UNRAVELING GEOPOLITICAL RISK AND ECONOMIC DYNAMICS: IMPLICATIONS FOR FOREIGN PORTFOLIO INVESTMENT INFLOW IN MALAYSIA

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DECLARATION

We hereby declare that:

(1) This undergraduate FYP is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this FYP has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) Equal contribution has been made by each group member in completing the FYP.

(4) The word count of this research report is 20,162.

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LIST OF ABBREVIATIONS

ADF	Augmented Dickey-Fuller Test
BNM	Bank Negara Malaysia
CLT	Central Limit Theorem
DV	Dependent Variable
ECOWAS	Economic Community of West African States
EG	Economic Growth
FDI	Foreign Direct Investment
FPI	Foreign Portfolio Investment
FPII	Foreign Portfolio Investment Inflow
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GPR	Geopolitical Risk
GR	Global Risk
IDP	Investment Development Path Theory
IR	Interest Rate
IV	Independent Variable
JB	Jarque-Bera Test
MCO	Movement Control Order
MYR	Malaysian Ringgit
NIIP	Net International Investment Position

OECD	Organization for Economic Cooperation and Development
OLI	Eclectic Paradigm Model
OLS	Ordinary Least Squared
OPR	Overnight Policy Rate
PP	Phillips-Perron Test
PRIV	Political Risk and International Valuation Model
SIC	Schwarz Information Criterion
US	United States
VIF	Variance Inflation Factor
VIX	CBOE Volatility Index

ABSTRACT

This study is conducted to unveil the impact of geopolitical risk and other economic factors such as economic growth, interest rate, and global risk on the capital inflow in Malaysia which is indicated by foreign portfolio investment. The data collected in this study is secondary data in quarterly form from quarter 1 of 2005 to quarter 4 of 2022, in total of 72 observations. The different sources such as Department of Statistics Malaysia, Bank Negara Malaysia, Yahoo Finance, World Bank and Matteo Iacoviello's website are being explored to obtain the relevant data in this study. Moreover, EViews version 12 is being used as the analytic tool in this study, which is to conduct the unit root test, multiple linear regression, diagnosis checking, granger causality test and variance decomposition. In short, this study can conclude that there is a significant and negative relationship for the dependent variable, capital inflow in Malaysia, and the independent variables, interest rate, geopolitical risk and global risk while insignificant and positive relationship is obtained for the capital inflow in Malaysia and economic growth.

CHAPTER 1: INTRODUCTION

1.0 Introduction

This study aims to identify the implications affecting the foreign portfolio investment (FPI) inflow in Malaysia. Under Chapter 1, research background is firstly covered to understand the current situation of this study, followed by a problem statement to explain the problem associated with this study. Then, research objectives, questions and hypotheses are studied respectively. Also, the significance of study is being discussed and explained. Lastly, a conclusion outlines the key ideas stated in Chapter 1.

1.1 Research Background

Capital flows are essential to the functioning of the global economy, especially during this era of globalization. There has been a significant growth since the 1980s, on the capital flow globally much of which is attributable to activity on the equity and bond markets. Cross broader capital flow has been enticed by efficient capital markets, the effects of globalization, and easy access to financial services. Because of the efficiency of the financial market, the removal of informational barriers and simple access to information technology, and the introduction of new financial products and services, capital flow in the economy is more deliberate (Qamruzzaman & Wei, 2019). With this, the overall external assets and liabilities of several countries have greatly expanded due to the additional capital flows flowing from different countries. They bring a variety of benefits and risks to the particular country, where it is closely correlated with economic and financial situations and creates significant policy issues. The relevance of capital flows for financial stability and financial growth, especially in a developing country, can be particularly vulnerable to fluctuations in the availability of foreign money, despite the majority of capital movements in absolute terms being between established countries (Koepke, 2019). Not to mention, with the global financial crisis that has triggered the vulnerability of the overall capital flow due to external shocks can vary significantly depending on which economic sectors are receiving

capital inflows and giving capital outflow. For instance, in the Latin American crisis, sovereign debt proved to be the weak link that affected the capital flow and on the other hand the main source of fragility in the Asian financial crisis was the private sector debt supported by capital inflows (Kalemli-Ozcan, 2020). So, capital flow has been explored to distinguish between the acts of capital inflow and outflow while exploring the variables pertaining to it.

Capital outflow is known as the money that leaves a country as a result of variables, which are typically a combination of political and economic considerations (Nasrudin, 2022). It is usually viewed as a negative development when capital outflow is experienced in the country and capital restrictions would be enforced to limit the flow of capital moving out from the country. This occurs when assets start to move from the home country to another country where better prospects and increased economic stability in foreign markets can be achieved. So, it can impact the country in a macroeconomic scale where it discourages both domestic and foreign investments (Chen, 2021). It gives a combination of mixed impacts towards the home country where the economy is at stake when there is a significant outflow experienced. This can result in severe depreciation and an exchange rate crisis which might trigger an economic crisis. On the other hand, capital outflow would be able to ensure the capital flow in the country is at an equilibrium. Therefore, restrictions of capital outflow acts as one of the most effective barriers against undesired inflows. Not to mention, capital restrictions on withdrawals may be necessary during a severe crisis where it further prevents the depreciation of currency to quicken and a bank run that may occur. This scenario of capital outflows occurs in both advanced and emerging economies. However, the impact is more severe towards emerging economies as they are more susceptible to large and sudden capital outflows (Vaidya, n.d.).

Capital inflow is a strategy for emerging economies to achieve economic integration and globalization. When it comes to domestic resources, many less developed countries such as the ECOWAS countries like Nigeria, Ghana, and others that rely on external sources to fund and carry out long-term development projects. The need for increased capital inflow to support domestic resources has, however, been a catalyst for economic growth and development (Musibau et al., 2019). The structure of capital inflow has a significant impact on how economies function in a country as it is recognised as the core component of the process of economic expansion in the

majority of developing countries (Mohd et al., 2018). In addition to boosting domestic investments, management abilities, technology transfer and employment rates, capital inflows also boost managerials skills. The economic effects of capital inflows are extremely important for advancing control from the depressive phase into the prosperous phase (Musibau et al., 2019). Capital inflows consist of foreign direct investment (FDI), foreign portfolio investment (FPI) and other kinds of investments made available. The economic structures will be impacted differently by various types of capital inflow as it differs between institutional and retail investors, currency denomination and the economic sectors involved in the transactions (Koepke, 2019).

FDI is seen as a crucial component of economic growth and the process of financial globalization for its inflow of FDI contributes not only to much-needed additional foreign capital but also new technology advancements, improve managerial and marketing skills, and horizontal and vertical knowledge transfer through backward or forward linkages with local firms (Osei & Kim, 2020). It is seen that FDI is reliable and sustainable, as opposed to FPI which is seen to be more risky and inconsistent. So, to gain maximum amount of FDI, several nations around the world are in the works to lower the barriers of entry and to improve its attractiveness (Khalfaoui & Derbali, 2021). Especially in developing and developed countries, policymakers have eliminated various entry barriers, opened up new industries to foreign investment, and provided various forms of investment incentives, such as import duty exemptions and tax holiday, to encourage foreign investment in their specific grounds. As a result, over the past 20 years, there has been a sharp increase in the proportion of FDI in the total capital flows globally (Osei & Kim, 2020). This implies that a long-term relationship has its presence between the direct investor, a resident of one economy, and the direct investment enterprise, a resident of another economy, which gives a significant degree of influence towards the investors on the management of the enterprise. This is due to better positioned gained from FDI when nations have higher levels of human capital and a more hospitable business environment (Gade et al., 2023). This will therefore have an impact on FDI inflow, particularly in developing countries where it is reliant on the rate of economic growth.

Next, FPI refers to the transfer of financial assets, such as cash, stocks, or bonds, across international borders with the intention of making a profit. The economy's efficient and advanced capital market is very attractive to FPI. An investor can diversify their investments and share risk

when capital flows in the form of equity on the financial market. The impacts of FPI allow for improved investment diversification as well as an increase in return with sectoral related commodities (Qamruzzaman & Wei, 2019). FPI has grown to be a large contributor to the global economy and a significant source of funding for both developed and developing countries (Mohd et al., 2018). When there is an increase in FPI, it showcases there is more capital market liquidity which creates a deeper and wider market as it is the least risky type of investment to investors. Moreover, it supports the growth of the nation's capital market where the financial infrastructure is strengthened and the process of financial intermediation is deepened. It also promotes the development of the financial sector (Acha & Essien, 2018).

Another form of capital inflow, other types of investments, comprises debt where it's mainly from the banking sector such as loans, deposits, and banking capital, private sector loans, trade credits, official government flows, and other smaller residual components. They have largely received little attention due to its volatility as it experiences the most pronounced declines during instances of both global and country-specific abrupt halt (Eichengreen et al., 2018). A bank's ability to recover its investments if lending is abruptly discontinued may also be substantially compromised once funds have been pledged in this manner. Due to the illiquid nature of bank loans, prices of the bank loans do not adjust automatically which leads to banks to change the amount of lending instead. The uncertainty and risk increase in difficult financial times, and interest rates reflect this. Its volatility is influenced by the interest rate disparity and this will affect the decision-making behavior of residents to invest abroad and that of non-residents to invest in the recipient country. Other types of investments can be seen to be vulnerable to deviations from the uncovered interest parity and whose nominal value is unaffected by risk shocks (Hannan, 2017).

Malaysia has received favorable ratings for its capacity to draw in international investments and for its ability to sustain its economic growth rate for years while maintaining great price stability. By fostering an atmosphere that is favorable to foreign companies, the country's policies have boosted the ease of doing business. The Malaysian economy has steadily recovered primarily due to significant reforms and a favorable external environment ever since the financial crisis dated back to 1997 - 1998. Over the years, it has grown to be a more alluring location for international investors looking for diversification and potentially high returns due to its status as a

developing country with a strong financial industry and compelling investment prospects. Multiple continuous reforms in its financial sector and the efficiency of securities markets run with the enhancement of corporate governance has strengthened the resilience of the economy (Amin, 2017).

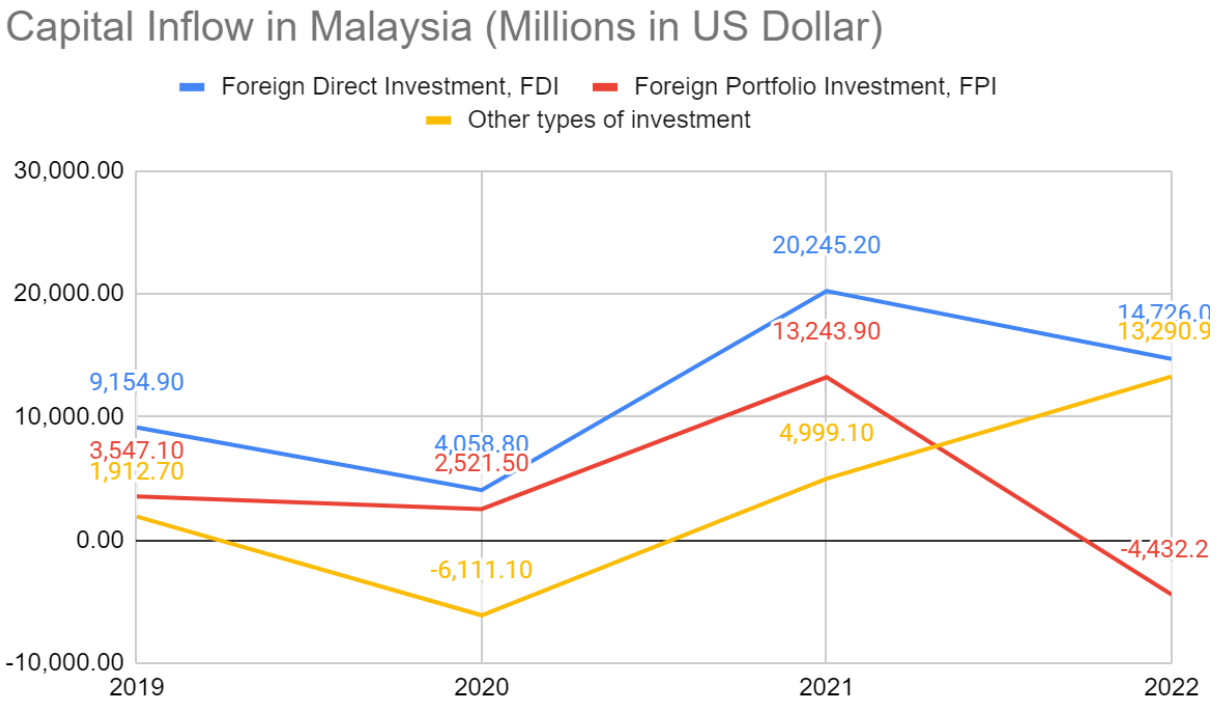

Figure 1.1. Capital inflow in Malaysia. Adapted from International Monetary Fund. (n.d.). *Balance of payments and international investment position statistics*. https://data.imf.org/?sk=7a51304b-6426-40c0-83dd-ca473ca1fd52&sid=1542635306163

The figure 1.1 above showcases the performance of each type of capital inflow in Malaysia from 2019 to 2022. Overall, there is an increasing trend where 2021 records the highest of inflows which is contributed mainly from foreign direct investment (FDI). Throughout the years, the main contributing factor of capital inflow in Malaysia is FDI where it records $9,154.9 million in 2019 up to a sum of $14,726.0 million. It is a good sign as it signifies that there is economic growth due to investors' confidence in investing in Malaysia. On the other hand, other types of investment also have a steady upward trend where in 2022 recorded the highest throughout the four years which is $13,290.9 million. So, investments such as debts like bank loans have been frequently issued

which leads to an increase in the capital inflow for other types of investments since 2019. However, FPI is seen to have an overall decreasing trend except for the year 2021 where it has recorded a total of $13,243.9 million. This stood out the most as with the recent year of 2022, among the types of capital inflow, FPI recorded a deficit whereas FDI and other types of investments recorded a surplus. This can be explained more in this study regarding the geopolitical tensions that Malaysia is facing at that particular moment. So, diving in deeper to understand the nature of foreign portfolio investment inflow (FPII) should be studied.

