The Impact of Control of Corruption, Human Development Index, and Macroeconomics on Economic Growth Rates in Low-Middle Income Countries

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Abstract: - Economic growth is part of the indicators used in assessing economic performance and it also becomes a benchmark for developing a country. Therefore, this study aims to determine the effect of control of corruption, human development index, inflation, and exchange rate on economic growth in 15 low-middle-income countries in Asia between 2016–2020. Furthermore, secondary data obtained from the World Bank in the form of panel data were utilized and processed using the EViews 10 analysis tool. The results showed control of corruption and the human development index had a positive and significant impact on the level of economic growth in Asia's lower middle-income countries in 2016-2020. However, inflation and exchange rates had a negative and significant impact on economic growth rates.

Key-Words: - Economic Growth, Control of Corruption, Human Development Index, Inflation, Exchange Rate

Received: November 2, 2022. Revised: April 13, 2023. Accepted: May 6, 2023. Published: May 15, 2023.

1 Introduction

A country tends to experience economic growth when it is accompanied by an increase in individual income. Economic growth is part of the indicators used to examine and estimate economic performance and it is also a benchmark in developing a region, [1].

Asia's lower-middle-income countries are those with low economic growth rates. This low income impacts growth because one useful indicator to determine a country's economic condition is the Gross Domestic Product (GDP). The GDP functions as the basis for making policy decisions when there are problems at the macro level and it is also useful for determining the level of growth and structure in a country.

Table 1. Average Gross Domestic Product of 15 Low-middle Income Countries in Asia 2016-2020

Country	2016	2017	2018	2019	2020	Average
Bangladesh	265,236.25	293,754.65	321,379.2	351,238.4	373,902.1	321,102.1
Cambodia	20,016.75	22,177.20	24,571.75	27,089.39	25,872.80	23,945.58
India	2,294,797.9	2,651,472.5	2,702,929.7	2,831,552.2	2,667,687.9	2,629,688.1
Indonesia	931,877.36	1,015,618.7	1,042,271.5	1,119,099.8	1,058,688.9	1,033,511.
Iran	457,954.61	486,630.15	330,991.59	291,362.92	231,547.57	359,697.37
Kyrgyzstan	6,813.09	7,702.93	8,271.11	8,871.03	7,780.87	7,887.81
Mongolia	11,181.35	11,480.85	13,178.09	14,206.36	13,312.98	12,671.93
Myanmar	60,291.74	61,449.39	67,144.73	68,697.76	78,930.26	67,302.77
Nepal	24,524.10	28,971.59	33,111.53	34,186.19	33,433.67	30,845.41
Pakistan	313,629.86	339,205.62	356,128.22	320,909.49	300,306.33	326,035.90
Philippines	318,626.76	328,480.87	346,842.09	376,823.28	361,751.12	346,504.82
Sri Langka	82,401.04	87,428.13	87,963.04	83,902.57	80,969.68	84,532.89
Tajikistan	6,992.39	7,536.44	7,765.01	8,300.78	8,134.00	7,745.73
Timor Leste	1,650.62	1,615.61	1,583.88	2,047.93	1,902.16	1,760.04
Vietnam	257,095.96	281,353.40	308,702.09	330,391.33	343,242.57	304,157.07

Source: World Bank

Based on the table above, the Asian lower-middle-income countries fluctuated, especially in 2020 when the COVID-19 pandemic occurred, such that the economic growth in most countries experienced a significant decline. India had the highest average GDP level of 2,629,688.16 million USD compared to other countries. One factor contributing to this high GDP is the improving performance of the manufacturing and service sectors. Meanwhile, Timor Leste had the lowest average GDP of 1,760.04 million USD. The low economy in East Timor was caused by the unstable political conditions in the country.

High economic growth is required for countries that fall into the lower middle-income category. Also, increasing the classification of a country has a positive impact, one of which is the interest of investors to invest in the country, which indirectly has an impact on development.

Economic growth is impacted by economic and non-economic factors, [2]. One of the non-economic factors that cause growth in per capita income is institutional quality. This is one of the determining factors in the state of the country's economy. Well-managed resources can create good-quality institutions. Meanwhile, deviations by the government, through abuse of power for private or group interests, can degenerate the state institutions' quality. Economic growth will be more likely to experience a slowdown when this quality is poor. This quality can be noticed at the corruption level, [3].

