THE EFFECT OF COUNTRY RISK, INFLATION RATE, AND GROSS DOMESTIC PRODUCT ON STOCK MARKET INDICES IN ASEAN-4 COUNTRIES

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Abstract

The aim of this study is to prove whether country risks and inflation rates affected gross domestic product (GDP) and stock market indices in Indonesia, Malaysia, the Philippines, and Thailand from 2014 to 2022. Based on the phenomena that have been found, the type of research used is explanatory and descriptive studies, while to find out the relationship between the variables studied, quantitative methods are used. The population of this study is countries in Southeast Asia, the sample was generated using purposive sampling. The findings of this study are that the rule of law has a significant impact on the stock market indices. This research is a continuation of previous research, namely from Mohamad et al. (2020), Akter and Smith (2021), and also from Kabir et al. (2023), with the addition of a number of variables and new mathematical models. This research is important because: first, it can encourage governments in Southeast Asia to uphold the rule of law; second, for those who intend to invest in a country in Southeast Asia, it can consider the rule of law as an important factor for the long-term growth of stock indices.

Keywords: Investment, Risk, Stock Market Indices, Gross Domestic Product, Rule of Law

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1. INTRODUCTION

The main interest of investors in the capital market is the expected return that can be generated. The higher the expected return, the more investors are interested in investing in the capital market. Investors invest in the stock market of developing countries because they expect the gross domestic product (GDP) growth rate in developing countries to be higher and then provide higher returns as well (Hsu et al., 2023). However, changes in macroeconomic factors, such as inflation and others, not only affect GDP but also affect stock market conditions (Heinlein & Lepori, 2022). The main concern of the macroeconomic factor is GDP, as it is an important prerequisite for sustainable development (Trung, 2022).

Investors usually review various macroeconomic factors such as GDP and stock market indices, but investors must also be aware of risk factors. There are a number of measures of risk such as political stability, control of corruption, and rule of law, which are related to the situation in a country also known as country risk. GDP and the stock market indices are benchmarks of the government's success (or failure) in managing the economy within a certain period. So, the government of a country has an interest in managing factors that affect GDP and stock market indices.

Research conducted in Southeast Asia, which includes Indonesia, Malaysia, Thailand, Vietnam, and the Philippines, concluded that Indonesia has the highest country risk of all these countries (Pertiwi et al., 2020). This conclusion has similarities to other studies conducted in Malaysia, Thailand, and Indonesia, stating that corruption and political stability are still problems with the implementation and rule of law in Indonesia being ranked the lowest among the three countries (Holzhacker et al., 2016).

Indonesia, the largest country with the largest population in the Southeast Asian region, often experiences tense political conditions, especially during the presidential election. In fact, the two changes of power, namely in the years of 1966 and 1998, were preceded by demonstrations and quite a lot of casualties; hyperinflation also occurred around the years of the leadership change. After President Soeharto's 31-year leadership ended, political conditions did not immediately recover, instead, there was the removal of Abdurrahman Wahid from the presidency in the reform era (Eickhoff et al., 2017). The level of corruption and political instability after the reform period until now has not been getting better (Mujani, 2020).

The Philippines has a political history similar to Indonesia. The change of power from Ferdinand Marcos Sr. to Mrs. Corazon Aquino was marked by a major demonstration and made Ferdinand Marcos Sr. and his wife flee to Hawaii and die a few years later (Teehankee, 2023). The dissolution of the alliance between Marcos and Duterte raises crucial questions about the direction of Philippine politics and highlights the importance for Filipinos to take back and redesign their political map for a more inclusive future (Martinez et al., 2024).

Malaysia, Indonesia's closest neighbor, is also inseparable from political turmoil, where Anwar Ibrahim was arrested and put in prison on charges of deviant sexual behavior by his political opponents. Malaysia's biggest corruption case, known as the 1MDB (1Malaysia Development Berhad) case, has also implicated Malaysian Prime Minister Najib Razak (Wong & Ooi, 2018).

Thailand, as a neighbor in the region, also experienced political turmoil in the race for the position of prime minister; clashes between the red-shirt masses and the yellow-shirt masses often occurred there (Laohabut & McCargo, 2024).

In the chart that can be seen in the appendices, it can be seen that although the pattern of country risk, inflation rate, and GDP between the Philippines and Malaysia is quite similar, the stock market indices of the two are different. The Philippines' stock market indices have a flat trend, while Malaysia's stock market indices have a downward trend. Meanwhile, although the patterns of country risk, inflation rate, and GDP between Thailand and Indonesia are very different, the stock market indices of the two countries have similarities; both stock market indices have an upward trend.

For these reasons, the four countries are interesting to study, because despite experiencing political instability, high levels of corruption, high inflation rates, and weak law enforcement, their GDP remains high with moderate stock market indices. Therefore, this study was conducted to confirm whether these factors are still important and relevant for GDP and capital market indices in those countries.