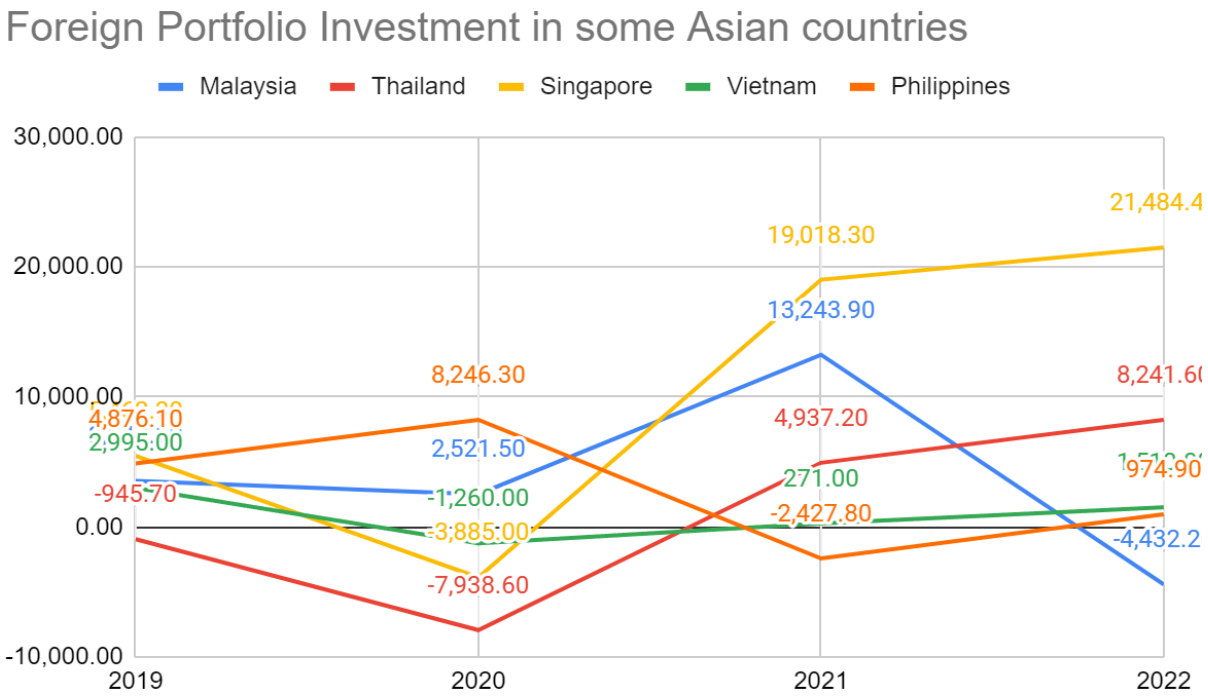

Figure 1.2. Foreign portfolio investment in some Asian countries. Adapted from International Monetary Fund. (n.d.). *Balance of payments and international investment position statistics*. https://data.imf.org/?sk=7a51304b-6426-40c0-83dd-ca473ca1fd52&sid=1542635306163

Looking into Figure 1.2 where in Thailand and Singapore there is a steady increase in the growth of FPI from 2019 to 2022 where in the recent year records the highest amount of $8,241.60 and $21,484.40. Countries like Vietnam and the Philippines face slight fluctuations in their FPI where eventually it records a positive growth in the year 2022. Unlike in Malaysia, there is a significant drop from a surplus of $13,243.90 in 2021 to a deficit of $4,432.20 in 2022. This is unfavorable especially when other Asian countries such as Thailand, Singapore, Vietnam and the

Philippines showcase surplus figures. The drop is due to Malaysia's general election and tighter monetary and financial circumstances that has led to the instability of the Malaysian Ringgit. Therefore, due to their diminished ability to make informed projections, investors have withdrawn their intended investments in Malaysia as a result of the decline in confidence (Ezanee, 2022). So, to understand more on the rationale of the deficit figure recorded by Malaysia, factors affecting it shall be studied such as economic growth, interest rate, global risk and geopolitical risk as efforts are needed by policymakers and respective bodies to boost up the growth of the FPII.

One of the factors that affect FPII in Malaysia would be economic growth. The demand for more foreign capital inflow to complement domestic resources has been acknowledged as an engine of economic growth and development. It is regarded as the key component of the process of economic growth in most countries as it increases domestic investment, improves managerial skills, encourages technological transfer, and boosts employment rates (Musibau et al., 2019). Economic growth or contraction may occur as the global economic cycle changes from the shrinking phase to the easing phase or vice versa. Capital patterns can shift quickly, especially during shocks to the global economy, as was the case during the Asian financial crisis of 1997 and the global financial crisis of 2007 (Park & Yang, 2021). According to Omay and Iren (2019), although the domestic macroeconomic and financial issues were the cause of the Asian financial crisis, investors' overreaction and herding behavior made the crisis worse. This is because capital inflow is dependent on the economic situation of the country, where investors’ or developed countries’ confidence is based on the performance of the country being invested. When the economy is doing well, it can be seen that the gross domestic production of the country increases, which contributes to the economic growth of the country and this ties into investments being invested into the country. However, it has the same effect when the economy is in distress, where the effect can be more severe due to the volatility of investments placed.

Another factor is global risk which refers to the incorporation of risk aversion and economic uncertainty, where it has accurately forecasted every form of capital flow occurrence in the country. It can be seen that the increase in global risk will result in more halts and retrenchments and fewer surges and fights. This indicates that foreign investors’ capital flows will abruptly stop, and domestic investors’ capital flows will be restricted (Cerutti et al., 2019).

Globalization has indeed played an important aspect where it has made it possible for investors to diversify their portfolios by investing in several international markets. This has made investors to be more susceptible to global as well as domestic shocks in their own countries as a result of this interaction. Many countries decide to place limitations and restrictions on foreign ownership of specific equities in order to strengthen domestic control in the market (Omay & Iren, 2019). In other words, global risk becomes a factor that makes it more difficult for policymakers to manage the capital inflow of the country's economy as it may lead to large capital flow fluctuations, especially in emerging markets.

In addition, interest rates play a significant role in the management of FPII, where interest rates will increase prior to a recession and then drop immediately following one. The rise in interest rates is an indication that the economy is expanding, and when it starts to grow more quickly and further, it signals the start of inflation. Portfolio investments are particularly sensitive to interest rate differentials in developing countries. This is due to differences in the existing interest rates on global markets, capital inflow is likely to shift into nations with high interest rates (Mohd et al., 2018).

Next is geopolitical risk (GPR) which refers to the risk associated with wars, terrorist attacks, and conflicts between nations that would disrupt the regular and peaceful development of international relations (Le & Tran, 2021). In short, it covers the aspect of political, economic, and natural where it affects macroeconomic fluctuation and causes policy uncertainty. The macroeconomic fluctuations and instability may affect global oil prices, stock market returns and commodity prices to worsen due to the economic environment. On the other hand, armed wards, terrorist acts and global tensions may arise due to policy uncertainty of a country (Yu & Wang, 2023). Geopolitical events such as the trade friction between China and the United States, Brexit, and the crisis in Russia and Ukraine, and tensions between China and India have been common in recent years, which may escalate the tension of geopolitical risk further. Not to mention, the world's capacity to respond to the Covid-19 pandemic crisis has been weakened, new geopolitical tensions have been created, the fragility of the system of international relations has been revealed, and the economy has entered a recession as a result of these shocks (Yu & Wang, 2023).

Adding on, geopolitical risk causes a spillover effect towards developing and developed countries in this era of globalization. Due to the friction, it causes in corporate policy, this risk has the potential to affect the business environment and resource reallocation, which is now a more pressing worry for the economy worldwide (Le & Tran, 2021; Lu et al., 2020). Therefore, it can be seen that geopolitical risk is a significant risk factor in terms of its impact. Failure to create plans to address them in a timely manner may undo years of progress in lowering poverty and inequality which eventually erode the social cohesiveness and international relations with countries (Yu & Wang, 2023).

Although it is generally acknowledged that investment inflow offers advantages of its own, the financial crises has given a lesson that investments may have negative impacts on the host economy. Therefore, understanding the factors such as economic growth, interest rate, and global and geopolitical risk influencing such investments is essential since FPII can have both positive and negative effects on a nation's economy. So, this study aims to dive deep into investigating the factors that influence the foreign portfolio investment inflow in Malaysia.

1.2 Problem Statement

While capital inflows can benefit recipient economies significantly, boosting investment and economic growth, an increase in capital inflows may potentially pose serious hazards and difficulties for emerging market economies. Looking specifically at foreign portfolio investments under the capital inflows, it can give several benefits to the national economy however, it also could have adverse effects on the said economy. For the purpose of accelerating economic growth through an increase in capital's marginal productivity, capital inflow makes funds available for the productive sectors, particularly in capital-deficient economies. This is because many emerging countries have a surplus of labor but are short on domestic capital to support growth due to insufficient domestic saving mobilization, which impedes capital formation and economic expansion. Foreign investments, such as FPI, is crucial as it closes the savings investment gap in emerging countries (Ehigiamusoe & Lean, 2019).

Currently, it is expected that the growth of real gross domestic product (GDP) in Malaysia will reduce from 4.2% to 4.0% in 2023. This can be attributed to the continuous weakness in external demand as the world economy slows down as a result of persistent monetary tightening and China's fragile recovery. This leads to Malaysia's export performance this year to be constrained by poor global demand from China's presence globally which has caused a spillover effect on the rest of the world as it is one of the biggest trading partners in the world (The Star, 2023). Therefore, being aware of the gaps in trades is needed to advance the economy where industry players are able to advance further the value chain in the long run. Moving up the value chain requires a highly skilled talent pool while producing products and services which have added value to the economy (Birruntha & Ariffin, 2023). This can attract foreign investors to import goods from Malaysia which improves the GDP of the country. So, greater clarity is anticipated in regard to domestic economic policies and objectives to encourage the increment in investments and Malaysia's growth momentum (Kana, 2023).

Additionally, FPI is prone to informational issues. Asymmetric information exists in the market where capital flow shifts from poor to rich markets that causes capital immobility. It can be seen that friction arises when market participants need time to analyze new information before integrating into investment portfolios and this is known to be time lapse (Yaacob et al., 2021). Not to mention, asymmetric information causes insider trading, an unfavorable selection process, ineffective resource allocation for investments, and other undesirable effects and also, lack of transparency may be visible especially at times of crises. So, information asymmetry happens when one party has superior information over the other party (Mohd et al., 2018).

Likewise, on a global context, foreign investors may pull out their stocks and bonds in its portfolio when their expectations vary according to the country's macroeconomic situations. For instance, Malaysia's FPI has experienced the highest outflow in June 2022 at RM 5.4 billion. This was brought on by the previous month's outflow of RM4.1 billion in Malaysian debt instruments and RM1.3 billion in stocks where this was triggered by the macroeconomic factors such as the rising inflation and the tighter monetary conditions globally (NST Business, 2022). So, this has caused foreign investors to not invest in Malaysia's stocks and bonds due to the instability of the economy. Therefore, redefining policies are needed to attract and set a foundation for foreign

investors to invest back into the country. Also, by looking into creating policies and incentives for businesses and sectors, this helps policymakers in laying down a foundation that actively promotes sustainability. The value of funding sustainable technologies and solutions was highlighted by emerging realities such as climate change that can put Malaysia back on track as the preferred investment destination by foreign investors (Vijeyasingam, 2023). So, building a safety net is important to showcase credibility and security towards Malaysia's economic status to foreign investors and the public.

Next, the interest rate of a country is known to be the gatekeeper that controls the capital inflow in the country. This is due to the correlation with the monetary policies in place as it will affect the economy and finances of the country (Habib & Venditti, 2019). Overnight policy rate (OPR) plays a significant role in the monetary policies of a country in safeguarding the financial status and ensuring the financial institutions are running smoothly. OPR is established by Bank Negara Malaysia (BNM), the central bank of Malaysia, as it sets the interest rate at which financial institutions lend money to one another overnight. It serves as a framework for monetary policy on a national scale, ensuring that banks have a steady supply of cash on hand. Changes to the OPR rate frequently will have an impact on a variety of other economic parameters beyond only lending rates as the OPR is so essential to the operation of the banking system (Property Guru, 2023).

Recently, the OPR rate has reached a new high of 3.00% in May 2023 as compared to a year recorded at 2.00%. One of the factors contributing to the increase in OPR is the depreciation of the Malaysian ringgit against the US dollar as a result of the US Federal Reserve's threat of raising interest rates (Jamal, 2022). The spike has caused rising interest rates which contributes to higher cost of borrowing to investors, money supply being reduced, and this affects the overall economy due to the rising of goods and services in Malaysia. Investments in Malaysia will be perceived as unattractive to investors due to the low returns gained. And recently, it is said that OPR would remain at 3.00% for the rest of 2023 despite the ringgit pressure and a higher Federal Fund rate that may occur (Birruntha, 2023). Therefore, precautionary measures needed to be taken by Bank Negara Malaysia (BNM) in closely monitoring the development in the monetary policies in place to ensure that OPR remains stable with the ongoing effect of inflation and economic uncertainties.

In addition, global economies and participants in the financial market have been concerned about the geopolitical uncertainties as it is one of the influential risk factors for the financial market. This is because geopolitical uncertainty produces an unfavorable economic environment that restricts the stock market's ability to perform well due to instances such as the real exchange rate of the country. One of the emerging stock markets with the quickest growth is Malaysia and with this, the stock market can easily be more vulnerable to worldwide uncertainties and tensions (Hoque et al., 2021). So, investments made can be volatile to investors upon investing in Malaysia as they would need to convert their currency into local currency, and this increased the demand for the currency. Not to mention, on a larger scale, the real exchange rate of the country affects the value of the investments that domestic companies carry on their balance sheets. When the actual exchange rate declines, the domestic company's ability to borrow money is reduced and foreign investors withdraw their money from the domestic economy. As a result, when the investment restrictions are binding, depreciations have contractionary implications (Korinek, 2018).

Drawing into diagram 1.1 and 1.2 whereby the foreign portfolio investment (FPI) in Malaysia had a massive drop from 2021 to 2022. According to NST Business (2022), due to tighter global monetary and financial circumstances, foreign investors withdrew from Malaysian equities and debt. This is due to the anticipation of continued US dollar strength and a weaker Chinese yuan, the ringgit's decline sees little relief and it is most likely to reach 4.70 level sooner than anticipated. Not to mention, Malaysia's 15th general election that has caused the instability towards the value of the ringgit Malaysia that happened in the third quarter of 2022. So, this goes against the positive association between the capital inflow and the growth of the economy itself as investments falter in the volatility of the stock market due to low investors' confidence. However, it is found that FPI into a country is able to generate more foreign currency and may help to ease pressure on the exchange rate (Acha & Essien, 2018). Therefore, proper risk management is needed for future events as a proper mitigation plan can be implemented to curb the impact. Policymakers are held responsible in future actions as with the formation of the new federal government, the trust and confidence from the public or foreign investors is crucial for Malaysia's development to better manage geopolitical risk and uncertainties that may be faced.

