The Impact of Economic Outlook on the Stock Market of the Service Sector in Malaysia

Yong Xian Jeat, Hafinaz Hasniyanti Hassan

Abstract: This research is focus on the impact of the economic factors on the service sector’s stock market in Malaysia for the period of year 2012 to year 2016 which are five years. In the year 2014, the value of the Malaysian Ringgit (MYR) was starting to decrease dramatically as well as other factors affected by the exchange rate of Malaysia currency such as interest rate and money supply. Therefore, this research seeks to find out on the effect of the exchange rate, interest rate and money supply on the stock market of the service and trading companies (service sectors). The relationship between the service sector’s stock market and the exchange rate, interest rate and money supply are determined by using the correlation and multiple regressions analysis. Overall, the results showed that the stock market of the service sectors in Malaysia would likely to be affected by the exchange rate, money supply and interest rate, yet the most influence factor was the exchange rate as the Malaysian Ringgit is decreased in value, sending the panic to the market.

Keywords: Stock market, exchange rate, interest rate, money supply, service sector

I. INTRODUCTION

The stock market is a trading platform for the securities of stocks which allow the investors and public to purchase and sell the stocks in the market, hence the buyers and sellers can trade their stocks in this market as the business or income generator. The stock market is included the stock exchange and the private trading of stock as well. Therefore, stock market is the platform to let people selling and buying the stocks from other in order to gain some income (Blocher, et al., 2013). Moreover, the organization and government can raise fund from the stock market which they can issue new stock into the stock market in order to get the funds from the investors and public, this is the primary market which the investors or public are directly purchase new issued stocks from them. In addition, the secondary market is the trading platform such as the stock exchange which allow the investors trade their stocks in the stock market. However, the higher price of the stock would indicate the wealth of the shareholders and the performance of the organization had been maximized, and this is the primary goal of the organization. The higher demand of the stock would increase the price of the stock due to the supply of the stock is low (Blocher, et al., 2013), thus the higher price would attract more investors who hold that particular stock to sell to other investors who are desired to buy. Therefore, the investors can purchase the issued shares to have a portion of ownership of the organization through the stock market.

However, the organization’s shares can only be traded on the stock market when the organization is listed company. In Malaysia, the stock exchange company named as Bursa Malaysia Berhad supervised and monitored by the Securities Commission. Securities Commission is an oversight body to ensure the stock exchange company fulfil the regulation (Bursamalaysia, 2017). Furthermore, the stock market can attract the attention of the economists, governments and financial experts because the stock market has the feature of providing the real economy. The stock market is the central point of capital market activities and it is a crucial growth in a nation’s economy because of the government and organization are raising their long-term capital by issuing new stock into the stock market in order to financing, expanding and modernizing their businesses which can contribute to the economy growth of a nation directly and indirectly (Gupta-Bhattacharya, et al., 2014). However, the stock is the most sensitive assets to the economic condition which the stock market can influenced by the macroeconomic variables (Barakat, et al., 2016). The macroeconomic variables such as the exchange rate, consumer price index (CPI), money supply, interest rate, industrial production index, Gross Domestic Product (GDP), financial crisis and inflation rate (Gupta-Bhattacharya, et al., 2014) (Ricky Chee & Shiok, 2015).

According to Jermann and Quadrini (2012), they found out the macroeconomic effect can bring the shock to the financial of the organization or the nation. Therefore, Sindhu (2014), Kalyanaraman & Tuwajri (2014), Megeravalli & Sampagnaro (2018) and (El-Nader & Alramony (2012) did the research on the macroeconomic effect on the stock market of the service stock in order to determine the impact of the macroeconomic variable whether is significantly influence the stock market. The effect of the macroeconomic variables such as the money supply and interest rate on the stock price would likely reflect the current stock prices which cause the investors are unable to forecast the abnormal gain from the stock due to the macroeconomics effect (Maysami, et al., 2004). The macroeconomic variables are unable to predict and forecast what would happen in the future but the macroeconomic variables can be used to measure the performance of the stock market development, besides that the investors can use these variables to analyze their stock trend.

The economic outlook is one of the factor that investors must consider about before investing into the stock market because investors could have the better and clearer picture of understanding and performance of the stock through the economic outlook.
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The bear market and bull market which represented the down surges and up surges respectively in the stock market can be explained by the expected and current conditions of economic outlook (Gupta-Bhattacharya, et al., 2014). However, the economy outlook is subject to the changing of the global event or some nation event. Therefore, the stock market is likely to be pressured by the global event such as the interest rate and exchange rate movement, and these are the macroeconomic variables (Deb & Mukherjee, 2008). In addition, the relationship between the macroeconomic variable and the stock market is not only attracting the public but the economist, financial investors and policy makers as well because of the policy makers can predict the full effect of current and upcoming policies and regulations, investors can able to understand the risk occur when making any decision and public can aware of the changes that might happen or happened in the economy which could affect the stock market (Barakat, et al., 2016). Therefore, the investors can use the economy outlook to aid their decision on the stock trading, for example decide whether they want to buy or sell the stocks in the stock market. This is the reason the macroeconomic variable is important to the investors, public and government, which they can measure or forecast the performance of the stock market by looking at the current condition of the economy outlook.

