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The Impact on the European Market Indices Againts the Technology Stock Prices in Bursa Malaysia

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Abstract

This study had targeted to explore the relationship between the European market indices against the stock prices within the technology sector in Bursa Malaysia. The previous study had provided the suggestion where the literature review had observe the potential significant of the impact from the foreign market indices in Europe to create positive relationship against the movement of the stock prices in other country. With this, the quantitative research method had been designed to study the analysis on the past data of 10 years from 2012 to 2021 to understand the potential significant exist in the correlation and relationship between the market indices of London Stock Exchange (LSE) from UK and DAX from Germany against the technology stock prices in Bursa Malaysia. The findings had observed that the LSE posed a significant positive relationship, but DAX had suggested otherwise. The lack of evidence on the findings had concluded that the European market indices do not provide relevance impact towards the stock price performance in technology sector in Bursa Malaysia.

Keywords: *European market indices, technology sector, stock price, Bursa Malaysia, quantitative.*

INTRODUCTION

This research study begins with an exploration of the scope of research to identify an understanding of the relationship between stock performance in Malaysia and the global market index. It is a common understanding derived from the previous insight where the market index tends to represent the reference for determining business performance (Grnholdt et al., 2015). For example, during the Great Depression period, the financial crisis in 2008 saw a few major stock market crashes, with countries such as the United States and the United Kingdom experiencing some of the worst recessions and stock market impacts (Javanmard & Hasani, 2017).

This insight was related to the current research topic because the current corporate world of business had frequently been either optimistic or pessimistic in accordance with changes in the global market index (Spelta et al., 2020). The major market indexes, such as the NYSE, NSAQAD, HSI, FTSE, Nikkei, SZSE, SSE, KOSPI, and others, have frequently been cited as indicators to predict the outcome of existing business, even in other countries. This includes the Malaysian business sector, where most businesses have been relaying future business predictions based on the performance of the current market, which includes the measurement of the market index (Karnizova, 2010). Despite the possibility of a reference with Bursa Malaysia on the KLCI market

index for Malaysian companies, the reference has been extended to the global market index in order to understand the potential impact of the global economy on the business (Levanon et al., 2015).

The problem statement in this research study is where the concept that the global market index is a significant contributor to the stock price in the local market still has an influence on the local stock prices (Sheta, Ahmed & Faris, 2015). This is primarily due to a lack of strong evidence indicating that this concept is feasible to apply directly to every stock in the stock market (Aigbovo & Izekor, 2015). The dubious part on the influence of the foreign market index had not been proven academically but was suggested as a type of belief that creates the potential forecast that stock pricing in a country will be following the trend and pattern from the market index all over the world (Luo & Qin, 2017). For example, Malaysian investors and businesses frequently expect the same up and down trend as the US stock market to reflect in the stock price movement on Bursa Malaysia. With this, the motivation for the research study was expanded to investigate all market indexes from various countries and continents in order to understand the validity of this assumption in comparison to the Malaysia stock market under the technology industry stock prices. The problem statement addressed in this research will open up new avenues for research exploration, leading to research questions that arise within the scope of the study.

LITERATURE REVIEW

The stock market in Europe is frequently referred to as the world's major stock market. With the stock market in countries such as the United Kingdom, Germany, and France, the business industry has grown rapidly in these developed countries, where public listed companies in Europe can be seen as the major powerhouse in the business industry (Tsai, 2019). This will translate to the exposure of business opportunities for the European side to other parts of the countries on a global scale (Tsai, 2019). In their research, Malagrino, Roman, and Monteiro (2018) stated that the process of forecasting market index movement had been a reference on the performance of the stock market of other regions. Malagrino, Roman, and Monteiro (2018) conducted research on the use of the Europe market index using the Germany market index to forecast the closing direction of the So Paulo Exchange main index, and the results strongly suggested that there is a significant positive relationship between the market index performance of the two different countries in the two different regions. This will imply that the stock prices in the two different regions are moving in lockstep and are not affected by the different economic situations in the two different parts of the world (Malagrino, Roman & Monteiro, 2018).

According to Jareño & Negrut (2016), the US stock market has a strong relationship with changes in the country's macroeconomic factors. However, Jareño & Negrut (2016) suggest that the presence of a similar pattern for the impact on European stock markets is identified. As a result, the global macroeconomic situation revolving around the world will give the impression that the trend and movement for the stock market are potentially similar across different market indices from different regions. This opens up the possibility of the European market index referencing the factor movement of stock pricing in other countries such as Malaysia (Jareño & Negrut, 2016). Bagirov and Mateus (2019) stated that previous research in Europe stock markets furthered understanding on stock performance where the market index in Europe tends to represent firm performance at the global level where the research had explored the relationship between the global economy and firm performance against the stock market. The evidence from Europe, which has been used as an indicator for both economic and firm performance at the global level, shows a positive correlation influence on market index movement in the Europe stock exchange market (Bagirov & Mateus, 2019). This lends support to the notion that the European market index has a relationship with the

form performance of the rest of the world, indicating the possibility of similar stock price movement with the market index.