To the best of our knowledge, there has been a lack of research on the FPII in Malaysia in recent studies which may pose uncertainties in the future economy of the country due to the lack of understanding and awareness. Studies, particularly on FDI, have vastly been researched as it is a crucial determinant towards a country's economic growth with its long-term effects such as Gade et al. (2023) and Koepke (2019). FDI refers to the monetary resources that are brought from foreign sources and invested in a nation's financial market, economy, or infrastructure in forms of joint ventures, greenfield investments and strategic alliances. Therefore, it has become an essential tool for developing countries to boost employment, speed up economic growth and modernize infrastructure (Gade et al., 2023). On the other hand, FPI is short-term in nature and its volatility to market changes. However, looking into the bigger picture, both FDI and FPI equally contribute to the economical aspect of the country in terms of investors and foreign country's perception towards the performance and growth of the country. Therefore, it is necessary to evaluate and broaden the research to include more current studies as FPI is also relevant towards the response of the market in times of crisis or expansion in Malaysia's economy.

1.3 Research Objectives

1.3.1 General Objectives

This study sets out to analyze the factors pertaining to foreign portfolio investment (FPI) inflow in Malaysia in terms of economic growth, global risk, interest rate and geopolitical risk.

1.3.2 Specific Objectives

1. To determine the relationship between economic growth with the capital inflow of FPI in Malaysia.
2. To determine the relationship of global risk towards the capital inflow of FPI in Malaysia.

3. To determine the relationship between interest rate with the capital inflow of FPI in Malaysia.
4. To determine the relationship of geopolitical risk towards capital inflow of FPI in Malaysia.

1.4 Research Question

1. What is the relationship between economic growth and capital inflow of FPI in Malaysia?
2. What is the relationship between global risk and the capital inflow of FPI in Malaysia?
3. What is the relationship between interest rate and the capital inflow of FPI in Malaysia?
4. What is the relationship between geopolitical risk and capital inflow of FPI in Malaysia?

1.5 Significance of study

In this study, it would determine whether there is a correlation between the determinants including economic growth, global risk, interest rates and geopolitical risk towards the dependent variable which is capital inflow (foreign portfolio investment). Through this study, it is able to determine which variables have the most significant impact on the FPI inflow, and it gives a clearer image on the knowledge as well as the current status of the FPI inflow of Malaysia nowadays. It is important to understand the concept behind these variables in order to predict the future movement of capital inflow.

Through this study, it can raise the awareness and attention of the government about the importance of the FPI inflow and the impact brought by the missing of capital inflow, so they will treat this issue seriously by taking immediate actions to improve the FPI inflow of Malaysia. By referring to this study, the government will be inspired and gain the idea of formulating a series of suitable and proactive methods in order to create a favourable environment that can attract more capital inflow to Malaysia. For example, the government can improve spending in order to boost

the growth of the economy so that foreign investors will have confidence to place their investments in the country.

Current investors and potential investors will also be benefited from this study as they can have more understanding towards the current situation of Malaysia's FPI inflow, so that they can make wise decisions on their investments. Besides that, this study will also provide a clear direction for the investors and speculators to decide whether there is a need to change their portfolio or whether to invest in Malaysia at this moment. By understanding the current status of FPI inflow, investors and speculators are able to react immediately to their decision making and make a wise decision on their investments.

This study will be useful to future researchers such as institutional researchers where they can use this study for their future references. For institutional researchers, they might use the findings to come across new questions and conduct new research to further investigate the FPI inflow. Moreover, they could also compare their findings with this study in order to make a new conclusion. Other researchers may also provide advice to the government in formulating the policy to attract FPI inflow through the findings. For example, it might help the government in estimating the effect and the cost needed of the policy created.

1.6 Conclusion

In conclusion, factors that affect capital inflow particularly on FPI in Malaysia shall be looked upon deeply as this is an important capital inflow to the country and it will increase the nation's economic growth. Due to the insignificant research done previously specifically in Malaysia, this study attempts to bridge the gap between the factors that affect the capital inflow on FPI in Malaysia namely economic growth, global risk, interest rate and geopolitical risk.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

Under Chapter 2, it first discusses the underlying theories, subsequent to review of variables according to the dependent variable which is the capital inflow (measured by foreign portfolio investment) and independent variables such as economic growth, global risk, interest rate and geopolitical risk. After that, a conceptual framework will be discussed, followed by hypothesis development. Lastly, chapter summary will be used to summarize the whole Chapter 2 at the end.

2.1 Underlying Theories

2.1.1 Investment Development Path (IDP) Theory

John H. Dunning initiated this theory in 1981 as a proactive extension of his Eclectic paradigm (OLI) model in 1958. He formulated the IDP concept to investigate the correlation between capital inflow and a country's economic growth. According to his framework, a nation will go through five phases of investment evolution. These stages are associated with the accumulation of inward and outward stocks within a country (Narula & Dunning, 2010). Subsequently, the net international investment position (NIIP) of a country is established according to the fluctuations in the value of the country's portfolio investments. Dunning clarified that the changes in the volume of capital inflow in a country are influenced by the ownership advantage of domestic firms in that country. Nevertheless, economic growth is linked to the ownership advantage of domestic firms. The locational advantage is not apparent in a low-economic development country, ceteris paribus (Narula & Dunning, 2010). Conversely, an expansion in the economy encourages more businesses to grow in a competitive circumstance, as well as raising their investment for self-advancement, which

can bring an advancement in technology and facilities. Therefore, local businesses are more likely to have a greater ownership advantage to boost productivity when economic growth (measured by GDP) increases. Now that the local firm has attracted investors, they boost their capital contributions, which results in an increase in investment.

2.1.2 International Investment Theory

Yu and Wang (2023) claimed a fundamental theory called the international investment theory that studies the impact of risks associated in a country on the international capital flows, in the sense that the international capital flows here refer to both capital inflows and outflows. In the theory, it is said that investors tend to aim for higher return in their investment project. With the aim, they would evaluate a foreign investment based on the economic environment in foreign countries, as these investments are more vulnerable to the political and economy of foreign countries in comparison with the investments in the home country because of the restricted access to political and economic data for foreign investors and the lack of comprehensive legal safeguards (Yu & Wang, 2023). One of the dominant causes of economic costs is the unpredictability in the economic condition of host country. To put in another way, the investment decision of investors is subject to the risks that are associated in a country, instead of just depending on the return itself. According to the international investment theory, higher risks that adhere in a country including global risks and geopolitical risks would move the international capital to flow to countries with smaller risks, that to an extent, this creates a source of capital inflows to countries that have lower risks in their economic environment. The geopolitical risks will reduce the international capital flows and result in slower internal economic growth, where it creates a cycle on the effect of geopolitical risks and international capital flows. In other words, it is significant that a macroeconomy that is free from geopolitical risks and global risks can help in the ability of a country to bring in FPI inflows that can impact on the economic growth. As such, this theory is well explaining the connection between global risks and geopolitical risk with capital inflows.

2.1.3 Flow Theory

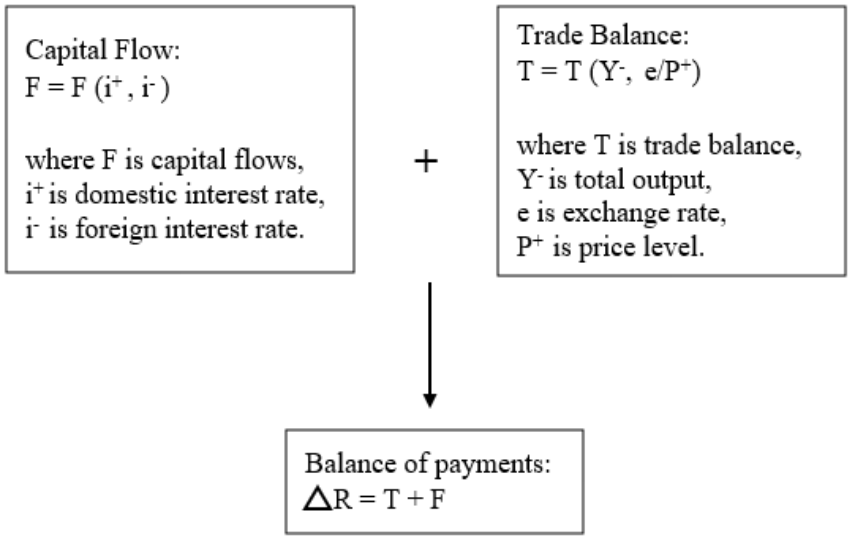

Figure 2.1.3. Model in flow theory. Adapted from Li, D. (2018). An economic analysis of international capital flow. *American Journal of Industrial and Business Management, 8*(2). https://www.scirp.org/journal/paperinformation.aspx?paperid=82645

In Figure 2.1.3, Li (2018) pointed out a fundamental theory, which is known as the flow theory, that examines the effect of interest rate on capital flows including capital inflows and outflows. It was proposed by James Edward Meade who had authored books called "The Theory of International Economic Policy" in 1951 and 1955. The flow theory claims that interest rate is a determinant that contributes towards the flows of capital between two countries, with the sense when differential interest rates can be found in two different countries. By way of explanation, capital flows can be discovered when the interest rate in a country differs from another, making a comparison in which one of the interest rates appears to be higher and another rate to be lower. According to the flow theory, capital outflows happen when foreign interest rate is higher than the domestic interest rate, bringing an outflow of domestic investment funds to foreign countries. In the view of capital inflows, it can be found when the interest rate in the home country appears to be higher than foreign interest rate, contributing an inflow of foreign investment funds to the home country. Based on Figure 2.1.3, the flow theory is explained in a bigger picture that the increase in the interest

rate in home country could bring to capital inflows raised from foreign countries, and with the total output and price level, the increase in the domestic interest rates could give a rise in the balance of payments in the home country. Hence, this theory well explains the connection between interest rate and capital inflows.

2.2 Review of Variables

2.2.1 Foreign Portfolio Investment Inflow

Table 2.2.1:

Definitions of foreign portfolio investment inflow

No	Name of author	Year	Definition
1	Ansari et al.	2023	The inflows of capital that can lead to a rise in the local money supply with foreign currencies.
2	Melvin and Norrbin	2023	The inward flows of capital that may be followed by a sharp rise in the money supply of a country.
3	Steiner	2017	The aggregate inflows of capital that a country receives from foreign direct investments, foreign portfolio investments and other investments.
4	Tillmann	2013	The funds that flow into a country that can help in cutting down costs of funding, in which it is much needed by countries with emerging economies.

Capital inflow on FPI is being examined as the dependent variable in this study. Table 2.2.1 above shows different ways used by different authors in defining the meaning of capital inflow on FPI. In this extent, Ansari et al. (2023) asserted that capital inflow is the inward flow of capital that can lead to an increment in the money supply of a country through the

usage of foreign currencies, as supported by Melvin and Norrbin (2023). While Steiner (2017) provided a different definition, saying that capital inflow is the total amount of funds received by a country from investments including foreign direct investment (FDI), foreign portfolio investment (FPI), and other kinds of investments. To put it another way, Tillmann (2013) added that capital inflow is those funds that can help in reducing the funding costs of a country. Among all the definitions stated above, it is concluded that the definition stated by Steiner (2017) is being referred throughout the whole study, as it highly reflects the concept of foreign portfolio investment that is being highlighted as the measurement of capital inflow in this study.

According to Ali and Iness (2020), capital inflows present a wide variety of potential opportunities as well as threats to the financial system stability in a nation, where it can be critically influenced by the capacity of the nation in acquiring foreign funds. Further elaborating on the potential opportunities, capital inflows contribute to the accessibility of funds in the event of production and technology advancement, which then brings to profitability in the long run. This is further reinforced by Igan et al. (2020), as well as Pan and Wu (2022), who emphasise the importance of acquiring substantial amount of capital inflow from a global perspective, where it can assure the development of emerging economies in developing countries, with the resources of capital being distributed effectively and efficiently. Yet, capital inflows are also possessing potential threats in macroeconomic perspectives in which the capital inflows can make a nation to be more susceptible to fluctuations in the global market, as well as to make the economy to be expanded excessively in a faster rate that may further result in a global inflation (Ali & Iness, 2020). Teimouri and Zietz (2018) also supported the point that capital inflows hold the risks where they may bring to the increase in the real exchange rate that would make commodities in a nation to be less competitive and less valuable.

Steiner (2017) claimed that capital inflow primarily includes foreign direct investment (FDI), foreign portfolio investment (FPI), and other investments. In this study, FPI is the area that is focused under the dependent variable of capital inflows. According to Ezeanyeji and Maureen (2019), FPI relates to the transfer of financial asset investments including stocks

and bonds that are held by foreign investors or institutions. Wanaguru (2020) pointed out that FPI can be particularly risky due to the investors' act of capital withdrawal at any time, in which it had once led to the 1997 financial crisis that gave a negative impact on the currencies of certain countries in Asia, including Malaysia. Thereafter, Malaysia introduced a capital control system with the aid of both measures in FPI and FDI to address the problem. This is where Wanaguru (2020) emphasised on the significance of FPI for Malaysia's economy to recover back from the crisis, in which the recovery may not be reachable with the usage of FDI alone.

Khayat (2020) emphasised on the significance in identifying factors that affect capital inflows in a nation. According to Ezeanyeji and Maureen (2019), the determinants of capital inflows can be divided into pull factors and push factors, where pull factors explain internal elements in local businesses that assist in bringing in capital from foreign investment, on the contrary, push factors describe external factors that would influence foreign investors to allocate their funds in local businesses. This is further supported by Ledochowski and Zuk (2022) who suggested the economic growth in a domestic country is the example of pull factors while interest rate is one of the examples of push factors.

2.2.2 Economic Growth

Table 2.2.2:

Definitions of economic growth

No	Name of author	Year	Definition
1	Nguyen et al.	2021	Economic growth, which can be assessed in real or nominal indicators, is marked as a rise in the output of tradable commodities by means of time.
2	Nguyen et al.	2021	The steady growth in terms of the market value of commodities generated by the economy throughout the years.
3	Nguyen et al.	2021	An aspect from macroeconomics theory that relates to a rise in the real national income that can remain stable across two successive quarters in a year.
4	Haller	2012	The process where the economy is expanding in a favourable way that can raise the standard of living in a nation.