This study aims to explore the impact of country risk, inflation rates, and GDP on the stock market indices of four nations (ASEAN-4): 1) Indonesia, 2) Malaysia, 3) Thailand, and 4) Philippines. The theoretical framework used is signaling theory (Akerlof, 1978) as a grand theory and Arbitrage Pricing Theory founded by Stephen A. Ross in 1976 (Brown et al., 2021) as an applied theory, while the literature gap is explored for the formation of hypotheses which will be discussed in detail in the literature review section. The type of research used is explanatory and descriptive studies. We will assess the extent and significance of these factors influencing the stock market indices in these countries. This research is important because these four countries are the main economic drivers in the Southeast Asian region, which has a stock market with high yields but also has high country risks. This research will also contribute to the existing literature on investment in developing nations and offer valuable insights for policymakers and investors.

RQ: Are country risk, inflation rate, and GDP affecting stock market indices in ASEAN-4 countries?

The subsequent organization of the paper is outlined as follows. Section 2 presents a review of the existing literature. Section 3 details the research methodology utilized. Section 4 integrates the findings of the study. Section 5 discusses the results, and Section 6 offers the concluding remarks, and limitations, and explores the implications of the research.

2. LITERATURE REVIEW

The relationship between macroeconomic indicators, such as political stability, inflation, and corruption, and socioeconomic outcomes like poverty and economic volatility has been the subject of extensive academic inquiry to explain the volatility of stock market indices. Particularly in emerging economies, the interplay between corporate performance, governance, and macroeconomics remains complex. The grand theory used is the signaling theory

(Akerlof, 1978), where, in this research, country risk functions as a signal received by investors, and the government in each country will try to provide a good signal. This research uses Arbitrage Pricing Theory, founded by Stephen A. Ross in 1976 (Brown et al., 2021) as the basis for making mathematical models. There are a number of studies regarding several factors that relate to the volatility of stock market indices, the rule of law, control of corruption, inflation rate, and political stability.

2.1. The relationship between the rule of law and political stability

Several studies recognize that the rule of law affects political stability. Milasaite and Micic (2022) investigated the relationship between political stability, inflation, unemployment, GDP per capita, and vice versa and found that poor economic performance in some countries is caused by unstable political institutions. Munzhelele (2024) discusses how political instability undermines the rule of law, with corruption flourishing in the absence of legal accountability. Maravall (2001) argues that the rule of law, while ideally a constraint on political excess, can also be co-opted by politicians to serve undemocratic ends.

Meanwhile, a number of research results have concluded that there is a relationship between political stability and the inflation rate. A 2015 study stated that if the political situation in a country is stable, inflation will be controlled, meaning that in the short term political stability will suppress inflation (Bjorvatn & Farzanegan, 2015), but in a study in a number of countries in Africa, in the long term, political stability will increase inflation due to GDP (Bleaney & Francisco, 2016), this was confirmed in a 2018 study in Indonesia (Yolanda, 2017).

From the results of research by Mohamad et al. (2020), it is stated that studies in a number of countries in Southeast Asia have not taken into account political stability and control of corruption, therefore, a recommendation was made for further research to be done on a number of countries in Southeast Asia using panel data (Mohamad et al., 2020). Therefore, this research links the relationship between the rule of law and political stability. The proxy for this relationship is: that without the rule of law, it is difficult to achieve political stability.

From the results of this research, it can be seen that there is a notion that there is a relationship between the rule of law, control of corruption, inflation levels, and political stability. This hypothetical relationship will be tested using statistical tools in this research.

H1: The rule of law has a positive effect on political stability.

2.2. The relationship between the rule of law, political stability, and the inflation rate

From a number of articles examined, it turns out that there is one factor that affects the control of corruption and inflation rate, namely the rule of law.

The increase in the rule of law will suppress the rate of inflation in a number of Asian countries, according to a study in 2020 (Kunaedi & Darwanto, 2020), including in Bangladesh, according to a study in 2023 (Kabir et al., 2023). Not only in Asia, the rule of law has a negative effect on inflation rates in dozens of Latin American countries, Central Europe, and Eastern Europe (Shevchuk et al., 2021).

H2: Rule of law and political stability have a simultaneous and partial negative effect on the inflation rate.

2.3. The relationship between the rule of law and the control of corruption

Improving the rule of law also increases the eradication of corruption (Kim, 2014), and the results of subsequent research in China also state the same (Zhu, 2017). Previous research confirms that the rule of law plays a critical role in controlling corruption, but the efficacy depends on implementation quality, institutional independence, and political will. The rule of law strengthens transparency and reduces corruption where these elements are aligned. Mohd-Rashid et al. (2023) state that the rule of law had a positive association with corruption. Empirical evidence from previous studies supports the hypothesis that improvements in the rule of law enhance control of corruption. However, research in the USA concluded that the effect of increasing the rule of law on improving control of corruption still has not had a significant impact (DeBacker et al., 2015).

H3: The rule of law has a positive effect on the control of corruption.

2.4. The relationship between political stability, inflation rate, control of corruption, and gross domestic product

Gross domestic product, as one of the macroeconomic factors that affect the stock price indices, is also influenced by a number of other macroeconomic factors, namely control of corruption, inflation rate, and political stability:

The control of corruption that is seriously carried out in Brazil shows positive results on GDP (Bologna, 2016). However, in the Asia-Pacific region, control of corruption sometimes has a positive impact, but sometimes it has a negative impact on GDP (Canare, 2017). Meanwhile, research in various countries also states that control of corruption has a negative impact on GDP at a number of different times (Lučić et al., 2016).

