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Frequency : Bi-Monthly
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Origin : Kuwait

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Impact Factor	No data
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Publication Count	87
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Impact of Exchange Rate, Foreign Direct and Portfolio Investment on ASEAN 4 Economic Recovery after Crisis: Global Imbalance Phenomenon

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Article History
Received: 19.12.2021
Accepted: 29.12.2021
Published: 10.01.2022

Abstract: ASEAN is a geopolitical organization in the Southeast Asian region that aims to increase economic growth, social and cultural development, promote peace and stability in political conditions at the regional level. With their potential and resources, ASEAN countries are included in the top 20 investment host countries. During the 1998 monetary crisis, ASEAN countries includin Indonesia, Malaysia, Thailand, and the Philippines (ASEAN 4) received a significant impact. Drastic corrections in currency exchar rates, significantly affected socio-political conditions, led to a decline in the amount of foreign direct investment and portfolio investment that flows into these countries. Various government and central bank policies in maintaining the ease of investment for investor countries have made the ASEAN 4 economy recover quickly as widely known of Miracle of Asia. After the Global Imbalar due to the subprime mortgage in the United States in 2008, ASEAN 4 countries were affected but not as significant as the economic crisis in 1998. The purpose of this study was to examine the effect of exchange rates, foreign direct investment, and portfolio investment in ASEAN 4 countries after the crisis in the global imbalance phenomenon. The variables used in this research are economic growth, exchange rate, FDI and Portfolio Investment. The method used is fixed effect regression model. The results obtained are the high value of FDI capital inflows to ASEAN 4 countries and a maintained exchange rate that can restore economic recovery which is proxied by rapid economic growth even in conditions of global imbalances.

Keywords: ASEAN, Economic Growth, Foreign Direct Investment, Portfolio Investment, Exchange Rate, Global Imbalance.

INTRODUCTION

ASEAN's involvement in trade, industry, and world economic activities, when viewed from an investment perspective, indicates that these ASEAN countries are destination countries for investment (Astrid, 2014). Singapore, Indonesia, and Vietnam still occupy a position in the ranking of 20 FDI Inflow countries, top host economies, 2019 and 2020 according to the report published by UNCTAD in the World Investment Report 2021. This is not a proud fact, due to previous UNCTAD reports, more ASEAN countries are included in the ranking of 20 investment destination countries. The 4-fold increase in FDI flows to ASEAN countries since the monetary crisis in 1997-1998 does not cover the fact that FDI continues to decline in developed countries including ASEAN countries which have decreased by 58% with a nominal value of $312. billion caused by strong fluctuations in financial flows as well as changes to investment company policies (World Investment Report 2021, 2021).

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Figure 1: Investment Flow to ASEAN 2010 – 2020 (***Source:*** World Investment Report 2021, 2021)

Gross Domestic Product or GDP according to economists is an indicator to assess a country's economic growth. According to Mankiw, GDP is an economic statistic that is the best single measure to assess the welfare of people in a country. The thing that underlies this theory is because GDP measures two parameters at one the total income of all people and also the total state spending on goods and services from the economy calculation can encourage the measurement of the balance of account of a country.

757086, India

GDP or Gross Domestic Product is used by various countries to measure the rate of national economic growth, as a comparison of economic progress between countries with the same measurement parameters, as well as a measuring tool for a country's economic structure to identify economic sectors that need improvement which will lead to policy decisions by the government.

The International Monetary Fund (2021) in its Regional Economic Outlook for Asia and Pacific October 2021 report mentions data related to the achievement of Gross Domestic Product or the amount of added value generated by all business units in a country, including data related to the number of residents to calculate the added value generated by all business units within one year or the Gross Domestic Product (GDP) per capita of ASEAN countries as follows

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Table 1: Population and GDP Comparison between ASEAN Countries (***Source:*** International Monetary Fund, 2021)

On average, many ASEAN countries adhere to an open economy. Economic openness is characterized by an increase in the flow of foreign capital that flows dynamically and increases the interconnection between exchange rates and foreign investment with macroeconomic variables such as output levels, interest rates, inflation, and current accounts (Grabner, 2018). The exchange rate itself is the key in designing monetary policy for an open economy in the context of inflation targeting policies, where foreign investment has a potential impact on the economic growth of the host country (Ministry of Finance, 2011).

The amount of liquidity and low global interest rates due to the monetary easing carried out by the state for economic recovery, mark the increasing flow of foreign capital between countries that occurred after the financial crisis, where the flow of foreign capital is beneficial for financing which has an impact on economic growth in Emerging countries. Market Economics (EMEs). But on the other hand, foreign capital flows can also increase the vulnerability of a country's economy to external shocks in the global economy (global spill over) (Crisis, 2017; Study, Sudirman, & Mada, 2017).

The flow of foreign capital gives complexity to the implementation of economic policies in an open economy. The achievement of the inflation targets and economic growth is strongly influenced by the volatility of the exchange rate and the flow of foreign capital. In the impossible trinity theory or the policy trilemma, a fixed exchange rate regime and a foreign exchange control regime are options where this choice is not in line with the flow of globalization which offers many benefits from international trade and investment for the domestic economy (Kholis, 2012).

Judging from the conditions a decade before the 2008-2009 global crisis, as a percentage of GDP, the amount of foreign capital increased from 5.7% in the 1980-1989 period to 6.2% in the period between the 1990-1999 crisis. Conditions after the Asian crisis even showed a surge in foreign capital inflows to 13.3% in the 2000-2007 period, and finally slumped back to only 6.2% in the 2008-2012 period.

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Figure 2: GDP Current US$ ASEAN 4 1995 – 2020 (***Source:*** World Bank, 2021)

Foreign investment is needed for the economic development of developing countries that have limited financial and capital. These developing countries have problems related to the existence of a saving – investment gap (the difference between investment and saving). This flow of foreign capital contributes to filling the gap between the saving – investment (Todaro & Smith, 2003). The results of this study do not necessarily apply to all developing countries. The flow of foreign capital into OECD countries in the primary sector tends to have a negative effect on growth, while in the manufacturing sector it has a positive effect, and an ambiguous effect on the service sector which does not apply to countries in Central and Eastern Europe (Alfaro, 2003; Neuhaus, 2006).

Several previous studies also concluded that the impact of FDI on growth must meet certain prerequisites. Among them is that foreign capital flows will have a strong impact on economic growth if followed by export-oriented trade policies (Balasubramyam, Salisu, Spasford, 1996) or foreign capital flows will have an impact on economic growth if and only if there is the adoption of new technologies and increased resources. Human capital (Borenzstein, Gregorio, Lee, 1998), as well as economic stability, adequate resource capital, and the existence of liberal markets (Sanchez-Robles, 2003)

This also applies in ASEAN countries where research has been conducted, examining the causal relationship between FDI and economic growth in 3 (three) developing countries: Chile, Malaysia and Thailand. The results show that there is no causality between GDP growth and FDI in Chile, but there is a two-way causality in Malaysia and Thailand (Chowdhury, Mavrotas, 2003). The results of this study were strengthened by the results of research by Carkovic and Levine (2002) who used the Generalized Method of Moments (GMM) estimator panel method which found that the exogenous component of PMA did not have a strong influence on growth.

The phenomenon that occurred after the global financial crisis in 2008 was the various series of financial policies implemented by governments in various countries affected by the financial crisis in order to get c[illegible]the impact of the crisis with the least possible impact. Indications of recovery from the economic crisis we[illegible] the second half of 2009 and continued to improve in 2010 as indicated by a positive economic growth [illegible] This achievement is in line with the economic growth rate in emerging market countries which reached [illegible] which is even higher than the recovery in developed countries whose economic growth rate persisted in the range

of 3% (Bank Indonesia, 2010). The fast growth rate in emerging market countries is not without side effects. This achievement of economic growth was accompanied by rising inflationary pressures, which led to a tightening of interest rate-oriented monetary policy compared to developed countries. This condition eventually had implications for the massive inflow of foreign capital to these emerging market countries, which resulted in rising global commodity prices.

Foreign capital inflows to emerging market countries in Asia increased quite significantly, amounting to US$85.2 billion, bringing the cumulative total throughout 2010 to US$446.9 billion. Some of the capital flows, which amounted to 152.6 billion US dollars, occurred in the form of direct investment, which was mostly absorbed by China with an amount of around 90 billion US dollars, followed by India at 40 billion US dollars. Foreign capital inflows to emerging market countries in Asia in the form of portfolio investment also increased, reaching 127.2 billion US dollars. The increase occurred evenly across all types of investment, namely direct investment, portfolio investment and loans. The largest portion of these capital flows was direct investment of US$79.7 billion, followed by loans from non-banks of US$60.9 billion, portfolio investments of US$52.9 billion and loans from banks of US$26.7 billion (Bank Indonesia, 2010). In Indonesia, the development of Foreign Direct Investment (FDI) after the global financial crisis, namely in 2009 decreased from 9,318 million US dollars to 4,877 million US dollars, and in 2010 experienced a significant increase to 13,771 million US dollars. Meanwhile, the portfolio investment position experienced an increasing trend from US$1,764 million to US$10,336 million in 2009 and US$13,202 million in 2010 (http://bi.go.id). The improving macroeconomic conditions in Indonesia and other emerging market countries in Asia have attracted foreign investors to gain investment returns coupled with tightening monetary policy through the policy of increasing interest rates.