The economic outlook also can be used to estimate the performance of the stock market included the stock market of service sector in order to reduce the uncertainty risk before investing into the stock market because by understanding the economic outlook can understand the current condition of the stock market development which can allow the investors make a better decision on the stock trading. Besides that, the stock market can shape the economic development of a nation as well, which the organization and government can get the funds immediately from the investors in order to expanding and financing their business. However, a healthy economy does not indicate that the stock market performance is in the great condition (Asmy, et al., 2009). Therefore, the better understanding of the economy outlook can increase the confidence of the investors to invest in the stock market by improving the decision making of the investors, once the confidence of the investors are high enough to purchase the stocks then the growth of the nation’s economy would likely to increase.

However, the investors would not make a clear decision of calling and pulling in the stock market if the investors do not know the existence of the external factors that influenced the stock market’s performance. Based on the statement of Shane Choo, the co-founder of the Life Champ, investors should understand the world economy outlook as it is important that investors can establish strategy to encounter the effects (Mahalingam, 2017). Thus, if Malaysian investors did not concern about the variables or enough knowledge, it could cause them unable to make decision clearly. From year 2008 until year 2009, the stock market of United States collapsed due to subprime crisis. It has badly affected the performance of global stock market in several regions including China, Japan, Singapore, Hong Kong as well as Malaysia (Landler, 2008). Therefore, the relationship between economic variables and stock market is very important to a nation because of the macroeconomic variable can influence the stock market and cause a lot of damage to investors if investors did not concern about the economic outlook.

The economic outlook of Malaysia in year 2012 was started dramatically changing with its currency value dropped (Davies, 2017), and the exchange rate had influence other factors such as interest due to the exchange rate affected the inflation rate and ultimately got higher interest rate (Borneopost, 2015). Therefore, the investors should have the better understanding on the impact of the economic outlook on the stock market especially in the service sector since it is one of the largest investments in Malaysia because this could help investors to increase their confidence and knowledge to invest into the stock market safety and with lower uncertainty. Therefore, investors can understand the effect of economic outlook on the service sector stock market from this research. Once, the investors understanding the volatility of the stock market and economic activities can influence their long-term and short-term decision making on stock trading (Engle, et al., 2013). In conclusion, the higher the knowledge of the impact of the macroeconomic variable on the stock market can lead to higher growth of a nation’s economy.

On the other hands, many previous researchers conducted the stock market and economic outlook but not into specific areas such as in depth of the manufacturing, primary and service sector. Service sector is one of the major and important income sources in Malaysia that gradually increase from 47.1% in 2008 up to 55.1% in year 2015. There are huge amount of investments in the service sector as compared to other sectors (refer to Table 1 below). The value added into the service sector includes the wholesale, retail trading, restaurants and hotels, transport, government, financial, professional, and personal service such as the health care, real estate service and education. However, the bank service, import duties and any statistical discrepancies noted by the national compliers as well as discrepancies arising from the rescaling are included in the service sector (Databank worldbank, 2017).
Asset pricing theory (APT) is the view that some factors are the leading source of one or more variables correlated among the asset returns which the macroeconomic variable would affect the stock market’s performance as macroeconomic variable is a systematic risk, it was developed by Ross in 1976 (Bodurtha, et al., 1989). According to Bodurtha et al. (1989), the APT does not provide a specific economic factors that influence the asset prices. However, there are two distinct strategies in the APT, first strategy is the factors analysis that measure the unobservable common factors, it is to focus on the systematic risk of single security or factor loading but there is limitation which the pricing factors cannot be identified because of intrinsic issue of rotation. The second is a common factor that measured by macroeconomic or financial data (Bodurtha, et al., 1989), such as the inflation rate, money supply, interest rate and industrial production as the macroeconomic variables, hence these variable can influence trend of the performance of the stock market in this theory (Chee & Lim, 2015). APT is one of the method to forecast the stock returns but there is another model to predict the stock market’s performance which is the Capital Asset Pricing Model (CAPM) (Ouma & Muriu, 2014).