The results of the study in Vietnam concluded that the inflation rate has a negative effect on GDP (Tien, 2021). On the other hand, in the long run, the inflation rate has a positive impact on GDP in Malaysia (Akter & Smith, 2021). Research in Nigeria and also in a number of developing countries in the same year concluded that inflation rates have no impact on GDP (Adaramola & Dada, 2020; Omar & Inaba, 2020).

Political stability also affects GDP, this is contained in the conclusions of a study conducted in 2015 in Romania (Radu, 2015) and in a number of developing countries in a 2017 study (Uddin et al., 2017). In contrast, research in hundreds of other countries in 2019 concluded that GDP is not affected by political stability (Karnane & Quinn, 2019).

From the results of this research, it can be seen that there is a connection between GDP, control of corruption, inflation rate, and political stability. This hypothetical relationship will be tested using statistical tools in this research.

H4: Political stability, inflation rate, and control of corruption have a simultaneous and partial positive effect on GDP.

2.5. The relationship between gross domestic product, control of corruption, and stock market index

There are also a number of studies on factors that affect capital market conditions:

A study in Vietnam in 2020 concluded that GDP has a positive impact on stock prices (Huy et al., 2020). This conclusion is in line with the conclusion of Giri and Joshi (2017), who examined the influence of GDP on stock prices in India. However, research in the Japanese capital market shows that GDP has no significant effect on stock prices (Funashima et al., 2020).

Capital market conditions are also influenced by the control of corruption. A number of studies in various countries, namely in countries in Europe, the USA, and Japan, concluded that control of corruption has a positive impact on stock price indices (Donadelli et al., 2014; Pellegrini et al., 2017). The results of research in China also concluded that control of corruption has a positive impact on the stock price indices (Cao et al., 2018; Chen et al., 2018). On the contrary, research in Tunisia concluded that the stock price indices are not affected by the control of corruption (Missaoui et al., 2018).

From the results of this research, it can be seen that there is a notion about the relationship between GDP, control of corruption, and stock market conditions using the stock market indices as a proxy. This hypothetical relationship will be tested using statistical tools in this case study.

H5: GDP and control of corruption have a simultaneous and partial positive effect on stock market indices.

3. RESEARCH METHODOLOGY

The type of research used is explanatory and descriptive studies, while to find out the relationship between the variables studied, quantitative methods are used. The population of this study is countries in Southeast Asia, the sample was generated using purposive sampling. The use of secondary data and purposive sampling is similar to the research conducted by the previous study (Sargsyan & Seissian, 2024), but with differences in the object and period of the year of the study. The reason for choosing this population is that the Southeast Asian region has abundant natural and human resources, but also has the same problems, namely corruption and political instability.

This study uses secondary data taken from investing.com and bbvaresearch.com for four countries in Southeast Asia that are still included in the category of developing countries, namely Indonesia, Thailand, Malaysia, and the Philippines, while Singapore is not included because it has been included as a developed country. The samples obtained from the four countries spanned from 2014 to 2022, with a number of factors that were successfully obtained from secondary data, so that panel data containing 216 data points could be formed. The reason this data starts from 2014 is that the fully available data for Southeast Asian countries is only available from 2014, and the last data that can be obtained when this study was conducted is only until 2022.

This study used a multivariate regression technique to find the main factors that affect the stock price index rather than using a discriminant analysis to find differences in causal factors. Before using multivariable regression techniques to test hypotheses, one must first begin by testing the fit of the model, whether it is more suitable to use the fixed effect model, the common effect model, or the random effect model.

3.1. Operational variables

The variable symbols that can be seen in the table below are *PoS* value, *RoL* value, *CoC* value, *IFR* value, *GDP* value as independent variables, and *SI* value as a dependent variable.

Table 1. Definition of operational variables

No.	*Variable names*	*Sources*	*Scale*	*Symbol*
1	Stock market indices	investing.com	Ratio	*SI*
2	Gross domestic product	bbvaresearch.com		*GDP*
3	Inflation rate			*IFR*
4	Political stability			*PoS*
5	Rule of law			*RoL*
6	Control of corruption			*CoC*

3.2. Research models

From the results of the theoretical review and research that have been conducted, research models can be made as follows:

$$PoS = p_0 + p_1 RoL_{i,t} + \mu_{i,t} \quad (1)$$

$$IFR = \acute{\eta}_0 + \acute{\eta}_1 RoL_{i,t} + \acute{\eta}_2 PoS_{i,t} + \mu_{i,t} \quad (2)$$

$$CoC = \acute{\iota}_0 + \acute{\iota}_1 RoL_{i,t} \quad (3)$$

$$GDP = \acute{\upsilon}_0 + \acute{\upsilon}_1 PoS_{i,t} + \acute{\upsilon}_2 IFR_{i,t} + \acute{\upsilon}_3 CoC_{i,t} + \mu_{i,t} \quad (4)$$

$$SI = \psi_0 + \psi_1 GDP_{i,t} + \psi_2 CoC_{i,t} + \mu_{i,t} \quad (5)$$

where,

- p_0, $\acute{\eta}_0$, $\acute{\iota}_0$, $\acute{\upsilon}_0$, ψ_0: intercept;
- p_1, $\acute{\eta}_1$, $\acute{\eta}_2$, $\acute{\iota}_1$, $\acute{\upsilon}_1$, $\acute{\upsilon}_2$, $\acute{\upsilon}_3$, ψ_1, ψ_2: coefficients;
- *t*: time period;
- *i*: country;
- μ: term of error.