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Figure 3: FDI Net Inflows (BoP, Current US$) ASEAN 4 1995 – 2020 (***Source:*** World Bank, 2021)

The volatility that occurs in the prices of financial instruments that are related to financial market volatility is one of the representations of the global imbalance phenomenon. From the graph above, the development of fluctuations in the price of financial instruments is also related to the level of market risk in influencing the economic development of a country. This indicator when it is at the peak point means that it describes the greater changes in the exchange rate within a certain period. The significant increase in the middle of 2008 to 2012 indicates that the subprime mortgage crisis that occurred in 2008 caused an increase in financial market volatility and affected global economic developments. In 2011, when the crisis hit several countries in Europe, the volatility index increased along with the deteriorating condition of exchange rates on financial markets which resulted in the depreciation of several currencies. Furthermore, financial market volatility conditions tended to be stable even though there were several high spikes in the middle of 2016 and 2018. This phenomenon shows a balanced financial market condition formed from global economic developments that occurred in developed and developing countries with the role of monetary policy being taken to stabilize prices. (World Bank, 2017)

When stable global economic conditions are achieved, the volume and value of world trade will also improve in line with the economic growth of developed and developing countries. From the results of a statistical review of trade volume summarized in the World Trade Statistical Review 2020 report by the WTO, a graph of the volume and value of world trade is obtained as follows

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Figure 4: Value and Volume of Worldwide Goods & Service Trade 2008 – 2020 (***Source:*** World Trade Statistical Review, 2020)

In a period of 5 years, trading volume grew by 4.7% and was the strongest growth in the last 6 years. In value alone, trade in goods (merchandise) also increased by 11% at the end of 2017. This increase in volume shows that global economic stability has an influence on the volume and value of world trade. The relationship between international economic shocks and macroeconomic conditions in developing countries needs to be studied more deeply, especially regarding the monetary policy taken by the government of that country towards the financial sector (Kim & Hyun, 2018; Kido, 2018).

This study focuses on the effect of FDI volatility, portfolio investment and exchange rates in post-crisis global imbalance conditions in ASEAN 4 countries based on the similarity of the exchange rate regime and the effect of differences in monetary policy used. The financial crisis that occurred in Asia demonstrated the importance of exchange rate flexibility and a policy framework with high credibility to increase the ability of central banks to make policies (Morgan, 2013).

After the economic crisis that hit the ASEAN region in 1997-1998, ASEAN countries have made various efforts to attract foreign investors to return to invest in their country. The increase in FDI in 2010 was marked by an increase of 97% compared to the previous year. An extraordinary increase of 24% from the 2010 achievement occurred in 2011, where the value of foreign investment that flowed to reach US$ 114.1 million which is a fantastic achievement (ASEAN Investment Report 2010, 2010).

FDI itself is a long-term capital flow and is relatively resilient to economic turmoil (Ruth, 2014). In contrast to FDI, Portfolio Investment is short-term and relatively easy to be affected by economic turmoil. FDI and P
together with the exchange rate will eventually affect the country's economic growth. The occurrence o
that befell a country, will be addressed by policies issued by the country's central bank and the country'
government in general. The economic recovery of a country can be proxied by economic growth in post-c

conditions. Exchange rate fluctuations, a decrease or increase in FDI and PI entering the country also affect how the central bank and government policies in issuing policies that affect the post-crisis economic recovery.

LITERATURE REVIEW

Neoclassical economic growth theory was created from the development of economic activity in society. Entrepreneurship and investment are other factors that influence economic growth according to experts who carry neoclassical economic growth theory. R.F. Harrod and Evsey Domar say that there is a need for capital formation or investment to achieve steady economic growth. The more capital there is, the more the process of producing goods and services will increase. This theory is called the Harrod-Domar theory.

Historical growth theory reveals that economic growth must pass through certain stages of time. These time stages must be passed to achieve the targeted economic growth. This theory was introduced by Frederich List. According to List, economic growth is achieved after people pass through certain stages of time or period. These stages are hunting and wandering (nomadic depending on nature), raising livestock and farming, farming, and making simple crafts, then only reaches the stage of advanced crafts, industry and commerce.

Economic growth in accordance with neoclassical and historical theory states that investment is part of economic growth itself. Investments that initially occur on a small scale within the community or within countries, develop into inter-country investments. This investment activity was then widely known as Foreign Direct Investment or Foreign Investment. FDI is an investment activity carried out by the private sector from abroad or it can be said that investment from one country to another on behalf of the government that owns the capital. There are 3 advantages to the inflow of FDI capital, namely: as a means of reducing the risk of capital ownership by diversifying through investment, as the best spread for the establishment of corporate governance, accounting rules and legality in capital market integration, and encouraging the creation of government financial policies. Appropriate use due to the flow of capital flows. Not only enriching the investment destination country (host country), but also encouraging the improvement of human resource capabilities through the transfer of knowledge and technology that encourages the creation of sustainable economic growth (Rahajeng, 2014).

Todaro (2000) reveals that the resources used to increase income and consumption in the future are referred to as investments. Another point of view is expressed by Deliarnov (1999) that investment is a company expense including the purchase of raw materials, machinery, and production equipment and other needs to assist the production process.

Investment can also be interpreted as expenditure or investment or company spending to buy capital goods and production equipment to increase the ability to produce goods and services available for economic activities (Sukirno, 1996).

World economist, Nicholas Gregory Mankiw (2000), states that there are 3 types of investment spending that exist in the structure of society. These forms of investment are:
Business Fixed Investment or Fixed Business Investment, whose activities include the process of purchasing equipment and other structures used in the production process
Residential Investment or Residential Investment, where there is a sale and purchase of land for housing needs as a place to live and purchase of land for rent
Inventory Investment or Inventory Investment, where the activity is the storage of manufactured goods or semi-finished goods and equipment as well as finished materials

The relationship between investment theory and development theory in accordance with the role of foreign capital can be explained as follows:
The classical theory explains that the higher the interest rate, the higher the cost of borrowing for investment financing so that the level of profit to be obtained decreases and the level of investment will also decrease (Amin, 2003).
In neo-classical theory, there is a positive relationship between investment and income (output) and a negative relationship between investment and capital rental costs and interest rates. Amin (2003) states that in Keynes's theory, the interest rate, cost of capital and the amount of profit to be obtained will be the determinants of investment. The expected rate of return or the expected net rate of return on additional capital expenditure is referred to as the Marginal Efficiency of Capital (MEC). MEC which is greater than the interest rate makes investors reluctant to invest.
Another relation related to Foreign Direct Investment was put forward by Stephen Hymer (1965) which stated that according to the development of the modern monopolistic advantage theory which puts that foreign direct investment is more common in oligopolistic industries than industries operating in near perfect markets (near perfect competition).). This thinking was developed into that foreign investment decision making is based on the optimization of companies in imperfect competition market conditions, the creation of internal markets to cut the impact of market imperfections, and the creation of multinational companies (MNCs) (Buckley-Caso, 1976).
The Product Life Cycle model introduced in a book entitled International Investment and International Trade in The Product Cycle (1996) states that there are 3 stages in the development of manufactured products. The innovation stage, the new market search stage, and the standardization stage where more advanced research has been created so that semi-skilled and unskilled workers can be used in the production process. This condition finally encourages companies to look for new countries that have lower labour costs to optimize the profits earned by the company (Vernon, 1996).

Gross Domestic Product or Gross Domestic Product is the value of the market size level of final goods and services produced in a certain period. The purpose of calculating the value of GDP is to determine the value of economic activity in a single money value over a certain period (Mankiw, 2015).

Macroeconomic conditions become more stable when total productivity increases, driven by appro government policies. The condition of economic growth can be reviewed through the business cycle and

term sustainable growth in the country concerned. The high level of GDP encourages foreign investment to be invested more and in various sectors (Solnik and McLeavy, 2019).

The exchange rate is an important variable in the economy of a country. Changes in exchange rates will also have an impact on economic activities between countries (international trade). Depreciation of the exchange rate is a burden for importing countries, due to an increase in the price of goods imported from abroad. Different conditions occur for countries providing goods or exporters. This change in the exchange rate will provide a significant advantage where the price of their goods will be much cheaper and accepted by the international trade market.

When viewed from another point of view, the exchange rate is considered to have a bad impact on the economy because of the potential for capital flow speculation, moral hazard, and encouraging over investment. In general, the ideal condition to be achieved is that the exchange rate is maintained at a stationary and stable level which will encourage lower transaction costs in domestic and international trade (Nasution, 2009).

Developing countries are very vulnerable to exchange rate fluctuations. The financial balance of banks and companies that have foreign debt denominated in foreign currencies will affect economic growth. A significant increase in exchange rate depreciation will increase the risk of Non-Performing Loans (NPL) or default and lead to a crisis (Eichengreen and Hausmann, 1999). A stable exchange rate will create a business climate that grows positively and is attractive for additional investment (Jakob, 2016).

Research Method

This study uses samples from ASEAN 4 countries, namely Indonesia, Malaysia, Philippines, and Thailand. The type of research used is quantitative research with a descriptive approach.

The data used in this study is secondary data obtained from various sources.

