2012). There are two forms of economic growth, namely extensive use of more resources and intensive use of a number of resources that are more efficient (productive). The higher the economic growth, the economy is using the greater capacity of resources in a more efficient way. Thus, the unemployment rate is expected to decline. MSMEs
are able to provide economic equality among the lower middle class by creating new jobs, expanding businesses, and reducing unemployment.

**Research Hypothesis**

To answer theoretically, it is assumed that an increase in credit, investment, and technology will increase the growth of MSMEs. The increase in MSMEs growth will also increase its contribution to the national economy and the implication will be to reduce the unemployment rate. The formulation of the research hypotheses are as follows: 1) There is a simultaneous and partial positive influence of credit, investment, and technology on the growth of MSMEs; 2) There is a positive influence on the growth of MSMEs on the national economic growth, and 3) There is a negative effect of economic growth on unemployment.

**Methodology**

This study was conducted based on the quarterly data from 2010 to 2018, in Indonesia and Malaysia. The variables used in this study are as illustrated in Table 1. All variables were transformed into a natural logarithm form.

| No. | Notation | Description of the Variables | Derivation of the Variables |
|-----|----------|-------------------------------|----------------------------|
| 1   | Y        | MSMEs growth                 | Derived from the number of MSMEs. |
| 2   | X1       | Credit                        | Derived from the sources of funds by financial institutions (in $ billion) |
| 3   | X2       | Investment                    | Derived from the amount of domestic investment by both government and private sectors, channelled to MSMEs |
| 4   | X3       | Technology                    | Derived from the number of MSMEs that have access to Internet services. |
| 5   | Z1       | Economic growth               | Derived from the economic growth of Indonesia and Malaysia |
| 5   | Z2       | Unemployment                  | Derived from the unemployment rate in both Indonesia and Malaysia |

In answering the research objectives, three models were formed. The first model is formulated to determine the effect of credit, investment, and technology on MSMEs growth. The second model is used to determine the effect of MSMEs growth on the national economic growth. The third model is used to determine the effect of economic growth on the unemployment rate. The equations for all three models are as follows:

\[
LY = \beta_0 + \beta_1LX1t + \beta_2LX2t + \beta_3LX3t + \epsilon t \tag{1}
\]

\[
LZ1 = \beta_0 + \beta_4LY(E)t + \epsilon t \tag{2}
\]

\[
LZ2 = \beta_0 + \beta_5LZ1(E)t + \epsilon t \tag{3}
\]

where \(\beta_0\) is the intercept, \(\beta_1\) to \(\beta_5\) are the coefficients for each variable, \(LY(E)\) and \(LZ1(E)\) are the expected values of \(LY\) and \(LZ1\) based on equation (1) and (2) respectively, while \(\epsilon\) is the error
term. This study is based on a time series analysis and the method used is the ordinary least square (OLS) method. In ensuring the results are valid and unbiased, the ADF unit root test and classical assumption tests were carried out, in accordance with the recommendations by (Gujarati and Porter, 2012).

**Result and Discussion**

The results of the descriptive statistics of Indonesian and Malaysian MSMEs are presented in Table 2a and Table 2b, respectively. It shows that Malaysia had recorded average values of credit \((X_1)\) and investment \((X_2)\) of $3.2086 billion and $295.78 billion, respectively. The values were slightly higher than Indonesia’s credit and investment ($0.0655 billion and $64.7909 billion). However, the mean values of technology \((X_3)\) for both countries indicate that there were a higher number of MSMEs in Indonesia (4,175,892) that have access to Internet services as compared to Malaysia (468,527). Similarly, the growth of MSMEs is higher for Indonesia (0.7795 percent) relative to Malaysia (0.2470 percent).