Corruption will result in inefficient use of budget allocations. This inefficiency causes the inability to achieve the desired budget, therefore, leading to high costs. This results in the inability to maximize capital expenditures sourced from the total budget. Capital expenditure, which is a form of government investment, will affect decreasing output and result in a slowdown in economic growth. Therefore, it is necessary to control corruption to stabilize and increase the level of economic growth. Control of corruption is an important factor in economic growth, especially for developing countries, [4].

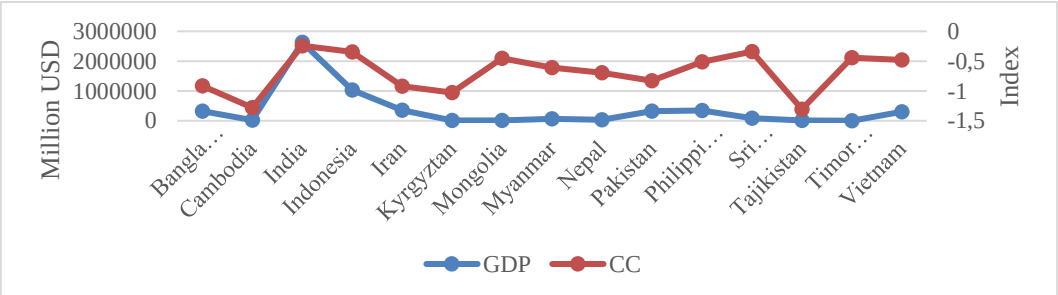

Fig. 1: Relationship between Gross Domestic Product and Control of Corruption in 15 Asian Low-Middle-Income Countries 2016-2020

Source: World Bank (data processed)

Based on the picture above, control of corruption in 15 low-middle-income countries in Asia is not optimal. This is one of the factors causing low state income and limiting economic growth. India is a country with a fairly good index of control of corruption compared to others, which affects its economic growth. Meanwhile, Tajikistan has the lowest control level, which affects low economic growth.

In addition to the government perspective, the determining factor for the high economic growth of a country is that it comes from the people. Human quality greatly affects economic growth, therefore, the government, as the driving force of the state, should develop the quality of its people. Also, human development should be continuously carried out for the community to benefit the country. Development has many sub-levels in achieving the expected economic growth, which is also related to the Human Development Index, [5]. The human development index can be used as a benchmark in the fields of education, health, life expectancy, and literacy rates. The Human Development Index is a factor that influences economic growth. Also, the improvement and distribution will accelerate growth, [6].

The authors in [7] explained that if the development of human resources has increased, it will also affect the increase economically because the existence of quality human resources can make a real contribution to the growth of an economy, even though economic growth has a dual relationship. causation with the human development index in which each region has its results as a result of differences in the composition of the three components of the human development index in influencing economic growth in a given region.

Table 2. Classification of Human Development Index

Classification	Index
Low	<0.550
Medium	0.550-0.699
High	0.700-0.799
Very High	>0.800

Source: World Bank

The table above shows the classification of the human development index. Good development is classified in the index of 0.700 and above. Meanwhile, less than 500 index indicates that the government is required to improve. The following is the average human development index data for 15 low-middle-income countries in Asia.

Table 3. Average Human Development Index of 15 Asian Low-middle Income Countries 2016-2020

Country	HDI
Bangladesh	0.623667
Cambodia	0.587253
India	0.643187
Indonesia	0.71284
Iran	0.787067
Kyrgyztan	0.696787
Mongolia	0.73476
Myanmar	0.57812
Nepal	0.596853
Pakistan	0.552773
Philippines	0.712947
Sri Langka	0.778907
Tajikistan	0.661493
Timor Leste	0.5984
Vietnam	0.700533

Source: World Bank

Based on Table 3, there are six countries with a high human development index, namely Indonesia, Iran, Mongolia, the Philippines, Sri Lanka, and Vietnam. Meanwhile, the nine others are still in the medium classification. Therefore, a government policy is needed to improve human development to affect the country's economic growth.