II. LITERATURE REVIEW

A. Arbitrage Pricing Theory (APT)

The stock market is the important platform that the organization and government can raise the fund for their capital which the investors can have a portion of the ownership of the organization after the trading of stock. However, the stock market performance can be affected by the increasing or decreasing of the stock prices (Asmy, et al., 2009). Therefore, the performance of the stock market can be measured by the return, volatility and liquidity of the stock market. The high level of the volatility of the stock market would lead to the higher level of uncertainty which is higher risk, which the risk takers would invest into the stock market while the volatility of stock market is high. However, the risk averse would hold the stock or sell the stock while the volatility of stock market is high (Jayasuriya, 2005). Therefore, the high volatility of stock market would cause low number of investors to invest into the stock market and lead to the lower stock market performance. A part from that, the performance of the stock market would influence the growth of the economic in a nation, from this feature can also attract the foreign investors to invest into the stock market of the nation because of the organization can reduce the investment risk by obtaining the capital from market. Therefore, the performance of the stock market can increase the economic growth of a nation by attracting the foreign investment into the nation (Singh, 1993). However, according to Maysami and Koh (2000), the macroeconomic variable have the relationship with the stock market level which the macroeconomic variable can be influenced the performance of the stock market. Therefore, the macroeconomic variable can be affected the growth of the nation’s economic by influencing the stock market performance. Besides that, the stock market performance is sensitive to the economic condition which the changes of the stock price would affect the economy (Barakat, et al., 2016). According to Linck and Decourt (2016), the stock market is really sensitive to many variables which from the host of economic indices to the disclosure of fundamentalist information, which the result showed that the variables can influence the changes of stock market. Furthermore, the volatility of the stock market is highly related to the economic activities which the movement of the stock market can be influenced by the macroeconomic variables (Engle, et al., 2013).

B. Capital Asset Pricing Model (CAPM)

The Capital Asset Pricing Model (CAPM) is developed by Sharpe in 1964, Mossin in 1966 and Lintner in 1965 (Lipiec, 2014) (Ouma & Muriu, 2014), three of them have the same conclusion that the CAPM related the expected return of a security to the systematic risk which is the market risk which cannot be diversified. In this theory, two types of risk had been assumed which are the market risk (systematic risk) and the security risk (unsystematic risk) (Ouma & Muriu, 2014). The security risk is the individual risk which can be diversified by adding new security into the portfolio in order to reduce the risk (Lipiec, 2014).

Table 1: Total Investment in each Sector

<table>
<thead>
<tr>
<th>Summary</th>
<th>Number</th>
<th>Domestic Investment (RM million)</th>
<th>Foreign Investment (RM million)</th>
<th>Total Investment (RM million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Sector</td>
<td>Jan-Sept 2017</td>
<td>36</td>
<td>6,357.7</td>
<td>4,925.2</td>
</tr>
<tr>
<td>Manufacturing Sector</td>
<td>Jan-Sept 2017</td>
<td>464</td>
<td>20,807.6</td>
<td>31,075.3</td>
</tr>
<tr>
<td>Service Sector</td>
<td>Jan-Sept 2017</td>
<td>3,386</td>
<td>56,222.6</td>
<td>117,705.5</td>
</tr>
<tr>
<td>Total</td>
<td>Jan-Sept 2017</td>
<td>3,886</td>
<td>83,387.9</td>
<td>153,706.0</td>
</tr>
</tbody>
</table>

Source: (Mida, 2017)
In conclusion, the stock market can be influenced by the variables of the economic outlook which performance of the stock market can be measured by the variable as well. When there are any changes of the economic outlook would affect the stock market price.

**C. Inflation rate**

The inflation rate can be defined as the indicator of the stability of the economic condition of a nation. The inflation rate is the pricing level of the good and service in a nation which the prices of the goods and services can be affected by the inflation rate. The inflation rate is the percentage of how much the price of goods and services would increase. In addition, the higher inflation rate would indicated that the purchasing power of the domestic consumers have decrease, in result the value of the nation’s currency would decline. Therefore, a nation have the responsible to control the inflation rate in order to sustain its economic stability (Rashid, et al., 2011). Based on the research of Aliyu (2012), the inflation rate had the impacts on the stock returns and its volatility. The result of this research showed that the changing on the inflation rate would lead to the volatility of the stock return becomes more fluctuated. Besides that, the volatility of the stock market is highly influenced by the news as well which the news is bad would be more affecting than the good news. In addition, according to the Omran and Pointon (2001), the relationship between the performance of the stock market and the inflation rate had been conducted which showed the inflation rate influenced the performance of the stock market in terms of the activity and liquidity. However, the result showed that the inflation rate have the negative relationship with the stock market liquidity when in the long term. Asmyet al. (2009) argued that the relationship between the inflation rate and the stock market was positive relationship in the long term in the crisis period in Malaysia. However, the result showed that the inflation rate is increased would likely to affect the money supply which it will become negative relationship with the stock market due to the stock prices decreased. Furthermore, Engle et al. (2013) and Linck and Roberto (2016) both agreed and found out that the relationship between the inflation rate and the stock market was positive relationship. Sajjadet al. (2012) supported that the inflation rate is positively impact on the stock market performance but the long term relationship is not existed between the inflation rate and stock market performance. Khan et al. (2011) also agreed that the inflation rate and the stock market has the positive relationship which the inflation rate is high in a nation would affect the number of investment, it would decrease the investments number because the inflation rate would reduce the income of the investors from purchasing power reduced and the depreciation of the nation’s currency. Last but not least, the Gupta- Bhattacharya et al. (2014) stated that the inflation rate should maintain in the reasonable level in order to enhance the performance of the stock market.