The above equation model involves variable *i,* which represents the number of countries at time *t*, and μ as the term of error. *PoS* stands for political stability, *RoL* stands for rule of law, *IFR* stands for inflation rate, *CoC* stands for control of corruption, *GDP* stands for gross domestic product, and *SI* stands for stock market indices.

Equation (1) measures the influence of the rule of law on political stability. Compliance with the rule of law by all members of society is the main principle in modern society. Political contestation in democratic life often creates tension between opposing supporters, and compliance with the law and equality before the law are the keys to high political stability in a country. This is included as a mediating variable in accordance with previous studies that show its importance in influencing the stock price index (Mohamad et al., 2020).

Equation (2) measures the influence of the rule of law and political stability on the inflation rate.

The *PoS* variable from Eq. (1) becomes the mediating variable in Eq. (2). When a country experiences political instability, usually the supply of commodities is disrupted, and people tend to store a lot of goods because of the fear of riots, which will cause commodity prices to increase rapidly. On the other hand, high political stability will keep the inflation rate under control. Law enforcement, which is characteristic of a high rule of law, will have an impact on controlling commodity prices because various informal levies such as corruption and extortion have been eradicated. These are included as a mediating variable in accordance with previous studies that show their importance in influencing the stock price index (Bleaney & Francisco, 2016; Kabir et al., 2023; Kunaedi & Darwanto, 2020; Shevchuk et al., 2021; Yolanda, 2017).

Equation (3) measures the influence of the rule of law on the control of corruption. A high rule of law has an impact on reducing the level of corruption. This is included as a mediating variable in accordance with previous studies that show its importance in influencing the stock price index (Kim, 2014; Zhu, 2017).

Equation (4) measures the influence of political stability, inflation rates, and corruption control simultaneously. The *PoS* variable from Eq. (1), the *IFR* variable from Eq. (2), and the *CoC* variable from Eq. (3) become the mediating variables of Eq. (4). There are many factors that influence the growth of domestic products, but in this study, we want to focus on these three independent variables. The goal is to prove whether there is a significant influence and how much it affects the growth of domestic products. These are included as a mediating variable in accordance with previous studies that show their importance in influencing the stock price index (Bologna, 2016; Radu, 2015; Uddin et al., 2017).

Equation (5) measures the influence of *GDP* and control of corruption on stock market indices simultaneously. The *CoC* variable from Eq. (3) and the *GDP* variable from Eq. (4) become the mediating variables of Eq. (5). Economic growth and oversight of corruption will give investors confidence, and the capital market will grow rapidly. These are included as mediating variables in accordance with previous studies showing their importance in influencing the stock price index (Cao et al., 2018; Donadelli et al., 2014; Giri & Joshi, 2017; Huy et al., 2020; Pellegrini et al., 2017).

4. RESULTS

4.1. Determining the model

The first step is to determine the suitable model for panel data which is used in this research.

4.1.1. Lagrangian multiplier effect test

The common effect model is recommended to be used if the p-value test result is > 0.05, otherwise, the random effect model is recommended to be used. The test results in Table 2 suggest using a random effect model.

4.1.2. Chow test

The common effect model is recommended to be used if the p-value test result is > 0.05; otherwise, the fixed effect model is recommended to be used. The test results in Table 2 suggest using a fixed-effect model.

4.1.3. Hausman test

The random effect model is recommended to be used if the p-value test result is > 0.05, otherwise, the fixed effect model is recommended to be used. The test results in Table 2 suggest using a random effect model.

Table 2. Tests to choose the suitable model

The Lagrangian multiplier effect test	***Equation (1)***	***Equation (2)***	***Equation (3)***	***Equation (4)***	***Equation (5)***
	Breusch-Pagan test hypothesis				
Cross-section	65.311	1.736	12.957	1.752	130.639
	0.0000	0.1876	0.0003	0.1855	0.0000
Time	3.982	18.704	0.216	18.201	5.239
	0.04601	0	0.64150	0	0.02210
Both	69.290	20.440	13.170	19.950	135.80
	0	0	0	0	0
Chow test	***Test of fixed effect-cross***				
Chi-square statistics	44.735		22.16	0.636	143.7
		0.884636			
d.f.	3	3	3	3	3
Prob.	0.0000	0.8291	0.0001	0.8880	0.0000
Hausman test	***Random-cross***				
Chi-square statistics	0.053	0.426	3.059	0.517	0.315
d.f.	1	2	1	3	2
Prob.	0.816	0.808	0.080	0.915	0.854

Source: Authors' elaboration.

4.2. Multivariate regression result

Based on the test results above, the random effect model is used in the following multivariable regression test. When the data panel uses a random effect model, the data already meets the requirement of a best linear unbiased estimator, so there is no need to conduct a classical assumption test (Gujarati, 2021).