Macroeconomic factors are also very influential on economic growth, such as inflation and exchange rates. According to [8], the determinants of a country's economic growth are the exchange and inflation rates. Inflation is an economic condition that often occurs even though this situation is not wanted. Milton Friedman also stated that it exists everywhere and will always be a monetary phenomenon, which indicates that there is an excessive and unstable monetary growth condition, [9]. Inflation occurs when the condition of the price level rises, and this increase can hurt production activities. This is because when production costs rise, it will cause investment activities to shift to activities that do not spur national products, hence, the productive investment will decrease, and economic activity will decline. When the production of goods decreases, it will affect the level of economic growth.

Although inflation has a fairly bad impact on the rate of economic growth, it does not mean that the inflation rate should be lowered to zero percent. The condition of the inflation rate at zero percent will also not be able to encourage economic growth but will cause stagnation. Furthermore, government

policies will have a significant impact on economic activity should they keep the inflation rate relatively low. An inflation rate that is below 5% is ideal because it can increase economic activity.

Table 4. Average Inflation of 15 Low-middle Income Countries in Asia 2016-2020

Country	Inflation
Bangladesh	5.608458
Cambodia	2.654746
India	4.513632
Indonesia	3.096901
Iran	20.76119
Kyrgyztan	2.513171
Mongolia	4.572697
Myanmar	6.737302
Nepal	5.419931
Pakistan	6.649381
Philippines	2.840292
Sri Langka	4.696081
Tajikistan	6.327735
Timor Leste	0.31566
Vietnam	3.148978

Source: World Bank

Based on Table 4, the nine countries with an ideal average inflation rate are Cambodia, India, Indonesia, Kyrgyzstan, Mongolia, the Philippines, Sri Lanka, Timor Leste, and Vietnam, while others, such as Bangladesh, Iran, Myanmar, Nepal, Pakistan, and Tajikistan have less than ideal inflation rates. The high rate will affect the country's economic growth. This will indirectly affect the economic growth of a country like Iran with a very high average inflation rate. Effective policies are needed by a country to decrease or maintain its inflation rate at an ideal level.

Furthermore, the exchange rate is a macroeconomic factor that influences the economic growth of a country. It is the one unit price of foreign currency against domestic or vice versa. The demand and supply of a particular currency can affect its exchange rate. According to [10], the exchange rate was identified as one of the most influential economic factors in a country's economic growth conditions.

Table 5. Average Exchange Rate of 15 Low- middle Income Countries in Asia 2016-2020

Country	Exchange Rate
Bangladesh	82.33935
Cambodia	4062.875
India	69.04525
Indonesia	13931.19
Iran	37801.1
Kyrgyztan	70.9513
Mongolia	2505.877
Myanmar	1384.982
Nepal	110.3561
Pakistan	128.7846
Philippines	50.3955
Sri Langka	164.9661
Tajikistan	9.772423
Timor Leste	1
Vietnam	22633.15

Source: World Bank

Based on Table 5, most Asian lower-middle-income countries have variable exchange rate volatility, including Iran, which has a very high average exchange rate of 37,801.1 rials to the dollar. The weakening of the Iranian rial exchange rate was caused by sanctions from the US because Iran was developing a nuclear program, therefore, all transactions using the currency would be subject to fines from the US. Vietnam has a depreciating currency value due to the intentionality of its central bank to weaken the dong currency and boost the country's exports to China after the depreciation of the Yuan. This greatly affected Vietnam's economic growth, which continued to increase, as it was triggered by the industrial and manufacturing production sectors as well as foreign investment.

These results are expected to reveal several factors that influence the economic growth of low-middle-income countries in Asia. In addition, it can provide recommendations for the government to make an effective and efficient policy that can maintain and increase the level of economic growth. Effective policies are very necessary for a country, especially those with lower middle income. High income will have an impact on the development of a country.

In recent years, various literature has been carried out by several research teams on the control of corruption effect, the human development index, and macroeconomics on economic growth and the results are as follows. Control of corruption has a positive influence on the level of economic growth in a country. In other words, when a country's control of corruption is good, it can increase

economic growth. According to [11], control of corruption is positively and significantly related to growth. The study emphasized that it is one of the main factors used to examine economic growth in Kazakhstan. Similarly, the authors in [12] explained control of corruption positively affects Asian economic growth. Based on the study by [13] control of corruption failed to significantly affect the level of economic growth in sub-Saharan Africa.