Most of the prior studies showed that the relationship between the inflation rate and the stock market is positive but only one studies found that the relationship is negative. Therefore, the result was not consistent. Besides that, the inflation rate is seemed to be had the relationship with the money supply and exchange rate during the crisis condition. As conclusion, the variable had been selected due to the inflation rate has the linkage to other variables such as the money supply and exchange rate, a part from that, the inflation rate in Malaysia is one of the crucial influenced on the purchasing power of the investor. Therefore, the hypothesis can be formed as:

H0: There is no significant relationship between inflation rate and the stock market in Malaysia.

H1: There is significant relationship between inflation rate and the stock market in Malaysia.

**D. Money Supply**

The money supply can be defined as the total amount of the currency in units which supplied in the economy of the nation. However, the money supply has three categories which are the M1, M2 and M3. The M1 is the money supply in the form of coins, currency notes and paper, cheques of traveller and checkable deposits. The M2 is the saving and time deposit but the M3 has the larger time deposit which both of them are in the non-institutional money market mutual funds (Zafar, et al., 2011). The M2 is usually used by the researchers to conduct the research (Gupta- Bhattacharya, et al., 2014).

According to the result of Khan et al. (2011), the money supply (M2) has the positive relationship with the stock market. When the money supply was increased, the stock market performance would be better and cause the higher return to the investors. Ricky Chee and Lee (2015) agreed that the relationship between the money supply and stock market is positive. The share price can be influenced by the money supply in the Malaysia in the long term. Furthermore, Li and Wu (2008) and Abdelbaki (2013) found that the money supply would bring the impact to the economy of a nation included the impact on the stock market. Li and Wu (2008) stated that the monetary policy can stimulate the export activities and Abdelbaki (2013) stated that the monetary policy which increase the money supply would affect the stock market which the interest rate would decrease when the money supply is high, this caused the investors have more funds to invest into the stock market. Based on the research of Gupta- Bhattacharya et al. (2014), the money supply has the positive relationship with the stock market and the money supply is the macroeconomic variable that can increase the growth of a nation’s economy and stability of the stock market. However, there are some prior researchers Barakatet al. (2016) and Gupta-Bhattacharya et al. (2014) stated that the money supply has the negative relationship with the stock market.

This variable is selected due to the inconsistent result and money supply is also one of the variables that can influence the confidence of the investors for investing in the stock market which can contribute to the economic growth in a nation. However, the money supply is whether able to influence the stock market during the exchange rate is high in Malaysia. Therefore, the hypothesis can be formed as:

H1: There is significant relationship between money supply (M2) and the stock market in Malaysia.
E. Exchange rate

The exchange rate is also one of the macroeconomic variables as well and it is the factor that consolidates the financial position of a nation. The exchange rate is the rate that arises when the value of the domestic currency is changing such as depreciation or appreciation. The exchange rate can be the additional cost or the income for the people. However, the appreciation of the value of domestic currency will indicate that other currencies are depreciated in other nations (Adjasi, et al., 2008). The exchange rate can be used to determine the performance of the stock market because when the domestic currency decreased, it would attract more foreign investors to invest in that nation which they can use lower cost to buy stocks after the exchange rate increased again, they would sell the stock to gain profit (Asmy, et al., 2009).

According to Gupta- Bhattacharyya et al. (2014), the exchange rate has the positive relationship with the stock market, hence the investors should aware on the changing of the exchange rate due to the exchange rate can affect the stock market return even though there are the Malaysia Stock Market Development (MSMD) assist the investors in establishing the appropriate trades. Based on other prior studies of Engle et al. (2013), Linck and Roberto (2016) and Ricky Chee and Lim (2015), they agreed that the relationship between the exchange rate and the stock market is positive relationship. However, based on Asmyet al. (2009), they found out the exchange rate is positive relationship with the stock market before the financial crisis but after the crisis the relationship will be negative. The depreciation on the currency would bring more investment into the nation.

