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CÁC YẾU TỐ ẢNH HƯỞNG ĐẾN TĂNG TRƯỞNG KINH TẾ: NGHIÊN CỨU THỰC NGHIỆM TỪ CÁC NƯỚC CHÂU Á TRONG GIAI ĐOẠN 2010 - 2022

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Tóm tắt

Tăng trưởng kinh tế đóng một vai trò quan trọng trên thế giới ngày nay, là động lực chính cho sự thịnh vượng và phát triển của xã hội. Nghiên cứu các yếu tố ảnh hưởng đến tăng trưởng kinh tế là vô cùng cần thiết vì nó cung cấp những hiểu biết quý giá về động lực và yếu tố quyết định của tăng trưởng kinh tế cho các nhà hoạch định chính sách, nhà kinh tế và doanh nghiệp. Nghiên cứu này nhằm mục đích kiểm tra mối quan hệ giữa sáu biến độc lập và tăng trưởng kinh tế từ giai đoạn 2010 đến 2022 bằng cách thu thập dữ liệu từ 47 quốc gia ở châu Á, vượt qua phạm vi nghiên cứu của tất cả công trình trước đây trong chủ đề này, và cung cấp một sự hiểu biết toàn diện hơn đối với tình hình kinh tế của châu lục. Tác giả sử dụng dữ liệu thứ cấp được thu thập chủ yếu từ Ngân hàng Thế giới và Quỹ Tiền tệ Quốc tế, sau đó nhóm tác giả sử dụng STATA để xử lý số liệu và kiểm định đa cộng tuyến, kiểm định Hausman cũng như kiểm định Wooldridge và Breusch-Pagan để đánh giá các giả định và tính chất của hồi quy. Mô hình ước lượng sai số chuẩn vững (HAC) cũng được sử dụng. Kết quả cho thấy kiểm soát tham nhũng có mối tương quan nghịch với tăng trưởng kinh tế, trong khi điều ngược lại đúng với lạm phát, độ mở thương mại và chi tiêu chính phủ. FDI và thất nghiệp không tác động lên tăng trưởng

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kinh tế. Những kết luận này sau đó sẽ được sử dụng để đưa ra các khuyến nghị nhằm thúc đẩy tăng trưởng kinh tế ở Việt Nam trong bối cảnh hiện tại.

Từ khoá: nhân tố, tăng trưởng kinh tế, các nước châu Á

FACTORS AFFECTING ECONOMIC GROWTH: EMPIRICAL STUDY FROM ASIAN COUNTRIES IN THE PERIOD OF 2010 – 2022

Abstract

Economic growth plays a paramount role in the world today, serving as a key driver of prosperity, development, and social progress. Researching factors affecting economic growth is extremely necessary because it provides policymakers, economists, and businesses with valuable insights into the drivers and determinants of economic expansion. This research aims to examine the relationship between six variables and economic growth from the period of 2010 to 2022 by collecting data from 47 countries in Asia to identify, which surpasses the scope of all previous research in this topic and provides a more comprehensive understanding of the continent's economic situation. The authors use secondary data collected mainly from World Bank and the International Monetary Fund, then we use STATA to process data and the multicollinearity test, the Hausman test, as well as the Wooldridge and Breusch-Pagan test to evaluate the assumptions and properties of regression models, and Robust Standard Errors (HAC) test is also used. The result shows that corruption control is negatively correlated with economic growth, while the opposite is true for inflation, trade openness, and government expenditure. FDI and unemployment do not affect economic growth. These findings are then used to give recommendations for the current situation of Vietnam to better foster economic growth.

Keywords: factors, economic growth, Asian countries

1. Introduction

Economic growth is becoming increasingly important today as one of the top priorities of any country, and also one of the topics that spark significant interest among researchers and policymakers worldwide. Asia is no exception in this case, with a breakneck economic growth speed, not only coming from developed countries but also from developing countries as well.

Up to now, the factors affecting economic growth have been extremely diverse and complex, from inflation, to trade openness, government spending, unemployment rate, and many more. Although the number of research projects on these factors is not small, there are still many research gaps remaining after those studies. Considering the Asian context, research results on some factors such as inflation or trade openness show mixed signals: they can both have a positive impact in one group of countries, but they have a negative impact in another group of countries. Some factors are even concluded to have no impact on economic growth at all, or the conclusion can be opposite at two different ends of a threshold.