**TABLE 2a. Descriptive Statistics from 2010 to 2018 for Indonesia**

| Descriptive Statistics | Indonesia  |
|------------------------|------------|
|                        | X1         | X2         | X3         | Y          |
| Mean                   | 0.0655     | 64.7909    | 4175892    | 0.7795     |
| Median                 | 0.0650     | 28.3045    | 3729364    | 0.6952     |
| Maximum                | 0.1068     | 127.2050   | 9220253    | 1.6840     |
| Minimum                | 0.0505     | 23.7732    | 2449762    | 0.3367     |
| Std. Dev.              | 0.0132     | 42.8759    | 1776867    | 0.3007     |
| Skewness               | 1.3702     | 0.2382     | 1.7336     | 0.7898     |
| Kurtosis               | 4.8901     | 1.1302     | 5.4782     | 3.2380     |
| Jarque-Bera            | 20.318     | 6.8254     | 33.3013    | 4.6790     |
| Probability            | 0.0000     | 0.0329     | 0.0000     | 0.0963     |

**TABLE 2b. Descriptive Statistics from 2010 to 2018 for Malaysia**

| Descriptive Statistics | Malaysia  |
|------------------------|-----------|
|                        | X1        | X2        | X3        | Y          |
| Mean                   | 3.2086    | 295.783   | 468527    | 0.2470     |
| Median                 | 3.4175    | 272.856   | 435548    | 0.18       |
| Maximum                | 4.2200    | 613.28    | 808195    | 0.41       |
| Minimum                | 2.1000    | 89        | 214830    | 0.18       |
| Std. Dev.              | 0.6944    | 138.185   | 170219    | 0.1014     |
| Skewness               | -0.3416   | 0.3885    | 0.27716   | 0.9138     |
| Kurtosis               | 1.5915    | 2.4277    | 1.8350    | 1.9278     |
| Jarque-Bera            | 3.6759    | 1.3971    | 2.4967    | 6.7353     |
| Probability            | 0.1591    | 0.4973    | 0.2869    | 0.0344     |
Besides, the standard deviations for all variables are small except for X3 for both countries. It indirectly implies that there is a sharp increase in the technology adoption among MSMEs in both countries from 2010 to 2018.

In order to ensure an unbiased estimator, it is essential to investigate the stationarity status for each variable. The results of the ADF unit root test for all variables are shown in Table 3. The subscript of I and M in each variable indicates Indonesia and Malaysia, respectively.

| Variable | Level | First Difference | Remarks |
|----------|-------|------------------|---------|
|          | t-Statistics | Probability | t-Statistics | Probability |
| YI       | -3.221268 | 0.0255**       | -6.707776 | 0.0000*** | I(1) |
| X1I      | -3.091623 | 0.0349**       | -7.109665 | 0.0000*** | I(1) |
| X2I      | -0.920549 | 0.7721         | -5.959076 | 0.0000*** | I(1) |
| X3I      | 1.740090  | 0.9996         | -4.834307 | 0.0003*** | I(1) |
| Z1I      | -1.503941 | 0.5221         | -8.236157 | 0.0000*** | I(1) |
| Z2I      | 0.490275  | 0.9840         | -8.174684 | 0.0000*** | I(1) |
| YM       | 0.288314  | 0.7636         | -2.171241 | 0.0307**  | I(1) |
| X1M      | -0.900432 | 0.3189         | -2.016627 | 0.0434**  | I(1) |
| X2M      | 1.827723  | 0.9813         | -1.795477 | 0.0693*   | I(1) |
| X3M      | -0.050433 | 0.6579         | -1.621269 | 0.0979*   | I(1) |
| Z1M      | -1.819739 | 0.0659         | -1.903505 | 0.0553*   | I(1) |
| Z2M      | -0.120280 | 0.6350         | -2.116051 | 0.0348**  | I(1) |

Note: I(1) indicates that the variable is stationary at first difference.