Therefore, this variable is selected due to the exchange rate is significant in this study because the exchange rate in Malaysia from year 2013 to year 2016 has a big changes. It can show how well the exchange rate affect the stock market, and from this study could able to find out the possible crisis in the future.

H1: There is significant relationship between exchange rate and the stock market in Malaysia

III. METHODS & MATERIALS

This study will be based on the quantitative study which is to collect the data first, then analyze the data and conclude the findings. The next step will be explaining the findings based on the data analysis. The quantitative approaches are used to identify the relationship between the variables and explain how the variables related to each other (Creswell , 2013). Besides, this study uses secondary data of inflation rate, money supply and exchange rate from Monthly Statistical Bulletin of Bank Negara Malaysia. However the stock market performance of Malaysia will be collected from Wall Street Journal. The FTSE KLCI is using top 30 companies as the index and the current number of the listing companies is more than 900 included ACE and LEAP. Therefore, 100 service and trading companies will be selected as the sample to form the Index for the service sector. The Index is used to represent the performance of the stock market of service sector. Besides that, the data will be quarterly collected for each year. Hence, the collected stock prices data of the 100 companies should in the month of January, April, July and October of the year. The data collection is from the year of 2012 to year of 2016 because during these years, the exchange rate of the Malaysia has huge differences as compared to past few years. The exchange rate of MYR to USD was unfavourable as the annual gain of the MYR currency based on Bloomberg Markets. The MYR was weakening and the value of the MYR was dropped significantly in end of 2014 (Ho, 2014; Davies, 2017). The money supply is using two type of money supply which are the M2 and M1. The measurement of the M1 is the sum of the currency notes, coins, checkable deposits and cheques of traveller. The measurement of the M2 is the sum of the M1, saving deposits, time deposits, money market mutual funds which is the non-institutional. The inflation rate (INF) is the percentage of the consumer price in the Bank Negara Malaysia Statistics. The exchange rate (ER) and Money Supply (M2) also will be extracted from the Bank Negara Malaysia Statistics, while the performance of the stock market is represented by the Kuala Lumpur Composite Index (KLCI) for the Malaysia stock market.

This study will use two type of analysis to conduct the research which is to find the positive or negative relationship between the dependent variable and the independent variables and the significant relationship of the impact of the economic outlook on the stock market’s service sector. Therefore, the correlation analysis and multiple regression analysis will be used to find the positive or negative relationship between the dependent variable and the independent variables and to identify the significant relationship between those variables respectively.

IV. RESULTS

A. Normality Test

Skewness and Kurtosis are used to check whether the data is normally distributed or not. Consequently the range of the Skewness and Kurtosis of the result should between positive two and negative two (±2) which it would be considered as normally distributed (Lomax & Hahs-Vaughn, 2012). Besides that, the statistic of the Skewness and Kurtosis result can be divided by the standard error to check the normality of the data as well which the range of the Skewness and Kurtosis are also in the range of ±2. Therefore, the result of data of Index (Stock price of Trading and Service Companies), Money Supply (M2), Inflation Rate and Exchange Rate are acceptable as normal distributed since the data are within the range of ±2. Another normality is the one-sample Kolmogorov- Smirnova. It is one of the non-parametric test that directly testing the variables with its mean and standard deviation to verify the normal distribution of the data (Vianee, et al., 2012). All the variables are normally distributed using one-sample Kolmogorov- Smirnova with all significant level above 0.05. Besides from that, there is another normality test which is the Q-Q plot. It can check the normality of the data as well examine the points on the Q-Q plot whether is fell on the straight line or there are some outliers in the Q-Q plot (Veleza & Moralesb, 2015). If the points mostly fall on the straight line, the data would be normal but if there are many outliers or some points are
far from the straight line, it would assume the data is not normal distributed. The outcome of the Q-Q plot showed the data of the variables are still in the range of normal (refer to Figures below).

B. Correlation Analysis

According to Saunders, et al. (2009), the relationship of the variable is perfectly independent once the correlation is 0. The correlation of ±0.3 and ±0.7 would indicate the relationship between variables are weak relationship and strong relationship respectively. Besides that, the level of significant should be less than 0.05 to reveal the significant correlation of the variables.