The method used is panel data regression with a Fixed Effect Model (FEM) approach with a regression model as below:

Y =

Description as below:

Y : economic growth (GDP)

X_1 : *foreign direct investment* (FDI)

X_2 : *portfolio investment* (PI)

X_3 : *exchange rate* (ER)

: Constanta

: Regression coefficient

: Error

The hypothesis developed based on the conditions mentioned above is as follows:

Hypothesis 1 (H1)

FDI growth has a significant and positive effect on GDP

Hypothesis 2 (H2)

FDI growth has a significant and positive effect on GDP

Hypothesis 3 (H3)

The rate of exchange rate depreciation has a significant and positive effect on FDI & PI

Hypothesis 4 (H4)

Global Imbalance conditions have a negative effect on GDP

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Figure 5: Conceptual Framework

RESULT AND CONCLUSION

The economic growth of ASEAN 4 countries was significantly corrected during the 1997 economic crisis, where the exchange rate was also corrected due to the shock that occurred, and FDI and PI growth were also corrected but could soon return within 2 years after the crisis.

The subprime mortgage that occurred in 2008, shook the world economy because of the contagious effect that had an impact on the European economy. As developed countries, the shocks received by European countries forced these countries to implement various policies to maintain their macroeconomic valuations in a stable and focused condition. European countries tend to hold back foreign investment abroad, even making large and fast withdrawals of funds from developing countries that are host countries or investment destination countries. This condition ultimately reduces the amount of FDI and PI growth in emerging markets or developing countries that are investment destinations. The lack of FDI and PI can encourage a decrease in the number of jobs which will have an impact on the purchasing power of the people in ASEAN 4 countries. The decline in people's pu power will ultimately correct economic growth away from the targets set by the governments of these countries.

The interpretation of the selected model is used to examine the relationship between the independent variable or the independent variable on the dependent variable or the dependent variable in the Fixed Effect Model as the selected model.

Simultaneous Significance Test

The rule applied is the prob value. (F-Statistic) <0.05. The results of this simultaneous significance test are as follows

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Figure 6: Result of Simultaneous Significance Test

From the results of the simultaneous significance test, it was found that the prob value. (F-statistic) for the variable FDI and Exchange Rate is <0.05 while the value of the PI variable is 0.1736 and is greater than 0.05.

This shows that the FDI variable and the Exchange Rate have a simultaneous effect on the variable economic growth which is proxied in the form of GDP.

Determinant Coefficient Test

In the determinant coefficient test, the adjusted R-squared value is 0.834058 or 83%. The test results show that variations in economic growth or GDP can be explained by FDI and Exchange Rate. The remaining value is 100% - 83% = 17%, can be explained by PI and other variables.

Partial Significance Test (Individual)

The rules for the partial (individual) significance test are as follows:
Prob value. FDI is 0.00 < 0.05 so that it accepts H1 i.e., FDI has a significant and positive effect on GDP
Prob value. PI is 0.17 > 0.05 so it does not accept H2, namely PI has no significant effect on GDP
Prob value. Exchange Rate (ER) is 0.00 < 0.05 so that it accepts H3 which has a significant and positive effect on GDP

When considering the global imbalance condition, it can be divided into the following periods:
Before the 1998 economic crisis
Before the 2008 tapper tantrum crisis

The data obtained for conditions prior to the 1998 economic crisis are as follows

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Figure 7: Result of Partial Significance Test before 1998 Crisis

This condition indicates that prior to the 1998 economic crisis, FDI had a significant and positive effect on economic growth, while PI had a significant but negative effect on economic growth. Exchange Rate has no significant effect on GDP.

Before the tapper tantrum crisis triggered by the subprime mortgage in the United States in 2008, the following results were obtained

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Figure 8: Result of Partial Significance Test before 2008 Crisis

Conditions during the 2008 economic crisis showed that FDI and ER had a significant and positive effect on GDP growth in ASEAN 4 countries. PI had a significant but negative effect on GDP.

The combination of pre-crisis and post-crisis conditions is as follows

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Based on the table above, before the 1997 crisis, it can be concluded that FDI had a significant and positive effect on GDP growth in ASEAN 4 countries by 17%. Portfolio Investment has a significant but negative effect on economic growth as a proxy for GDP of 12%. Meanwhile, the exchange rate does not have a significant impact on GDP.

Conditions at the time of the global imbalance due to the subprime mortgage in 2008 showed that FDI had a significant and positive influence on GDP of ASEAN 4 with the amount of 18%. The investment portfolio itself still has a negative impact on GDP. The Exchange Rate or exchange rate has a significant and positive influence on GDP because the exchange rate affects the economic conditions of ASEAN 4 countries.

After the 1997 and 2008 crises, it is known that FDI and the Exchange Rate have a significant effect on GDP growth. Even for FDI, the amount increased to 24% in influencing the GDP of ASEAN 4 countries. Portfolio Investment which has a weakness vulnerable to shock is known to have no effect on ASEAN 4 GDP.

CONCLUSION

From the results of data collection and studies both theoretically and empirically, it is known that F. Exchange Rate have a significant influence on the economic growth of ASEAN 4 countries when there is economic crisis that causes a global imbalance that can affect the economic life of ASEAN 4 countries. Portfolio

Investment or portfolio investment that favours investment in the short term, has been proven according to theory as well as theoretical and empirical studies that does not have much effect on economic growth as proxied by GDP for ASEAN 4 countries, namely Indonesia, Malaysia, Thailand and the Philippines.

The condition of global imbalance that occurs due to various factors has brought a contagious effect to countries that have close geographical proximity, business relations and as host countries for investor countries. The global imbalance can also have an impact not only on emerging markets or developing countries but can also have a significant impact on developed countries. The global imbalance that occurred due to the crisis conditions that occurred in Thailand in mid 1997 also contributed to causing panic towards developed countries which made ASEAN 4 countries the host country. Massive and rapid withdrawals of investment funds, the exchange of local currencies into stronger foreign currencies led to the weakening of the currencies of countries affected by the 1997 economic crisis. Unstable economic conditions even led to social and political crises for the country. Indonesia.

The subprime mortgage that hit the United States has caused the bankruptcy of financial institutions in the United States. The same pattern occurred as in the 1997 economic crisis in Asia. Countries associated with US financial institutions, take action to withdraw their investment funds. This crisis has led to a financial crisis that is more severe and affects countries that are geographically connected to the United States and have trade relations with the United States. The government policies of each country always strive for safe and stable conditions for their country to keep the impact of the crisis under control.

The crisis conditions that encourage the creation of global imbalances have had an impact not only on developed countries but also on developing countries or emerging markets. Developing countries such as ASEAN 4 countries such as Indonesia, Malaysia, Thailand, and the Philippines, experienced a more significant impact due to their high dependence on exports and imports, foreign investment and international trade.

As with the suggestions that have been submitted by previous researchers, the governments of ASEAN 4 countries are expected to be able to carry out the following activities:
Prioritizing direct withdrawal of foreign investment by implementing policy packages that help facilitate investment. One of the things that can be done is the ease of obtaining permits, providing tax relief and infrastructure development that can encourage facilities for companies originating from investing countries.
In relation to the suggestions stated earlier, ASEAN 4 countries are also encouraged to prioritize the potential of their respective countries. The development of the digital industry, which is marked by the growth of the start-up industry, can be one that developing countries can develop. A growing start-up industry will have a valuation of up to millions of dollars with promising reviews. This is also an attraction for investor countries to be able to invest and contribute to the development of their business.

REFERENCES

1. Borensztein, E., De Gregorio, J., & Lee, J. W. (1998). How does foreign direct investment affect economic growth?. *Journal of international Economics*, *45*(1), 115-135.
2. Dreher, A. (2006). Does globalization affect growth? Evidence from a new index of globalization. *Applied economics*, *38*(10), 1091-1110. DOI: 10.1080/00036840500392078.
3. Ghozali, I., & Hengky, L. (2015). Partial Least Squares concepts, techniques, and applications Using SmartPLS 3.0 Program. *Semarang: Diponegoro University Publishing Agency*, 76-77.
4. Hair, Joseph E, Jr. *et al.,* (2014). A Primar of Partial Least Squares Structural Equation Modeling (PLS- SEM). Sage Productions, Inc. California. USA, 44. Accessed August 2021
5. Hamdi, F. M. (2013). The impact of globalization in the developing countries. *Developing Country Studies*, *3*(11), 142-144. ISSN 2224-607x (Paper). ISSN 2225-0565 (Online). Www.Iiste.Org. Accessed August 2021.
6. Kakar, Z. K., Bashir, A. K., & Muhammad, J. K. (2011). Globalization and Economic Growth: Evidence from Pakistan. *Acta Universitatis Danubius (AUD), 7*(3), 208-217.
7. Zerrin, K., & Dumrul, Y. (2018). The impact of globalization on economic growth: empirical evidence from the Turkey. *International Journal of Economics and Financial Issues*, *8*(5), 115-123.
8. Kof Index of Globalization. The Swiss Economic Institute. Http://Globalization.Kof.Ethz.Ch/. Accessed on September 2021.
9. Maduka, A. C., Madichie, C. V., & Eze, E. A. (2017). Globalization and economic growth: Evidence from Nigeria. *International Journal of Social Science and Economic Research*, *2*(8), 4177-4191. ISSN: 2455-8834.
10. Majidi, A. F. (2017). Globalization and economic growth: The case study of developing countries. *Asian Economic and Financial Review*, *7*(6), 589-599. Doi: 10.18488/Journal.Aefr.2017.76.589.599
11. Rao, B. B., & Vadlamannati, K. C. (2011). Globalization and growth in the low income African countries with the extreme bounds analysis. *Economic Modelling*, *28*(3), 795-805. DOI: 10.1016/j. econmod.2010.10.009.
12. Samimi, P., & Jenatabadi, H. S. (2014). Globalization and Economic Growth: Empirical Evidence on the Role of Complementarities. *Www.Plosone.Org, 9*(4), 1-7. DOI:10.1371/Journal.Pone.0087824.
13. Suci, S. C., Asmara, A., & Mulatsih, S. (2016). The impact of globalization on economic growth in ASEAN. *BISNIS & BIROKRASI: Jurnal Ilmu Administrasi dan Organisasi*, *22*(2), 79-87.
14. The World Bank, Available at http://www.worldbank.org/unite nations/. Accessed September 2021. The Association of Southeast Asian Nations (ASEAN), Available at https://asean.org/asean/about-asean/overview/. Accessed September 2021.
15. Wolf, Martin. 2004. Globalization and Interdependence. New Haven: Yale University. Available at: http://www.un.org/esa/documents/un.oct.2004. globalisation.and.interdepence.pdf. Accessed on September 2018.
16. Ying, Y. H., Chang, K., & Lee, C. H. (2014). The impact of globalization on economic growth. *Romanian Journal of Economic Forecasting*, *17*(2), 25-34.
17. Ang, J. B. (2008). Foreign Direct Investment and its Impact on the Thai Economy: The Role of Financ Development. *Journal Economic Financial, 33*, 316-323