Furthermore, it is important to recognize that a significant portion of research projects examining economic growth factors in Asia are limited in scope, focusing only on a few countries. As a result, these studies fail to provide a comprehensive understanding that can be applied to the entire continent, thereby impeding the development of overarching policies for

Asia as a whole. Additionally, it is worth noting that some Asian countries have been overlooked in all previous research on this subject.

To address these limitations and offer a more thorough analysis, the authors choose to research the topic ***"Factors affecting economic growth: Empirical study from Asian countries in the period of 2010 - 2022"***. By compiling an exhaustive list of Asian countries and incorporating the latest research available until 2022, surpassing the existing publications, this study endeavors to derive the most comprehensive conclusions regarding the factors influencing economic growth in one of the continents experiencing rapid economic growth, while being relatively young. From there, we also expect to provide useful information for managers, policymakers, and economic - related parties and individuals in Asian countries to continue promoting their country and the continent's economic growth as a whole.

2. Literature review

The pursuit of understanding and fostering economic growth has driven researchers and policymakers to embark on an extensive exploration of the multifaceted factors that contribute to this complex phenomenon. To comprehensively grasp the dynamics of economic growth, some previous research papers have undertaken extensive investigations into the various factors that influence it. Some previous studies on Asian countries namely *Klasra (2011), Adhikary (2011), Kumari et al. (2023), and Yang and Shafiq (2020)* conducted a comprehensive analysis focusing on Asian developing countries, which indicated the significant effect of FDI, Inflation, and Trade Openness on Economic Growth. According to the research by *Fung and Nga (2022)* on nine ASEAN countries, Unemployment Rate and Inflation are highlighted as causing adverse and positive effects on the economy, respectively. Moreover, the implementation of AFTA motivated *Simatupang and Marselina (2023)* to conduct a study on the ASEAN-7 countries. Besides identifying a negative correlation between inflation and economic growth, their study also highlighted the contrasting impact of Government Expenditure, which varies across countries, with different levels of expenditure yielding diverse effects. In addition, *Uddin and Rahman (2023)* studied 79 developing countries and emphasized the negative impact of Unemployment Rate and Corruption on Economic Growth, expanding on previous research.

Building upon the insights from these studies, and the previous research papers, the determined six factors, including ***Inflation, Trade Openness, Unemployment Rate, Corruption, Government Expenditure, and FDI***, are chosen concerning Economic Growth.

2.1. Inflation

According to *Akinsola and Odhiambo (2017)*, inflation is defined as the increase of prices, in general, resulting in a "decline in the purchasing power of money". The complex relationship between inflation and economic growth (EG) has been a major topic for many authors, monetarists, and governments over the decades.

In a recent study by *Yang and Shafiq (2020)*, 20 Asian countries were examined using data from 2007 to 2018. The findings of their research highlighted the negative impact of high inflation on economic growth. According to their study, high inflation adversely affects a

country's productivity, investment levels, and employment rate, thereby hindering overall economic progress. In contrast, *Fung and Nga (2022)* with the Panel Granger Causality test claimed a positive significant impact in the long run of two variables with further detail that the increase of 1% in inflation causes economic growth to increase by 0.31%. Another study on 7 - ASEAN countries during the AFTA period from 2015 to 2019 showed a negative relationship between inflation and economic growth because it leads to a weak level of output.

On a smaller scale, the results also vary. The research of *Tien (2021)* in the context of Vietnam and the research of *Karki et al. (2020)* in the context of Nepal indicated that inflation is only negative when it surpasses the threshold of 6% which aligns with the Phillips Curve theory and the publication of *Khan and Senhadji (2001)* on the threshold for industrial countries and developing countries. In Afghanistan, by using The Autoregressive Distributed Lag (ARDL), *Faten (2020)* stated the short-run positive correlation but no interconnection in the long run. With the same method, the result by *Mhamad (2022b)* in Iraq achieved a similar result.