The Human Development Index significantly influences the economic growth of a country. According to [14], it positively affects economic growth in East Java province between 2016-2018. Similarly, the authors in [15] showed that the Human Development Index significantly influences economic growth in Southeast Asia. This is contrary to [16] that the Human Development Index negatively affects the economic growth of the Bangka Belitung Islands from 2010-2017.

The macroeconomic variable inflation rate has a significant negative effect on economic growth. When the inflation rate decreases, the rate of economic growth will increase. This is further emphasized by [17] regarding the exchange rate, inflation, and economic growth in developing countries. The results showed inflation negatively affects economic growth. This is similar to [18] that the inflation rate negatively influences economic growth in Vietnam. However, the study in [19] indicated it positively affects economic growth in the euro area.

The exchange rate is a variable that negatively and significantly influences the economic growth of a country. This is supported by [20] that the exchange rate negatively affects the economic growth in Turkish. Similarly, the study in [21] emphasized it negatively influences the economic growth in Turkey. The results are contrary to [22] that the real exchange rate positively affects the regional economic growth in Indonesia.

In summary, the literature review proposes several points in common. Most of the literature suggests that control of corruption, human development index, inflation, and exchange rates have a significant effect on economic growth. However, a gap phenomenon still occurs in several studies, therefore, further research is needed. This is possible because of the use of methods and several ways of obtaining data to produce different results.

2 Methodology and Variables

2.1 Methodology

This study utilized a type of data sekunder obtained from the World Bank in the form of panel data, time series, and cross-section. The time series data were obtained over 5 years, from 2016 to 2020, while cross-section data were obtained from 15 countries in Southeast Asia, including Bangladesh, Cambodia, India, Indonesia, Iran, Kyrgyzstan, Mongolia, Myanmar, Nepal, Pakistan, the Philippines, Sri Lanka, Tajikistan, Timor Leste, and Vietnam. Furthermore, this study utilized four independent and one dependent variable. The dependent variable is the rate of economic growth, while the independent variable is the rate of human development, the rate of inflation, and the level of unemployment. Subsequently, the data obtained from the World Bank were analyzed using the EViews 10 analysis tool. The analysis technique used is data panel regression with the following regression models:

$$LN\_GDP_{it} = \beta_0 + \beta_1 CC_{it} + \beta_2 HDI_{it} - \beta_3 INF_{it} - \beta_4 NTit + e_{it} \quad (1)$$

Where LN_GDP is LN Gross Domestic Product (Million USD), CC is Control of Corruption(index), HDI is Human Development Index (index), INF is Inflation Rate (%), NT is Exchange Rate, β_0 is Constant, $\beta_1, \beta_2, \ldots, \beta_6$ is Regression Coefficient, and e is Error Term.

2.2 Variables

2.2.1 Control of Corruption

Control of corruption is an effort to encourage future generations and develop a steadfast rejection of all forms of social vices. This study used the Control of corruption Index data sourced from the World Bank. Control of corruption is suspected to positively affect economic growth. In other words, the higher the control, the greater the level of economic growth, and vice versa.

2.2.2 Human Development Index

The stages of human development are the process of accessing the necessary resources for a healthy and good level of individual life. In a country, these stages are measured by employing the Human Development Index. The index estimates the three dimensions of human well-being including health, education, and income. This study utilized Human Development Index data sourced from the World

Bank. The index positively affects economic growth, indicating that the increase in the human development index tends to raise the level of economic growth, and vice versa.

2.2.3 Inflation

Inflation is regarded as the rise in the price of goods and services. This increase occurs due to the rise in the number of requests compared to the supply of goods or services in the market. This study utilized data percentages sourced from the World Bank. The inflation rate is thought to negatively affect economic growth, indicating that, the lower the inflation rate, the higher the economic growth rate, and vice versa.

2.2.4 Exchange Rate

The exchange rate is the price of one unit of foreign currency against the domestic currency or vice versa. The demand and supply of a particular currency can affect its exchange rate. The data for this study were sourced from the World Bank. The exchange rate is believed to hurt the rate of economic growth, hence, the exchange rate decreases with an increase in the rate of economic growth.