18. Badan Pusat Statistik. (2015). *Panjang Jalan Menurut Tingkat Kewenangan.* http://www.bps.go.id/tab_sub/view.php?kat=2&tabel=1&daftar=1&id_subyek=17&notab=10. Diakses pada 28 Januari 2015
19. Bari, M. (2013). Foreign Direct Investment and Economic Growth In Bangladesh and India: A Comparative Study. *South Asian Journal of Management*, *20*(1), 7-37
20. Boediono. (1999). Teori Pertumbuhan Ekonomi. Yogyakarta: BPFE UGM.
21. Gujarati, D. N., & Dawn, C. P. (2009). Basic Econometrics, *Fifth Edition. New York: McGraw Hill*.
22. Jhingan, M. L. (2004). Ekonomi Pembangunan dan Perencanaan, *Edisi 1 cetakan Ke-10. Jakarta: PT Grafindo Persada*.
23. Jogiyanto, H. M. (2010). Metodologi Penelitian Bisnis: Salah Kaprah dan Pengalaman- Pengalaman. *Yogyakarta: BPFE Yogyakarta*.
24. Jones, H. G. (1975). An Introduction to Modern Theories of Economic Growth. *Great Britain: Thomas Nelson and Sons, Ltd*.
25. Kuncoro, M. (2003). Metode Riset Untuk Bisnis dan Ekonomi. *Jakarta: Erlangga*.
26. Meier, G. M. (1989). Leading Issues in Economic Development. *Cambridge: Oxford University Press*.
27. Salvatore, D. (2007). International Economics. *New Jersey: Prentice-Hall*.
28. Sukirno, S. (2000). Makroekonomi Modern: perkembangan pemikiran dari klasik hingga Keynesian baru. *Jakarta: Raja Garfindo Pustaka*.
29. Syofyan, S. (2009). Modul Ekonometrika II, Revisi 2008. http://www.scribd.com/ doc/12853877/Modul-Ekonometrika-II-Revisi-2008-By-Syofriza-Syofyan# scribd. Diakses pada 29 Januari 2015.
30. Tandelilin, E. (2001). Analisis Investasi Manajemen Portfolio, Cetakan Pertama, *Yogyakarta: BPFE*.
31. Todaro, M. P., & Stephen, C. S. (2004). Pembangunan Ekonomi di Dunia Ketiga, Edisi Kedelapan. *Jakarta: Erlangga*.
32. Undang-Undang Republik Indonesia No.25 tahun 2007 tentang Penanam Modal.
33. United Nations Conference on Trade and Development. (2020). *World Investment Report.* http://webcache.googleusercontent.com/search?q=cache:Y3LBkDCjl PEJ:unctad.org/en/docs/wir2020ch5_en.pdf+&cd=3&hl=en&ct=clnk. Diakses pada tanggal 10 Februari 2021
34. Wahiba, N. F. (2014). Impact of Foreign Direct Investment on Economic Growth in Tunisia. *Academic Research International*, *5*(2), 186-195.

HIMALAYAN JOURNALS

Himalayan Economics and Business Management

ISSN Print : 2709-3549 | ISSN Online : 2709-3557 Open Access

Research Article

Impact of Exchange Rate, Foreign Direct and Portfolio Investment on ASEAN 4 Economic Recovery after Crisis: Global Imbalance Phenomenon

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Article History
Received: 19.12.2021
Accepted: 29.12.2021
Published: 10.01.2022

Citations:
Ratri Ardianto, Sebastiana Viphindrartin and Moh. Adenan. (2022); Impact of Exchange Rate, Foreign Direct and Portfolio Investment on ASEAN 4 Economic Recovery after Crisis: Global Imbalance Phenomenon. *Hmlyan Jr Eco Bus Mgn; 3*(1) 1-11.

DOI: 10.47310/Hjebm.2022.v03i01.001

Abstract: ASEAN is a geopolitical organization in the Southeast Asian region that aims to increase economic growth, social and cultural development, promote peace and stability in political conditions at the regional level. With their potential and resources, ASEAN countries are included in the top 20 investment host countries. During the 1998 monetary crisis, ASEAN countries including Indonesia, Malaysia, Thailand, and the Philippines (ASEAN 4) received a significant impact. Drastic corrections in currency exchange rates, significantly affected socio-political conditions, led to a decline in the amount of foreign direct investment and portfolio investment that flows into these countries. Various government and central bank policies in maintaining the ease of investment for investor countries have made the ASEAN 4 economy recover quickly as widely known of Miracle of Asia. After the Global Imbalance due to the subprime mortgage in the United States in 2008, ASEAN 4 countries were affected but not as significant as the economic crisis in 1998. The purpose of this study was to examine the effect of exchange rates, foreign direct investment, and portfolio investment in ASEAN 4 countries after the crisis in the global imbalance phenomenon. The variables used in this research are economic growth, exchange rate, FDI and Portfolio Investment. The method used is fixed effect regression model. The results obtained are the high value of FDI capital inflows to ASEAN 4 countries and a maintained exchange rate that can restore economic recovery which is proxied by rapid economic growth even in conditions of global imbalances.

Keywords: ASEAN, Economic Growth, Foreign Direct Investment, Portfolio Investment, Exchange Rate, Global Imbalance.

INTRODUCTION

ASEAN's involvement in trade, industry, and world economic activities, when viewed from an investment perspective, indicates that these ASEAN countries are destination countries for investment (Astrid, 2014). Singapore, Indonesia, and Vietnam still occupy a position in the ranking of 20 FDI Inflow countries, top host economies, 2019 and 2020 according to the report published by UNCTAD in the World Investment Report 2021. This is not a proud fact, due to previous UNCTAD reports, more ASEAN countries are included in the ranking of 20 investment destination countries. The 4-fold increase in FDI flows to ASEAN countries since the monetary crisis in 1997-1998 does not cover the fact that FDI continues to decline in developed countries including ASEAN countries which have decreased by 58% with a nominal value of $312. billion caused by strong fluctuations in financial flows as well as changes to investment company policies (World Investment Report 2021, 2021).

Figure 1: Investment Flow to ASEAN 2010 – 2020 (***Source:*** World Investment Report 2021, 2021)

Gross Domestic Product or GDP according to economists is an indicator to assess a country's economic growth. According to Mankiw, GDP is an economic statistic that is the best single measure to assess the welfare of people in a country. The thing that underlies this theory is because GDP measures two parameters at once, namely the total income of all people and also the total state spending on goods and services from the economy. This calculation can encourage the measurement of the balance of account of a country.

GDP or Gross Domestic Product is used by various countries to measure the rate of national economic growth, as a comparison of economic progress between countries with the same measurement parameters, as well as a measuring tool for a country's economic structure to identify economic sectors that need improvement which will lead to policy decisions by the government.

The International Monetary Fund (2021) in its Regional Economic Outlook for Asia and Pacific October 2021 report mentions data related to the achievement of Gross Domestic Product or the amount of added value generated by all business units in a country, including data related to the number of residents to calculate the added value generated by all business units within one year or the Gross Domestic Product (GDP) per capita of ASEAN countries as follows

RANK	COUNTRY	POPULATION (IN MIO)	GDP (MIO USD)	GDP per capita	GDP (PPP)	GDP (P per capita
1	INDONESIA	272.270	1.158.783	4.256	3.507.249	12.882
2	THAILAND	69.947	538.735	7.702	1.329.324	19.004
3	PHILIPPINES	110.432	402.638	3.646	1.000.617	9.061
4	MALAYSIA	33.358	387.093	11.604	979.000	2.934
5	SINGAPURA	5.840	374.394	64.103	600.000	102.742
6	VIETNAM	98.328	354.868	3.609	1.148.054	11.677
7	MYANMAR	54.923	75.800	1.630	45.400	5.200
8	KAMBOJA	17.041	29.809	1.720	78.065	4.930
9	LAO PDR	7.371	20.440	2.773	62.797	8.519
10	BRUNEI	461	15.278	33.097	29.731	64.405

Table 1: Population and GDP Comparison between ASEAN Countries (***Source:*** International Monetary Fund, 2021)

On average, many ASEAN countries adhere to an open economy. Economic openness is characterized by an increase in the flow of foreign capital that flows dynamically and increases the interconnection between exchange rates and foreign investment with macroeconomic variables such as output levels, interest rates, inflation, and current accounts (Grabner, 2018). The exchange rate itself is the key in designing monetary policy for an open economy in the context of inflation targeting policies, where foreign investment has a potential impact on the economic growth of the host country (Ministry of Finance, 2011).

