Comparative Study of Stock Price Index on European Stock Exchanges Before and After Brexit UK Stock Price in Europe

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Abstract: This study was conducted to analyze the comparison of the impact of Britain to Exit (Brexit) on the UK Stock Price Index in the European region. The sampling countries in this study include four European countries, namely Denmark, France, Germany, and England. This research method uses quantitative research by comparing stock price index data before and after the UK's exit from the European Union. This research is an event study research that is analyzing the market reaction due to an event or the publication of an announcement. Results from this study were that the CSE index Denmark, France CAC index, the index HDAX Germany has a significant influence before and after Brexit Britain while Britain's FTSE index had no impact on the stock price index volatility before and after Brexit. This shows that the investment decisions of investors in Denmark, France, and Germany were greatly influenced by the Brexit announcement so that the stock price indexes in these three countries experienced significant movements. While the Brexit announcement does not affect the decisions of investors in the UK itself because this Brexit event does not contain strong information so that market participants do not react before and after the event.

Keywords: stock price index, Britain to exit, Brexit, event study, European stock exchanges

INTRODUCTION

A major decision in the referendum to leave the European Union was carried out by the British community on June 23, 2016, history noted that the purpose of the European Union was to strengthen trade and simplify the payment system for countries in the European region and remove barriers to international trade in the region. Europe. However, as the European Union progressed, there were many internal conflicts in the UK where the British community was divided into two, some were in favor of joining the European Union and some were against the British joining the European Union. The main reason for the supporters of the British Brexit with the European Union is because of the problem of the large number of immigrants entering the UK so that it can threaten security and labor competition.

The exit of the British state from the European Union brought major consequences for the British economy and other European countries. This policy is considered to close the European free market which has been well established. Demographically, the European Union is inhabited by about 500 million people, relying heavily on the economic strength of the influence of western countries, namely America, and reducing dependence on the US dollar.

The British Brexit decision against the European Union created panic and doubt in the eyes of investors, where the freedom of business, trade, and investment that has been carried out so far will experience obstacles and cause a situation of uncertainty over investment and the market that has been pioneered since the beginning. This was marked by massive stock selling in the capital and money markets. The stock price index in England fell drastically and fell and the value of the currency fell helplessly, forcing the Bank of England to increase interest rates to maintain the exchange rate. This indicates a reaction by market participants to the announcement of the UK's exit from the European Union. When the condition of the situation is stable, it will be seen that the movement of the stock price index is relatively fixed. However, when the stock market situation is sluggish, it will be seen that the movement of the stock price index has decreased significantly.

Investors feel no longer confident in the British economy after they panicked and withdrew their capital and fear that the trade that has been running so far will be destroyed due to the Brexit policy. Not only that, the UK's exit from the European Union made the members of the European Union confused, where so far Britain has contributed about 20% in supporting the European economy, no doubt Europe was dragged down against the American dollar. The political stability of a country that has an impact on economic conditions must make investors or market participants feel safe and confident in investing in the stock market. This study aims to examine one of the political events on the market reaction in the stock market, namely the incident of Britain's exit from the European Union, commonly known as Britain to Exit (Brexit) which occurred on June 23, 2016.

Several empirical studies related to this Brexit event or the result of a political and economic event stated different results. Lestari and Nuzula's research (2018) which examined Britain Exit on the LQ 45 index on Abnormal Return and Trading Volume Activity on the IDX concluded that Britain's Brexit had an effect on trading volume on the IDX. Research on before and after Brexit in the ASEAN capital market conducted by Prayogo et al. (2019) found that the Brexit event could change the segmented ASEAN region into an integrated one and found that the Singapore capital market had an impact on the British Brexit. Furthermore, Candra et al. (2018) who examined the British, French and Indonesian capital markets before and after Brexit found that before the issue of the British capital market Brexit against the French capital market, there was a very strong and significant relationship, for the British capital market to the Indonesian capital market (LQ45). Research conducted by Handayani (2014) found that world gold prices, world oil, and exchange rates affected the JCI. Furthermore, Aditya's research (2018), trying to research the Foreign Exchange Index and Macroeconomics on the JCI, found that the DJIA and Nikkei had a positive and significant effect on the JCI.

Based on the description above, it can be seen that there is an inconsistency from the results of previous research regarding the relationship between the announcement of political or economic events on the reaction of investors on the stock market before and after the event.