Table 2.2.2 above illustrates different definitions of economic growth stated by different authors. Referring to the above table, there are two definitions stated in similar ways, in which economic growth is defined as a rise in the output of tradable commodities generated by an economy throughout the years (Nguyen et al., 2021). Nguyen et al. (2021) further added a point where it can be only regarded as 'economic growth' when the rise in the real national income can remain stable for at least two consecutive quarters in the same year. While Haller (2012) provided an additional point where economic growth can raise the standard of living for citizens in a country. In the end, it is said that the third definition provided by Nguyen et al. (2021) is being referred throughout the whole study, as it highly reflects the condition in a domestic country that will be employed as one of the independent variables to examine its relationship with the dependent variable which is capital inflows in the foreign portfolio investment.

The literature review on the relationship between economic growth and capital inflows produces a mixed result which supports both positive and negative relationships. According to Khayat (2020), economic growth in a domestic country is having a positive effect towards foreign portfolio investment inflows in Gulf Cooperation Council (GCC) countries including Saudi Arabia, Kuwait, the United Arab Emirates, Qatar, Bahrain, and also Oman, as supported by research in 2011 that having the same countries as the settings. In view of Malaysia, there are no recent studies that can prove the positive relationship between economic growth and foreign portfolio investment (FPI) inflows, but it had been proved in research in earlier year 2009 where a rapid growth in the Malaysian GDP helps to attract more FPI inflows, as it offers high possibility and opportunities in obtaining profit (Duasa & Kassim, 2009). There is an argument saying that there is a bidirectional relationship between economic growth and capital inflows, where it also emphasised on the use of positive capital inflows to increase an economic development in a country (Li, 2018). This is further supported by Igan et al. (2020) and Nguyen et al. (2021) who claimed the benefits of capital inflows which help to reduce financing costs, to enhance productivity as well as increasing the resources in investment activities, where all these benefits could bring to an acceleration in the growth of the GDP in a domestic country.

In other way round, Leung et al. (2018) pointed out a negative relationship between economic growth and capital inflows, in which a slower economic growth in the Organization for Economic Cooperation and Development (OECD) countries such as Denmark, the United Kingdom, the United States, Australia, and many countries more, could stimulate more capital inflows in domestic countries. This can be further traced back to Calvo et al. (1993) who supported the negative relationship that took place in Latin America with the introduction of push factors that contribute to capital inflows, in which the push factors are viewed in a macroeconomic perspective rather than viewed from internal fundamentals in a domestic country. Yet, Ledochowski and Zuk (2022) argued that a greater economic growth in the push factors would lead to higher capital inflows to the emerging countries, indicating a positive relationship in between. The difference in the results may be due to different settings in terms of years and variables that both the research undergoes, where this reason can be seen in the research proposed by Koepke (2019).

To conclude, the mixed result that produced in the literature review of economic growth and FPI inflows is mainly due to the view from different perspectives, which are pull factors that contribute to a positive relationship and push factors that contribute to a negative relationship.

2.2.3 Global Risk

Table 2.2.3:

Definitions of global risk

No	Name of author	Year	Definition
1	World Economic Forum	2022	The potential of the outcome of a situation that will bring negative effects for businesses in some countries.
2	Aven and Zio	2021	The risk that is marked by significant uncertainty that occurred in the global market.
3	Cerutti et al.	2019	The inclusion of both risk aversion and volatility in the global economy.

Table 2.2.3 above shows the definitions of global risk asserted by different authors. It is said that Cerutti et al. (2019), as well as Aven and Zio (2021), explained global risk in a similar way, where global risk is defined as substantial volatility that takes place in the global economy. While the World Economic Forum (2022) added that global risk can bring to the outcome of giving negative impacts on businesses in different countries. In this study, the definition stated by Cerutti et al. (2019), as well as Aven and Zio (2021), are being referred along the way due to the reason where it highly reflects the condition in the global market that will be employed as one of the independent variables to examine its relationship with the dependent variable which is capital inflows in the foreign portfolio investment.

The literature review on the relationship between global risk and capital inflows produces a single result which supports negative relationships. According to Khayat (2020) who conducts the study in GCC countries, a secure environment in the macroeconomy, is deemed to be attractive for foreign investors to allocate their funds in the foreign portfolio investment, bringing to the rise in the capital inflows in a domestic country, that to an extent, global risk is having negative relationship with FPI inflows. The negative relationship is further supported by Mara et al. (2021) whose study taken place in Indonesia, claimed that an increase in the global risk will result in a reduction of capital inflows, on the opposite side, a reduction in the global risk will bring more opportunities for foreign investors to diminish the risk in their investment, bringing more capital inflows in the FPI. Koepke (2019) further agreed on the adverse relationship by applying the concept of push factors to the relationship. To strengthen the statement, an example was then given to illustrate the relationship between the global risk that was held in the global financial crisis 2008 up until 2019 and the volatility of capital inflows in the emerging economies. There are no studies that argued for the negative relationship between global risk and capital inflows due to the nature of the behaviour of investors that would not place themselves in a dangerous stake.

2.2.4 Interest Rate

Table 2.2.4:

Definitions of interest rate

No	Name of author	Year	Definition
1	Faroh and Shen	2015	The rate that is being charged for the borrowings in the funds.
2	Faure	2014	Interest rate, which is measured in percentage, is the incentive given to a lender from a borrower for using funds over a set period of time.
3	Glantz and Kissell	2014	The rate that can be divided into two components, which are real interest rate and nominal interest rate.

Table 2.2.4 above shows the definitions of interest rate stated by different authors. The definitions provided by Faroh and Shen (2015), as well as Faure (2014), explained interest rate in the same way, where interest rate is described as the rate that is measured in percentage forms and is charged for the borrowings borrowers borrow from lenders over a specific time of period. Additionally, Glantz and Kissell (2014) added that interest rate can be categorized into two elements, which are real interest rate and nominal interest rate. In this study, the definition asserted by Faure (2014) and Faroh and Shen (2015), is being referred to as it highly reflects the condition that will be examined as one of the independent variables to test its relationship with the capital inflows in relation with the foreign portfolio investments.

The literature review on the relationship between interest rate and capital inflows produces a mixed result which supports both positive and negative relationships. According to Khayat (2020), the interest rate that is offered in a domestic country significantly affected the foreign portfolio investment inflows in a positive manner. It is due to the reason where high interest rates can attract foreign investors to inject their capital in foreign portfolio investments in the sense to obtain more earnings in the return. Additionally, it is stated that

interest rate differential, which is the difference between domestic and foreign countries, would contribute towards the FPI inflows positively. This relationship is further supported by Olaleye and Oluwabunmi (2022) whose study conducted in Nigeria, a developing country, yet it is argued in terms of its significance of the test, concluding that the interest rate differentiation is having positive relationship with capital inflows in FPI, but it is tested insignificantly in the probability test in the study. However, it appeared to be a significant result in the F-test.

On the contrary, Koepke (2019) pointed out the push factors, also known as external factors, in relation with the interest rate that is highlighted in the foreign countries. In this extent, the relationship between foreign interest rate and capital inflows will be viewed in negative, as supported by Kaya and Haan (2022). A further explanation is given that the decrease in the foreign interest rate had led to a surge in the capital inflows that took place in Latin American countries in the 20th century. This is due to the reason where investors would opt for an interest rate that is higher in the investment so that they can earn higher return on the investment. In relation to this, it makes sense when a reduction in the foreign interest rate can contribute towards the increment in capital inflows in the domestic country as the domestic interest rate is seen to be higher than foreign interest rate. However, Kim (2020) argued that the result remained questionable as the study done for Latin American countries in the 20th century had yet to include pull factors in the study, making the negative relationship to be uncertain.

To conclude, the mixed result that produced in the literature review of interest rate and FPI inflows is mainly due to the view from different perspectives, which are pull factors that contribute to a positive relationship and push factors that contribute to a negative relationship.

2.2.5 Geopolitical Risk

Table 2.2.5:

Definitions of geopolitical risk

No	Name of author	Year	Definition
1	Feng et al.	2023	The occurrence of wars, terrorist acts and forces that would influence international relations.
2	Yu and Wang	2023	Risks triggered in the economy of global politics such as the event of Sino-US trading tensions and the Russia-Ukraine war.
3	Nguyen et al.	2022	The occurrence of unexpected events like armed - force, nuclear tensions and wars that lead to risks that are associated in the global political economy.

In table 2.2.5 above, it shows the definitions of geopolitical risk defined by different authors. It is said that Nguyen et al. (2022), as well as Yu and Wang (2023), explained the definitions in a similar way, where geopolitical risk is defined as the occurrence of unfavourable events such as wars, terrorist threats or nuclear tension that would place the risks into the global political economy. Feng et al. (2023) added that geopolitical risks would have a negative impact on international relations among certain countries. In this study, the definition asserted by Nguyen et al. (2022), as well as Yu and Wang (2023), are being referred throughout the study as it highly reflects the condition in the global economy that is deemed as one of the independent variables to test its relationship with the FPI inflows.

Among all the literature reviews on the capital inflows, there are no researchers who can recognise the significant impact of geopolitical risk on the foreign portfolio investment inflow due to the challenge in measuring geopolitical risks (Feng et al., 2023). In previous studies, there have been a few scholars that support the statement of which the increase in geopolitical risks can lead to the reduction in purchasing foreign assets as according to Portes et al. (2001). Thereafter, an introduction of the measurement of geopolitical risk, which is

known as geopolitical risk index (GPR), that proposed in a study in year 2022, has gradually increased in the number of studies that accounted for geopolitical risks (Bouoiyour et al., 2019). There have been a few studies to examine the relationship between geopolitical risk and foreign direct investment inflows, but not FPI in this case. As such, this literature review will be focused on a study conducted by Feng et al. (2023) who examined both the capital outflows and capital inflows that included FDI and FPI in relation to the geopolitical risk. With this, it is concluded that geopolitical risk is viewed as the gap variable in this study.

A study was carried out by Feng et al. (2023) that had collected data of capital flows from 45 countries from the year 2005 to 2019, where the countries involved were further categorized into advanced economies and emerging economies. Focusing on capital inflows on foreign portfolio investment, the authors measured the relationship between geopolitical risk and capital inflows using the measurement of GPR index, where the results drove a significant negative relationship between the variables of geopolitical risk and capital inflows particularly for foreign portfolio investment in both advanced economies and emerging economies. It can be explained in a way that investors would opt for their domestic investments rather than foreign investments that are being affected by the rise in the geopolitical risks. As such, it can be observed that capital inflows are experiencing a reduction in this way (Feng et al., 2023). Yet, Feng et al. (2023) also pointed out a positive relationship between geopolitical risks and capital inflows only in advanced economies, where the initial negative relationship between the variables would turn into positive relationship after six months. It is due to the reason where the advanced economies will adapt into a safer environment after being affected by the geopolitical risks for around six months.

Geopolitical risks as one of the determinants of capital inflow is gaining rising interest from researchers, yet most of the studies that have been published are mostly focused on foreign direct investment inflows instead of foreign portfolio investment inflows. With this, it comes to a conclusion that the variable of geopolitical risks is employed to fill in the gap of this study.

2.3 Conceptual Framework

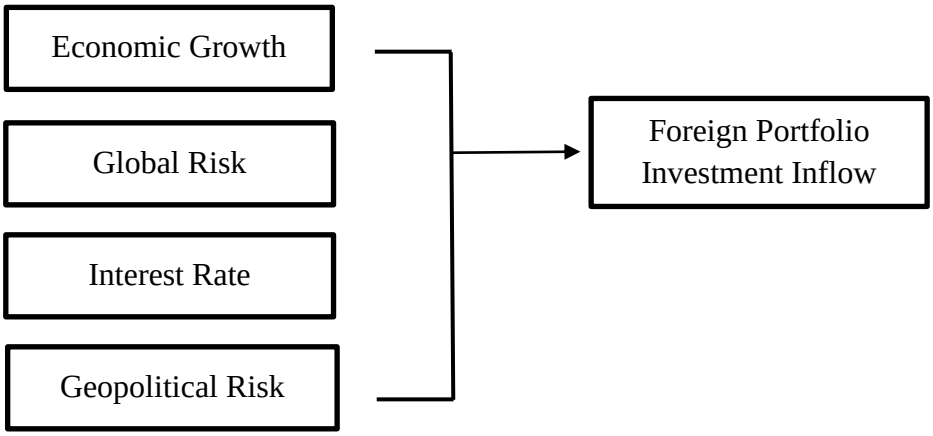

Figure 2.3: Conceptual framework

The above Figure 2.3 shows the conceptual framework that examines the factors affecting FPI inflows in Malaysia. Four independent variables are being introduced in the above conceptual framework including economic growth, global risk, interest rate and geopolitical risk. All independent variables show a significant relationship towards the FPI inflow according to previous research. As such, the relationship between economic growth, global risk, interest rate and geopolitical risk with FPI inflow will be investigated in this study based on the above conceptual framework.

2.4 Hypotheses Development

2.4.1 Economic Growth

H0: There is no significant relationship between economic growth with the capital inflow of FPI in Malaysia.

H1: There is a significant relationship between economic growth with the capital inflow of FPI in Malaysia.

2.4.2 Global Risk

H0: There is no significant relationship between global risk with the capital inflow of FPI in Malaysia.
H1: There is a significant relationship between global risk with the capital inflow of FPI in Malaysia.

2.4.3 Interest Rate

H0: There is no significant relationship between the interest rate with the capital inflow of FPI in Malaysia.
H1: There is a significant relationship between the interest rate with the capital inflow of FPI in Malaysia.

2.4.4 Geopolitical Risk

H0: There is no significant relationship between the geopolitical risk with the capital inflow of FPI in Malaysia.
H1: There is a significant relationship between the geopolitical risk with the capital inflow of FPI in Malaysia.

2.5 Conclusion

This chapter has discussed the literature review of past studies about the relationship between economic growth, global risk, interest rate and geopolitical risk with capital inflows on FPI done by past researchers. The theory is proposed to understand the relationship between the four determinants with the dependent variable. Lastly, a conceptual framework is formed to have a clearer image for this study.