Because the hypothesis uses direction, the significance level used is a value of $\alpha / 2$, so the α values used are 2.5% and 0.5%. In the table below, the symbol for the dependent variables is Y, while for the independent variables is X_n. The test results obtained are as follows:

Table 3. Multivariable regression test

Equations	*Variable*	*Coefficients*	*ε*	*t-stat.*	*p-values*
		Equation (1)			
Y	*PoS*				
Coeff.	*C*	-0.481	0.168	-2.848	0.007
X_1	*RoL*	0.851	0.220	3.864	0.000**
		Weighted statistic			
Adj. R²		***F-statistic***		***p-values for F-statistic***	
0.290		15.360		0.000**	
		Equation (2)			
Y	*IFR*				
Coeff.	*C*	4.103	0.613	6.691	0.000
X_1	*RoL*	-4.438	1.277	-3.475	0.001**
X_2	*PoS*	2.929	1.104	2.652	0.012*
		Weighted statistic			
Adj. R²		***F-statistic***		***p-values for F-statistic***	
0.240		6.51		0.004**	
		Equation (3)			
Y	*CoC*				
Coeff.	*C*	-0.232	0.060	-3.825	0.0005
X_1	*RoL*	0.565	0.114	4.947	0.000**
		Weighted statistic			
Adj. R²		***F-statistic***		***p-values for F-statistic***	
0.386812		23.078		0.000**	
		Equation (4)			
Y	*GDP*				
Coeff.	*C*	-0.066	1.084	-0.061	0.951
X_2	*PoS*	-3.772	1.804	-2.090	0.044
X_3	*CoC*	6.678	2.750	2.427	0.021*
X_4	*IFR*	1.147	0.269	4.260	0.0002**
		Weighted statistic			
Adj. R²		***F-statistic***		***p-values for F-statistic***	
0.331		6.790584		0.001**	
		Equation (5)			
Y	*SI*				
Coeff.	*C*	2536.205	2094.660	1.210796	0.234
X_3	*CoC*	1545	524.049	2.949358	0.005**
X_5	*GDP*	-5.466968	17.200	-0.317830	0.752
		Weighted statistic			
Adj. R²		***F-statistic***		***p-values for F-statistic***	
0.170		4.586		0.017**	

*Note: * significant at α ≤ 2.5% or 0.025; ** significant at α ≤ 0.5% or 0.005; ε = standard error.*
Source: Authors' elaboration.

Mathematical models that can be formed are:

$$PoS = -0.481 + 0.851RoL_{i,t}$$

$$IFR = 4.103 - 4.438RoL_{i,t} + 2.929PoS_{i,t}$$

$$CoC = -0.232 + 0.565RoL_{i,t}$$

$$GDP = -0.066 - 3.772PoS_{i,t} + 1.147IFR_{i,t} + 6.678CoC_{i,t}$$

$$SI = 2536.205 - 5.466GDP_{i,t} + 1545CoC_{i,t}$$

The results of the Eq. (1) test prove that the rule of law has a significant and unidirectional influence, meaning that increasing or decreasing the rule of law will also increase or decrease political stability. A coefficient value of 0.85 indicates that the rule of law has a very high influence on political stability in ASEAN-4 countries.

The results of the Eq. (2) test prove that in ASEAN-4 countries, the inflation rate is simultaneously and significantly influenced by the rule of law and political stability. The rule of law has a negative effect on the inflation rate, while political stability has a positive effect on the inflation rate. The rule of law has a partial negative impact on inflation, which means that increasing the rule of law can reduce inflation. On the other hand, political stability has a partially positive and significant impact on inflation, which means that as political stability increases, so will inflation. This is because investment interest will increase when political stability increases, so cost-push inflation occurs, which will happen vice versa if political stability decreases.

The results of the Eq. (3) test prove that increasing the rule of law will increase the control of corruption, meaning that efforts to suppress corruption in ASEAN-4 countries must be supported by a rule of law that is well implemented and sustained.

The results of the Eq. (4) test prove that GDP in ASEAN-4 countries is simultaneously influenced by political stability, inflation rate, and control of corruption, but partially, only control of corruption and inflation rate have a significant effect. Control of corruption has a positive effect on GDP, meaning that stricter supervision of corruption will increase GDP. The inflation rate also has a positive effect on GDP due to demand-pull inflation. Demand-pull inflation indicates an increase in people's purchasing power, which will then attract foreign investors and local investors to set up companies in a country so that the country's GDP rises.

The results of the Eq. (5) test prove that stock market indices in ASEAN-4 countries are simultaneously influenced by GDP and control of corruption, but partially, only control of corruption has a significant effect. Control of corruption has a positive effect on stock market indices, meaning that stricter supervision of corruption will increase stock market indices.

The rule of law has been proven to have a positive and significant effect on three

macroeconomic factors, namely control of corruption, political stability, and inflation rate, which then all three have a significant effect on GDP and stock market indices. This means that the rule of law is the earliest factor that must be improved so that the economy of a country can increase and be sustainable.

The results of this study are similar to several previous studies. For political stability and its influence on the inflation rate, this study is similar to several previous studies from Bjorvatn and Farzanegan (2015), Bleaney and Francisco (2016), and Yolanda (2017). For the rule of law and its influence on the inflation rate, this study is similar to several previous studies from Kabir et al. (2023), Kunaedi and Darwanto (2020), and Shevchuk et al. (2021). For the supremacy of law and its influence on to control of corruption, this study is similar to several previous studies by Kim (2014) and Zhu (2017). To control its impact on GDP, this study is similar to a previous study from Bologna (2016). For the inflation rate and its effect on GDP, this study is similar to the previous study by Akter and Smith (2021). To control corruption and its influence on stock market indices, this study is similar to several previous studies from Pellegrini et al. (2017), Cao et al. (2018), and Donadelli et al. (2014). To control corruption and its influence on stock market indices, this study is similar to several previous studies from Pellegrini et al. (2017), Cao et al. (2018), Chen et al. (2018), and Donadelli et al. (2014).