As shown in Table 3a and Table 3b, all variables for Indonesia Malaysia are stationary at first difference. The regression results for all models are shown in Table 4. The results indicate that all models are significant since the probability values of the F-statistics are less than 0.05.
| Variables | Model 1 | Model 2 | Model 3 |
|-----------|---------|---------|---------|
|           | LY      | LZ1     | LZ1     | LZ2     | LZ2     |
|           | Indonesia | Malaysia | Indonesia | Malaysia | Indonesia | Malaysia |
| LX1       | 1.1511** | -       | 0.2624** | *       | (0.1721) | *       | (0.0948) |
|           |          |         | (0.0661) |         |          |         |          |
| LX2       | -       | 0.0180  | 0.1885** | *       | (0.0320) | *       | (0.1544) |
| LX3       | 0.8431** | 0.0132  | *        | (0.0476) |         |         |          |
| LY(-1)    | 1.2679** | *       |          | (0.1629) |         |         |          |
| LY(-2)    | -       | 0.4555** | *       | (0.1406) |         |         |          |
| C         | 1.9705** | -0.2426 | 3.5000** | -0.2958** | 1.5382** | 0.0756* | (0.0389) |
|           | (0.5608) | (0.5872) | (0.5701) | (0.1192) |         | (0.4112) |          |
| LY(E)     | -       | -0.0280 | 3.3601** | *       | (0.0340) |         |          |
|           |          |         | (0.6844) |         |          |         |          |
| LZ1(-1)   | 1.6439** | *       |          | (0.1271) |         |         |          |
| LZ1(-2)   | -       | 0.7408** | *       | (0.1219) |         |         |          |
| LZ1(E)    | -0.1079** | -0.0027 | (0.0494) | (0.0079) |         |         |          |
| LZ2(-1)   | 1.7245  |         | (0.1138) |         |         |         |          |
| LZ2(-2)   | -0.7964 |         | (0.1153) |         |         |         |          |
| R2        | 0.6878  | 0.9872  | 0.3646  | 0.9552  | 0.1021  | 0.9713  |
| Adjusted R2 | 0.6644  | 0.9850  | 0.3495  | 0.9508  | 0.0807  | 0.9685  |
Variables | Model 1 | Model 2 | Model 3
--- | --- | --- | ---
LY Indonesia | 0.0000** | 0.0000** | 0.0344**
LY Malaysia | 0.0000** | 0.0000** | 0.0000**
LZ1 Indonesia | 0.0000** | 0.0000** | 0.0000**
LZ1 Malaysia | 0.0000** | 0.0000** | 0.0000**
LZ2 Indonesia | 0.0000** | 0.0000** | 0.0000**
LZ2 Malaysia | 0.0000** | 0.0000** | 0.0000**

Diagnostic Tests

| | Indonesia | Malaysia | Indonesia | Malaysia |
|---|---|---|---|---|
| Serial Correlation | 0.9430 | 0.9668 | 0.9888 | 0.9904 |
| Heteroskedasticity | 0.7002 | 0.8373 | 0.1117 | 0.1121 |
| Normality | 0.6620 | 0.2566 | 0.3556 | 0.4225 |

Discussion on Model 1

As shown in Table 4, all models for Malaysia include the lagged dependent variables as the regressors since the initial models as mentioned in equation 1 to equation 3 were all facing autocorrelation and serial correlation problems. Nevertheless, the addition of the regressors was not the main concern of the analyses as the main concerns are on the key variables that are indicated in the three equations.