2.2. Trade Openness

Trade openness is measured as the total of imports and exports divided by the gross domestic product (*Menyah et al., 2014*). *Yang and Shafiq (2020)* in their research on 20 Asian countries from 2008 to 2018 indicated a positive relationship between trade openness and economic growth. Another study by *Hye et al. (2016)* tested this link in the Chinese context and also showed the same result in both the short run and long run. The critic of this view, when researching 23 Asian countries, claimed that trade openness at the regional level shows a positive correlation with economic growth only after the financial crisis (1998); however, at the country-specific level, it is not the main engine for Asian's amazing growth (*Trejos, S., & Barboza, G. (2015)*). In contrast, *Rizavi et al. (2020)* in a study of India, Pakistan, and Bangladesh from 1980 to 2008 claimed the opposite view on the relationship.

2.3. Unemployment

Unemployment, as defined by the International Monetary Fund, refers to the proportion of individuals actively seeking employment. Extensive research conducted by *Imran et al. (2015)* examined the relationship between unemployment and economic growth across 12 Asian countries from 1982 to 2011. Their findings provided substantial evidence of a significantly negative correlation between these two factors. Similarly, *Resurrection (2014)* conducted research focused on the Philippines from 1980 to 2009, employing the frameworks of Okun's Law and the Phillips Curve. The study supported the notion of the detrimental impact of unemployment on economic growth. Furthermore, *Wajid and Kalim (2013)* investigated the unemployment-growth relationship in Pakistan throughout the period from 1973 to 2010 with a fully modified ordinary least square method (FMOLS) for long-run examination and error correction mechanism (ECM) for short-run one, shedding light on the adverse effects of unemployment on the country's economic performance. These studies collectively underscore the critical importance of addressing unemployment as a key factor in fostering sustainable and robust economic growth. On the contrary, research on Jordan shows the opposite result when the dependent variable and explanatory variable are unrelated (*Kreishan, 2011*).

2.4. Corruption control

Corruption was defined by the World Bank as the "abuse of public office for private gain". *Grundler and Potrafke (2019)* conducted research on 175 countries in 7 years from 2012 to 2018 with new empirical evidence claiming a negative correlation between corruption and EG, rejecting Transparency International's Perception of Corruption Index (CPI), since it was not comparable to time. This result was in line with previous research of *Cieslik and Goczek (2018)* and *Swaleheen (2011)*, as these studies concluded that "corruption directly hindered EG by hampering investment" and "corruption had an adverse effect on the rate of growth per capita", respectively. In contrast, in another research by *Huang (2016)* on 13 Asia-Pacific countries, there was no causality proven to be run from corruption to EG in 12 countries amongst those 13 chosen ones, with South Korea being the only exception, due to the fact that the "grease the wheel" hypothesis is suggested to be supporting that country only.

2.5. Government Expenditure

According to The World Bank, government expenditure (GE) can be defined as "the expenditure of public authority - central, state, and local governments". Findings in *Wu & colleagues' (2010)* research on 182 different countries suggested a positive effect of GE on general economic growth. This result aligns with a modern empirical study conducted by *Simatupang & Marselina (2023)* in seven ASEAN countries. Using the REM model, the research supported the view of a positive relationship between GE and EG, with GDP acting as an indicator variable of economic growth. Another research by *Attari & Javed (2013)* proposed some very interesting conclusions using a slightly different approach, as the research team divided GE into current and future expenses, which stated that: "the coefficient of government current expenditure is statistically insignificant", while "the coefficient of government development expenditure is statistically significant", yielding positive relationships.

2.6. Foreign Direct Investment

Regarding foreign direct investment (FDI), research by *Almfraji and Almsafir (2014)* cited a definition of FDI from the International Monetary Fund (IMF) as "the investment that involves a long-term relationship reflecting a lasting interest of a resident entity in one economy" or "the net inflows of investment to acquire a lasting management interest". The majority of research on this topic of FDI's impacts on economic growth has claimed a positive correlation between the two variables, including *Tiwari and Mutascu's (2011)* research on 23 developing Asian countries from 1986 to 2008 and *Iamsiraroj's (2016)* research on a massive number of 124 countries over the 1975 - 2004 period. However, there were still some opposed views on this topic, with a noticeable instance being the research from *Azman-Saini et al. (2010)* which stated that FDI had no direct impact on EG. Besides that, *Azman-Saini and Law (2010)* once again published another study saying that the FDI factor was only proven to be positively correlated with EG, after the "financial market factor kicks in", which plays the mediating role in that same study.

