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Research article

Corruption and Economic Growth in ASEAN-5 Countries

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Abstract: The goal of economic development is economic growth nor foreign direct investment, but this increase must be supported by improving the quality of people, the population, and reducing the level of corruption. The purpose of this study is to determine the impact of corruption on economic growth and foreign direct investment. Using the variables of economic growth, foreign direct investment, corruption perception index, population, and human development index. The sample is ASEAN-5 countries, namely Indonesia, Malaysia, Singapore, Philippines, and Thailand from 2010-2020. The findings of our first model show that neither the corruption perception index nor the population index is significant, while the human development index has a positive relationship and has a significant effect on foreign direct investment in ASEAN-5. The findings of our second model are that the corruption perception index has a negative and significant effect on economic growth, while the human development index and foreign direct investment have no significant effect on economic growth in ASEAN-5.

Keywords: economic growth, FDI, corruption perception index, HDI, population

JEL Classification: O12, F21, D73, P42, O15

Abstrak: Tujuan pembangunan ekonomi adalah pertumbuhan ekonomi maupun investasi langsung asing, namun peningkatan tersebut harus didukung dari peningkatan kualitas manusia, penduduk, dan juga mengurangi tingkat korupsi. Tujuan dari penelitian ini adalah untuk mengetahui dampak korupsi pada pertumbuhan ekonomi dan investasi langsung asing. Menggunakan variabel pertumbuhan ekonomi, investasi langsung asing, indeks persepsi korupsi, penduduk, dan indeks pembangunan manusia. Sampel adalah negara ASEAN-5, yaitu Indonesia, Malaysia, Singapura, Filipina, dan Thailand dari tahun 2010-2020. Temuan model pertama kami menunjukkan bahwa indeks persepsi korupsi maupun population tidak signifikan, sementara indeks pembangunan manusia ada hubungan positif dan berpengaruh signifikan terhadap investasi langsung asing di ASEAN-5. Temuan model kedua kami adalah Indeks persepsi korupsi memiliki hubungan negatif dan berpengaruh signifikan terhadap pertumbuhan ekonomi, sementara indeks pembangunan manusia maupun investasi langsung asing tidak berpengaruh signifikan terhadap pertumbuhan ekonomi di ASEAN-5.

Kata kunci: pertumbuhan ekonomi, FDI, indeks persepsi korupsi, IPM, populasi

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1. INTRODUCTION

Corruption is one of the diseases in the country's economic development, where the impact of corruption will cause problems both in developed countries and especially in developing countries. As a result, many countries have established a special institution to crack down on corruption violations. Corruption tends to be high during times of transition countries, because countries undergoing transition are not efficient in fighting corruption (Ahmeti et al., 2008).

Mostly in developing countries the growth of corruption tends to increase due to weak transparency, low accountability, broken judicial and legislative systems, wrong organizational structure (Audi & Ali, 2019).

ASEAN-5 is the country that founded the first ASEAN organization, namely Indonesia, the Philippines, Singapore, Malaysia, and Thailand, where the corruption index of ASEAN countries is. Where ASEAN has made significant progress because it has an increasing level of income, but on the other hand the increase in per capita income is not supported by the decline in the corruption index of ASEAN countries, where 7 out of 10 ASEAN countries have index below 50 or between 0-50 (very low) and if 100 (very clean), meaning that the corruption index of ASEAN countries is still quite high (Lutfi et al., 2020). The high corruption index of countries, especially ASEAN-5 members will have an impact on the economic growth of ASEAN-5 countries such as Indonesia, Malaysia, Thailand, the Philippines, and Singapore.

The ASEAN-5 country with the lowest corruption perceptions index (CPI) ranking in 2020 is Singapore, which is ranked 3rd with the lowest corruption perception out of 180 countries in the world, while the country with the highest level of perception is the Philippines, which is at number 115 out of 180 countries. Corruption according to Transparency International is an abuse of power to benefit oneself. According to Thach & Ngoc (2021) based on a report from Transparency International organization said that most ASEAN member countries have a high level of corruption with economic freedom that tends to increase, only Singapore and Malaysia with a low level of corruption. The ASEAN 5 member countries and in Southeast Asia, the best economic growth is Vietnam, where in 2020 Vietnam has an economic growth of 2.91 percent, Indonesia has negative economic growth is -2.07 percent, Singapore is -5.4 percent, Thailand at -5.6 percent and the Philippines had the worst economic growth to -9.5 percent in 2020.