The results imply that credit, investment, and technology play essential roles in influencing the growth of MSMEs. Both credit and technology help to boost the MSMEs growth, but not in the case of investment, which was found to give an adverse effect on MSMEs growth. In opposite, the growth of MSMEs is negatively influenced by credit in Malaysia. Despite the fact that getting credit from financial institutions remains the most common source of finance for MSMEs in Malaysia, the result demonstrates that they are not the most conducive to MSMEs’ performance and growth due to the higher costs of loan financing that MSMEs confront. Fu, Ke & Huang (2002) suggested that MSMEs were able to access equity funding that is more profitable than those that relied significantly on debt financing. They added that their inability to create consistent cash flows and/or high-value collateral increases their credit risk, resulting in higher borrowing costs. This finding is in line with Cheong, Lee, and Weissmann (2020) who found that long-term loans have a statistically significant negative impact on all performance metrics, supporting the idea that MSMEs that take on too much debt suffer performance setbacks as a result of bigger loan obligations resulting from banks charging them higher risk premiums. The findings are in line with previous research, indicating that huge quantities of debt have a negative impact on performance and investor appeal. Since banks view MSMEs as riskier than larger and stable public firms, the risk premiums placed on their debt commitments are higher, limiting the MSMEs’ capacity to repay. In other words, they had to bear the amount of interest charged to make the loan repayment, rather than using it as the rolling capital of the business. Thus, Cheong et al (2020) suggest that new initiatives and plans that provide non-debt finance should be implemented by private or public entities to stimulate continued growth in MSMEs performance.

Meanwhile, although investment has a significant relationship, the findings indicate that it has a negative impact on Indonesian MSMEs growth. In the case of Malaysia, the findings of this study demonstrated that any investment in MSMEs had no statistical effect on overall MSMEs growth in Malaysia. Investment decisions are critical for a company’s continued
operation and development, as they entail freezing financial resources for a longer period of time. Generally, the higher the investment, the higher the MSMEs production of goods and services. It results to higher growth of MSMEs. Unfortunately, having sufficient capital resources for the implementation of investments is difficult for many of the MSMEs (Firlej, 2018). The ASEAN Policy Blueprint for SME Development also revealed low average effectiveness scores for any investment programs devoted to human resource development and capacity building, boosting SME marketing capabilities, access to financing (include investment), access to technology and R&D, and creating a favorable policy environment (Aldaba, 2012). Manufacturing MSMEs, for example, have not generated enough value-added and employment to boost the country's overall manufacturing growth in the recent decade (Aldaba, 2012).

Technology has a significant effect on economic growth in Indonesia. MSMEs, e-commerce, which makes it easier for individuals of all groups to take out economic activities like buying and selling, are the main benefactors of the digital economy. Despite the fact that technical advancements dominate numerous sectors and continue to grow every year, the use of technology is difficult for MSMEs to thrive in the present pandemic condition. One of the most important uses of technology for MSMEs is to make commercial transactions easier. Unfortunately, even though this facility exists in Indonesia, it is underutilized by businesses and their customers (Lestari & Rahmawati, 2021). The lack of knowledge, skills, and expertise in technology, particularly online payment technology, is to blame for the low percentage of MSMEs embracing digital technology. Despite the fact that technology is a new resource for economic growth in the era of globalization, technology is shown to be insignificant in this study for Malaysia. The adoption of internet-based ICT is still not been warmly embraced by MSMEs since a decade ago because it is still being hindered by security and high ICT costs issues among them. Although they see the benefits, most of them are hesitant to implement it due to concerns about ICT security (Tan & Eze, 2008). Tan and Eze discovered in their research that small-scale MSMEs believe that investing in ICT hardware and software is expensive. This has been supported by Chapman et. al., (2000), in which in many developing and developed European countries, however, MSMEs face increased difficulty in adopting new technologies due to various resource constraints and a lack of understanding of ICT-related opportunities.