CONCEPTUAL FRAMEWORK/RESEARCH METHODOLOGY

This research is an event study to analyze the impact of the announcement of an event on the reaction of investors in the stock market. The research question of this study is whether there is a significant difference in the stock price index before and after the Brexit event in European countries.

According to market efficiency theory, the capital market whose share price reflects all available information (Fama, 1997). The available information is directly absorbed by market participants or investors and used in making investment decisions. The decision to buy or sell shares from these investors results in the movement of the stock price index in the capital market.

This research model tries to make a comparison of stock price indexes in European countries before and after Britain's Brexit against the European Union. This research is important considering that the UK is a large country that contributes directly or indirectly to the economy of the European Union, as well as to find out the direct impact on the development of stock price indexes in the European region as a reflection of the success of economic policies.

This research was conducted by looking at the stock price index for two years before the British Brexit, namely June 2016, and two years after the British Brexit by using a sampling of 4 European countries, namely Denmark, France, Germany, and England. So that it can be photographed the condition of the stock price index in each of these countries.

The data collection method used to view stock price indexes on stock exchanges in European countries, in this case, is to use secondary data published by Bloomberg, namely stock index data in four European countries: the Danish CSE index, the French CAC index, the German HDAX index and the FTSE index. Britain for 23 months before and after the Brexit as a European Union country.

To be able to examine in depth the impact of the British Brexit from the European Union on its share price, a paired sample t-test was carried out so that it could measure the success or failure of the program being able to increase or decrease the stock price index in the country, member of the European Union which is the object of research. The formula for the two-sample difference test in pairs is as follows:

Where: $t = \dfrac{\overline{X}_D - \mu_0}{s_D/\sqrt{n}}$. $\overline{X}_d = \dfrac{\sum D}{n}$

D = Difference between X1 and X2 (X1-X2)
N = Number of Samples
X bar = Average
SD = Standard Deviation d

RESULT AND DISCUSSION

This study analyzes the impact of Britain's Brexit on the same price index in four European countries, namely the Danish CSE Index, France's CAC Index, Germany's HDAX Index, and the UK's FTSE Index. The data used in this study is secondary data by looking at stock price trading data in 4 European countries. Determination of the starting point of this research data starting from June 2016, was chosen as a benchmark at the time the UK was declared out of the European Union. This research data was taken based on monthly data published by Bloomberg, which is 23 months before and after British Brexit.

The stock price index data on the Danish Copenhagen Stock Exchange can be presented in the following figure:

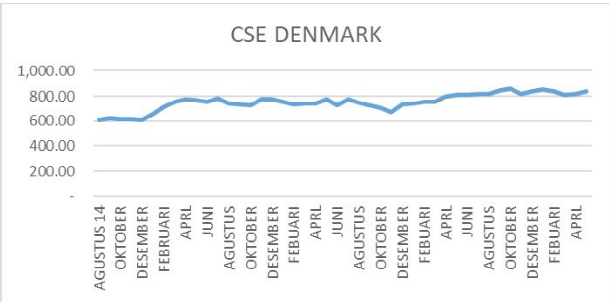

Figure 1 Movement Graph Denmark Copenhagen Stock Exchange (CSE) Before and After Brexit UK
Source: Bloomberg

Based on the research data above, it can be seen that the stock price index on the Danish Copenhagen Stock Exchange is more likely to experience an increase, this can be seen from the trend in which the period before the Brexit occurred, namely, in August 2014 the CSE index was in the range of 607.59 and increased when the Brexit occurred. in June 2016 the CSE Index was 754.25. Denmark's CSE index had fallen one month after Brexit, namely in August by 749.98, and continued to fall until November 2016 by 673.62. Then at the beginning of 2017, the CSE Index experienced a sharp increase of 742.88 and continued to rise until its peak in April 2018 of 815.75.

Furthermore, the CAC stock price index in France can be presented in the following figure:

Figure 2 Movement Graph French Cotation Assistee en Continu (CAC) Stock Exchange Before and After
Source: Bloomberg

The stock price index in France or better known as the French CAC 40 Index can be seen before the British Brexit period, which was 3,258 in August 2014 and continued to increase until April 2015 by 4,001, then the French CAC 40 Index decreased to its peak during BREXIT last month. June 2018 amounted to 3,892. However, the index rose sharply after Brexit in September 2016 by 3476 and continued to rise until March 2018 by 4083.