Based on table below, the correlation between Index and Money Supply (M2) have strong positive relationship (0.835) with significant level 0.000. Thus when the value or amount of the M2 is increased, the Index would likely to increase as well due to the positive correlation that move toward the same direction. On the other hand, the Inflation Rate and Index have the result of correlation 0.412 and significant level of 0.071. Consequently the result showed that these two variables have positive correlation but the relationship is weak, expressing the Inflation Rate increased does not significantly follow the movement of the Index or vice versa. The result of the correlation between Index and Exchange Rate is 0.485 with significant level of 0.03. Both variables have positive weak correlation relationship which the Exchange Rate increased or decreased, the Index would likely to have the same movement with the Exchange Rate.

<table>
<thead>
<tr>
<th></th>
<th>Index</th>
<th>Money Supply 2</th>
<th>Inflation Rate</th>
<th>Exchange Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Index</strong></td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.835**</td>
<td>.412</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.071</td>
<td>.030</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td><strong>Money Supply 2 for Quarter in each Year</strong></td>
<td>Pearson Correlation</td>
<td>.835**</td>
<td>1</td>
<td>.178</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.454</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td><strong>Inflation Rate for Quarter in each Year</strong></td>
<td>Pearson Correlation</td>
<td>.412</td>
<td>.178</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.071</td>
<td>.454</td>
<td>.691</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td><strong>Exchange Rate for Quarter in each Year</strong></td>
<td>Pearson Correlation</td>
<td>.485**</td>
<td>.849**</td>
<td>.095</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.030</td>
<td>.000</td>
<td>.691</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
C. Multiple Regression Analysis

The Model Summary showed the R and adjusted R Square (Adjusted R²). According to Saunders, et al. (2009) and Burns & Burns (2008), the R and adjusted R Square are used to determine the fitness of the independent variables on the regression analysis. Besides that, the variance of the dependent variables can be determined and explained by the regression analysis from the result of the Model Summary. Therefore, the R is representing the multiple correlation of the independent that is whether correlating with the dependent variable (Saunders, et al., 2009), and the adjusted R Square can illustrate the dependent variable whether can explain by the independent variables (Burns & Burns, 2008). In the table below, the R from the Model Summary is 0.962 and the adjusted R Square is 0.911; it indicated the variables have the great degree that can fit into the regression analysis. It also shows that combining three independent variables and dependent variable. Furthermore, the adjusted R Square is 0.911 which revealed 91.1% of the index can be explained by the independent variables in the multiple regression analysis while the remaining percent is unexplained which might able to explain by other factors.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.962a</td>
<td>.925</td>
<td>.911</td>
<td>.0622936</td>
</tr>
</tbody>
</table>

According to Sawyer (2009) and Kim (2014), the Anova test can explain the independent variables are whether significantly related to the dependent variable. Moreover, the F-statistic would show the measure of variances dispersion which testing the distance of the data from the mean, and the higher F-statistic would have higher degree of dispersion (Burns & Burns, 2008). Therefore, the result of the Anova test showed in the table below, the F-statistic is 65.956 with the significant level of 0.000 which indicating the independent variables are significantly related to the dependent variable.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>.768</td>
<td>3</td>
<td>.256</td>
<td>65.956</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>.062</td>
<td>16</td>
<td>.004</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>.830</td>
<td>19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Saunders, et al. (2009) and Burns & Burns (2008), coefficients is to reveal the significant of the regression among the variables. In the table below, it showed the result of the multiple regression analysis that the Money Supply is statistically significant result with significant level of 0.000.

The Inflation Rate and Exchange Rate shared the same result with the Money Supply which the significant levels are 0.005 and 0.000 respectively. Overall, the results showed three variables are significant as their level of significant are below 0.05. This implied the null hypothesis is successfully to reject and the alternative hypothesis to be accepted.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-0.965</td>
<td>0.183</td>
<td>-5.26</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>Money Supply 2 for Quarter in each Year</td>
<td>2.445E-06</td>
<td>0</td>
<td>1.433</td>
</tr>
<tr>
<td></td>
<td>Inflation Rate for Quarter in each Year</td>
<td>0.06</td>
<td>0.018</td>
<td>0.228</td>
</tr>
<tr>
<td></td>
<td>Exchange Rate for Quarter in each Year</td>
<td>-0.344</td>
<td>0.059</td>
<td>-0.753</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Stock Price of 100 Companies for Quarter in each Year
According to Sindhu (2014), Kalyanaraman & Tuwajri (2014), Ricky Chee and Lee (2015), El-Nader & Alraimoney (2012) and Suhaib et al. (2017), the Money Supply had the significant relationship with the stock market which is consistent with the obtained result. Based on the research of El-Nader & Alraimoney (2012), the Money Supply had the positive significant relationship with the stock market of Amman, which means the Money increased in amount, it will cause the stock market increased as well in Amman. Despite, the finding of Suhaib et al. (2017) showed the Money Supply had the significant relationship with the stock market but the result was negative significant relationship. The Money Supply would have negative impact toward to stock market of twelve African countries. Therefore, the Money Supply increased would affect the stock market performance that it would decrease in the stock performance or stock price. Overall, the Money Supply would have the significant relationship with the stock market but the relationship could be positive or negative depending on the country.