CHAPTER 3: METHODOLOGY

3.0 Introduction

In this chapter, methodology of the study is discussed. The research design, data collection methods, data processing and source of data are discussed. The relationship between the dependent variable which is foreign portfolio investment inflow (FPII) and independent variables which are economic growth (EG), global risk (GR), interest rate (IR), and geopolitical risk (GPR) is examined by the constructed econometrics model. Several tests are carried out to study the impact of the independent variables on the dependent variable. Diagnostic checking is also applied to test the multicollinearity, heteroscedasticity, and autocorrelation of the model.

3.1 Research Design

In this study, the quantitative research method is used to analyze and discuss the factors influencing FPII in Malaysia. This is because the quantitative research method can test the relationship between dependent variable and independent variables. The quantitative research method means by using mathematical methods, a phenomenon or issue can be explained by gathering numerical data and analyzing them.

This study focuses on identifying the factors impacting the FPII in Malaysia. Four independent variables are chosen which are economy growth (EG), global risk (GR), interest rate (IR), and geopolitical risk (GPR). According to Cerutti et al. (2019), this study can rely on portfolio investment liability to measure the capital inflow. Moreover, global risk can be measured by VIX (Cerutti et al., 2019; Xu, 2017). According to Koepke (2019), it is mentioned that economy growth can be determined by Gross Domestic Product (GDP) growth. Interest rate is suggested to be

measured by the central bank interest rate (Cerutti et al., 2019; Koepke, 2019). According to Feng et al. (2023), this study can measure geopolitical risk by GPR index.

3.2 Data Collection Method and Data Processing

This study uses the secondary data collection method. The definition of secondary data is instead of the researcher acquiring the data directly, secondary data refers to information that has been gathered, analyzed, and published by someone else (Hassan, 2022). From the year 2005 to 2022, the quarterly data are collected. The reason the data in this study are being collected from 2005 is due to from 2005, the global capital flows have experienced significant changes (Feng et al., 2023). The data of portfolio investment is sourced from Department of Statistics Malaysia, interest rate is gathered from the World Bank. The GDP growth data is collected from Bank Negara Malaysia. The VIX data is gotten from Yahoo Finance. The data for the GPR index are collected from Matteo Iacoviello's website, who is one of the authors who published "Measuring Geopolitical Risk" in 2022. After all the data is gathered, the data are checked and reviewed to make sure that all the quarterly data gathered for 18 years are correct and complete. Microsoft Excel is utilized to rearrange the data and EViews 12 is utilized to import the data for analysis. A few tests are run to get the empirical results with EViews 12. Ultimately, the empirical results are analysed and interpreted.

3.3 Source of Data

Table 3.1:

Source of data gathered

Variables	Indicator Name	Measurement	Source of Data
Foreign Portfolio Investment Inflow	FPII	Portfolio Investment Liability, Bop, in RM million	Department of Statistics Malaysia
Economic Growth	EG	GDP growth, %	Bank Negara Malaysia
Global Risk	GR	VIX	Yahoo Finance
Interest Rate	IR	Bank Negara Malaysia interest rate, %	World Bank
Geopolitical Risk	GPR	GPR index	Matteo Iacoviello's website

3.4 Econometrics Model

$$FPII_t = \beta_0 + \beta_1 EG_t + \beta_2 GR_t + \beta_3 IR_t + \beta_4 GPR_t + \varepsilon_t$$

Where,

FPII denotes as foreign portfolio investment inflow

EG denotes as economy growth

GR denotes as global risk

IR denotes as interest rate

GPR denotes as geopolitical risk

$\boldsymbol{\varepsilon}$ denotes as error term

Furthermore, **t** refers to the period of 2005Q1, 2005Q2, 2005Q3, 2005Q4, 2006Q1 …, 2022Q4.

3.5 Proposed Data Analysis Tool

3.5.1 Descriptive Analysis

A huge amount of data has been collected in this study, descriptive analysis helps to get a complete picture of data and summarize them to an easier way of interpretation. It can translate the data to provide insightful data like median, mode, mean, standard deviation, and frequency.

3.5.2 Unit Root Test

The stationarity of time-series data can be tested by using unit root test. According to Gujarati (2021), if the time-series data is stationary, across different time frames, the mean, variance and covariance are the same. Before analyzing the time-series data statistically, the data must be stationary, otherwise, it will lead to misleading and inaccurate results. Thus, if the time-series data is not stationary, differentiation of the data must be taken till the differentiated data is stationary.

The Augmented Dickey-Fuller (ADF) test and Phillips-Perron (PP) test are being utilized to test the presence of unit root in the time-series data of all the variables in this study. The presence of unit root indicates the data is non-stationary.

ADF test

To test the presence of unit root:

H0: The variable is not stationary

H1: The variable is stationary

Decision Rule: If the p-value is less than the significant level, H0 is rejected. Otherwise, H0 is not rejected.

PP test

To test the presence of unit root:

H0: The variable is not stationary

H1: The variable is stationary

Decision Rule: If the p-value is less than the significant level, H0 is rejected. Otherwise, H0 is not rejected.

3.5.3 Multiple Linear Regression Analysis

Multiple linear regression is able to examine the relationship of a range of independent variables to a single dependent variable. Thus, in this study, the multiple linear regression is being utilized to study the relationship between the dependent variable and the independent variables. Moreover, it can help to get the coefficient of determination (R^2) to determine the overall fitness of the model.

The hypotheses of the Multiple Linear Regression is represented as following:

To test the significance of the model:

H0: The Multiple Linear Regression model is not significant.

H1: The Multiple Linear Regression model is significant.

Decision Rule: If the p-value of F-statistics is less than the significant level, H0 is rejected. Otherwise, H0 is not rejected.

To test the significance of EG:

H0: $\beta 1=0$

H1: $\beta 1\neq 0$

Decision Rule: If the p-value is less than the significant level, H0 is rejected. Otherwise, H0 is not rejected.

To test the significance of GR:

H0: $\boldsymbol{\beta}2=0$

H1: $\boldsymbol{\beta}2\neq0$

Decision Rule: If the p-value is less than the significant level, H0 is rejected. Otherwise, H0 is not rejected.

To test the significance of IR:

H0: $\boldsymbol{\beta}3=0$

H1: $\boldsymbol{\beta}3\neq0$

Decision Rule: If the p-value is less than the significant level, H0 is rejected. Otherwise, H0 is not rejected.

To test the significance of GPR:

H0: $\boldsymbol{\beta}4=0$

H1: $\boldsymbol{\beta}4\neq0$

Decision Rule: If the p-value is less than the significant level, H0 is rejected. Otherwise, H0 is not rejected.

3.5.4 Granger Causality Test

Granger Causality Test is to test whether there is causal relationship between the independent variable and dependent variable (Gujarati, 2021).

To test the Granger Causality:

H0: The dependent variable is not granger caused by the independent variable

H1: The dependent variable is granger caused by the independent variable.

Decision rule: If the p-value is less than the significant level, H0 is rejected. Otherwise, H0 is not rejected.

3.5.5 Variance Decomposition

According to Omet (2017), Variance Decomposition is able to demonstrate how the variability of the dependent variable is being impacted by the different independent variables across different time periods. Thus, by performing Variance Decomposition, this study is able to conclude that the variability of the dependent variable is affected by which independent variable the most.

3.6 Diagnostic Checking

3.6.1 Multicollinearity

When the high correlation to each other among the independent variables exists in the econometric model, multicollinearity occurs. In this case, the econometric model is not able to examine that which independent variable is impacting the dependent variable significantly (Gujarati, 2021). In this study, the multicollinearity problem is detected by making use of variance inflation factor (VIF). Referring to the rule of thumb, low multicollinearity issue exists if the VIF value is ranged between 1-10; high multicollinearity issue exists if the VIF value is higher than 10.

3.6.2 Normality Test

Jarque-Bera (JB) test is being utilized to determine the normality of the error terms in this study. However, Central Limit Theorem (CLT) quoted that a model assumed to be normal if the sample size is more than 30. In JB test, the skewness and kurtosis of the OLS residuals are being computed and uses the below test statistic:

JB= n((S^2)/6+((K-3)^2)/24)

Where: n = sample size; S = skewness; K = kurtosis

The hypothesis of the JB test is represented as following:

H0: The error term is normally distributed.
H1: The error term is not normally distributed.

Decision Rule: Reject H0 if the p-value is less than the significant level. Otherwise, do not reject H0.

3.6.3 Heteroscedasticity

According to Gujarati (2021), heteroscedasticity occurs when the non-constant variance of error terms exists in the econometric model. It will lead to the estimators becoming not efficient as the estimators' variance is not being minimized anymore. Moreover, as the variances of the estimated coefficients are affected by heteroscedasticity, the variance of the estimated coefficients may be biased. As a result, the values of t statistics and F statistics will become unreliable as the standard error of estimated coefficients is no longer valid for building confidence intervals and t statistics. In the end, the conclusion drawn may be misleading. In this study, white test is being utilized to test the heteroscedasticity.

The hypothesis of the white test is shown as following:

H0: Homoscedasticity exists.
H1: Heteroscedasticity exists.

Decision Rule: If the p-value is less than the significant level, H0 is rejected. Otherwise, H0 is not rejected.

3.6.4 Autocorrelation

Autocorrelation happens when two error terms are dependent on each other (Gujarati, 2021). This will lead to the Ordinary Least Squared (OLS) estimators becoming not efficient. Thus, the variance of the estimators will be understated or overstated. As a result, if the variance of the OLS estimators is understated, a larger t statistic will be produced by the smaller standard error, the insignificant variables may be considered as significant in this case, it leads to the hypothesis becoming not reliable. Apart from this, if the variance of the OLS estimators is overstated, a smaller t statistic will be produced by the larger standard error, the significant variables may be considered as insignificant in this case, it leads to the hypothesis becoming not valid as well. In this study, the Breusch-Godfrey Serial Correlation LM Test is being utilized to examine the autocorrelation problem.

The hypothesis of the Breusch-Godfrey Serial Correlation LM Test is shown as following:

H0: There is no serial correlation.
H1: There is serial correlation.

Decision Rule: If the p-value is less than the significant level, H0 is rejected. Otherwise, H0 is not rejected.

3.7 Conclusion

In conclusion, the research design, diagnostic checking, data collection method has been discussed in this chapter. Moreover, this chapter proposed various data analysis techniques. All the relevant data are arranged on Microsoft Excel worksheet, and EViews 12 have been utilised to conduct the data analyses. In the following chapter, the computed results are revealed.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

Firstly, the descriptive analysis is conducted. Secondly, the unit root tests, which are ADF test and PP test, are being performed to test the stationarity of the time series data being used in this study. Thirdly, Multiple Linear Regression Analysis is performed. Accordingly, Granger Causality and Variance Decomposition are being conducted. Lastly, diagnosis checking is performed to test multicollinearity, normality, heteroscedasticity, and autocorrelation. All of these analyses are performed by using EViews 12.

4.1 Descriptive Analysis

Table 4.1.1:

Descriptive Analysis Output of FPII

Sample size	72
Mean	2969.944
Median	4186
Maximum	51686
Minimum	-51128
Standard Deviation	17886.48
Skewness	-0.314357
Kurtosis	3.580154
Jarque Bera	2.19558

Referring to table 4.1.1, the mean of 2969.944 indicates that from quarter 1 of 2005 till quarter 4 of 2022, Malaysia received averagely RM2969.944 million of FPII. Besides, the median of 4186 demonstrates that during 50% of the time period from quarter 1 of 2005 till quarter 4 of 2022, Malaysia received more than RM4186 millions of FPII while during another 50% of the time period, Malaysia received less than RM 4186 million of FPII. Apart from that, the highest amount of FPII that Malaysia has received during the indicated period is RM51686 million while the lowest amount of FPII that Malaysia has received during the indicated period is -RM51128 million. Furthermore, standard deviation of 17886.48 indicates that on average, each amount of the FPII that Malaysia received during the stated period differs from the mean (RM2969.944 million) by RM17886.48 million. Moreover, the skewness of -0.314357 shows that the data distribution of FPII skewed to the left which indicates the probability of Malaysia to get the extremely low FPII is higher than the probability of Malaysia to get the extremely high FPII.

4.2 Unit root test

Table 4.2.1:

Unit Root Test Output

	ADF	**PP**
Variables	**Level Form**	**Level Form**
FPII	-7.0795***	-7.1267***
GPR	-5.2556***	-5.2336***
IR	-2.7198*	-2.2167*
EG	-2.9338**	-3.2501**
GR	-3.6698***	-3.6578***

Note: Significance at 10%, 5%, and 1% levels, are represented by *, **, ***, respectively. SIC is being used to determine the optimal lag number in ADF test while Newey-West Bandwidth is being used in PP test. The null hypothesis for both ADF test and PP test is there is a unit root.

ADF test and PP test are being used to verify the result of each other. This would provide a more confident result.

In both ADF and PP level form tests, FPII, GPR and GR are stationary at 1% significance level; EG is stationary at 5% significance level; IR is stationary at 10% significance level.

In short, the ADF test and PP test conclude that the time series data of all the variables are stationary. Thus, the study can proceed with other tests.

4.3 Multiple Linear Regression

Table 4.3.1:

Multiple Linear Regression Output

Variables	**Coefficient**	**t-Statistic**
GPR	-181.5271	-1.9019* (0.0615)
IR	-13299.69	-3.0793*** (0.0030)
EG	621.9857	0.7672 (0.4457)
GR	-863.7993	-3.1001*** (0.0028)
R^2	0.2011	
Adjusted R^2	0.1534	
F-Statistic	4.2165*** (0.0042)	

Note: Significance at 10%, 5%, and 1% levels, are represented by *, **, ***, respectively. Within the parentheses, p-value is stated.

GPR

The p-value (0.0615) of the t-statistic of GPR is less than 0.1, which indicates that the relationship between GPR and FPII is significant at 10% significance level. The coefficient of -181.5271 showcases that if GPR increases by 1, the FPII will decrease by RM181 million, ceteris paribus.

IR

The p-value (0.0030) of the t-statistic of IR is less than 0.01, which demonstrates that the relationship between IR and FPII is significant at 1% significance level. Furthermore, the study suggests that if IR increases by 1%, the FPII will decrease by RM13299.69 million, ceteris paribus.

EG

The p-value (0.4457) of the t-statistic of EG is more than 0.1, which indicates that the relationship between EG and FPII is not significant. However, the result shows that if EG increases by 1%, the FPII will increase by RM621.9857 million, ceteris paribus.