Furthermore, the stock index in Germany HDAX before and after the UK Brexit can be presented as follows:

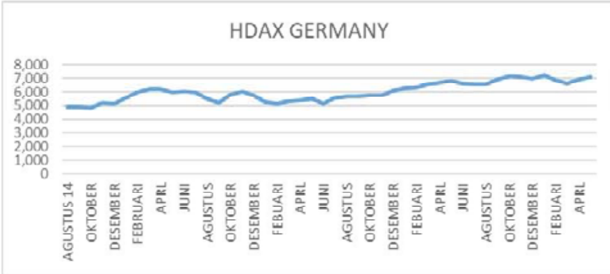

Figure 3 Movement Graph HDAX Germany Stock Exchange. Before and After Brexit UK

The data above shows the German HDAX Index in August 2014 of 4,908 and an increase in April 2016 of 6181. However, the HDAX Index fell sharply before the British Brexit in May 2015 by 5,990 and continued until June 2016, after the British Brexit Index shot sharply to its peak, namely in December 2017 amounted to 7,002 and continues to increase.

The movement of the stock price index on the UK stock exchange before and after the Brexit event can be seen in the image below:

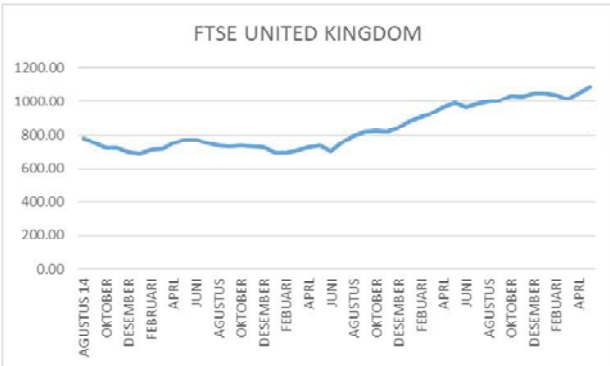

Figure 4 Movement Graph FTSE UK Stock Exchange Before and After Brexit UK
Source: Bloomberg

The research data above shows that the FTSE United Kingdom Index in August 2014 was 6,718.79 and experienced a very sharp decline until November 2014 was recorded at 6567.24, then the index continued to decline until February 2016 at 5950.

To determine the effect of the stock price index on the European Stock Exchange before and after the British Brexit, see the following figure:

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	CSE Sebelum - CSE Sesudah	-7308,82609	4366,56692	910,49214	-9197,07122	-5420,58095	-8,027	22	,000
Pair 2	ACC-Sebelum - ACC-Sesudah	-411,21739	336,39073	70,14232	-556,68365	-265,75113	-5,863	22	,000
Pair 3	HDAX-Sebelum - HDAX-Sesudah	-992,08696	539,42570	112,47803	-1225,35212	-758,82179	-8,820	22	,000
Pair 4	FTSE-Sebelum - FTSE-Sesudah	18200,78261	43450,38386	9060,03133	-588,57236	36990,13758	2,009	22	,057

Source: processed data, 2021

The data above shows that the Danish Copenhagen Stock Exchange (CSE) has a sig value of 0.000 which means it has a significant effect before and after the British Brexit, while The French CAC index was recorded to have a sig value of 0.000 which means it has a significant influence on the stock price index before and after the UK Brexit, as well as the German HDAX Index which also has a sig value of 0.000 which means it has a significant impact before and after the UK Brexit.

FTSE United Kingdom has no significant effect before and after the UK Brexit because the sig value of 0.057 is greater than 0.05. Indicates that the reaction of the capital market in the UK to this event is uncertain and not prolonged.

The results of this study support research conducted by Lestari and Nuzula (2018), Prayogo et al. (2019), Candra at al. (2018), that the existence of political policies will have an impact on the vitality of the stock price index on the Global Exchange.

CONCLUSION

From the results of this study, it can be seen that the Danish CSE Index, the French CAC index, the German HDAX index have a significant influence before and after the British Brexit, this can be seen from the Sig value of 0.000 which is smaller than 0.05. Meanwhile, the UK FTSE Index has no impact on the volatility of the stock price index before and after Brexit, which statistically has a Sig value above 0.05.

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