This could be based on the situation of the country in which the investors and companies’ reaction can be whether positive or negative toward the increasing of the Money Supply. Consequently, the result showed that the research objective is achieved as the outcomes demonstrate the impact of the Money Supply on the stock market performance of the service sector and trading and service companies. Therefore, the Money Supply of Malaysia increased would lead to the stock market of service sector increase in value. One of the reasons is the Money Supply or Monetary Policy implemented by the government could affect other factors such as the Exchange Rate (Dilmaghani & Tehranchian, 2015). Therefore, investors and companies are responded to the Money Supply on the stock market, including other factors that affected by the Money Supply. The correlation of the Money Supply and Exchange Rate is strongly positive significant as well. Overall, the investors and companies are concerned and heeded about the Money Supply in Malaysia which they think it would affect the performance of the companies and lead to stock prices increase or decrease. Besides that, the investors could sell or buy on the stock market causing volatility of the stock price as they believe the companies’ performance would be affected. Furthermore, there could be the chain reaction of the Money Supply whether increase or decrease as it could affect other factors that concerned by the investors and result at high volatility on stock market. For example, the Hong Kong exchange rate which is pegged with USD, in order to peg the currency is required the Hong Kong government to adopt the monetary policy of the US such as the interest rate (Yeung, 2018). Therefore, they increase the interest rate to the same interest rate with US to maintain the peg. Eventually, the stock market of the real estate had slowed down due to high interest rate which people reluctant to get loan to buy houses (Yeung, 2018). Therefore, it showed that increase in Exchange Rate would affect the interest rate after influence the stock market, and this is called chain reaction. In conclusion, the investors and companies of Malaysia would respond on the service sector’s stock market toward the Money Supply.

On the other hand, the Inflation Rate demonstrated the positive relationship with the Index despite it was a weaker relationship. In addition, the Multiple Regression analysis showed the Inflation Rate had the significant relationship with the Index as the null hypothesis is rejected and alternative hypothesis is accepted. Thus, the Inflation Rate would influence the Index which is the stock market of the service sector. According to Sindhu (2014), Kalyanaraman & Tuwajri (2014) and Badullahewage (2018), stated that the Inflation Rate had the strong positive relationship with stock market, which suggested that the lower Inflation Rate would benefit the stock market performance. However, the Inflation Rate had weak relationship on the stock market based on the finding of Ogunmuyiwa (2015) and Bai (2014). The Inflation Rate had a weak relationship on stock market in Nigeria because the investors do not bother about the inflation rate (Ogunmuyiwa, 2015). Thus, the investors in Nigeria are unlikely influenced by the inflation rate as they are more concern on other factors than the Inflation Rate. Besides that, Inflation Rate had also weak relationship because the government is regulating and controlling the inflation rate in China (Bai, 2014). Therefore, the Inflation Rate has a weak impact on the stock price even though the inflation rate in china is causing cost of living increased and people of china are suffering which supposed to shrink economy and decelerate the stock market (Bai, 2014), but stock market did not fall as well as the economics of China because it is too strong. According to Megaravalli & Sampagnaro (2018), the finding was indicated the Inflation Rate had no influence on the stock market in India, China and Japan because high inflation rate does not affect the confidence of the investors and companies in the market. Therefore, China would have relationship between Inflation Rate and stock market in few years back, but in year 2018 the investors are strongly confidence toward the stock market and the export of China is highly demanded which have no influence on the stock market on the Inflation Rate as the stock market is still growing. On the other hand, the increasing in Inflation Rate would likely have slightly influence on the stock market performance. However, the lower Inflation Rate would benefit the stock market performance. Therefore, the Inflation Rate demonstrated the positive relationship with the Index despite it was a weaker relationship.
Sindhu (2014), Kalyanaraman & Tuwajri (2014), Megaravalli & Sampagnaro (2018), Badullahewage (2018) and Kabeer (2017) suggested that the Exchange Rate has significant relationship with the stock market. The Exchange Rate could affect the stock market performance in long run especially in India and China. The finding of Badullahewage (2018) stated that the Exchange Rate have strong correlation with the stock market. The Exchange Rate is positive relationship and significant relationship in Nigeria. The fluctuation of Exchange Rate would influence the stock market or eventually collapse the market (Hassan & Bala, 2018). Besides that, the Exchange Rate had positive significant relationship in Dhaka, Bangladesh and Colombo but negative in Pakistan. However, the Exchange Rate have negative significant relationship in India and China, due to India government had restricted the policy on USD and China had the extremely high export which the goods are high demand as well. Therefore, the exchange rate in India and China would unlikely to shrink down the stock market (Kabeer, 2017). El-Nader & Alraimone (2012) iterated that the Exchange Rate had the negative strong relationship with the stock market in Amman due to the economy of Amman is depending on the export and import. Therefore, the increasing on Exchange Rate would likely to pull down the stock market performance depending on exporting country.