GR

The p-value (0.0028) of the t-statistic of GR is less than 0.01, which suggests that the relationship between GR and FPII is significant at 1% significance level. In addition, the coefficient of -863.7993 indicates that if GR increases by 1, the FPII will decrease by RM 863.7993 million, ceteris paribus.

Other than that, the coefficient of determination, R^2 of 0.2011 reveals that there are 20.11% of the variation in FPII in Malaysia is explained by the combined variation in EG, GR, IR and GPR. The remaining 79.89% of the variation in FPII in Malaysia is forecasted by other factors.

Besides, the adjusted R^2 of 0.1534 shows that the 15.34% of the variation in FPII in Malaysia is explained by the combined variation in EG, GR, IR and GPR after taking into account degrees of freedom.

Moreover, the multiple linear regression model is statistically significant at 1% significance level. This is due to the p-value (0.0042) of the F-test is less than 0.01. Therefore, this model can demonstrate significantly the relationship between the dependent variable which is FPII and the independent variables which are EG, GR, IR and GPR.

In short, this study concludes that FPII and GPR are having a negative relationship at 10% significance level; IR negatively impacts FPIIF at 1% significance level; EG exhibits positive relationship with FPII, however, it is not significant; GR negatively influences FPII at 1% significance level.

4.4 Granger Causality

Table 4.4.1:

Granger Causality Output

DV \ IV	**GPR**	**IR**	**EG**	**GR**	**FPII**
GPR	-	-	-	-	0.0989 (0.9060)
IR	-	-	-	-	1.3372 (0.2697)
EG	-	-	-	-	1.9679 (0.1480)
GR	-	-	-	-	0.3237 (0.7246)
FPII	0.5386 (0.5861)	1.7415 (0.1833)	0.8768 (0.4210)	0.7205 (0.4904)	-

Note: Significance at 10%, 5%, and 1% levels, are represented by *, **, ***, respectively. Within the parentheses, p-value is stated. The null hypothesis is that there is no granger causality.

The result shows that all the p-values are higher than 0.1. This means that all the null hypotheses among the variables are being rejected. There is no granger causality being found among FPII, GPR, IR, EG, and GR.

4.5 Variance Decomposition

Table 4.5.1:

FPII's Variance Decomposition Output

Period	**GPR**	**IR**	**EG**	**GR**
1	0.0000	0.0000	0.0000	0.0000
2	0.7241	0.2853	0.2721	0.2374
3	1.6397	0.5850	0.4606	0.2977
4	1.7035	0.6628	1.0834	0.5968
5	1.7022	0.6851	1.9201	1.0494
6	1.7076	0.6832	2.5869	1.4657
7	1.7106	0.6772	3.0346	1.7694
8	1.7080	0.6884	3.3019	1.9640
9	1.7047	0.7195	3.4276	2.0699
10	1.7025	0.7629	3.4645	2.1139

It can be seen that the contribution to FPII of GPR in the beginning period from period 1 to period 3 grew the most rapidly among all independent variables based on variance decomposition while other independent variables increased at a more relatively moderate rate. However, starting from period 4, the contribution to FPII of GPR is almost stationary at 1.7% until the period 10, while EG increased with the highest growth rate, followed by GR and IR. In period 10, EG had the highest contribution to FPII which is 3.46% as compared to other variables. Hence, it can be concluded EG has the biggest influence on FPII among all independent variables in this study based on variance decomposition.

4.6 Diagnostic Checking

Table 4.6.1:

Multicollinearity Test Output

Variables	**Variance Inflation Factor (VIF)**
GPR	1.3069
IR	1.4323
EG	1.7110
GR	1.2615

Table 4.6.2:

Diagnostic Test Output

Test	**test-statistic**
Jacque Bera Test	0.3788 (0.8275)
White Test	11.7923 (0.6230)
Breusch-Godfrey Serial Correlation LM Test	1.0225 (0.5997)

Note: Significance at 10%, 5%, and 1% levels, are represented by *, **, ***, respectively. Within the parentheses, p-value is stated.

4.6.1 Multicollinearity Test

Referring to the rule of thumb, as the VIF of all independent variables is within the range 1-10 in table 4.6.1, it can be concluded that there is low multicollinearity in this study.

4.6.2 Normality Test

The result of Jacque Beta Test in table 4.6.2 shows that the null hypothesis is not being rejected. It can be concluded that the model in this study is normal.

4.6.3 Heteroscedasticity Test

The outcome of White Test in table 4.6.2 indicates that the null hypothesis is not being rejected. It can be concluded that there is no heteroscedasticity problem in this study.

4.6.4 Autocorrelation Test

The findings of Breusch-Godfrey Serial Correlation LM Test in table 4.6.2 showcases that the null hypothesis is not being rejected. It can be concluded that there is no autocorrelation problem in this study.

4.7 Conclusion

EViews 12 is being used to conduct the tests. ADF test and PP test are being used to test the stationarity of the gathered data. From the result of multiple linear regression, EG is positively insignificant to FPII, while GR, IR and GPR are all negatively significant to FPII. There is no normality problem, multicollinearity problem, heteroscedasticity problem and autocorrelation problem in this study.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.0 Introduction

It summarizes the empirical results analysis, discussion of major findings, as well as the implications of study in this chapter. Additionally, several recommendations and limitations for future research are also being discussed here.

5.1 Discussions of Major Findings

Table 5.1:

Summary of empirical results

Independent Variables	Coefficient	P-value	Results
Economic Growth	621.9857	0.4457	Insignificant Positive
Global Risk	-863.7993	0.0028	Significant Negative
Interest Rate	-13299.69	0.0030	Significant Negative
Geopolitical Risk	-181.5271	0.0615	Significant Negative

Thoroughly, this study examines the relationship between economic growth, global risk, interest rate, and geopolitical risk with FPII. The above Table 5.1 presents the summarized empirical results analysis, where economic growth is positively insignificant with FPI inflows, while global risk, interest rate as well as geopolitical risk are all negatively significant with FPI inflows. These results will be discussed in the below sections in more detail.

5.1.1 Economic Growth

Based on the results shown, economic growth is positively insignificant to the capital inflows on FPI, implying that a rise in the GDP growth will lead to an increment in the FPI inflows. Yet, these two variables are found to have no relationship with the results showing insignificant, where it is opposed to all past studies that indicate a significant relationship between the two variables, regardless of positively or negatively.

According to Leung et al. (2018), a slower economic growth in the OECD countries such as the United States, could stimulate more capital inflows in domestic countries, implying a negatively significant relationship, which is contradictory with the result of this study. Both findings are different due to the settings of which members of OECD are mostly developed countries but not for the case of Malaysia. This can be explained where developed countries are equipped with more powerful knowledge-based assets that can draw higher capital into the countries (Yoo & Reimann, 2017). On the other hand, Khayat (2020) asserted a positively significant relationship found on the two variables, which emphasized on the positive effect of the economic growth in a domestic country towards the FPI inflows, showing a contradiction in the significance of the findings in this study. This is also due to settings in the GCC countries that make difference in the matter of economies policies.

In view of emerging economies, Koepke (2019) also concluded a positively significant relationship found between domestic economic growth and capital inflows, even the setting shares the similarity in the characteristics such as country development and industrialization as Malaysia. The explanation that relates to the difference in the significance of both studies can be found in previous study conducted by Abu Bakar (2015) that revealed an insignificant result between economic growth and FDI inflows, where it is believed that the variation had in the economic trend brings to the insignificance in results. Even it appears in a different inflow as this study, yet it still pictures the same situation of economic growth in Malaysia. In 2009, the economy in Malaysia was experienced negative in value for three consecutive quarters where it was declared as a recession impacted from the global financial crisis 2007 in the way that it was primarily due to the excessive reduction in the export trade value of

27.9% (Bank Negara Malaysia, 2009). While during the quarters in year 2008 and 2009, it can be seen in the fluctuations of FPI inflows to be changed in positive and negative value uncertainly together with the variation in the value of GDP growth, showing an inconsistent result between economic growth and FPII in Malaysia, thus resulting in the insignificant relationship in this study. This applies the same situation in year 2020 and 2021 where the GDP growth in Malaysia was appeared to be variance in value as a result from the outbreak of Covid-19 epidemic that triggered global economic shock and brought to the enforcement of Movement Control Order (MCO) that restrained the activities in the manufacturing sector. Again, the variation in this economic growth trends does not explain the fluctuation in the FPI inflows, bringing to the explanation of inconsistent and insignificant impact between the two variables in this study.

5.1.2 Global Risk

From the summary of empirical results, it shows that global risk is negatively significant related to FPI inflows, inferring that a reduction in the global risk will bring to more FPI inflows injected in Malaysia. This is supported by every previous study that is conducted by Koepke (2019), Khayat (2020), as well as Mara et al. (2021). All researchers agreed upon where a macroeconomy that is free from global risk is attractive for foreign investors to allocate their funds in FPI, which can bring more capital inflows in a domestic country. According to Koepke (2019), the variable of global risk is a determinant that can create the most impact on the FPI inflows in countries with emerging economies, where the finding shows a robust proof of a negatively significant relationship in previous studies that had been reviewed, implying that global risk receives mostly the attentions of foreign portfolio investors to make decisions on portfolio investments. Though there are different settings whereby Koepke (2019) conducted the study in developing countries, Khayat (2020) in GCC countries, while Mara et al. (2021) in Indonesia, yet all the outcomes are the same which is negatively significant relationship, where it can be explained by the nature of the behavior of investors that would not place themselves in a dangerous stake when they foresee the market is vulnerable to global risk.

5.1.3 Interest Rate

The findings obtained from this study indicate a negatively significant relationship between interest rate and FPI inflows, implying that a rise in interest rates will contribute to a reduction in FPI inflows. Though the literature review on Kaya and Haan (2022) as well as Koepke (2019) pointed out the same result as this study, yet both the studies do not share the same concept of interest rates, whereby Kaya and Haan (2022) and Koepke (2019) viewed interest rate as a push factor to the capital inflows. In other words, the interest rate in both the past studies referred to foreign interest rate, which is opposed to the concept of this study that placed interest rate as a pull factor.

On the other way round, the domestic interest rate that contributes to a negatively significant relationship in this study is still not supported by Khayat (2020) even though it placed interest rate as a pull factor. This past study asserted a positively significant relationship between the two variables, where high interest rates offered in the domestic country can attract more foreign investors to contribute capital into the country in order to gain higher return. This concept is verifiable to describe the rise in the capital inflows when the OPR is increased in Malaysia (Ri, 2019). It is further explained that the borrowing cost becomes higher when the OPR is increased, attracting the foreign portfolio investors to lend more funds in order to gain higher return, as supported by Hannan (2018).

Nonetheless, the past study that proposed a positively significant relationship is not fixed with the finding of this study that indicates a negatively significant relationship. Yet, it is consistent with the findings of Yun (2020) whose study was conducted in Korea, a country located in Asia same as Malaysia. In this past study, it emphasized on the dramatic surge in the gross FPI outflows that occurred in 2012, which took place after the financial crisis in the year 2007, by the reason where local investors in Korea were mostly demanded for portfolio investments in foreign countries due to the low domestic interest rate offered in the market. Consequently, it surged the demand for foreign exchange, leading to the rise in the FPI inflows despite the lower domestic interest rate in Korea, in which it showed a negative relationship between domestic interest rate and FPI inflows (Yun, 2020).

This study applies the same concept as the past study conducted by Yun (2020) as the data collected in this study is within the year 2005 to 2022 that involves the financial crisis in 2007. It can be seen in the past study conducted by Duasa and Kassim (2008) about the sharp rise in the FPI outflow from RM 162 billion amounting to RM 353 billion in 2007 in Malaysia due to the high US interest rate. This made a compatible result to a sharp rise in the FPI inflow which had risen by RM 204 billion in the same year even though the OPR is lower than US interest rate, and it was influenced by the increasing demand in foreign currency that brought foreign investors to contribute more towards domestic portfolio investments.

Other than the 2007 financial crisis, the time frame of this study also captures the event of Covid-19 pandemic that has impacted the global economy including Malaysia. During the pandemic, the US implemented a quantitative easing method to boost up the economy by applying expansionary monetary policy while at the same time to make the Federal Fund Rate near to zero (Feldkircher et al., 2021). However, there was a sudden and significant change in the Federal Fund Rate in 2022 that was unexpected, as reported in the Financial Times (Wheatly, 2022). In the news report, it stated that foreign investors pulled out investments in emerging markets and started investments in the US. In response to this, BNM rose up OPR to be rated at 2.75% in the fourth quarter of 2022, yet it still contributed to diminishing in the FPI inflows due to the higher Federal Fund Rate quoted at 4.33%, showing a negative relationship between OPR and FPI inflows in Malaysia (Department of Statistics Malaysia, 2024).

5.1.4 Geopolitical Risk

Geopolitical risk exerts a negatively significant relationship with capital inflows on foreign portfolio investment based on the results summarized from the empirical analysis. In other words, it means that a surge in geopolitical risk will bring a reduction in the FPI inflows. Feng et al. (2023) is the only past study that examines the relationship between geopolitical risk and FPI inflows. In this case, the study conducted by Feng et al. (2023) brought to a consistent result as this study, where it is due to the selection of foreign investors to invest in

their domestic investment rather than foreign investments that are affected by the geopolitical risks, bringing to a reduction in the capital inflows (Feng et al., 2023).

On the contrary, Feng et al. (2023) pointed out a positively significant relationship between the two variables only in the case when advanced economies have successfully adapted the macroeconomy that is affected by geopolitical risk, and it will turn from negative relationship to positive relationship after six months. In this case, Malaysia is a country with an emerging economy, thus it is more to have a negatively significant relationship between the geopolitical risks and FPI inflows.

5.2 Implications of the Study

This study offered some different perspectives compared to previous studies as it can be seen that economic growth, interest rate and global risk is significantly negatively related to the foreign portfolio investment (FPI) in Malaysia as what has been supported in the study by Koepke (2019). Looking at the economic growth factor, its insignificance impacts positively on FPI which is aligned with studies like Khayat (2020). The findings of this study therefore have given some important implications to the implementations of policies to further promote the country's competitiveness in attracting foreign portfolio investments inflows (FPII) in Malaysia.