3 Result and Discussion

3.1 Result

3.1.1 Selection of a Regression Model

There are three choices of panel data regression models, namely the common effect model (CEM), fixed effect model (FEM), and random effect model (REM).

Table 6. Panel Data Regression Model Selection

Test	Prob	Decision
Uji Chow	0.0000	FEM
Uji Hausman	0.2492	REM
Uji Lagrange Multiplier	0.0000	REM

Source: Results of Data Processing with Eviews 10 (2022)

Based on the table above, it can be concluded that the best model for estimating the research data is the Random Effect Model (REM).

3.1.2 Classic Assumption Test

Compliance with modern econometric requirements in conducting assessments has a significant impact on the quality of calculations, [23]. One that must be met is the classical assumption test.

3.1.2.1 Normality test

A normality test is used in determining whether the independent and the dependent variables are normally distributed or not in the regression model. The Jarque-Bera test is used to detect normality. In the Figure 2 you will find the normality test. Based on the test above, the Jarque-Bera probability value is 0.098178, which is greater than 5 percent or 0.05, therefore, it can be concluded that the data in this research model were normally distributed.

3.1.2.2 Deteksi Multikolinieritas

A multicollinearity test is used to determine whether there is a linear relationship between independent variables or not. Therefore, when the correlation value between independent variables is below 0.8, it indicates that there is no multicollinearity problem, [24].

Fig. 2: Normality Test Results
Source: Results of Data Processing with Eviews 10 (2022)

Table 7. Multicollinearity Test Results

	CC	HDI	INF	NT
CC	1.000000	0.246767	-0.256182	-0.022730
HDI	0.246767	1.000000	0.269714	0.508057
INF	-0.256182	0.269714	1.000000	0.589059
NT	-0.022730	0.508057	0.589059	1.000000

Source: Results of Data Processing with Eviews 10 (2022)

Table 8. Heteroscedasticity Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.905011	0.828001	2.300735	0.0244
CC	-0.103242	0.154680	-0.667451	0.5067
HDI	-0.271301	1.159019	-0.234078	0.8156
INF	-0.001871	0.004004	-0.467187	0.6418
NT	-1.27E-06	1.12E-05	-0.113319	0.9101

Source: Results of Data Processing with Eviews 10 (2022)

Based on the multicollinearity test, the value between the dependent variables was below 0.8, therefore, there was no multicollinearity problem in the regression model of this study.

3.1.2.3 Heteroscedasticity Test

Heteroscedasticity tests help in determining whether the residuals of a regression model are constant or not and this was conducted using the Glesjer method. The heteroscedasticity problem occurs when the p-value of each independent variable is greater than 5 percent or 0.05.

Based on the test above, the p-value of each independent variable is smaller than 5 percent or 0.05. Therefore, it can be concluded that there was no heteroscedasticity problem.

3.1.2.4 Autocorrelation Test

An autocorrelation test is used to define whether there is a correlation between independent variables in a model or not. This test was conducted using the Durbin-Watson method.

According to [25], the Durbin-Watson statistic between -2 and +2, indicates that there is no autocorrelation symptom and the level of significance used in the study is 5 percent. The Durbin-Watson value was 1.581103, which indicated that there was no autocorrelation problem in the regression model. This is because the value (1.581103) is still between -2 and +2.

3.1.3 Regression Estimation Results

Based on the selection results, the random effect model (REM) was concluded to be the best. The following are the regression results using the Random Effect Model:

Table 9. Estimated Result of Random Effect Regression Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	20.17205	0.951651	21.19689	0.0000
CC	0.331688	0.157633	2.104185	0.0390
HDI	8.089599	1.195880	6.764558	0.0000
INF	-0.007849	0.004118	-1.905810	0.0608
NT	-2.50E-05	1.18E-05	-2.121794	0.0374
Effects Specification				
			S.D.	Rho
Cross-section random			2.013156	0.9985
Idiosyncratic random			0.078525	0.0015
Weighted Statistics				
R-squared	0.572402	Mean dependent var		0.438414
Adjusted R-squared	0.547968	S.D. dependent var		0.117952
S.E. of regression	0.079303	Sum squared resid		0.440227
F-statistic	23.42627	Durbin-Watson stat		1.432869
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	-0.031729	Mean dependent var		25.13663
Sum squared resid	310.1349	Durbin-Watson stat		0.002034