5. DISCUSSION

This research is a development of various previous studies, but this research model provides a novelty that is different from the previous research models. The model produced in this study is more complex and comprehensive, including various related variables. From the resulting model, it can be seen that the rule of law is the main factor that will have an impact on various other factors, including control of corruption, political stability, and inflation rate, which then all three have a significant effect on GDP and stock market indices so that a country's economy can increase and be sustainable. This is in line with previous research, which stated government intervention has proven to be a significant factor, positively impacting stock returns (Phan & Nguyen, 2024).

Investors will certainly consider the equilibrium between country risk and the return that will be obtained. Therefore, it is common that when country risk increases, the return of government bonds also increases. On the one hand, this is beneficial for investors in the short term, but not necessarily profitable in the long term because it is proven that the increased risk of various country risks, such as the deteriorating rule of law and political instability, will have a negative impact in the long term on the country's GDP and stock returns. The government of a country that experiences an increase in country risks, such as a deteriorating rule of law, will also get a double burden. The burden is: that in the short term, it will have to increase interest rates to attract investors, and of course, this is a burden for the government, and the second is that in the long term, it will experience a deterioration in GDP and market share indices. These findings are a development of previous research that stated the enactment of global laws and policies causes substantial effects on the global stock market (Alajlani et al., 2024). Henceforth, the results of this research can be used both by investors and policymakers in a country, especially in the ASEAN-4 countries, in order to increase GDP and market share indices.

Increasing the rule of law will also have an impact on reducing political risk, and controlling corruption, and inflation rates. Politicians' adherence to the law will reduce political risks such as anarchist demonstrations that damage government offices and public facilities, which can lead to the destruction of infrastructure and increase insecurity for businessmen and consumers. The level of corruption that would increase corporate costs could also decrease drastically if the same law applied to all citizens, including officials in the country. Inflation rates can be suppressed if the rule of law is followed by all residents in the country because the absence of corruption and extortion can eliminate the impact of high-cost economies.

Upholding the rule of law will have implications for investor comfort, high economic growth, and an increasing stock price index so that developing countries can become developed countries.

Simultaneously, inflation rates, political stability, and corruption control act as intervention variables and have a positive effect on GDP. It is clear that inflation control, inflation stability, and political stability are the main things that investors want to be able to make long-term investments in a country. Investors can focus more on taking care of internal matters in the form of company operations rather than worrying about external affairs, such as business security and extortion by gangsters.

Furthermore, increasing GDP and controlling corruption simultaneously will increase the stock market index, as more investors are interested in investing, and people's purchasing power increases, as the demand for labor also increases.

6. CONCLUSION

It can be concluded that the first and foremost factor to increase GDP and stock market indices is the rule of law. Increasing the rule of law will reduce the inflation rate so that it remains at a safe level, increase political stability, and suppress corruption by increasing control of corruption. Furthermore, increasing political stability will increase the inflation rate, so the rule of law and political stability seem to function as a gas pedal and brake to control the inflation rate so that it remains at a safe level. Finally, increasing control of corruption plays an important role in increasing GDP and market share indices. The findings of this study contradict earlier research that indicated inflation consistently exerts a negative influence on stock market variables (Chikeya & Mpofu, 2024). In other words, the first factor that must be improved in order for an increase in GDP and stock market indices is the rule of law. The situation that investors are most worried about when there is a change in leadership in a country is legal uncertainty. An action that has been implemented and approved in the previous government era, but can be considered wrong in the next government era, is a nightmare for investors. Multinational companies that build factories in a country will experience a payback period many years after the factory is operational. If suddenly the permit for

the existence of the factory is revoked by the new government, the company will suffer enormous losses. Legal certainty will ensure that an investment takes place according to the initial approval, and this will make investors feel safe.

Although this study has limitations in the form of data from a number of Southeast Asian countries that are not available, the ASEAN-4, which is the four largest countries in Southeast Asia, is considered sufficiently representative because the characteristics and problems faced by the four countries are similar.

The novelty of this study is: first, to find and prove statistically that the rule of law is very important in increasing GDP and stock market indices; second, a new mathematical equation from a series of macroeconomic variables. The difference from the previous study is that this research produces a more comprehensive model, in which more factors were included. From the model produced in this study, it appears that the rule of law plays an important role in maintaining the inflation rate, preventing corruption, and maintaining political stability. Furthermore, a safe level of inflation and control of corruption will increase GDP furthermore, preventing corruption will also increase the stock market indices. However, simultaneously, all independent variables studied have a significant effect on increasing GDP and the stock market indices.

The contribution of this research to the public is: first, those who intend to invest in a country, especially countries in Southeast Asia, can consider the rule of law as an important factor for the growth of stock indices in the long term; second, it can encourage people in various countries, especially countries in Southeast Asia, to create a law-abiding society and choose a government that is on the side of upholding the rule of law. For further research, researchers can continue this research in other regions of the world or by using other methods.