5.2.1 Central Bank and Policymakers

Bank Negara Malaysia (BNM) is a key player in enforcing the country's monetary policies and is responsible for managing the overnight policy rate (OPR). In this study, the outcome implied that interest rate holds a significant impact on the foreign portfolio investments inflow (FPII) where it has an inverse relationship due to many external factors and uncertainties that lie with this. Hence, it is essential for the central bank and policymakers to redefine the policies in place to find a sweet spot for OPR to sit in.

The stability of the OPR is important to encourage FPI inflows as it signals investors to gain stable investment returns in the future. Not only that, to gain a stable cost of funds if they do borrow from domestic banks (Abdul et al., 2016). BNM has been seen maintaining the same OPR rate till the end of 2023 despite the ringgits' pressure and ever going economic conditions. Investors are low in confidence with their investments in Malaysia due to several uncertainties. This indicates that other factors are jointly impacting the inflow of FPI into the country. With this study, it backs the vision of BNM and policy makers in developing suitable policies to ensure that OPR rate does not significantly fluctuate to the point where it will have a significant impact on FPI. In the case that a major event is anticipated, BNM and policymakers can plan ahead with a contingency plan to better handle the situation at that moment. This could support Malaysia's ability to maintain economic stability and resilience. Therefore, in order to create precise forecasts, policymakers might utilize the data studied in this study.

5.2.2 Investors and Traders

While the current state of the market is different from the traditional market from decades ago, traders in the foreign exchange market may want to shift their focus from interest rate and inflation rate to other variables such as geopolitical risk and global risk in that particular country. The high significance of both geopolitical risk and global risk showcases that it has negative correlation to the FPII in Malaysia. It can be seen that Malaysia's stock market has not been performing well over some time due to different political and economical uncertainty and this puts pressure on the value of the Malaysian Ringgit (MYR) which undoubtedly impacts FPII.

It has been recently discovered that FPI in a country can increase foreign exchange earnings and potentially relieve pressure on the exchange rate (Acha & Essien, 2018). Investors and traders may develop an improved approach to forecast the MYR exchange rate, enabling them to make more thoughtful and logical trading decisions. From the perspective of investors and traders, they view stability in the value of MYR as essential to guaranteeing

stability in their investment returns. Therefore, in order to promote widespread involvement from foreign investors, it is imperative that efforts be made to further improve the local stock market.

5.2.3 Government Officials

Government officials also play an active approach in tackling the significance of geopolitical and global risk in the country. Redefining economic policies is necessary to draw in and lay the groundwork for foreign investors to return to the nation. Furthermore, by assessing the development of regulations and incentives for industry players and market players, the government's role in establishing a framework that actively supports sustainability could be the next big thing in gaining investors' confidence. Emerging realities like climate change have brought attention to the importance of funding sustainable technology and solutions and thus, creates an opportunity for Malaysia to gain a position as one of the investment destinations for foreign investors (Vijeyasingam, 2023). It is evident that the government's stand in ensuring the inflow of FPI lies through policies that ensure innovation and sustainable efforts are constantly in place as this upholds credibility and assurance to Malaysia's economy.

Understanding a nation's present economic condition starts with looking at its gross domestic product (GDP) of the country. However, the economic growth holds insignificantly towards the FPII in Malaysia with it being positively correlated. This implies that based on this study, it does not impact significantly in regard to investors' confidence of their investments with the economic growth in Malaysia. However, government officials shall also play an active role in advocating and implementing fiscal policies that do justice to the economy of the country.

5.2.4 Academic Researchers

Previously, there were very limited studies in regard to the study specifically on foreign portfolio investment inflow (FPII) in Malaysia as often times most journal articles emphasize generally on capital flow only such as Cerutti et al. (2019) and Park and Yang (2021) or towards foreign direct investment (FDI) such as Gade et al. (2023) and Koepke (2019). This study has given academic researchers a current understanding on the influences of FPII in Malaysia which allows them to develop their research using it as a reference to broaden the area of study. This is to bridge the gap of information especially in Malaysia where this information is significant to policymakers and decision-makers in understanding the issues currently faced in regard to capital inflow of foreign portfolio investment. In light of this, academic researchers may be keen to investigate further on the factors mentioned in this study needed to have precautionary measures and how it is able to progress further in the future by also developing evidence-based recommendations for future research priorities, practices, and policies.

5.3 Limitations of the Study

In this study, it has yielded a multitude of valuable insights for pertinent stakeholders, including policymakers, investors, and researchers. However, every study possesses inherent limitations that researchers cannot evade. Because of this, there are several limitations to this study that need to be addressed in future research in order to get the best possible outcome.

Firstly, the main limitation on this study is limited research available to investigate the relationship between independent variable and dependent variable which leads to some relevant information and data cannot be obtained successfully. This is concluded as such by the reason of which the studies that could be found in Malaysia are mostly conducted to study foreign direct investments, which is against this study that emphasizes on foreign portfolio investment inflows. This limitation hinders the ability to form a thorough and precise comprehension of the issues. Consequently, collecting pertinent and dependable data has proven problematic, along with

challenges in analyzing and upholding the setting up of the discoveries. Therefore, this study might be failing towards considering crucial elements that could have been recognized through prior studies. Furthermore, the absence of pertinent data could limit the ability to establish a baseline for subsequent studies or to compare the findings of the current study with those of previous studies. Although constrained by these limitations, this study addresses a gap in the research by offering fresh viewpoints as well as enriching the body of knowledge that has been known about the topic.

Apart from that, this study collects secondary data to examine the relationship between the independent variables including economic growth, global risk, interest rate and geopolitical risk with the dependent variable which is the inflow of FPI in Malaysia. It is believed that these four independent variables are considerable enough to be examined in the Malaysia context, however, to explore more knowledge in this area, many other determinants can be examined as independent variables to study the impacts on FPI inflows in Malaysia. This is due to the fact that R square in this study is only 0.2011, which indicates that 79.89% of variation of FPI inflow in Malaysia is influenced by other factors. It shows that this study has overlooked other important variables affecting the FPI inflow in Malaysia. However, this study can offer the overall significance of the model and anticipated and trustworthy results from each variable, it is still reliable to investigate these four variables as our independent variable affecting the FPI inflow. Lastly, it is still recommended that future research explore additional influencing variables that are understudied to obtain new and diverse perspectives on the findings. By and large, using only four independent variables may oversimplify the underlying interactions and dynamics, which causes an insufficient understanding of the situation.

The outbreak of Covid-19 epidemic in 2020 has brought tragic consequences to the global economy in view of the increasing vulnerability and uncertainty of financial systems. Nonetheless, the sudden outbreak of the pandemic is seen as an unexpected and unexplored area in past studies that has yet to include the element of Covid-19 before it occurred. In other words, there are many past studies that had been conducted before the occurrence of the pandemic, leading to where the result generated from the past studies could not be totally compatible with the actual conditions that were influenced by the Covid-19 pandemic. The epidemic has caused unexpected changes to the landscape, including as the abrupt and widespread adoption of remote work, shifts in consumer

behavior, an acceleration of the digital transformation, and supply chain disruptions. Hence, it's essential to acknowledge that the results and understandings derived from studies conducted before the pandemic might require careful consideration when applied to the post-pandemic environment.

5.4 Recommendations for Future Research

Firstly, the future researchers may expand their investigation beyond the current body of literature to encompass additional reservoirs like industry analyses, governmental releases, and global databases to collect pertinent information concerning foreign portfolio investment inflows to solve the insufficient research issue. Engaging with professionals in the field or consulting with practitioners could also yield valuable perspectives and access to data reservoirs that might not be easily accessible otherwise. Moreover, carrying out primary research, like surveys or interviews with pertinent stakeholders, could provide valuable firsthand insights to complement the existing data. Moreover, applying strong procedures and rigorous analytical techniques might assist lessen the constraints related to context creation and data interpretation. Lastly, despite the difficulties experienced, addressing the study's limits honestly and offering suggestions for further research can support the current debate and increase our understanding of the subject.

Moreover, researchers ought to contemplate broadening the study's scope by integrating a more extensive array of independent variables that could potentially influence foreign portfolio investment (FPI) inflows in Malaysia to overcome the inadequate independent variable issue. This entails conducting an exhaustive literature review to pinpoint additional factors that may have been disregarded in the present analysis. For instance, exchange rate, labor market conditions and market size are the examples of independent variables that can impact the foreign portfolio investment (FPI) inflows. By considering a more diverse set of independent variables, researchers can gain a more nuanced understanding of the complex interactions and dynamics at play, leading to more robust and comprehensive findings. In addition, researchers may apply advanced statistical methods to increase the precision of the study conducted. For example, multivariate analysis can be used to capture the interrelationships between many variables, so that it can bring more insight about how the variables correlate with each other.

Conducting new research studies that especially focus on the repercussions and implications of the pandemic is one way to reconcile the disparity between pre-pandemic research findings and the contemporary scenario defined by the COVID-19 pandemic. These studies can offer current and pertinent information about the ways in which the pandemic has affected the economy, culture, and technology. Researchers can conduct studies exploring shifts in consumer behavior, the utilization of technology for remote work, and the pandemic's repercussions on global supply chains. By gathering data and examining trends during and after the epidemic, researchers can gain important insights that can guide decision-making, policy formation, and future research objectives. Moreover, interdisciplinary research collaborations, engaging specialists from varied domains like economics, public health, technology, and sociology, can furnish a holistic comprehension of the intricate effects of the pandemic.

5.5 Conclusion

This study investigates the relationship between variables such as economic growth, global risk, interest rate and geopolitical risk with capital inflow of foreign portfolio investments (FPI) in Malaysia. It can be seen that global risk, interest rate and geopolitical risk has a significant impact towards FPI negatively. On the other hand, economic growth has an insignificant positive relationship with FPI. All things considered, government officials, policy makers, investors, traders, and academic scholars can use this vital and current insights provided by this study to inform their strategies and guide future research.

REFERENCES

Abdul Karim, Z., Ramli, N., & Khalid, N. (2016). The determinants of foreign portfolio investment flows in Malaysia: A panel ARDL study. *Jurnal Ekonomi Malaysia, 50*, 3-14.

Abu Bakar, N. (2015). Macroeconomics variables and business environment influence the foreign direct investment (FDI) inflows in Malaysia. *Master of Science University Utara Malaysia.* https://etd.uum.edu.my/4621/1/s811080.pdf

Acha, I. A., & Essien, J. M. (2018). The economic growth imperative of foreign portfolio investment for Nigeria. *Noble International Journal of Economics and Financial Research, 3*(6), 71-77.

Ali, M., & Iness, A. (2020). Capital inflows and bank stability around the financial crisis: The mitigating role of macro-prudential policies. *Journal of International Financial Markets, Institutions and Money, 69,* 101254. https://www-sciencedirect-com.libezp2.utar.edu.my/science/article/pii/S1042443120301384

Amin, I. Z. B. M. (2017). *The impact of capital flows on the real exchange rate: The case of Malaysia* [Master's thesis, Universiti Putra Malaysia]. Academia. https://www.academia.edu/42891245/The_Impact_of_Capital_Flows_On_the_Real_Exchange_Rate_The_Case_of_Malaysia

Ansari, Z. N., Dar, M. H., & Zafar, S. (2023). Do capital inflows affect domestic bank credit? Empirical evidence from India. *Future Business Journal, 9*(28). https://fbj.springeropen.com/articles/10.1186/s43093-023-00203-6

Aven, T., & Zio, E. (2021). Globalization and global risk: How risk analysis needs to be enhanced to be effective in confronting current threats. *Reliability Engineering and System Safety, 205*, 107270. https://www.sciencedirect.com/science/article/pii/S0951832020307687

Bank Negara Malaysia. (2009). *Monetary policy statement.* http://www.bnm.gov.my.

Birruntha, S. (2023, July 7). Bank Negara likely to keep OPR at 3pct. *New Straits Times.* https://www.nst.com.my/business/2023/07/928739/bank-negara-likely-keep-opr-3pct#:~:text=KUALA%20LUMPUR%3A%20Analysts%20are%20unanimous,remains%20supportive%20of%20the%20economy

Birruntha, S., & Ariffin, A. (2023, June 20). Sluggish external demand to hamper trade. *New Straits Times.* https://www.nst.com.my/business/2023/06/922468/sluggish-external-demand-hamper-trade

Bouoiyour, J., Selmi, R., Hammoudeh, S., & Wohar, M. E. (2019). What are the categories of geopolitical risks that could drive oil prices higher? Acts threat? *Energy Economics,* 84.

Calvo, G. A., Leiderman, L., & Reinhart, C. M. (1993). Capital inflows and real exchange rate appreciation in Latin America: The role of external factors. *IMF Staff Papers*, 108-151.

Cerutti, E., Claessens, S., & Rose, A. K. (2019). How important is the global financial cycle? Evidence from capital flows. *IMF Economic Review*, *67*(1), 24–60. https://doi.org/10.1057/s41308-019-00073-5

Chen, J. (2021). *Capital outflow: Definition and examples.* Investopedia. https://www.investopedia.com/terms/c/capital-outflow.asp

Department of Statistics Malaysia. (2024). *Balance of payments.* https://open.dosm.gov.my/dashboard/balance-of-payments

Duasa, J., & Kassim, S. (2008). Foreign portfolio investment inflows and economic performance in Malaysia. *Gadjah Mada International Journal of Business, 10*(3), 313-330. https://www.researchgate.net/publication/272238351_Foreign_Portfolio_Investment_Inflows_and_Economic_PErformance_in_Malaysia_A_Disaggregated_Analysis

Duasa, J., & Kassim, S. (2009). Foreign portfolio investment and economic growth in Malaysia. *The Pakistan Development Review, 48*(2), 109-123. https://www.researchgate.net/publication/227361758_Foreign_Portfolio_Investment_and_Economic_Growth_in_Malaysia

Ehigiamusoe, K. U., & Lean, H. H. (2019). Foreign capital inflows and economic growth in Nigeria: Any nexus? *Journal of African Business, 20*(4), 455-471.

Eichengreen, B., Gupta, P., & Masetti, O. (2018). Are capital flows fickle? Increasingly? And does the answer still depend on type? *Asian Economic Papers, 17*(1), 22-41.