**Discussion on Model 2**

The rapid development of a country is often associated with an increase in a country's GDP. A rising GDP indicates a country's economy is improving and it is a great signal for measuring the country's GDP performance. Nevertheless, the result for Model 2 shows that the predicted value of MSMEs’ growth is not significant in influencing the economic growth in both countries, Indonesia, and Malaysia. In this case, other relevant variables might be significant in understanding the economic growth for both countries. For instance, Upreti (2015) through his study in developing countries found that there are several factors that contribute to the raising of the economic growth of a country, such as natural resource production, life expectancy, the volume of exports, government debt, net foreign aid, investment rates, and foreign direct investment. However, through his study, there are only four (4) variables that have positive impacts on the GDP growth in developing countries, namely the high volume of exports, plenty of natural resources, longer life expectancy, and higher investment rates. For Indonesia's context, the other reason might be in terms of export. Indonesia’s MSMEs are still lagging behind their
larger competitors. According to Tambunan (2019), Indonesian exports have never exceeded 19 percent of total exports. In 2013, their share of the market was only 4.14 percent, compared to 11.54 percent for medium enterprises. The lower export contribution of MSMEs compared to large enterprises is due to a number of challenges they face when it comes to exporting, including the difficulty in obtaining export permits (although the government has been trying to ease and simplify the processing of export licenses in recent years by, among other things, establishing the Indonesian National Single Window); and financing constraints (ADB, 2002; Hapsari, 2014; Tambunan, 2019).

Besides, the same situation in the Malaysia context, in which Malaysia's economy was strong and diverse in 2015, with high-tech exports worth US$57.258 billion, and exports the second largest volume and value of palm oil products globally. The manufacturing industry, mainly electronics, followed by services and agriculture (agriculture, livestock, forestry, and fisheries) has emerged as the leading economic sector and the biggest contributor to Malaysia’s economic growth. In contrast, Malaysia SMEs 2015 data has recorded their share in GDP were only 35.9 percent and in total exports 19 percent which considers remaining small contributions if compared to large industries (Chin & Lim, 2018). Therefore, it can be considered that MSMEs growth in Malaysia contributes very little (as most of them are micro-sized establishment enterprises) compared to large industrial players where most of them are dominated by multinational companies.

**Discussion on Model 3**

In the Indonesian context, the findings indicate that recursive economic growth simultaneously has a significant effect on unemployment. As mentioned by Prasetyo (2019) through his study, MSMEs are introduced to increase income by providing many jobs to improve economic growth as well as to support the local industry. However, Yuhua (2013) observed the same phenomenon in her Asia-Pacific study, which indicated that MSMEs created more than 90 percent of total employment in all nations in the region, but their contribution to GDP was low.

Nevertheless, in Malaysia’s context, the result shows that economic growth has an insignificant effect on unemployment. The potential reason might be due to the type of unemployment which is more structural rather than cyclical (Kreishan, 2011). Unemployed people who have lack of skills and qualifications to accomplish the available occupations are classified as structurally unemployed. Therefore, this type of unemployment cannot be reduced even though the economy is growing. Hence, there is a need for Malaysia’s government to invest more in their human capital to ensure more skilled and experienced laborers are in the marketplace.

**Conclusion**

The growth of MSMEs is very significant for the countries’ development. Although it has gained massive academic interest, not a single model has been developed that can sufficiently explain why some MSMEs grow, and others do not. Our objectives in this research are to analyze the simultaneous and partial effects of credit, investment, and technology on the growth of MSMEs. In addition, we also assess the influence of the growth of MSMEs and the effect of economic growth on unemployment in the MSMEs. This study found that simultaneously, the distribution of credit, private and government investment, and the use of technology have a significant effect on the growth of MSMEs in Indonesia, but not in Malaysia.
It is worth noting that bank credit proved to hinder MSMEs’ growth in Malaysia despite being one of the primary sources of financing. Rather than using credit as rolling capital for the business, MSMEs have to utilize the fund to pay the cost of financing resulting in an adverse impact on their growth. Furthermore, any investment in Malaysian MSMEs has little statistical significance in terms of total growth due to difficulties faced in providing adequate capital resources. MSMEs require assistance and support from the government and SME sector to expand further into domestic and foreign investment markets. Their growth is also limited by the fact that income is used as saving against uncertain events like financial crises instead of their development. MSMEs are still hesitant to use internet-based ICT because of security concerns and expensive ICT expenses. They also have limited awareness of ICT’s potential and capabilities.