The amount of liquidity and low global interest rates due to the monetary easing carried out by the state for economic recovery, mark the increasing flow of foreign capital between countries that occurred after the financial crisis, where the flow of foreign capital is beneficial for financing which has an impact on economic growth in Emerging countries. Market Economics (EMEs). But on the other hand, foreign capital flows can also increase the vulnerability of a country's economy to external shocks in the global economy (global spill over) (Crisis, 2017; Study, Sudirman, & Mada, 2017).

The flow of foreign capital gives complexity to the implementation of economic policies in an open economy. The achievement of the inflation targets and economic growth is strongly influenced by the volatility of the exchange rate and the flow of foreign capital. In the impossible trinity theory or the policy trilemma, a fixed exchange rate regime and a foreign exchange control regime are options where this choice is not in line with the flow of globalization which offers many benefits from international trade and investment for the domestic economy (Kholis, 2012).

Judging from the conditions a decade before the 2008-2009 global crisis, as a percentage of GDP, the amount of foreign capital increased from 5.7% in the 1980-1989 period to 6.2% in the period between the 1990-1999 crisis. Conditions after the Asian crisis even showed a surge in foreign capital inflows to 13.3% in the 2000-2007 period, and finally slumped back to only 6.2% in the 2008-2012 period.

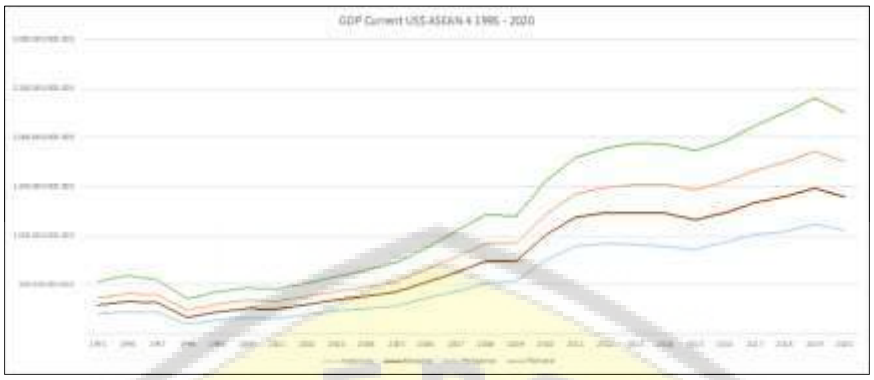

Figure 2: GDP Current US$ ASEAN 4 1995 – 2020 (***Source:*** World Bank, 2021)

Foreign investment is needed for the economic development of developing countries that have limited financial and capital. These developing countries have problems related to the existence of a saving – investment gap (the difference between investment and saving). This flow of foreign capital contributes to filling the gap between the saving – investment (Todaro & Smith, 2003). The results of this study do not necessarily apply to all developing countries. The flow of foreign capital into OECD countries in the primary sector tends to have a negative effect on growth, while in the manufacturing sector it has a positive effect, and an ambiguous effect on the service sector which does not apply to countries in Central and Eastern Europe (Alfaro, 2003; Neuhaus, 2006).

Several previous studies also concluded that the impact of FDI on growth must meet certain prerequisites. Among them is that foreign capital flows will have a strong impact on economic growth if followed by export-oriented trade policies (Balasubramyam, Salisu, Spasford, 1996) or foreign capital flows will have an impact on economic growth if and only if there is the adoption of new technologies and increased resources. Human capital (Borenzstein, Gregorio, Lee, 1998), as well as economic stability, adequate resource capital, and the existence of liberal markets (Sanchez-Robles, 2003)

This also applies in ASEAN countries where research has been conducted, examining the causal relationship between FDI and economic growth in 3 (three) developing countries: Chile, Malaysia and Thailand. The results show that there is no causality between GDP growth and FDI in Chile, but there is a two-way causality in Malaysia and Thailand (Chowdhury, Mavrotas, 2003). The results of this study were strengthened by the results of research by Carkovic and Levine (2002) who used the Generalized Method of Moments (GMM) estimator panel method which found that the exogenous component of PMA did not have a strong influence on growth.

The phenomenon that occurred after the global financial crisis in 2008 was the various series of financial policies implemented by governments in various countries affected by the financial crisis in order to get out of the impact of the crisis with the least possible impact. Indications of recovery from the economic crisis were seen in the second half of 2009 and continued to improve in 2010 as indicated by a positive economic growth rate of 5%. This achievement is in line with the economic growth rate in emerging market countries which reached 7.1%, which is even higher than the recovery in developed countries whose economic growth rate persisted in the range of 3% (Bank Indonesia, 2010). The fast growth rate in emerging market countries is not without side effects. This achievement of economic growth was accompanied by rising inflationary pressures, which led to a tightening of interest rate-oriented monetary policy compared to developed countries. This condition eventually had implications for the massive inflow of foreign capital to these emerging market countries, which resulted in rising global commodity prices.

Foreign capital inflows to emerging market countries in Asia increased quite significantly, amounting to US$85.2 billion, bringing the cumulative total throughout 2010 to US$446.9 billion. Some of the capital flows, which amounted to 152.6 billion US dollars, occurred in the form of direct investment, which was mostly absorbed by China with an amount of around 90 billion US dollars, followed by India at 40 billion US dollars. Foreign capital inflows to emerging market countries in Asia in the form of portfolio investment also increased, reaching 127.2 billion US dollars. The increase occurred evenly across all types of investment, namely direct investment, portfolio investment and loans. The largest portion of these capital flows was direct investment of US$79.7 billion,

followed by loans from non-banks of US$60.9 billion, portfolio investments of US$52.9 billion and loans from banks of US$26.7 billion (Bank Indonesia, 2010). In Indonesia, the development of Foreign Direct Investment (FDI) after the global financial crisis, namely in 2009 decreased from 9,318 million US dollars to 4,877 million US dollars, and in 2010 experienced a significant increase to 13,771 million US dollars. Meanwhile, the portfolio investment position experienced an increasing trend from US$1,764 million to US$10,336 million in 2009 and US$13,202 million in 2010 (http://bi.go.id). The improving macroeconomic conditions in Indonesia and other emerging market countries in Asia have attracted foreign investors to gain investment returns coupled with tightening monetary policy through the policy of increasing interest rates.

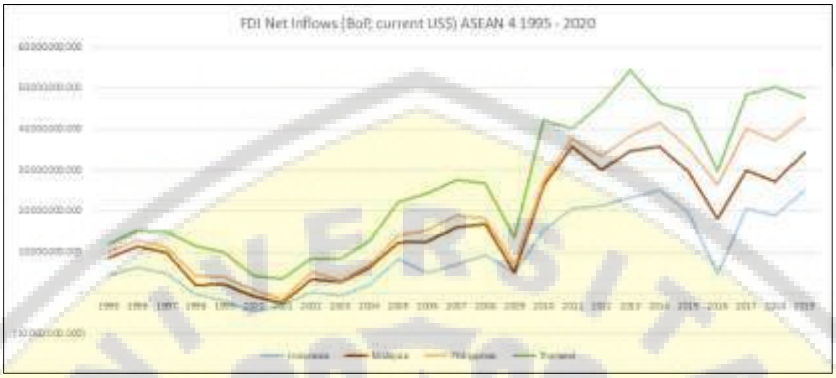

Figure 3: FDI Net Inflows (BoP, Current US$) ASEAN 4 1995 – 2020 (***Source:*** World Bank, 2021)

The volatility that occurs in the prices of financial instruments that are related to financial market volatility is one of the representations of the global imbalance phenomenon. From the graph above, the development of fluctuations in the price of financial instruments is also related to the level of market risk in influencing the economic development of a country. This indicator when it is at the peak point means that it describes the greater changes in the exchange rate within a certain period. The significant increase in the middle of 2008 to 2012 indicates that the subprime mortgage crisis that occurred in 2008 caused an increase in financial market volatility and affected global economic developments. In 2011, when the crisis hit several countries in Europe, the volatility index increased along with the deteriorating condition of exchange rates on financial markets which resulted in the depreciation of several currencies. Furthermore, financial market volatility conditions tended to be stable even though there were several high spikes in the middle of 2016 and 2018. This phenomenon shows a balanced financial market condition formed from global economic developments that occurred in developed and developing countries with the role of monetary policy being taken to stabilize prices. (World Bank, 2017)

When stable global economic conditions are achieved, the volume and value of world trade will also improve in line with the economic growth of developed and developing countries. From the results of a statistical review of trade volume summarized in the World Trade Statistical Review 2020 report by the WTO, a graph of the volume and value of world trade is obtained as follows