Based on the previous study, it is now more convincing to suggest that there is a potential strong positive relationship between European market indexes and Malaysian stock prices, which draws the proposal on the hypothesis for this research as suggested below.

H0: There is no significant positive relationship between market index in Europe against the technology stock prices in Malaysia.

H1: There is a significant positive relationship between market index in Europe against the technology stock prices in Malaysia.

METHODOLOGY

The research methodology approach is used to identify the planning stage as well as the development of the procedure for the research study. This is where the research steps for the study are identified, from broad assumptions to detailed application of methodology to demonstrate clear concise on the process such as data collection, analysis, and interpretation (Apuke, 2017). To put the study in a clear direction, this research will seek to adopt quantitative analysis, where quantitative analysis has taken the definition of analyzing data in the form of numerical data where statistical analysis is applied for the findings (Sharela, 2016). The preference for the quantitative method for this research is primarily due to the nature of the data, which will be in the form of numerical data involving data such as stock price, which made the quantitative method more appropriate for this research methodology. Furthermore, quantitative analysis will provide more precise and objective results that provide significant empirical evidence in the findings that can help to achieve the study's research objective by conducting the necessary hypothesis testing (Apuke, 2017).

Based on the proposed quantitative study, deductive reasoning will be the preferred application for the study, where deductive reasoning will aid in the development of understanding based on the logical form of critical thinking that will assist the study in arriving at the objective and concrete conclusion of the research outcome (Cooper & Schindler, 2014). Moving on to the study's timeline application, the longitudinal study will become the preferred practice for this study where the study will need to adhere to a specific timeline for the research. Based on the study's need, the study aimed to investigate the pattern and data for the previous ten years, necessitating the use of a longitudinal study to develop a relevant understanding of the time period involved in the study.

The Europe stock market had been considered as the significant stock market in the global level as often being used for analysis by the experts to study besides the US stock market. This is mainly because the high involvement of the economic activities and business industry globalisation which put the European stock market in the highlight within the global level. In the research, Malagrino, Roman & Monteiro (2018) had studied on the use of Europe market index using the Germany market index to reference on the forecasting of the São Paulo Exchange main index’s closing direction where the result strongly suggested there is significant positive relationship between the market index performance between the two different countries in the two different regions. Besides, Bagirov & Mateus (2019) mentioned that the market index movement in the Europe stock exchange market share the positive correlation with the stock prices from other countries. This put up the suggestion to include the London Stock Exchange (LSE) from UK and DAX from Germany for the study which will see the market index data extracted to be tested as the independent variable within the research framework. The Table 1 as below showed the market indices in Europe to be included in the study for the research findings.

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Table 1: Europe Market Index

Region	Country	Market Index
Europe	UK	London Stock Exchange (LSE)
	Germany	DAX

DATA ANALYSIS

Table 2: Summary of Correlation Analysis

Market Indices	Pearson Correlation	Correlation	Strength of Correlation	Sig. (2-tailed)	Significant Correlation
London Stock Exchange (LSE)	0.392	Positive	Weak	0.000	Yes
DAX	-0.221	Negative	Weak	0.021	Yes

The Table 2 had been demonstrating the summary of the correlation analysis for the London Stock Exchange (LSE) from UK and the DAX from Germany representing the market indices from Europe against the technology stock prices from Bursa Malaysia over the study of 10 years of data. The result in Table 2 had shown the evidence on there is existence of the significant correlation between both market indices against the stock price of technology sector companies listed in Bursa Malaysia. The LSE appear to have weak positive correlation against the stock price of technology sector companies listed in Bursa Malaysia while on the other hand, the DAX shared a weak negative correlation stock price of technology sector companies listed in Bursa Malaysia. This would translate the interpretation that the movement of increase and decrease in the market index in Europe had been weak in having the similar pattern to be reflected in the stock price movement for the technology sector companies in Malaysia.

Table 3: Regression Analysis – Europe Market Indices

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.913[a]	.834	.831	.11092
a. Predictors: (Constant), DAX, LSE				

The model summary based on the regression model on the Europe Market Indices against Malaysia technology stock prices was shown in Table 3. Based on statistical evidence, the Europe Market Indices are thought to be capable of predicting and explaining 83.4% of the potential outcome in the movement of technology stock prices on the Bursa Malaysia.

Table 4: ANOVA Analysis

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.541	2	3.270	265.797	.000[b]
	Residual	1.304	106	.012		
	Total	7.845	108			
a. Dependent Variable: Tech Stock						
b. Predictors: (Constant), DAX, LSE						

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The result in Table 4 had been demonstrating the ANOVA analysis for the regression model constructed for the purpose of the study. The outcome in the ANOVA analysis provide the reflection on the feasible of the regression model to conduct the testing on the relationship between the independent variables of the Europe market indices against the stock price in Bursa Malaysia as the dependent variable as defined from the research framework. Based on the data in Table 4, the p-value recorded for the ANOVA analysis had pointed out to be significant where the p-value 0.000 is lower than the tolerance level of 5% which indicate that the regression model is suitable and fit to be included for the study on the relationship between independent variables against dependent variable through the regression analysis.