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APPENDIX

Figure A.1. Philippines' country risk, inflation rate, and gross domestic product

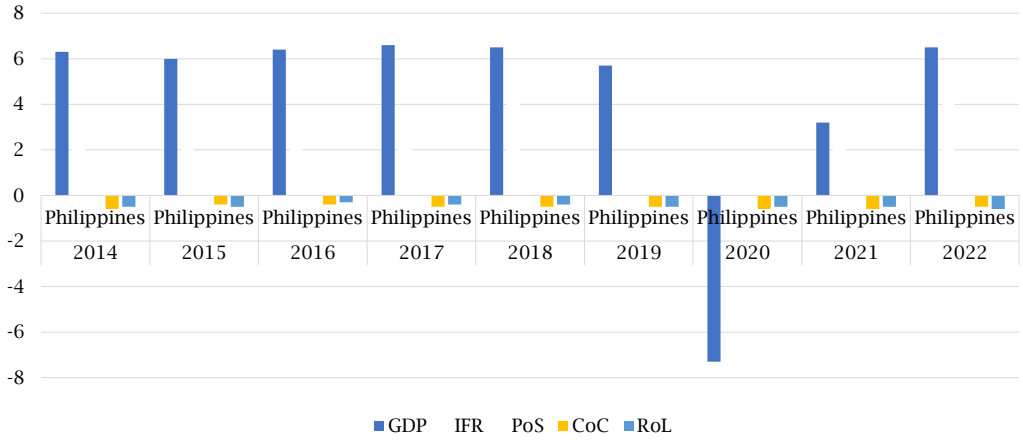

Figure A.2. Philippines' stock market indices

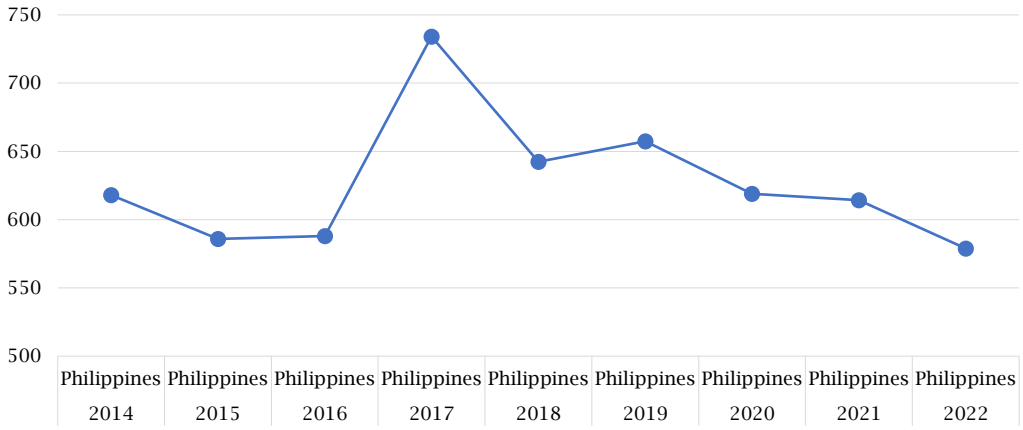

Figure A.3. Malaysia's country risk, inflation rate, and gross domestic product

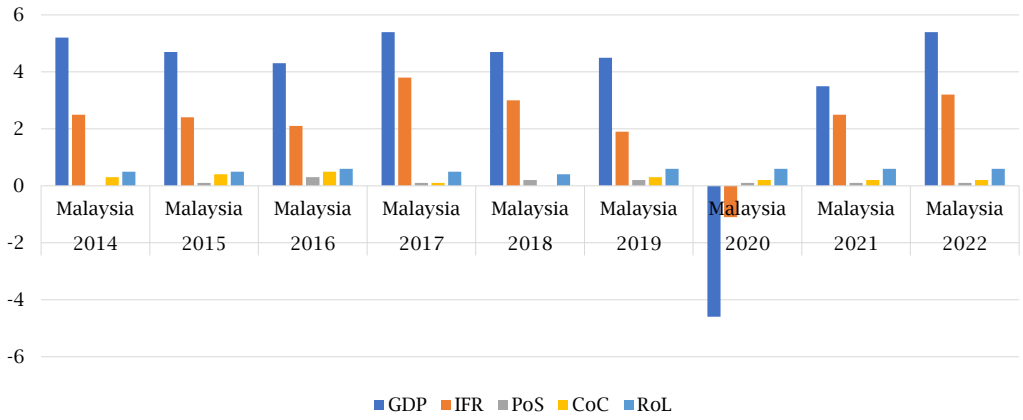

Figure A.4. Malaysia's stock market indices