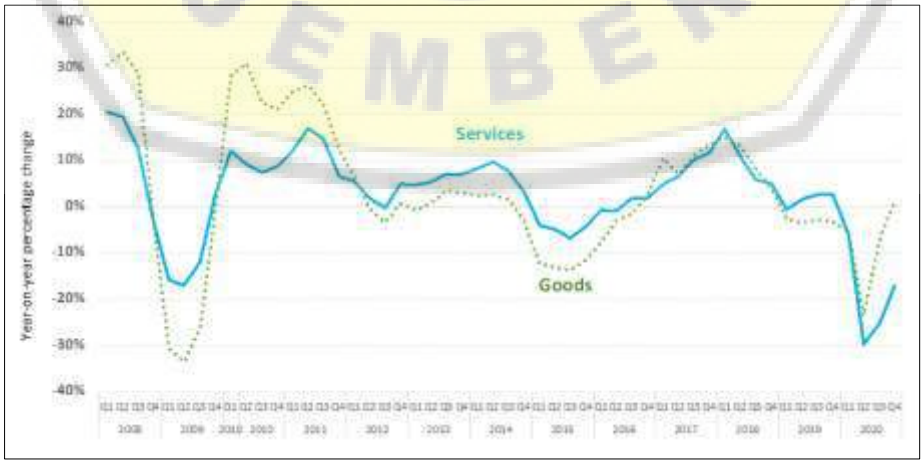

Figure 4: Value and Volume of Worldwide Goods & Service Trade 2008 – 2020 (***Source:*** World Trade Statistical Review, 2020)

In a period of 5 years, trading volume grew by 4.7% and was the strongest growth in the last 6 years. In value alone, trade in goods (merchandise) also increased by 11% at the end of 2017. This increase in volume shows that global economic stability has an influence on the volume and value of world trade. The relationship between international economic shocks and macroeconomic conditions in developing countries needs to be studied more deeply, especially regarding the monetary policy taken by the government of that country towards the financial sector (Kim & Hyun, 2018; Kido, 2018).

This study focuses on the effect of FDI volatility, portfolio investment and exchange rates in post-crisis global imbalance conditions in ASEAN 4 countries based on the similarity of the exchange rate regime and the effect of differences in monetary policy used. The financial crisis that occurred in Asia demonstrated the importance of exchange rate flexibility and a policy framework with high credibility to increase the ability of central banks to make policies (Morgan, 2013).

After the economic crisis that hit the ASEAN region in 1997-1998, ASEAN countries have made various efforts to attract foreign investors to return to invest in their country. The increase in FDI in 2010 was marked by an increase of 97% compared to the previous year. An extraordinary increase of 24% from the 2010 achievement occurred in 2011, where the value of foreign investment that flowed to reach US$ 114.1 million which is a fantastic achievement (ASEAN Investment Report 2010, 2010).

FDI itself is a long-term capital flow and is relatively resilient to economic turmoil (Ruth, 2014). In contrast to FDI, Portfolio Investment is short-term and relatively easy to be affected by economic turmoil. FDI and PI together with the exchange rate will eventually affect the country's economic growth. The occurrence of a crisis that befell a country, will be addressed by policies issued by the country's central bank and the country's government in general. The economic recovery of a country can be proxied by economic growth in post-crisis conditions. Exchange rate fluctuations, a decrease or increase in FDI and PI entering the country also affect how the central bank and government policies in issuing policies that affect the post-crisis economic recovery.

LITERATURE REVIEW

Neoclassical economic growth theory was created from the development of economic activity in society. Entrepreneurship and investment are other factors that influence economic growth according to experts who carry neoclassical economic growth theory. R.F. Harrod and Evsey Domar say that there is a need for capital formation or investment to achieve steady economic growth. The more capital there is, the more the process of producing goods and services will increase. This theory is called the Harrod-Domar theory.

Historical growth theory reveals that economic growth must pass through certain stages of time. These time stages must be passed to achieve the targeted economic growth. This theory was introduced by Frederich List. According to List, economic growth is achieved after people pass through certain stages of time or period. These stages are hunting and wandering (nomadic depending on nature), raising livestock and farming, farming, and making simple crafts, then only reaches the stage of advanced crafts, industry and commerce.

Economic growth in accordance with neoclassical and historical theory states that investment is part of economic growth itself. Investments that initially occur on a small scale within the community or within countries, develop into inter-country investments. This investment activity was then widely known as Foreign Direct Investment or Foreign Investment. FDI is an investment activity carried out by the private sector from abroad or it can be said that investment from one country to another on behalf of the government that owns the capital. There are 3 advantages to the inflow of FDI capital, namely: as a means of reducing the risk of capital ownership by diversifying through investment, as the best spread for the establishment of corporate governance, accounting rules and legality in capital market integration, and encouraging the creation of government financial policies. Appropriate use due to the flow of capital flows. Not only enriching the investment destination country (host country), but also encouraging the improvement of human resource capabilities through the transfer of knowledge and technology that encourages the creation of sustainable economic growth (Rahajeng, 2014).

Todaro (2000) reveals that the resources used to increase income and consumption in the future are referred to as investments. Another point of view is expressed by Deliarnov (1999) that investment is a company expense including the purchase of raw materials, machinery, and production equipment and other needs to assist the production process.

Investment can also be interpreted as expenditure or investment or company spending to buy capital goods and production equipment to increase the ability to produce goods and services available for economic activities (Sukirno, 1996).

World economist, Nicholas Gregory Mankiw (2000), states that there are 3 types of investment spending that exist in the structure of society. These forms of investment are:

- Business Fixed Investment or Fixed Business Investment, whose activities include the process of

purchasing equipment and other structures used in the production process

- Residential Investment or Residential Investment, where there is a sale and purchase of land for housing needs as a place to live and purchase of land for rent
- Inventory Investment or Inventory Investment, where the activity is the storage of manufactured goods or semi-finished goods and equipment as well as finished materials

The relationship between investment theory and development theory in accordance with the role of foreign capital can be explained as follows:

- The classical theory explains that the higher the interest rate, the higher the cost of borrowing for investment financing so that the level of profit to be obtained decreases and the level of investment will also decrease (Amin, 2003).
- In neo-classical theory, there is a positive relationship between investment and income (output) and a negative relationship between investment and capital rental costs and interest rates. Amin (2003) states that in Keynes's theory, the interest rate, cost of capital and the amount of profit to be obtained will be the determinants of investment. The expected rate of return or the expected net rate of return on additional capital expenditure is referred to as the Marginal Efficiency of Capital (MEC). MEC which is greater than the interest rate makes investors reluctant to invest.
- Another relation related to Foreign Direct Investment was put forward by Stephen Hymer (1965) which stated that according to the development of the modern monopolistic advantage theory which puts that foreign direct investment is more common in oligopolistic industries than industries operating in near perfect markets (near perfect competition).). This thinking was developed into that foreign investment decision making is based on the optimization of companies in imperfect competition market conditions, the creation of internal markets to cut the impact of market imperfections, and the creation of multinational companies (MNCs) (Buckley-Caso, 1976).
- The Product Life Cycle model introduced in a book entitled International Investment and International Trade in The Product Cycle (1996) states that there are 3 stages in the development of manufactured products. The innovation stage, the new market search stage, and the standardization stage where more advanced research has been created so that semi-skilled and unskilled workers can be used in the production process. This condition finally encourages companies to look for new countries that have lower labour costs to optimize the profits earned by the company (Vernon, 1996).

Gross Domestic Product or Gross Domestic Product is the value of the market size level of final goods and services produced in a certain period. The purpose of calculating the value of GDP is to determine the value of economic activity in a single money value over a certain period (Mankiw, 2015).

Macroeconomic conditions become more stable when total productivity increases, driven by appropriate government policies. The condition of economic growth can be reviewed through the business cycle and long-term sustainable growth in the country concerned. The high level of GDP encourages foreign investment to be invested more and in various sectors (Solnik and McLeavy, 2019).

The exchange rate is an important variable in the economy of a country. Changes in exchange rates will also have an impact on economic activities between countries (international trade). Depreciation of the exchange rate is a burden for importing countries, due to an increase in the price of goods imported from abroad. Different conditions occur for countries providing goods or exporters. This change in the exchange rate will provide a significant advantage where the price of their goods will be much cheaper and accepted by the international trade market.

When viewed from another point of view, the exchange rate is considered to have a bad impact on the economy because of the potential for capital flow speculation, moral hazard, and encouraging over investment. In general, the ideal condition to be achieved is that the exchange rate is maintained at a stationary and stable level which will encourage lower transaction costs in domestic and international trade (Nasution, 2009).

Developing countries are very vulnerable to exchange rate fluctuations. The financial balance of banks and companies that have foreign debt denominated in foreign currencies will affect economic growth. A significant increase in exchange rate depreciation will increase the risk of Non-Performing Loans (NPL) or default and lead to a crisis (Eichengreen and Hausmann, 1999). A stable exchange rate will create a business climate that grows positively and is attractive for additional investment (Jakob, 2016).

RESEARCH METHOD

This study uses samples from ASEAN 4 countries, namely Indonesia, Malaysia, Philippines, and Thailand. The type of research used is quantitative research with a descriptive approach.

The data used in this study is secondary data obtained from various sources.