According to Lutfi et al. (2020), argue that corruption has a negative impact on the economic growth of a country, because corruption has an impact on inefficiency, especially in the public sector. However, even though ASEAN countries differ substantially in economic performance, political stability, and levels of perceived corruption, it is still possible to identify common core governance challenges that affect their ability and willingness to tackle corruption (Schoeberlein, 2020). Likewise in study by Kurniawan et al. (2020) found that the corruption perception index and the human development index (HDI) have a simultaneous effect on gross domestic product (GDP), because the world's corruption perception index is increasing, in fact the top 10 of corrupt countries are 80 percent of the world's most populous countries. The OIC countries are Somalia, Syria, Sudan, Yemen, Afghanistan, Burundi, Libya, and Iraq. Likewise, the results of study by Nawatmi (2016) found that corruption has an influence on economic growth in 12 Asia Pacific countries, where the corruption perception index is not a grease of wheel or a lubricant for the economy of these countries.

Podobnik et al. (2008) also strengthens the results of the research above, where the results of his research find that an increase in the CPI will lead to an increase in GDP per capita growth, especially in European countries. Likewise, in study by Attila (2018), corruption in addition to affecting tax levels, corruption can also distort, where more taxes will disrupt growth and a high level of corruption in a country has a stronger negative effect than taxes on growth. According to Tseng (2020) in order to fight corruption, it is necessary to have knowledge from various aspects simultaneously and promote relevant measures such as reform of bureaucratic institutions and major public utilities, increasing economic freedom and relevant system design, improving the quality of resources. According to Shabbir et al. (2016) found that political stability has a significant positive effect on growth where politics encourages growth in politically unstable countries but becomes an obstacle in politically stable countries.

This is in contrast to the results of study by Ozpolat et al. (2016), where his research found that the rule of law index, corruption control index, and voting and accountability indices are positively correlated with GDP in high-income countries. Likewise in his research Nasir et al. (2021) and Lestari et al. (2020) found that partially the corruption index has a significant influence on economic growth, this implies that the high CPI has low economic growth and conversely countries with low CPI have high economic growth. Study conducted by Das et al. (2020) found that

corruption in the Asian region, especially developing countries and countries with little innovation, has a positive impact on corruption, this is due to the lack of R & D facilities and the prevalence of corruption. Based on Blackburn et al. (2011); and Kurniawan et al. (2020), explains that corruption is an obstacle to the movement of the country's economy, especially affecting the effectiveness and efficiency of economic resources, as well as corruption as an obstacle to economic development.

2. RESEARCH METHODS

2.1. Data

The data used in this study is secondary data, namely corruption measured by corruption perceptions index (CPI) data sourced from Transparency International organization; economic growth measured by GDP growth data sourced from World Development Indicators, Human Development Index (HDI) data sourced from the UNESCO Institute for statistics, data flows of inward foreign Direct investment (FDI) to ASEAN is sourced from data.aseanstats.org and population data is sourced from World Development Indicators from 2012–2020. The samples are ASEAN-5 members, namely Indonesia, Malaysia, Singapore, Thailand, and the Philippines. The data used in this study is using panel data (pooled data), namely data that combines cross section data with time series data.