3. Theoretical framework and methodology

3.1. Empirical model setting

In macroeconomic time series data, variables often exhibit skewness, or a lack of symmetry in their distribution. When dealing with variables measured in USD, which may have a skewed distribution, taking the natural logarithm (ln) can help mitigate the skewness and make the data more symmetric. By applying the ln transformation, the extreme values are compressed, resulting in a more balanced distribution and reducing the impact of outliers.

On the other hand, variables measured in percentages (%) typically represent growth rates or proportions and are already normalized. Since these variables are already in a relative form, there is usually no need to apply the ln transformation, as it would not significantly affect their skewness.

Using the log-linear model, the author developed the following model to determine the effect of aforementioned factors on economic growth. All of the variables are transformed into logarithms form:

$$lnGDP = \beta_0 + \beta_1 lnFDI + \beta_2 lnTO + \beta_3 lnGE + \beta_4 INF + \beta_5 CORR + \beta_6 UNEM + \varepsilon_{it}$$

In which:

β_0 : the intercept of the regression model

β_1 : the regression coefficients

*ln*FDI: the natural logarithms of Foreign Direct Investment. FDI has a positive impact on economic growth as being stated in a research of *Iamsiraroj (2016)* as the results are consistently in favor of significant gains to a host country from attracting FDI.

*ln*TO: the natural logarithms of Trade Openness. According to *Amna (2020)*, trade openness has a favorable effect on economic growth, as trade openness and economic growth have bidirectional causality in Western Asia, whereas this is only unidirectional causality Southern Asia.

*ln*GE: the natural logarithms of Government Expenditure. Government expenditure would have a positive impact on economic growth according to a research by *Cooray (2009)*, which is in line with previous researches of Hulton, who showed that efficient public capital can lead to economic growth.

INF: the inflation level. According to *Khan and Hanif (2018)*, inflation has an adverse effect on economic growth in the long run, as with "countries with improvements on the institutional fronts, the conventional taxes become more feasible and the cost of inflation in terms of output growth loss becomes high."

CORR: the control of corruption level. According to *Afonso (2021)*, the presence of corruption has a detrimental impact on economic growth, thus control of corruption would have a positive impact on economic growth.

UNEM: the unemployment level. Unemployment has a negative impact on economic growth. According to *Levine (2012)*, unemployment rate has an adverse impact on economic

growth in the long run, as in the research has stated: “real GDP growth about equal to the rate of potential output growth usually is required to maintain a stable unemployment rate”.

ε_{it}: is the error term country i in year t, which represents other factors that are not in the model but still have impacts on the dependent variables.

3.2. Research methodology and Variable description

The author conducted a comprehensive analysis utilizing secondary data obtained from reputable online sources. The data was processed using the STATA software. Subsequently, the authors performed a multicollinearity test to assess the degree of correlation among the independent variables in the regression model. Additionally, a correlation matrix was employed to summarize the extensive dataset, identify patterns, and inform decision-making. The researchers further employed the Hausman test, as well as the Wooldridge and Breusch-Pagan test. The Hausman test was utilized to determine whether a Fixed Effects Model (FEM) or a Random Effects Model (REM) was more suitable for the analysis. The Wooldridge and Breusch-Pagan test, on the other hand, was implemented to assess the presence of any deficiencies in the model. In the event of identified deficiencies, the authors employed Robust Standard Errors (HAC) test to rectify them.

Based on the previous studies and research papers, GDPP, FDIP, Trade Openness, Government Expenditure, Inflation, Corruption control and Unemployment are chosen as determined factors affecting economic growth. Variables used in the research are presented in the following table.