The method used is panel data regression with a Fixed Effect Model (FEM) approach with a regression model as below:

$$Y = \propto + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Description as below:

Y	: economic growth (GDP)
X_1	: *foreign direct investment* (FDI)
X_2	: *portfolio investment* (PI)
X_3	: *exchange rate* (ER)
$\propto$	**:** Constanta
$\beta_1, \beta_2, \beta_3, \beta_4$	: Regression coefficient
ε	: Error

The hypothesis developed based on the conditions mentioned above is as follows:

- Hypothesis 1 (H1)

  FDI growth has a significant and positive effect on GDP

- Hypothesis 2 (H2)

  FDI growth has a significant and positive effect on GDP

- Hypothesis 3 (H3)

  The rate of exchange rate depreciation has a significant and positive effect on FDI & PI

- Hypothesis 4 (H4)

  Global Imbalance conditions have a negative effect on GDP

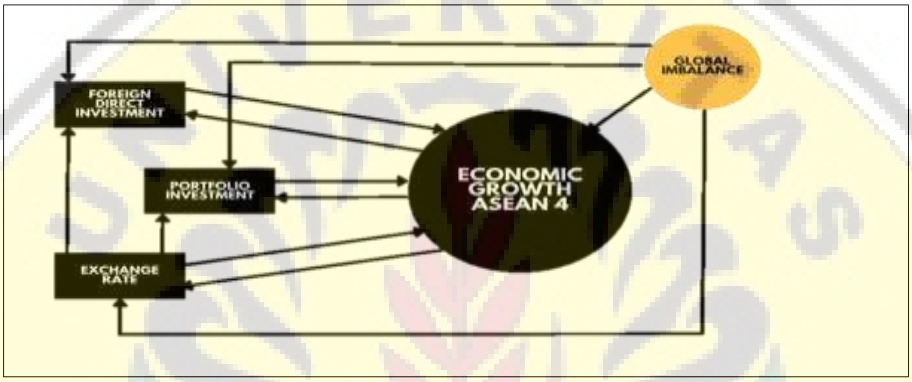

Figure 5: Conceptual Framework

RESULT AND CONCLUSION

The economic growth of ASEAN 4 countries was significantly corrected during the 1997 economic crisis, where the exchange rate was also corrected due to the shock that occurred, and FDI and PI growth were also corrected but could soon return within 2 years after the crisis.

The subprime mortgage that occurred in 2008, shook the world economy because of the contagious effect that had an impact on the European economy. As developed countries, the shocks received by European countries forced these countries to implement various policies to maintain their macroeconomic valuations in a stable and focused condition. European countries tend to hold back foreign investment abroad, even making large and fast withdrawals of funds from developing countries that are host countries or investment destination countries. This condition ultimately reduces the amount of FDI and PI growth in emerging markets or developing countries that are investment destinations. The lack of FDI and PI can encourage a decrease in the number of jobs which will have an impact on the purchasing power of the people in ASEAN 4 countries. The decline in people's purchasing power will ultimately correct economic growth away from the targets set by the governments of these ASEAN 4 countries.

The interpretation of the selected model is used to examine the relationship between the independent variable or the independent variable on the dependent variable or the dependent variable in the Fixed Effect Model as the selected model.

Simultaneous Significance Test

The rule applied is the prob value. (F-Statistic) <0.05. The results of this simultaneous significance test are as follows

Dependent Variable: GDP
Method: Panel Least Squares
Date: 12/14/21 Time: 11:43
Sample (adjusted): 1995 2019
Periods included: 25
Cross-sections included: 4
Total panel (unbalanced) observations: 96

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.34E+10	2.00E+10	2.163646	0.0332
FDI	24.89468	1.949155	12.77204	0.0000
PI	-4.559613	3.324219	-1.371634	0.1736
ER	38772296	6885897.	5.630682	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.844539	Mean dependent var	3.08E+11
Adjusted R-squared	0.834058	S.D. dependent var	2.46E+11
S.E. of regression	1.00E+11	Akaike info criterion	53.57090
Sum squared resid	8.95E+23	Schwarz criterion	53.75788
Log likelihood	-2564.403	Hannan-Quinn criter.	53.64648
F-statistic	80.58156	Durbin-Watson stat	1.417614
Prob(F-statistic)	0.000000		

Figure 6: Result of Simultaneous Significance Test

From the results of the simultaneous significance test, it was found that the prob value. (F-statistic) for the variable FDI and Exchange Rate is <0.05 while the value of the PI variable is 0.1736 and is greater than 0.05.

This shows that the FDI variable and the Exchange Rate have a simultaneous effect on the variable economic growth which is proxied in the form of GDP.

Determinant Coefficient Test

In the determinant coefficient test, the adjusted R-squared value is 0.834058 or 83%. The test results show that variations in economic growth or GDP can be explained by FDI and Exchange Rate. The remaining value is 100% - 83% = 17%, can be explained by PI and other variables.

Partial Significance Test (Individual)

The rules for the partial (individual) significance test are as follows:

- Prob value. FDI is 0.00 < 0.05 so that it accepts H1 i.e., FDI has a significant and positive effect on GDP
- Prob value. PI is 0.17 > 0.05 so it does not accept H2, namely PI has no significant effect on GDP
- Prob value. Exchange Rate (ER) is 0.00 < 0.05 so that it accepts H3 which has a significant and positive effect on GDP

When considering the global imbalance condition, it can be divided into the following periods:

- Before the 1998 economic crisis
- Before the 2008 tapper tantrum crisis

The data obtained for conditions prior to the 1998 economic crisis are as follows

Dependent Variable: GDP
Method: Panel Least Squares
Date: 12/15/21 Time: 22:47
Sample (adjusted): 1974 1996
Periods included: 23
Cross-sections included: 4
Total panel (unbalanced) observations: 81

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.43E+10	3.11E+09	11.01714	0.0000
FDI	17.80056	1.603056	11.10414	0.0000
PI	-12.93335	1.532868	-8.437352	0.0000
ER	1206772.	8425037.	0.143236	0.8865

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.888586	Mean dependent var	6.24E+10
Adjusted R-squared	0.879552	S.D. dependent var	4.74E+10
S.E. of regression	1.64E+10	Akaike info criterion	49.96565
Sum squared resid	2.00E+22	Schwarz criterion	50.17258
Log likelihood	-2016.609	Hannan-Quinn criter.	50.04867
F-statistic	98.36495	Durbin-Watson stat	0.756772
Prob(F-statistic)	0.000000		

Figure 7: Result of Partial Significance Test before 1998 Crisis

This condition indicates that prior to the 1998 economic crisis, FDI had a significant and positive effect on economic growth, while PI had a significant but negative effect on economic growth. Exchange Rate has no significant effect on GDP.

Before the tapper tantrum crisis triggered by the subprime mortgage in the United States in 2008, the following results were obtained

Dependent Variable: GDP
Method: Panel Least Squares
Date: 12/15/21 Time: 22:56
Sample (adjusted): 1974 2007
Periods included: 34
Cross-sections included: 4
Total panel (unbalanced) observations: 125

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.07E+10	3.84E+09	10.60800	0.0000
FDI	18.23284	1.272047	14.33347	0.0000
PI	-5.043603	1.482554	-3.401968	0.0009
ER	14568610	1595153.	9.133048	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.838239	Mean dependent var	9.36E+10
Adjusted R-squared	0.830014	S.D. dependent var	7.32E+10
S.E. of regression	3.02E+10	Akaike info criterion	51.15339
Sum squared resid	1.08E+23	Schwarz criterion	51.31178
Log likelihood	-3190.087	Hannan-Quinn criter.	51.21774
F-statistic	101.9117	Durbin-Watson stat	1.358456
Prob(F-statistic)	0.000000		

Figure 8: Result of Partial Significance Test before 2008 Crisis

Conditions during the 2008 economic crisis showed that FDI and ER had a significant and positive effect on GDP growth in ASEAN 4 countries. PI had a significant but negative effect on GDP.

The combination of pre-crisis and post-crisis conditions is as follows

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.34E+10	2.00E+10	2.163646	0.0332
FDI	24.89468	1.949155	12.77204	0.0000
PI	-4.559613	3.324219	-1.371634	0.1736
ER	38772296	6885897.	5.630682	0.0000
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	3.43E+10	3.11E+09	11.01714	0.0000
FDI	17.80056	1.603056	11.10414	0.0000
PI	-12.93335	1.532868	-8.437352	0.0000
ER	1206772.	8425037.	0.143236	0.8865
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	4.07E+10	3.84E+09	10.60800	0.0000
FDI	18.23284	1.272047	14.33347	0.0000
PI	-5.043603	1.482554	-3.401968	0.0009
ER	14568610	1595153.	9.133048	0.0000

Based on the table above, before the 1997 crisis, it can be concluded that FDI had a significant and positive effect on GDP growth in ASEAN 4 countries by 17%. Portfolio Investment has a significant but negative effect on economic growth as a proxy for GDP of 12%. Meanwhile, the exchange rate does not have a significant impact on GDP.

Conditions at the time of the global imbalance due to the subprime mortgage in 2008 showed that FDI had a significant and positive influence on GDP of ASEAN 4 with the amount of 18%. The investment portfolio itself still has a negative impact on GDP. The Exchange Rate or exchange rate has a significant and positive influence on GDP because the exchange rate affects the economic conditions of ASEAN 4 countries.