In contrast, heavy import country would benefit in the stock market if the Exchange Rate decreased. However, Exchange Rate had no relationship in Pakistan, as the investors invest more in the domestic market while the assets price increased (Suriani, et al., 2015), eventually increased the demand of the domestic currency that the currency would likely to appreciate.

Besides that, the interest rate will increase because forced by the currency appreciation, foreign investors attracted by this factors and invest in Pakistan to gain higher return from the interest rate. The result of the Exchange Rate showed it had the strong negative relationship with the stock market of the service sectors and service and trading companies in Malaysia. Therefore, the result is consistent with the finding of El-Nader & Alraimone (2012) and Kabeer (2017) as the Exchange Rate had the negative relationship toward the stock market. Both of these researchers found that the country that involved many export and import activities would likely to have the negative influence on the stock market as the increasing on Exchange Rate could slow down or shrink down the stock market performance. Therefore, the service companies would likely to be affected by the Exchange Rate in the Malaysia, which the Exchange Rate increased would cause the lessen of the service sector’s stock performance. One of the reasons is the foreign investors will withdraw their investment on the stock of the service companies as they wanted to cut losses before it drop further which may caused more losses. Therefore, high selling on the stock market would lead to weaken on the stock market and the stock price of the service and trading companies dropped. However, on the another way round, the Exchange Rate decreased would result to increase in stock market due to foreign investors invest in Malaysia to gain higher return from Exchange Rate by selling the appreciated currency to home currency. Furthermore, the trading and service companies that involved the export or import could be affected because the companies performance could be affected or the prediction on the companies stock performance is bad, hence the investors and fund managers would start to sell the stock which lead to decreasing on stock price. Last but not least, the confidence of the investors consisted foreigner or local, their confidence and emotion toward the stock market is crucial because they might sell the stock immediately when they think the increases on Exchange Rate would affect the stock market of service companies. Therefore, somehow the influence on stock market of the Exchange Rate could depend on the confidence of the market as well. In conclusion, the data and analysis showed that the stock market performance of the trading and service companies would affected by the Exchange Rate which it increased and the stock price of service companies was dropped, which investors and companies could reflect the information of Exchange Rate on stock market of service sector. Overall, the research objective is achieved as the result showed how the variables influenced the stock market on service sector companies. Besides that, the most significant variable would be the Exchange Rate as the Beta is higher than other variables’ Beta despite it was negative, which showed it had higher influence on stock market on service sector companies. Besides that, evidence from above showed that the Exchange Rate would have higher influences on service sector’s stock market in Malaysia as the Money Supply fluctuated would affect the Exchange Rate then investors and companies would only reflect the information on the stock market.

V. CONCLUSIONS AND RECOMMENDATIONS

For the further research, more variables can be considered such as Exchange Rate, Interest Rate, Inflation Rate, Monetary Policy, Government Policy Influences, Global event and more in order to make the research become more interesting and attracting. Furthermore, the selecting of the data is also important as this research using the stock price of the service and trading companies while ignoring the capital size of the companies and the business nature of the companies whether it is dealing with international business or only local. The background of the companies also can be considered as the companies backed by government would likely to have different relationship. Last but not least, the number of years to conduct the research should increase to more than five years, so the trend of the stock market movement toward the influences of the variables can show more results and discussions. On the other hand, the government of Malaysia should improve on the finance and investment education among potential investors, so that when the stock market fluctuated, they will not panic and sell all the stock of the companies that can worsen the situation.

In this study, the economic factors such as Exchange Rate, Inflation Rate and Money Supply do have the relationship with the stock market of the service sector companies in Malaysia.
However, the significant level of relationship of each variables are different. Therefore, the research objective of understanding the impact of the economic variables on the stock market of the service sector is proved that the Exchange Rate had strong negative relationship, Inflation Rate had weak positive relationship and Money Supply had the strong positive relationship in the context of Malaysia. The second research objective is also achieved whereby the Exchange Rate is the most significant impact of economic variables on the stock market of service sector.

REFERENCES


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