Table 5: Regression coefficient

Coefficients						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-10.515	1.160		-9.064	.000
	LSE	-.225	.369	-.030	-.609	.544
	DAX	3.095	.162	.930	19.072	.000
a. Dependent Variable: Tech Stock						

Based on the statistical output in Table 5, the result showed the details on the multiple regression model on the Europe market indices against Malaysia technology stock prices, with the LSE from the United Kingdom and the DAX from Germany included in the regression model. The regression analysis revealed that the DAX representing Europe market indices was significant with a p-value of 0.000, which is lower than the tolerance level of 5% or 0.05 on p-value, but the LSE from the UK had a p-value of 0.544, which is far above the tolerance level of 5%, indicating that the LSE market index representing Europe Market Indices was not significant against the Malaysia technology stock prices. This had become evidence that Europe market indices failed to show significant impact towards the change in the movement of the stock prices in technology companies in Malaysia.

DISCUSSION AND CONCLUSION

Based on previous research findings, Malagrino, Roman, and Monteiro (2018) investigated the use of the Europe market index using the Germany market index to forecast the closing direction of the So Paulo Exchange main index, and the results strongly suggested that there is a significant positive relationship between the market index performance of the two different countries in two different regions. Furthermore, Jareo and Negrut (2016) proposed that the global macroeconomic conditions revolving around the world will create the impression that the trend and movement for the stock market are potentially similar between the different market indices from different regions, with the findings indicating the presence of a similar pattern for the impact on the European stock markets. However, the current findings based on the research study did not agree with the previous findings suggested by Malagrino, Roman, and Monteiro (2018) and Jareo and Negrut (2018). (2016). Based on the findings, despite being one of Europe's largest market indices, the LSE from the United Kingdom failed to demonstrate any potential significant positive correlation with Malaysian technology stock prices. On the other hand, the German DAX market index showed a clear positive relationship with Malaysian technology stock prices. To elaborate, European economies and business industries tend to be more collectively focused within Europe. Cases such as Brexit clearly

demonstrated the impact of changing economic stability on business performance, which will then translate to stock performance in the Europe region. As a result, it is not surprising that European stock prices and market indexes will be more individually dependent, with no clear relationship in overall impression to the movement of technology stock prices on the Bursa Malaysia.

As a result, the findings summarized the research objective, with the findings indicating that there is no positive relationship between market indexes in Europe and technology stock prices in Malaysia.

THEORETICAL AND MANAGERIAL IMPLICATION

The outcome of the research indeed had achieved the significant in the empirical evidence that allow the current research to draw the conclusion of the study. With this research reaching the conclusion, there is also theoretical and managerial impact that had been observed from the development of the new knowledge through the outcome of study. First of all, the new knowledge obtained from the results and findings of the study had draw the gap towards the literature review closer where the academic had identified the new form of knowledge which can be channel as the new reference for the relevance area and expertise of study. Besides, the study also contribute the benefits to the management of the technology companies listed in Bursa Malaysia where they can draw the forecast and expectations of the financial performance without the consideration of the market indices in Europe as the market indices in Europe will not provide significant relevance impact towards the stock performance in Bursa Malaysia. Furthermore, the investor may gain from the fresh insight where the investors will not need to refer to the market indices performance in Europe to make the investment decision as the movement of the market indices in Europe appear to be irrelevance towards the prediction of the stock prices in technology sector in Bursa Malaysia.

FUTURE RESEARCH DIRECTION AND LIMITATION OF STUDY

The outcome of this current research study had posed new knowledge contribution to the academic, society and business which had been crucial for the business. The scope of the current research had been focusing to study the relationship between the market indices in Europe against the movement in the stock price of technology sector companies listed in bursa Malaysia. This had provided the limitations on the target study where the focus of the study had only to understand the relevance towards the technology sector but not other industries in Bursa Malaysia. Therefore, this opens the opportunity for the study to explore into the similar study to understand the potential impact from the foreign market indices against the movement of stock prices from other sector or industry listed in Bursa Malaysia.

Besides, the study had been exploring to understanding the consistency and alignment of the movement of the stock in the overall study where the research explores the relevance movement of the stock prices and the market indices. The study should be recommended to be extended to the comparison of the market indices in Europe against the market index of Bursa Malaysia to provide the better comparison of data to have the overall stock exchange in Malaysia to be included to understand the correlation and relationship against the movement of the market indices in Europe. This will help to minimize the limitation on the impact for comparing the different data between the market index and stock price to observe the whole pattern of the data input.

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