Source: Results of Data Processing with Eviews 10 (2022)

Table 10. Individual Parameter Significance Test (t-Test)

Variable	t-Statistic	t-Table	Description
CC	2.104185	1.66691	Significant
HDI	6.764558	1.66691	Significant
INF	-1.905810	1.66691	Significant
NT	-2.121794	1.66691	Significant

Source: Results of Data Processing with Eviews 10 (2022)

Based on Table 9, the following regression equation was obtained:

$$LN\_GDP_{it} = 20{,}17205 + 0{,}331688CC_{it} + 8{,}089599HDI_{it} - 0{,}007849INF_{it} - 2{,}502133\ NT_{it} \quad (2)$$

3.1.4 Statistical Test

3.1.4.1 Individual Parameter Significance Test (t-Test)

Individual parameter significance test or t-test, to determine the effect of each independent variable on the dependent variable. If the t statistic value is greater than the t table, the variable has a significant effect.

Based on Table 10, the results showed that the control of the corruption variable had a positive and significant effect on the level of economic growth. This can be seen from the t-statistical value (2.104185), which is greater than the t-table (1.66691). The human development index variable had a positive and significant effect on the level of economic growth, according to the t-statistic value (6.764558), which is greater than the t-table (1.66691). Meanwhile, the inflation rate variable had a negative and significant effect on the rate of economic growth, based on the t-statistic value (1.90581), which is greater than the t-table (1.66691). The exchange rate variable had a negative and significant effect on the level of economic growth, based on the t-statistic value (2.121794), which is greater than the t-table (1.66691).

3.1.4.2 Simultaneous Significance Test (F Test)

The simultaneous regression coefficient test was carried out to find out whether all the independent variables jointly have an effect on and are significant to the dependent variable. The test criterion is that if the value of F-Statistic > F- table means that together, at least one of the independent variables has a significant effect on the dependent variable.

Table 11. Simultaneous Significance Test (F Test)

df	F-Statistic	F-Table	Description
4,70	23,42627	2,50	Significant

Source: Results of Data Processing with Eviews 10 (2022)

Based on Table 11, the f-statistic value was 23,42627, where the value was greater than the f-table (2.50), indicating that the variables of control of corruption, human development index, inflation rate, and exchange rate together affected the rate of economic growth.

3.1.4.3 Coefficient of Determination (R^2)

Based on the regression estimation using the Random Effect Model (REM), the coefficient of determination (R^2) was 0.572402. This indicates that the independent variable used in this study affected the dependent variable by 57.2402% and 42.7598% is explained by variables not found in the research model.

3.2 Discussion

3.2.1 The Effect of Control of Corruption on the Economic Growth

According to the results, the control of corruption had a positive and significant impact on the level of economic growth, indicating that when the conditions of controlling corruption are good, it will increase the rate of economic growth and vice versa. Corruption practices stemming from the abuse of power will hinder economic growth. The value of a low control of corruption can reduce high economic costs to enable the government budget to be used and distributed fairly without leaking national income. Theoretically, this study proves the "Sand the Wheels" hypothesis that corruption can hinder the rate of economic growth.

Control of Corruption is one factor that effectively contributes to economic growth. Therefore, when a country is corrupt, it will shake economic growth, [26]. The occurrence of corruption in a country can result in damage to the economic competition which can reduce domestic productivity, create market distortions so that goods sold reach high enough prices, reduce the amount of domestic investment, and can cause economic inefficiency which is marked by increasing costs in a country. business as well as creating an income gap characterized by inequality and injustice to be able to increase poverty, then all of this will have an impact on decreasing economic growth.

According to [11], control of corruption has a positive impact on economic growth. Similarly, [12] stated that control of corruption has a positive and significant impact on increasing economic growth. However, this is inversely proportional to [27], which found that effective control of corruption does not have a positive impact on development in Africa.