This study also indicates that partially, bank lending and the use of information technology have a significant positive effect, while investment has a significant negative effect on MSMEs growth in Indonesia. Financing through bank credit allows MSMEs in Indonesia to further grow their business. This may be due to the Indonesian government’s response towards the financing policies by allocating a budget to subsidize SME loans which increase annually. The subsidies received from the government are an advantage for MSMEs in Indonesia to cover their financing cost. Notably, the utilization of information technology has aided Indonesian MSMEs in improving their operations. Since MSMEs are the major type of existing businesses in Indonesia, it has become necessary for the government to assist in digitalization in order to keep up with the shift in customer preferences towards m-commerce in recent years. However, Indonesian MSMEs’ investment negatively correlates with their growth. This may be due to a large number of funds allocated on investment rather than improving their business operation, which has impeded their growth.

Technology has a significant effect on economic growth in Indonesia. The biggest beneficiaries of the digital economy, in particular, are MSMEs, e-commerce which makes it easier for people of all groups to carry out economic activities such as buying and selling. Even though technological developments dominate many sectors, and keep increasing every year, however, the utilization of technology is a challenge for MSMEs to be able to survive. One of the main functions of the use of technology for MSMEs is to facilitate a business transaction. Unfortunately, in Indonesia, this facility, even though they have, but still underused by businesses and their customers. The low number of MSMEs using digital technology is due to a lack of knowledge, skills, and expertise on technology, particularly of online payment technology. There is a need for the MSMEs to synergize with Corporation experts in technology-based in order to increase competitiveness in the market.

Meanwhile, in Malaysia, only credit has a significant negative effect on the growth of MSMEs in Malaysia. MSMEs do not benefit from bank financing when it comes to business growth since the cost of the financing may be greater than the value it delivers. The risk premiums on debt commitment for MSMEs are high, thus limiting their ability to repay and hampering their business growth since they are obligated to pay the interest charged. However, technology and investment are both insignificant. Limited knowledge on ICT, high cost of implementation, and security are some of the worries that MSMEs have when it comes to embracing information technology, causing them to stay with a traditional operation which is ineffective towards their growth. Investment is also found to be non-related to MSMEs growth since it necessitates the establishment of capital resources which many MSMEs do not have. It is also challenging for
MSMEs to penetrate foreign or even local investment markets without additional support from the government and the industry.

The growth of MSMEs is found to have no significant effect on economic growth in Indonesia and Malaysia which means that their growth is not related to the growth of the economy. But economic growth has a significant effect on reducing unemployment in Indonesia, but not in the case of Malaysia. Indonesia is able to create job opportunities as a result of its economic growth which helps to alleviate unemployment. However, the same thing cannot be applied to Malaysia. In the period of economic growth, rapid technological and structural development may occur which limits the number of workers that may be equipped to handle the changes. Increasing productivity growth of employees may also be one of the reasons why economic growth has no effect on unemployment in Malaysia. Businesses are able to produce better output with the same number of employees due to the high productivity shown by them.

Suggestions for Future Research

This study provides an extensive investigation on MSMEs growth in Malaysia and Indonesia. Despite promising outcomes, there have been various limitations to the study which should be highlighted and addressed in the case of future research. In respect of the findings, the study may be limited to the populations and factors investigated in the context of the study which focuses on the credit, technology, and investment towards the growth of MSMEs in Malaysia and Indonesia. Future research can consider comparative studies between developed and developing countries. It is yet to be tested whether or not the findings can be applied more broadly to other factors in a different geographical location which may then be further explored by future researchers by including potential variables such as government support. Another limitation is that the data collected is time series secondary data through related agencies. Therefore, in order to verify the actual situation concerning MSMEs’ response towards the variables, it is recommended for future research to adapt primary data and continue studies on their growth amongst key players in the sector itself. This may improve the accuracy of the data findings since the information is acquired directly from the organization.

Moreover, the population in this study is all variable data studied in Indonesia with samples obtained from both Indonesia and Malaysia. Hence, by conducting interviews and focus groups with bigger sample size, generalizability may be expanded to a larger population. It is suggested for future research to adopt a qualitative approach to enhance the model in assessing MSMEs growth. New factors could be possibly extracted from in-depth interviews conducted among the organizations, thus improving the model of MSMEs growth.