Ezanee, A. a. M. (2022, November 24). Economic fallouts from hung parliament. *MalaysiaNow*. https://www.malaysianow.com/opinion/2022/11/24/economic-fallouts-from-hung-parliament

Ezeanyeji, C. I., & Maureen, I. (2019). Foreign portfolio investment on economic growth of Nigeria: An impact analysis. *International Journal of Academic Management Science Research, 3*(3), 24-36. https://www.researchgate.net/publication/332061303_Foreign_Portfolio_Investment_on_Economic_Growth_of_Nigeria_An_Impact_Analysis

Faroh, A., & Shen, H. (2015). Impact of interest rates on foreign direct investment: Case study Sierra Leone economy. *International Journal of Business Management and Economic Research, 6*(1), 124-132. http://www.ijbmer.com/docs/volumes/vol6issue1/ijbmer20150601030103.pdf

Faure, A. P. (2014). Interest rate 1: What are interest rates? *SSRN Electronic Journal.* https://www.researchgate.net/publication/315432395_Interest_Rates_1_What_are_Interest_Rates

Feldkircher, M., Huber, F., & Pfarrhofer, M. (2021). Measuring the effectiveness of US monetary policy during the Covid-19 recession. *Scott J Polit Econ, 68*(3), 287-297. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8014274/

Feng, C. -N., Han, L., Vigne, S. A., & Xu, Y. (2023). Geopolitical risk and the dynamics of international capital flows. *Journal of International Financial Markets, 82*, 101693. https://doi.org/10.1016/j.intfin.2022.101693

Gade, S., Byram Anand, P., Perumalla Varalaxmi, D. U. J., & Jamal, N. (2023). Investigating the effects of foreign direct investment on economic growth. *Journal of Survey in Fisheries Sciences, 10*(1S), 5078-5084.

Glantz, M., & Kissell, R. (2014). *Multi-asset risk modeling*. Academic Press.

Gujarati, D. N. (2021). *Essentials of econometrics* (5th ed.). Sage Publications.

Habib, M. M., & Venditti, F. (2019). The global capital flows cycle: Structural drivers and transmission channels. *Social Science Research Network*. https://doi.org/10.2139/ssrn.3389245

Haller, A. (2012). Concepts of economic growth and development: Challenges of crisis and of knowledge. *Economy Transdisciplinarity Cognition, 15*(1), 66-71. https://www.researchgate.net/publication/309577823_Concepts_of_Economic_Growth_and_Development_Challenges_of_Crisis_and_of_Knowledge

Hannan, S. A. (2017). The drivers of capital flows in emerging markets post global financial crisis. *Journal of International Commerce, Economics and Policy, 08*(02), 1750009. doi:10.1142/s1793993317500090

Hannan, S. A. (2018). *Revisiting the determinants of capital flows to emerging markets: A survey of the evolving literature* (WP 18/214). 2018 International Monetary Fund. file:///C:/Users/User/Downloads/wp18214.pdf

Hassan, M. (2022). *Secondary data - Types, methods and examples*. Research Method. https://researchmethod.net/secondary-data/

Hoque, M. E., Zaidi, M. A. S., & Hassan, M. K. (2021). Geopolitical uncertainties and Malaysian stock market returns: Do market conditions matter? *Mathematics, 9*(19), 2393.

Igan, D., Kutan, A. M., & Mirzaei, A. (2020). The real effects of capital inflows in emerging markets. *Journal of Banking and Finance, 119,* 105933. https://www.sciencedirect.com/science/article/abs/pii/S0378426620301953?via%3Dihub

Jamal, A. A. (2022, June 17). *Ringgit slump due to external factors, economists say.* MalaysiaNow. https://www.malaysianow.com/news/2022/06/18/ringgit-slump-due-to-external-factors-economists-say

Kalemli-Ozcan, S. (2020). Emerging market capital flows under COVID: What to expect given what we know. *IMF Research Special Series on COVID-19.*

Kana, G. (2023, August 22). String of forecast downgrades for 2023. *The Star*. https://www.thestar.com.my/business/business-news/2023/08/22/string-of-forecast-downgrades-for-2023

Kaya, A. I., & Haan, J. D. (2022). Capital flows, EU integration and the global financial crisis: An empirical analysis. *Journal of Applied Economics, 25*(1), 1025-1049. https://www.tandfonline.com/doi/epdf/10.1080/15140326.2022.2099726?needAccess=true&role=button

Khalfaoui, H., & Derbali, A. (2021). The determinants of foreign direct investment: What about the potential of the Arab Maghreb countries? *Journal of Investment Compliance, 22*(4), 295-308.

Khayat, S. H. (2020). Determinants of international foreign portfolio investment flows to GCC countries: An empirical evidence. *International Journal of Business and Management, 15* (10).https://www.researchgate.net/profile/SaharKhayat/publication/344611908_Determinants_of_International_Foreign_Portfolio_Investment_Flows_to_GCC_Countries_An_Empirical_Evidence/links/5f846433299bf1b53e2109eb/Determinants-of-International-Foreign-Portfolio-Investment-Flows-to-GCC-Countries-An-Empirical-Evidence.pdf

Kim, Y. (2020). Causes of capital flows in developing countries. *Journal of International Money and Finance, 19*(2), 235-253. https://www-sciencedirect-com.libezp2.utar.edu.my/science/article/pii/S0261560600000012

Koepke, R. (2019). What drives capital flows to emerging markets? A survey of the empirical literature. *Journal of Economic Surveys, 33*(2), 516-540. https://sci-hub.hkvisa.net/10.1111/joes.12273

Korinek, A. (2018). Regulating capital flows to emerging markets: An externality view. *Journal of International Economics, 111*, 61-80.

Le, A. T., & Tran, T. P. (2021). Does geopolitical risk matter for corporate investment? Evidence from emerging countries in Asia. *Journal of Multinational Financial Management, 62*, 100703.

Ledochowski, M., & Zuk, P. (2022). What drives portfolio capital inflows into emerging market economies? The role of the Fed's and ECB's balance sheet policies. *Emerging Market Review, 51*(B), 100881. https://www-sciencedirect-com.libezp2.utar.edu.my/science/artic

le/pii/S1566014121000893#bb0085

Leung, D., Zhang, J., & Wong, A. (2018). *Sensitivity of emerging market bond fund flows to US monetary stance and global risk aversion* (Report Memorandum 01/2018). Hong Kong Monetary Authority. https://www.hkma.gov.hk/media/eng/publication-and-research/research/research-memorandums/2018/RM01-2018.pdf

Li, D. (2018). An economic analysis of international capital flow. *American Journal of Industrial and Business Management, 8*(2). https://www.scirp.org/journal/paperinformation.aspx?paperid=82645

Lu, Z., Gozgor, G., Huang, M., & Chi Keung Lau, M. (2020). The impact of geopolitical risks on financial development: Evidence from emerging markets. *Journal of Competitiveness*, (1).

Mara, M. Y. I., Purwanto, N. M. A., Kurniati, I. N., Fauziah, N. R., & Aqmaliyah, E. (2021). Capital flow and banking credit in Indonesia. *Economic Modelling, 95*, 298-310. https://www.sciencedirect.com/science/article/abs/pii/S0264999319316402

Marcoulides, K. M., & Raykov, T. (2019). Evaluation of variance inflation factors in regression models using latent variable modeling methods. *Educational and Psychological Measurement*, *79*(5), 874–882. https://doi.org/10.1177/0013164418817803

Melvin, M., & Norrbin, S. (2023). *International money and finance* (10th ed.). Academic Press. https://www.sciencedirect.com/book/9780323906210/international-money-and-finance#book-info

Mohd, N. A., Rahman, A. A., & Yaacob, M. H. (2018). The impact of asymmetric information on foreign portfolio investment flows. *International Journal of Business and Management Science, 8*(2), 475-494.

Musibau, H. O., Yusuf, A. H., & Gold, K. L. (2019). Endogenous specification of foreign capital inflows, human capital development and economic growth: A study of pool mean group. *International Journal of Social Economics, 46*(3), 454-472.

Nasrudin, A. (2022). *Capital outflow: Meaning, determinants, and impacts*. Penpoin. https://penpoin.com/capital-outflow/

Nguyen, C. H., Pham, T. T. Q., Tran, T. H., & Nguyen, T. H. (2021). The relationship between foreign capital inflows and economic growth: Empirical evidence from Vietnam. *Journal of Asian Finance, Economics and Business, 8*(11), 325-332. https://www.researchgate.net/profile/Nguyen-Huu-Cung/publication/355887058_The_Relationship_between_Foreign_Capital_Inflows_and_Economic_Growth_Empirical_Evidence_from_Vietnam/links/618b0fd461f098772079ce32/The-Relationship-between-Foreign-Capital-Inflows-and-Economic-Growth-Empirical-Evidence-from-Vietnam.pdf

Nguyen, T. T. T., Pham, B. T., & Sala, H. (2022). Being an emerging economy: To what extent do geopolitical risks hamper technology and FDI inflows? *Economic Analysis and Policy, 74*, 728-746. https://www.sciencedirect.com/science/article/abs/pii/S031359262200571

NST Business. (2022, October 11). Heightened volatility in foreign capital flows in emerging markets including Malaysia. *New Straits Times.* https://www.nst.com.my/business/2022/10/839848/heightened-volatility-foreign-capital-flows-emerging-markets-including

Olaleye, O. O., & Oluwabunmi. (2022). Impact of foreign capital inflow on a selected macroeconomic variable in Nigeria 1990-2021. *Indiana Journal of Humanities and Social Sciences, 3*(7), 25-33. https://www.researchgate.net/publication/368396868_Impact_of_Foreign_Capital_Inflow_on_a_Selected_Macroeconomic_Variable_in_Nigeria_1990-2021

Omay, T., & Iren, P. (2019). Behavior of foreign investors in the Malaysian stock market in times of crisis: A nonlinear approach. *Journal of Asian Economics, 60,* 85-100.

Omet, G. (2017). *What purpose does variance decomposition serve in a VAR system?* Retrieved from https://www.researchgate.net/post/What-purpose-does-Variance-Decomposition-serve-in-a-VAR-system#:~:text=Variance%20decomposition%20enables%20you%20to,the%20dependent%20variables%20over%20time.

Osei, M. J., & Kim, J. (2020). Foreign direct investment and economic growth: Is more financial development better? *Economic Modelling*, *93*, 154-161.

Pan, X., & Wu, W. (2022). Can capital inflows reduce financing costs in emerging economies? Firm-level evidence from China and Malaysia. *Journal of International Financial Markets, Institutions and Money, 77*, 101492. https://www.sciencedirect.com/science/article/abs/pii/S1042443121001967

Park, S., & Yang, J. S. (2021). Relationship between capital flow and economic growth: A network analysis. *Journal of International Financial Markets, Institutions and Money, 72*. https://www.researchgate.net/publication/352372549_Relationships_between_capital_flow_and_economic_growth_A_network_analysis

Portes, R., Rey, H., & Oh, Y. (2001). Information and capital flows: The determinants of transactions in "financial assets". *European Economic Review, 45* (4-6), 783-796.

Property Guru. (2023). *OPR in Malaysia: How it affects you.* https://www.propertyguru.com.my/property-guides/what-is-overnight-policy-rate-opr-malaysia-14728

Qamruzzaman, M., & Wei, J. (2019). Do financial inclusion, stock market development attract foreign capital flows in developing economy: A panel data investigation. *Quantitative Finance and Economics, 3*(1), 88-108.

Ri, T. (2019). *Explaining and justify why would BNM increase the OPR.* Research Gate. https://www.researchgate.net/publication/333186092_Explaining_and_justify_why_would_BNM_Increase_the_OPR

Steiner, A. (2017). *Global imbalances, financial crises, and central bank policies.* Academic Press. https://www.sciencedirect.com/book/9780128104026/global-imbalances-financial-crises-and-central-bank-policies#book-info

Teimouri, S., & Zietz, J. (2018). The impact of surges in net private capital inflows on manufacturing, investment, and unemployment. *Journal of International Money and Finance, 88,* 158-170. https://www.sciencedirect.com/science/article/abs/pii/S0261560618303528

The Star. (2023, August 23). BMI revises Malaysia GDP forecast down to 4% this year. *The Star.* https://www.thestar.com.my/business/business-news/2023/08/23/bmi-revises-malaysia-gdp-forecast-down-to-4-this-year

Tillmann, P. (2013). Capital inflows and asset prices: Evidence from emerging Asia. *Journal of Banking and Finance, 37*(3), 717-729. https://www.sciencedirect.com/science/article/abs/pii/S0378426612003287

Vaidya, D. (n.d.). *Capital outflow.* Wall Street Mojo. https://www.wallstreetmojo.com/capital-outflow/

Vijeyasingam, T. (2023, March 8). Malaysia sees 13% drop in new investments. *Free Malaysia Today.* https://www.freemalaysiatoday.com/category/business/2023/03/08/malaysia-sees-13-drop-in-new-investments/

Wanaguru, N. D. (2020). *Effectiveness of foreign portfolio investment with regard to multinational corporations in the long run* [Paper Presentation]. 13th International Research Conference, Sri Lanka. http://192.248.104.6/bitstream/handle/345/2960/Effectiveness%20of%20Foreign%20Portfolio%20Investment%20with%20regard%20to%20Multinational%20Corporations%20in%20the%20Long%20Run.pdf?sequence=1&isAllowed=y

Wheatley, J. (2022, July 31). *Emerging markets hit by record streak of withdrawals by foreign investors.* The Financial Times. https://www.ft.com/content/35969b19-86db-4197-a419-b4a761094e9a

World Economic Forum. (2022). *Global risks report 2022* (Insight report 17th edition). https://www.weforum.org/reports/global-risks-report-2022/in-full/appendix-a-descriptions-of-global-risks-2022

Xu, N. R. (2017). Global risk aversion and international return comovements. *Social Science Research Network*. https://doi.org/10.2139/ssrn.3174176

Yaacob, M. H., Nor, R. A. M., Janor, H., & Hashim, N. A. (2021). The influence of asymmetric information on foreign capital inflows in ASEAN plus three countries. *International Journal of Management Studies, 28*(1), 89-114.

Yoo, D., & Reimann, F. (2017). Internationalization of developing country firms into developed countries: The role of host country knowledge-based assets and IPR protection in FDI location choice. *Journal of International Management, 23*(3), 242-254. https://www.sciencedirect.com/science/article/abs/pii/S1075425315301095

Yu, M., & Wang, N. (2023). The influence of geopolitical risk on international direct investment and its countermeasures. *Sustainability, 15*(3), 2522. https://doi.org/10.3390/su15032522

Yun, Y. (2020). Post-crisis changes in the pattern of capital flows - The case of Korea. *Economics Bulletin, 40*(1), 601-611. http://www.accessecon.com/Pubs/EB/2020/Volume40/EB-20-V40-I1-P51.pdf