Table 1: Variables and Data description

Variables	Meaning	Unit	Expectation of sign	Source
lnGDP	Natural logarithm of Gross domestic product per capita	USD		World Bank
lnFDI	Natural logarithm of inflows Foreign direct investment per capita	USD	+	World Bank
lnTO	Trade openness	USD	+	World Bank
lnGE	Natural logarithm of Government expenditure	USD	+	International Monetary Fund

Variables	Meaning	Unit	Expectation of sign	Source
INF	Inflation	%	-	World Bank
CORR	Control of Corruption [-2.5;2.5]	None	+	World Bank
UNEM	Unemployment	% of GDP	-	World Bank

Source: The author's compilation

4. Results

The data was collected from available online sources of 47 Asian countries, spanning 13 years from 2010 to 2022. However, there are some cases where a country does not have specific data for the given category of the given year.

Table 2: Data summary

Variables	Obs	Mean	Std. Dev	Min	Max
lnGDP	611	8.708557	1.349273	5.896258	11.49314
lnFDI	563	5.36876	2.144208	-2.577192	10.53074
lnTO	503	8.360839	1.434104	4.682131	11.74799
lnGE	522	7.415082	1.565609	3.753985	10.50879
INF	604	7.040033	12.6588	-30.19965	150.0007
CORR	612	-0.3268552	0.8626699	-1.7984	2.171363
UNEM	595	6.402536	4.873781	0.095	26.39

Source: The author's calculation by STATA

To ensure that the model's results are reliable, the research team first conducted a test for multicollinearity, which has a result shown in Table 3. The results showed that all variables had VIF values of less than or equal to 10, except for lnGE, which had a VIF value of 10.73. However, the research team decided to keep lnGE in the model because it is a significant

predictor of Economic Growth. Removing lnGE would likely reduce the reliability of the mode's other indicators, such as the p-values of other variables and R squared.

Table 3: Variable multicollinearity testing

Variable	VIF	1/VIF
lnGE	10.73	0.093170
lnTO	9.20	0.108747
lnFDI	4.23	0.236485
CORR	1.63	0.614828
INF	1.13	0.882267
UNEM	1.12	0.890672
Mean VIF	4.67	

Source: The author's calculation by STATA

The correlation matrix shown in Table 4 indicates that all independent variables are significantly correlated with Economic Growth at the 5% level. Most of these correlations are positive, except for Inflation and Unemployment Rate. The VIF of lnGE is higher than 10, which leads to the high correlation of lnGE with other variables in the model.

Table 4: Correlation matrix of variables

	lnGDP	lnFDI	lnTO	lnGE	INF	CORR	UNEM
lnGDP	1.0000						
lnFDI	0.8556	1.0000					
lnTO	0.9489	0.8452	1.0000				
lnGE	0.9756	0.8752	0.9417	1.0000			
INF	-0.1196	-0.1607	-0.1735	-0.1850	1.0000		
CORR	0.5454	0.4863	0.4952	0.5797	-0.5242	1.0000	
UNEM	0.2350	-0.1757	-0.2765	-0.2196	0.1404	-0.1010	1.0000

Source: The author's calculation by STATA

To determine which model, Fixed Effect Model or Random Effect Model, is more appropriate for the research, the team conducted a Hausman test. The results of the test, shown in Table 5 indicate that the Fixed Effect Model is more appropriate, as the probability value is less than 0.05.

Table 5: Result of Hausman test

Variable	Fixed Coefficient	Random Coefficient	Difference	SE
lnFDI	-0.0219	-0.0192	-0.0028	0.0021
lnTO	0.5341	0.5284	0.0058	0.0119
lnGE	0.2861	0.3231	-0.0369	0.0056
INF	0.0004	0.0007	-0.0003	0.0000
CORR	0.0822	0.0633	0.0189	0.0123
UNEM	0.0141	0.0114	0.0027	0.0018
chi2(6) = 36.80		Prob>chi2 = 0.0000		

Source: The author's calculation by STATA

To ensure the robustness of the model, the research team further investigated potential problems like autocorrelation and heteroskedasticity using Wooldridge and Breusch-Pagan tests. The results, with p-values below 0.05, revealed the presence of such defects. Therefore, the team applied Robust Standard Errors (HAC) to adjust the model and address these deficiencies. The resulting corrected model is presented in Table 6.