Next, limited information from primary data and it is, therefore, recommended to conduct another research with comprehensive primary together with secondary data. Therefore, this will make it possible for further comprehensive explanations for all the relationships been tested. Next, comprehensive studies are recommended to address the most important function of investment and technology on micro-businesses affected by the Covid-19 pandemic.

Therefore, given that these few limitations exist, it is acknowledged that future research should be carried out in light of the suggestion made in an attempt to further complement this study. Understanding the factors affecting MSMEs growth not only provides important insight to industry players and consumers but also will guide researchers studying the development of MSMEs.
References

ADB. (2020). Asia small and medium-sized enterprise monitor 2020. Volume II-covid-19 impact on micro, small and medium-sized enterprises in developing Asia. Retrieved from: https://www.adb.org/publications/asia-sme-monitor-2020-covid-19-impact-msmes

Aldaba, R. M. (2012). SME Development: Narrowing the Development Gap in the ASEAN Economic Community. *Philippine Journal of Development*, 39(1/2), 143–169.

Amalia, S. R. (2014). Perkembangan UMKM di Negara Berkembang (Fokus Pada Indonesia, Malaysia, dan Filipina). *Jurnal Ekonomi Pembangunan*, 1-15.

BL. (2016). Pemetaan dan strategi peningkatan daya saing UMKM dalam menghadapi masyarakat ekonomi ASEAN (MEA) 2015 dan pasca MEA 2025. Retrieved from: https://www.bi.go.id/id/umkm/penelitian/Pages/Pemetaan-dan-Strategi-Peningkatan-Daya-Saing-UMKM-dalam-Menghadapi-Masyarakat-Ekonomi-ASEAN-(2015)-dan-Pasca-MEA-2025.aspx

BPS. (2018). Statistik Telekomunikasi Indonesia 2018. Retrieved from: https://www.bps.go.id/publication/2019/12/02/6799f23db22e9bdc52c8e03/statistik-telekomunikasi-indonesia-2018.html

Chapman, P., James-Moore, M., Szczygiel, M., & Thompson, D. (2000). Building internet capabilities in SMEs. *Logistics Information Management* 13(6), 353-361.

Chin, Y. W., and Ee-Shiang, L. (2018). SME Policies and Performance in Malaysia. *Economics Working Paper*. ISEAS Yusof Ishak Institute. No. 2018-3.

Cheong, C. W. H., Lee, M. H., & Weissmann, M. A. (2020). Credit access, tax structure, and the performance of Malaysian manufacturing SMEs. *International Journal of Managerial Finance*, 16(4), 433–454. https://doi.org/10.1108/IJMF-08-2019-0308

Department of Statistic Malaysia Official Portal. (2021). Retrieved from; https://www.dosm.gov.my/v1/index.php?r=column/ctheme&menu_id=U3VPMldoYUxzVzFaYmNkWXZteGduZz09&bul_id=NHUxTlk1czVzMGYwS29mOEc5NUtOQT09.

Firlej, K. A. (2018). Financing innovations by venture capital funds as a determinant of innovativeness of economy. *Ekonomiczne Problemy Usług* 132, 41–53

Fu, T. W., Ke, M. C., & Huang, Y. S. (2002). Capital growth, financing source, and profitability of small businesses: evidence from Taiwan small enterprises. *Small Business Economics*, 18(4), 257-267.

Gujarati, D. N. & Porter, D. C. (2012). *Basic econometrics (5th ed.).* Mc. Graw Hill: New York.

Hapsari, I. M. (2014). Identifikasi berbagai permasalahan yang dihadapi oleh UKM dan peninjauan kembali regulasi UKM sebagai langkah awal revitalisasi UKM (Identifying various problems faced by SMEs and SME regulatory review as the first step of SME revitalization). *PERMANA*, V(2), 43–47.