After the 1997 and 2008 crises, it is known that FDI and the Exchange Rate have a significant effect on GDP growth. Even for FDI, the amount increased to 24% in influencing the GDP of ASEAN 4 countries. Portfolio Investment which has a weakness vulnerable to shock is known to have no effect on ASEAN 4 GDP.

CONCLUSION

From the results of data collection and studies both theoretically and empirically, it is known that FDI and the Exchange Rate have a significant influence on the economic growth of ASEAN 4 countries when there is an economic crisis that causes a global imbalance that can affect the economic life of ASEAN 4 countries. Portfolio Investment or portfolio investment that favours investment in the short term, has been proven according to theory as well as theoretical and empirical studies that does not have much effect on economic growth as proxied by GDP for ASEAN 4 countries, namely Indonesia, Malaysia, Thailand and the Philippines.

The condition of global imbalance that occurs due to various factors has brought a contagious effect to countries that have close geographical proximity, business relations and as host countries for investor

countries. The global imbalance can also have an impact not only on emerging markets or developing countries but can also have a significant impact on developed countries. The global imbalance that occurred due to the crisis conditions that occurred in Thailand in mid 1997 also contributed to causing panic towards developed countries which made ASEAN 4 countries the host country. Massive and rapid withdrawals of investment funds, the exchange of local currencies into stronger foreign currencies led to the weakening of the currencies of countries affected by the 1997 economic crisis. Unstable economic conditions even led to social and political crises for the country. Indonesia.

The subprime mortgage that hit the United States has caused the bankruptcy of financial institutions in the United States. The same pattern occurred as in the 1997 economic crisis in Asia. Countries associated with US financial institutions, take action to withdraw their investment funds. This crisis has led to a financial crisis that is more severe and affects countries that are geographically connected to the United States and have trade relations with the United States. The government policies of each country always strive for safe and stable conditions for their country to keep the impact of the crisis under control.

The crisis conditions that encourage the creation of global imbalances have had an impact not only on developed countries but also on developing countries or emerging markets. Developing countries such as ASEAN 4 countries such as Indonesia, Malaysia, Thailand, and the Philippines, experienced a more significant impact due to their high dependence on exports and imports, foreign investment and international trade.

As with the suggestions that have been submitted by previous researchers, the governments of ASEAN 4 countries are expected to be able to carry out the following activities:

- Prioritizing direct withdrawal of foreign investment by implementing policy packages that help facilitate investment. One of the things that can be done is the ease of obtaining permits, providing tax relief and infrastructure development that can encourage facilities for companies originating from investing countries.
- In relation to the suggestions stated earlier, ASEAN 4 countries are also encouraged to prioritize the potential of their respective countries. The development of the digital industry, which is marked by the growth of the start-up industry, can be one that developing countries can develop. A growing start-up industry will have a valuation of up to millions of dollars with promising reviews. This is also an attraction for investor countries to be able to invest and contribute to the development of their business.

REFERENCES

1. Borensztein, E., De Gregorio, J., & Lee, J. W. (1998). How does foreign direct investment affect economic growth?. *Journal of international Economics*, *45*(1), 115-135.
2. Dreher, A. (2006). Does globalization affect growth? Evidence from a new index of globalization. *Applied economics*, *38*(10), 1091-1110. DOI: 10.1080/00036840500392078.
3. Ghozali, I., & Hengky, L. (2015). Partial Least Squares concepts, techniques, and applications Using SmartPLS 3.0 Program. *Semarang: Diponegoro University Publishing Agency*, 76-77.
4. Hair, Joseph E, Jr. *et al.*, (2014). A Primar of Partial Least Squares Structural Equation Modeling (PLS- SEM). Sage Productions, Inc. California. USA, 44. Accessed August 2021
5. Hamdi, F. M. (2013). The impact of globalization in the developing countries. *Developing Country Studies*, *3*(11), 142-144. ISSN 2224-607x (Paper). ISSN 2225-0565 (Online). Www.Iiste.Org. Accessed August 2021.
6. Kakar, Z. K., Bashir, A. K., & Muhammad, J. K. (2011). Globalization and Economic Growth: Evidence from Pakistan. *Acta Universitatis Danubius (AUD)*, *7*(3), 208-217.
7. Zerrin, K., & Dumrul, Y. (2018). The impact of globalization on economic growth: empirical evidence from the Turkey. *International Journal of Economics and Financial Issues*, *8*(5), 115-123.
8. Kof Index of Globalization. The Swiss Economic Institute. Http://Globalization.Kof.Ethz.Ch/. Accessed on September 2021.
9. Maduka, A. C., Madichie, C. V., & Eze, E. A. (2017). Globalization and economic growth: Evidence from Nigeria. *International Journal of Social Science and Economic Research*, *2*(8), 4177-4191. ISSN: 2455-8834.
10. Majidi, A. F. (2017). Globalization and economic growth: The case study of developing countries. *Asian Economic and Financial Review*, *7*(6), 589-599. Doi: 10.18488/Journal.Aefr.2017.76.589.599
11. Rao, B. B., & Vadlamannati, K. C. (2011). Globalization and growth in the low income African countries with the extreme bounds analysis. *Economic Modelling*, *28*(3), 795-805. DOI: 10.1016/j. econmod.2010.10.009.
12. Samimi, P., & Jenatabadi, H. S. (2014). Globalization and Economic Growth: Empirical Evidence on the Role of Complementarities. *Www.Plosone.Org*, *9*(4), 1-7. DOI:10.1371/Journal.Pone.0087824.
13. Suci, S. C., Asmara, A., & Mulatsih, S. (2016). The impact of globalization on economic growth in ASEAN. *BISNIS & BIROKRASI: Jurnal Ilmu Administrasi dan Organisasi*, *22*(2), 79-87.

14. The World Bank, Available at http://www.worldbank.org/unite nations/. Accessed September 2021. The Association of Southeast Asian Nations (ASEAN), Available at https://asean.org/asean/about-asean/overview/. Accessed September 2021.
15. Wolf, Martin. 2004. Globalization and Interdependence. New Haven: Yale University. Available at: http://www.un.org/esa/documents/un.oct.2004. globalisation.and.interdepence.pdf. Accessed on September 2018.
16. Ying, Y. H., Chang, K., & Lee, C. H. (2014). The impact of globalization on economic growth. *Romanian Journal of Economic Forecasting*, *17*(2), 25-34.
17. Ang, J. B. (2008). Foreign Direct Investment and its Impact on the Thai Economy: The Role of Financial Development. *Journal Economic Financial*, *33*, 316-323
18. Badan Pusat Statistik. (2015). *Panjang Jalan Menurut Tingkat Kewenangan.* http://www.bps.go.id/tab_sub/view.php?kat=2&tabel=1&daftar=1&id_subyek=17&notab=10. Diakses pada 28 Januari 2015
19. Bari, M. (2013). Foreign Direct Investment and Economic Growth In Bangladesh and India: A Comparative Study. *South Asian Journal of Management*, *20*(1), 7-37
20. Boediono. (1999). Teori Pertumbuhan Ekonomi. Yogyakarta: BPFE UGM.
21. Gujarati, D. N., & Dawn, C. P. (2009). Basic Econometrics, *Fifth Edition. New York: McGraw Hill*.
22. Jhingan, M. L. (2004). Ekonomi Pembangunan dan Perencanaan, *Edisi 1 cetakan Ke-10. Jakarta: PT Grafindo Persada*.
23. Jogiyanto, H. M. (2010). Metodologi Penelitian Bisnis: Salah Kaprah dan Pengalaman-Pengalaman. *Yogyakarta: BPFE Yogyakarta*.
24. Jones, H. G. (1975). An Introduction to Modern Theories of Economic Growth. *Great Britain: Thomas Nelson and Sons, Ltd*.
25. Kuncoro, M. (2003). Metode Riset Untuk Bisnis dan Ekonomi. *Jakarta: Erlangga*.
26. Meier, G. M. (1989). Leading Issues in Economic Development. *Cambridge: Oxford University Press.*
27. Salvatore, D. (2007). International Economics. *New Jersey: Prentice-Hall*.
28. Sukirno, S. (2000). Makroekonomi Modern: perkembangan pemikiran dari klasik hingga Keynesian baru. *Jakarta: Raja Garfindo Pustaka*.
29. Syofyan, S. (2009). Modul Ekonometrika II, Revisi 2008. http://www.scribd.com/doc/12853877/Modul-Ekonometrika-II-Revisi-2008-By-Syofriza-Syofyan# scribd. Diakses pada 29 Januari 2015.
30. Tandelilin, E. (2001). Analisis Investasi Manajemen Portfolio, Cetakan Pertama, *Yogyakarta: BPFE*.
31. Todaro, M. P., & Stephen, C. S. (2004). Pembangunan Ekonomi di Dunia Ketiga, Edisi Kedelapan. *Jakarta: Erlangga*.
32. Undang-Undang Republik Indonesia No.25 tahun 2007 tentang Penanam Modal.
33. United Nations Conference on Trade and Development. (2020). *World Investment Report.* http://webcache.googleusercontent.com/search?q=cache:Y3LBkDCjl PEJ:unctad.org/en/docs/wir2020ch5_en.pdf+&cd=3&hl=en&ct=clnk. Diakses pada tanggal 10 Februari 2021
34. Wahiba, N. F. (2014). Impact of Foreign Direct Investment on Economic Growth in Tunisia. *Academic Research International*, *5*(2), 186-195.