Table 6: Final regression result

lnGDP	Coefficient	Standard Error	95% Confidence Interval	
lnFDI	-0.0125	0.0152	-0.0424	0.0174
lnTO	0.2152***	0.0032	0.1515	0.2789
lnGE	0.6775***	0.0381	0.6026	0.7522
INF	0.0033***	0.0010	0.0013	0.0053
CORR	-0.0475**	0.0237	-0.0940	-0.0009

lnGDP	Coefficient	Standard Error	95% Confidence Interval	
UNEM	-0.0001	0.0035	-0.0068	0.0067
_cons	1.9525***	0.1296	1.6978	2.2072
R-squared = 0.9569, Prob > F = 0.000			*** p < 0.01, ** p < 0.05, * p < 0.1	

Source: The author's calculation by STATA

The results of the regression analysis show that all variables except FDI and Unemployment Rate have a significant impact on Economic Growth at the threshold of 1% and 5%. Government Expenditure has the strongest positive impact, over Trade Openness and Inflation, with a coefficient of 0.6775, which means a 1% increase in Government Expenditure is associated with a 67.75% increase in Economic Growth.

5. Discussions and Implications

The regression model results show that inflation has a positive coefficient. When inflation exceeds a certain threshold, it will diminish labor productivity, erode the value of currency, and increase the prices of goods and services. However, if inflation is at a mild level, it can have a positive effect on economic growth *(Khan & Senhadji, 2001)*. This infers that different levels of inflation impact economic growth in different regions, specifically in Asian countries, inflation impacts positively on economic growth or vice versa; in the other regions, it is negative. Therefore, despite the difference in level, the result indicated that Inflation positively impacts on economic growth.

In addition, Trade Openness aligns with existing research demonstrating its positive impact on economic growth *(Feder, 1983)*. This positive influence can be attributed to the multifaceted ways trade openness bolsters economic development. These mechanisms may include, but are not limited to, the enhancement of human capital or the efficient reallocation of resources from less productive to more productive firms. Hence, the result agrees with some previous research that Trade Openness has a positive impact on economic growth.

The regression results also demonstrate the impact of the control of corruption. Other empirical evidence showed that corruption can deplete government resources due to excessive public spending *(Mohamed Ali Trabelsi, 2023)*. This suggests that when corruption is not effectively and tightly controlled, it ultimately leads to a long-term decline in economic growth. However, at different thresholds, the control of corruption can have either a positive or negative impact on the economy *(Eleftherios Spyromitros et al., 2022)*, particularly in Asian countries. Consequently, the result agrees with some previous research that Control of Corruption has a negative impact on economic growth.

On the other hand, government expenditure has the most significant positive impact on economic growth. The results indicate that government expenditure has a substantial impact on

economic growth, with a magnitude of 67.75%, exceeding the optimal range of 15-25% of GDP *(Pham The Anh, 2008)*. This demonstrates that government expenditure is a crucial factor in promoting economic growth, particularly in developing countries. When the government invests in education, healthcare, infrastructure, and social welfare, it generates dual benefits such as enhancing productive capacity, improving quality of life, and creating a favorable investment environment. Investing in human capital helps elevate educational attainment, health, and labor productivity, while constructing robust infrastructure and providing social welfare contribute to a better living environment for the population, laying the foundation for economic growth. Government expenditure plays a paramount role in driving economic growth and establishing the groundwork for sustainable development in a nation. Nonetheless, excessive reliance on additional expenditure to stimulate economic growth can lead to negative side effects, such as crowding-out effects and budget deficits. In the short term, when government expenditure increases, the crowding-in effect boosts aggregate demand and leads to economic growth. However, in the long run, it diminishes private investment, resulting in reduced output and economic growth. Moreover, when government expenditure rises without a corresponding increase in budget revenue, it can lead to budget deficits and the potential accumulation of government debt. Therefore, numerous previous studies have also demonstrated that government expenditure can have both positive and negative impacts on the economy in specific contexts *(Kwasi Poku et al., 2022)*, as mentioned by the aforementioned research group. Although the government expenditure variable has a VIF greater than 10, it has a significant impact on economic growth, being an indispensable part of determining the growth of a country with real benefits of economic growth, at the same time, it needs to be managed and used thoughtfully to ensure the efficiency and stability of the economy.