3.2.2 The Effect of the Human Development Index on the Rate of Economic Growth

According to the results, the human development index had a positive and significant impact on the level of economic growth, indicating that when human development conditions are good, it would increase the rate of economic growth and vice versa. Human capital is an important factor in the economy. However, economic performance becomes better when the quality of human resources is good. The authors in [28] emphasized that human capital is the most important factor in determining the character and pace of social and economic development in the country concerned.

A high level of human development largely determines the ability of the population to absorb and manage sources of economic growth, both related to technology and to institutions as an important means of achieving economic growth, [29]. The Human Development Index plays an important role in modern economic development because good human development will maximize production factors. A good-quality population will be able to innovate and develop existing production factors. Apart from that, high human development will also result in a high population so it will increase the level of consumption.

This study is in line with [30] which suggested that an increase in the level of the human development index will lead to increased opportunities for economic growth. It is also similar to [31] which stated that the human development index has a positive effect on economic growth. Contrastingly, the authors in [32] revealed that the human development index has a negative influence on economic growth.

3.2.3 The Effect of Inflation on the Rate of Economic Growth

The results showed that inflation had a negative and significant impact on the rate of economic growth, indicating that a decrease in the inflation rate will increase the rate of economic growth and vice versa. An increase in the inflation rate will have an impact on high prices and will result in reduced purchasing power for the people, which in turn can have an impact on decreasing economic growth. Meanwhile, low inflation can make a country's economic condition stable and healthy. This is because the inflation rate is an increase in the price of goods or services, and when the price is stable, subsequently, the capital purchased for the production of goods or services can be achieved. The creation of good market conditions will increase economic growth. Inflation can cause the rate of profit to decrease, and consequently have an impact on reducing capital accumulation. This ultimately results in a falling economic growth rate, [33].

In line with the results, the study in [34] discovered that inflation hurts economic growth. Similarly, the authors in [18] showed that high inflation rates can damage economic activity. However, this is inversely proportional to [19], which concluded that the inflation rate has a positive impact on the rate of economic growth in the euro area.

3.2.4 The Effect of the Exchange Rate on the Rate of Economic Growth

Based on the results, the exchange rate had a negative and significant impact on the level of economic growth, therefore, a decrease in the exchange rate would increase the rate of economic growth and vice versa. A weakening exchange rate can be a burden on economic growth. The government will feel burdened by the payment of government spending, in this case, the exchange rate weakens. Also, the weakening of the exchange rate will have an impact on countries that use a lot of imported raw materials. This is because when the exchange rate weakens, the price of imported goods will increase such that the industry struggles to fulfill raw materials, this will subsequently have an impact on slowing economic growth. The exchange rate is one of the benchmarks in terms of advancing the economic growth of a country, therefore maintaining its stability is an obligation for the government to improve the rate of economic growth faster.

This study is in line with [35] that the exchange rate coefficient negatively affects economic growth. Similarly, [20] explained the exchange rate negatively influences economic growth. However, this study is inversely proportional to [22] that the exchange rate positively affects regional economic growth.

4 Conclusion

Based on the results, the control of corruption and the human development index had a positive and significant impact on the level of economic growth in lower-middle-income countries in Asia between 2016-2020. Meanwhile, inflation and exchange rates had a negative and significant impact on economic growth rates.

This study implies that all independent variables (control of corruption, human development index, inflation rate, and exchange rates) can be used as a reference in policymaking. This is because the variables had a significant influence on the rate of economic growth. Effective and efficient policies can be expected to assist the country in increasing the rate of economic growth. Furthermore, monetary and fiscal policies can be used to strengthen the local currency and maintain inflation rates to avoid the adverse effects of exchange rate volatility and inflation on economic growth.

The limitation of this study is that it only used two macroeconomic variables, therefore, further research is expected to use other macroeconomic variables. This is to enable the government to see the overall impact of macroeconomics on economic growth and allow policy-making to be more effective.

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Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

Heru Wahyudi made a research framework and collected literature reviews. Suripto proposes policy recommendations. Fakhri Rizal Husain wrote the research. Widia Anggi Palupi collects and processes research data.

Sources of Funding for Research Presented in a Scientific Article or Scientific Article Itself

The research in this manuscript is supported by Lembaga Penelitian dan Pengabdian kepada Masyarakat (LPPM) Universitas Lampung.

Conflict of Interest

The authors have no conflict of interest to declare.