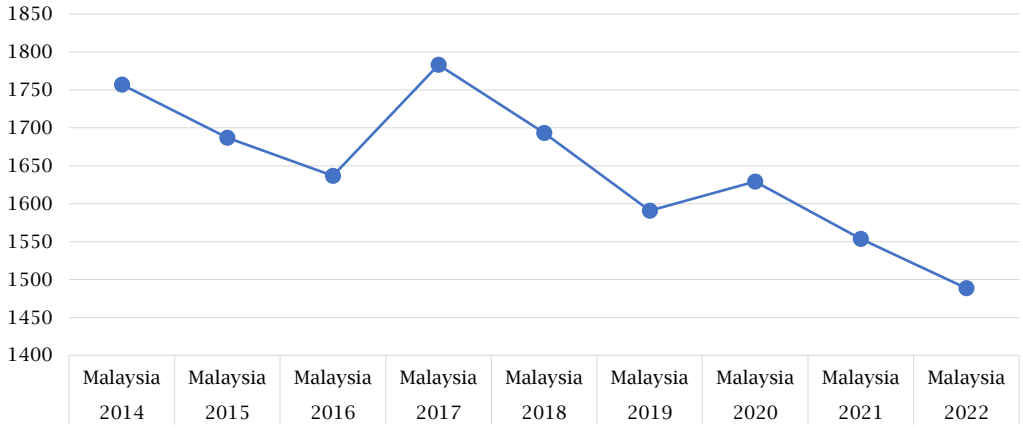

Figure A.5. Thailand's country risk, inflation rate, and gross domestic product

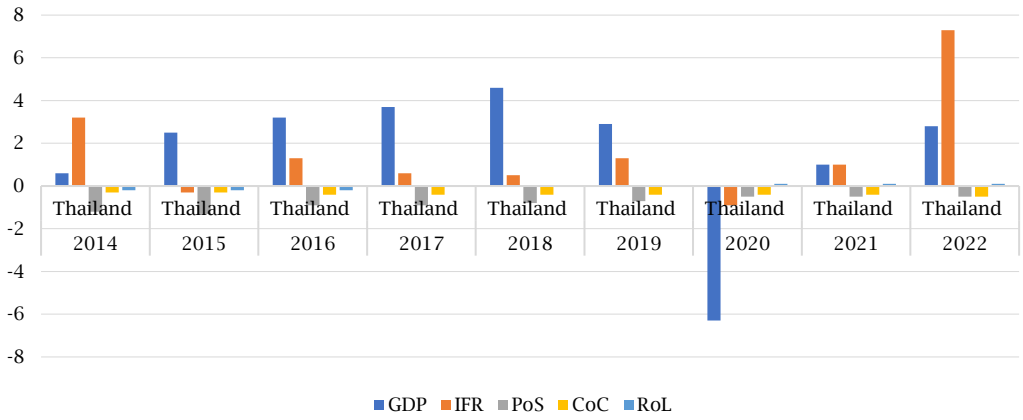

Figure A.6. Thailand's stock market indices

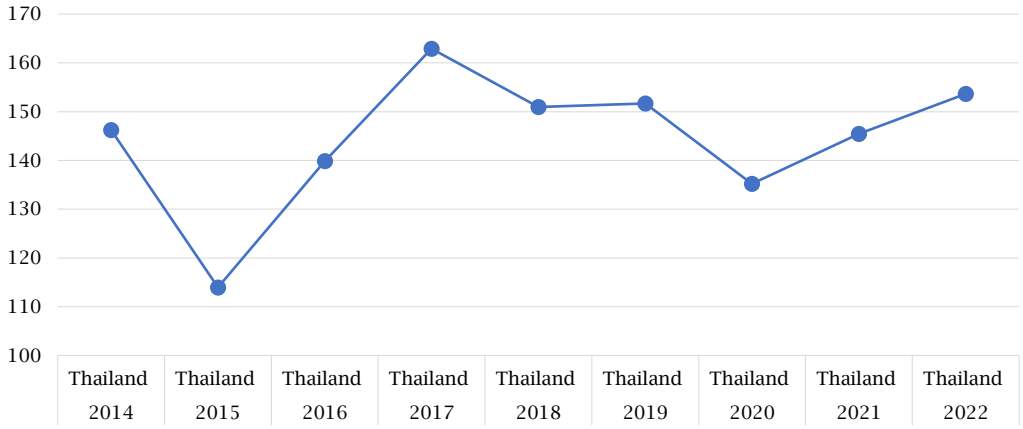

Figure A.7. Indonesia's country risk, inflation rate, and gross domestic product

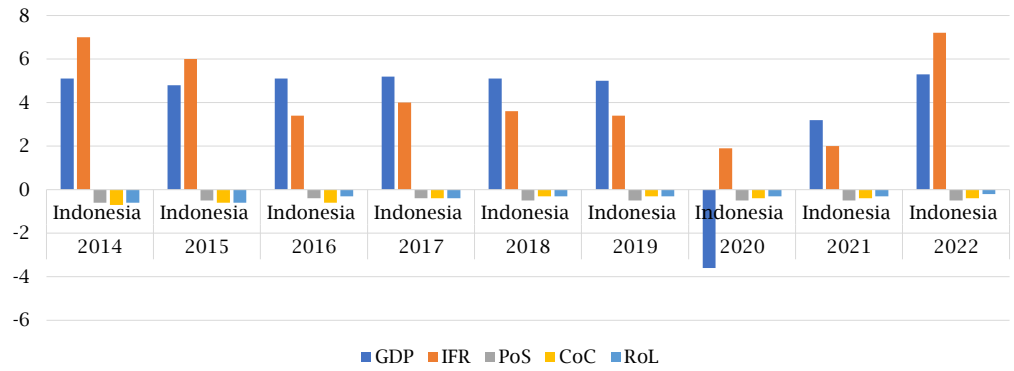

Figure A.8. Indonesia's stock market indices