Furthermore, regarding FDI and Unemployment, previous studies have indicated that FDI can stimulate economic growth by boosting the manufacturing and services sectors, leading to job creation and a reduction in unemployment rates *(Stefan Calimanu et al., 2021)*. However, other studies have highlighted that the impact of FDI on economic growth can be positive in the short term but harmful in the long term. In addition, despite the potential of FDI, its effectiveness may be limited due to inefficient investment, overexploitation of natural resources, trade deficits, a narrowing domestic market, and the importation of outdated technology *(Huong Nguyen, 2022)*. Similarly, concerning Unemployment, empirical findings from previous studies have shown a negative relationship between unemployment and economic growth, with statistical significance *(David Castells et al., 2012)*. This infers that a high unemployment rate results from inefficient use of resources and wasted work, which can never be recovered, concurrently it also entails a decline in aggregate demand causing consumption to become lower, directly harming a country's economic growth. Other studies illustrate that an increase in long-term unemployment will also reflect positively on boosting economic growth *(Banda et al., 2016)*. However, in our research group's study, both FDI and unemployment in this particular analysis have low reliability, possibly due to data limitations and the short scope of the data. However, if these two variables are removed, other indicators of the model, such as Prob and R-squared, will decrease, weakening the model and introducing noise. Consequently, the model would be incomplete and not fully reflect all the factors influencing economic growth. Therefore, the research group decided to retain the

variables of unemployment and FDI due to their importance in the model and their potential indirect impact on the dependent variable through other variables in the model.

According to the result of this research, the team proposes some relevant recommendations to increase Vietnam's economic growth. Firstly, the Vietnamese government needs to effectively manage inflation at a stable level to mitigate adverse impacts on labor productivity and currency value through the implementation of prudent monetary policies, including efficient interest rate management, control of money supply, and close monitoring of price developments. Moreover, the government should establish clear criteria and adhere to planned expenditure, exercise fiscal discipline, prioritize investments in high-yield sectors and infrastructure, optimize public spending, and promote transparency in public administration to combat corruption. This can be achieved by strengthening investigation and accountability measures in corruption cases, creating a fair and transparent business environment, and establishing a clear and effective legal framework to enforce responsibility and penalties for corrupt practices.

Additionally, the government should actively promote trade openness within the global economic landscape, engaging in multilateral trade agreements and strengthening trade relations with key partners. Simultaneously, customs reforms and reduction of trade barriers are essential to attract foreign investment and foster the development of export-oriented industries. Through these measures, the Vietnamese government can create an environment conducive to sustainable economic growth and enhance its integration into the global trading system.

6. Conclusion

In conclusion, as the author has proved above, while inflation, trade openness, corruption, and government expenditure have positive effects on economic growth, which means the increases of those factors lead to the overall growth of the economy, unemployment, and FDI don't really have a significant role in the development of the economy. This can partly be explained by the missing data or inconsistencies in data collection of several countries of some given years, which might affect the accuracy and comparability of the findings.

Furthermore, Asian countries are diverse in terms of their size, economic structures, and stages of development. Thus, finding common factors that apply uniformly across the region might be challenging. Future researchers may try narrowing down the number of countries or time scales to have a more focused result.

Lastly, economic growth may be influenced by non-qualitative factors, such as political stability, social unrest, or cultural factors. These are factors that may not be adequately captured in quantitative data and may require qualitative analysis to provide a more comprehensive understanding. Future researchers may consider conducting research using qualitative methods to tackle this limit.

To conclude, the research findings propose recommendations to enhance Vietnam's economic growth. The government could implement policies to maintain stable inflation and promote trade openness by reducing barriers and engaging in free trade agreements. Strengthening anti-corruption measures and promoting transparency in government institutions are crucial for combating corruption and improving the efficiency of public spending.

Additionally, actively contributing to technological progress and skill development will attract foreign direct investment and address unemployment effectively. These measures collectively aim to create a favorable environment for sustained economic growth in Vietnam.

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