Hendriyani, C. (2016). Contradictions economic growth & investor exit in Indonesia. *Jurnal AdBispreneur*, 1(1), 19-26.

Juditha, C. (2017). Study ekonomi digital di Indonesia sebagai pendorong untuk pertumbuhan industri digital masa depan. Badan penelitian dan pengembangan sumber daya manusia. Kominfo: Jakarta.

Kreishan. (2011). Economic growth and unemployment: An empirical analysis. *Journal of Social Sciences*, 7(2), 228–231. https://doi.org/10.3844/jssp.2011.228.231
Lestari, C. D. & Rahmawati, F. (2021). Measuring the impact of technology, politics, and human resources on inclusive economic growth in Indonesia. *Economics Social and Development Studies*, 8(1), 65-85.

Lidwina, A. (2020). PandemiC covid-19 pacu MSMEs gunakan media digital. Retrieved from: https://databoks.katadata.co.id/tags/MSMEs.

Marlina, L. (2020). Peluang dan tantangan UMKM dalam upaya memperkuat perekonomian nasional tahun 2020 ditengah pandemi covid-19. *Jurnal Ekonomi Universitas Borobudur*, 22(2): 118-124.

Munanand, A. (2016). The strategy development and competitive advantages of micro small medium enterprise business institutions toward regional development. *Jurnal AdBispreneur* 1(2), 103-112.

Nafziger, E. W. (2012). *Economic Development (5th ed.)*. Cambridge University Press: United Kingdom.

Prasetyo, P. E. (2019). The reliability of entrepreneurial productivity as a driver of economic growth and employment. *International Journal of Entrepreneurship*, 23(4), 1-15.

Pusparisa, Y. (2020). Berapa sumbangan MSMEs terhadap perekonomian di Indonesia. Retrieved from: https://databoks.katadata.co.id/tags/MSMEs.

Rudianto and Susilastuti, D. (2019). Determinan eksport industri kerajinan Indonesia. https://www.researchgate.net/publication/337058006. Prosiding Semnas Cendekiawan Univ. Trisaksi.

Salim, M. N., Susilastuti, D., and Rafiqah, I. W. (2020). The determinant of MSMEs performance and its impact on province GRDP. *International Journal of Business Economics and Management*, 7(1), 1-3.

Santia, T. (2020). Berapa jumlah MSMEs di Indonesia? Ini hitungannya. Retrieved from: https://www.liputan6.com/bisnis/read/4346352/berapa-jumlah-MSMEs-di-indonesia-ini-hitungannya#

Simatupang, A., & Subawa. (2018). Pengaruh suku bunga kredit bank konvensional, syariah dan koperasi terhadap permintaan kredit MSMEs eksport. *Journal of Business Studies*, 3(2), 1-18.

Tambunan, T. (2019). Recent evidence of the development of micro, small and medium enterprises in Indonesia. *Journal of Global Entrepreneurship Research*, 9(1). https://doi.org/10.1186/s40497-018-0140-4.

Tan, K. S., & Eze, U. C. (2008). An empirical study of internet-based ICT adoption among Malaysian SMEs. Proceedings of the 10th International Business Information Management Association Conference, 1, 292–302.

Tange, J., (2015). Effects of external factors on the small and medium enterprise in South Sumatera Province, Indonesia. *Jurnal Penelitian dan Pengetahuan Pengembangan Akuntansi*, 9(1), 27-52.

UMN. (2016). Principles of macroeconomics. The University of Minnesota Libraries Publishing.

Upreti, P. (2015). Major themes in economics factors affecting economic growth in developing countries. *Major Theme in Economics*, 17, 37–54.
Yuhua, B. Z. (2013). SMEs in the APEC region. APEC Policy Support Unit, Policy Brief No. 8. December. Singapore: APEC Secretariat.

Zakky, (2018). Pengertian Teknologi. Retrieved from: http://www.teknospin.com.