Table 1. Definition of operational variables

Variable	Definition	Source
Corruption Perceptions Index (CPI)	The corruption perception index is a description of the situation and condition of corruption at the country or territory level. The data used in this study is CPI score data.	Transparency International
Economic growth (GDP)	The economic growth is a picture of a cumulative increase or change in producing goods and services of a country as measured by Gross Domestic Product or Output per capita. The data used in this study is the percentage (%) of economic growth.	World Development Indicators
Foreign Direct Investment (FDI)	The foreign direct investment, either a loan or a purchase of the ownership of a company from outside another country to one's own country. The data used in this study is data on flows of inward foreign direct investment into ASEAN by source country (in million US$).	data.aseanstats.org
Human Development Index (HDI)	The human development index is a measurement of several indicators, namely life expectancy, literacy, education and living standards. The more concise meaning of HDI is to explain the condition of the community in terms of income, education and health. The data used in this study is the combined index data of the 3 dimensions.	UNESCO Institute for Statistics
Population (POP)	The population is the total population of a country in certain period	World Development Indicators

2.2. Model specification

This study was conducted by developing the results of several studies, following study by Kurniawan et al. (2020), namely the corruption perception index and the human development index have a simultaneous effect on gross domestic product. The next, study by Nawatmi (2016) argues that corruption has an influence on economic growth in 12 Asia Pacific countries. Mostly in developing countries the growth of corruption tends to increase due to weak transparency, low accountability, broken judicial and legislative systems, wrong organizational structure (Audi & Ali, 2019). According to Thach & Ngoc (2021) based on a report from Transparency International said that most ASEAN member countries have a high level of corruption with economic freedom that

tends to increase, only Singapore and Malaysia with a low level of corruption. For this matter, the study identifies two models, first identifying the impact of corruption, human development index, and population on foreign direct investment, second, identifying the impact of corruption, human development index, and population, foreign direct investment on economic growth. The two models are presented as follows:

$$FDI_{i,t} = \alpha_0 + \gamma_1 CPI_{i,t} + \gamma_2 HDI_{i,t} + \gamma_3 POP_{i,t} + \varepsilon_{1i,t} \quad (1)$$

$$GDP_{i,t} = \alpha_0 + \gamma_1 CPI_{i,t} + \gamma_2 HDI_{i,t} + \gamma_3 POP_{i,t} + \gamma_3 FDI_{i,t} + \varepsilon_{2i,t} \quad (2)$$

Where: GDP is economic growth per year for each country; FDI is foreign direct investment per year for each country; CPI is corruption perceptions index per year for each country; HDI is human developmen index; POP is the total of population per year for each country; i is cross-section for sample; t is time series; and ε is disturbance error.

3. RESULTS AND DISCUSSION

Based on the Table 2, we report that the results of descriptive statistical tests with a sample size of 55, where the variable economic growth has a minimum value of -9.600000 and a maximum value of 14.500000, with a mean value of 4.156364 and a standard deviation of 3.825149 or below the average. The CPI variable has a minimum value of 2.400000 and a maximum value of 87.0000, with a mean value of 40.45273 and a standard deviation of 24.47632 or above the average. The FDI variable has a minimum value of -2204,960 and a maximum value of 17486.61, with a mean value of 4200,895 and a standard deviation of 5185,284 or above the average. The HDI variable has a minimum value of 0.659000 and a maximum value of 0.938000, with a mean value of 0.768309 and a standard deviation of 0.087747 or below the average. The HDI variable has a minimum value of 5076732 and a maximum value of 2.74E+08, with a mean value of 92880951 and a standard deviation value of 89863814 or below the average.

Table 2. Descriptive statistical test results

Descriptive	GDP	CPI	FDI	HDI	POP
Mean	4.156364	40.45273	4200.895	0.768309	92880951
Median	5.000000	37.00000	1888.530	0.742000	68714519
Maximum	14.50000	87.00000	17486.61	0.938000	2.74E+08
Minimum	-9.600000	2.400000	-2204.960	0.659000	5076732.
Std. Dev.	3.825149	24.47632	5185.284	0.087747	89863814
Skewness	-1.475364	0.419940	1.354335	0.819976	1.028725
Kurtosis	6.907498	2.775856	3.466482	2.399240	2.657407
Jarque-Bera	54.94347	1.731675	17.31239	6.990402	9.969828
Probability	0.000000	0.420699	0.000174	0.030343	0.006840
GDP	-				
CPI	-0.285049	-			
FDI	-0.086945	0.697999	-		
HDI	-0.161942	0.726079		-	
POP	0.064070	-0.387968	-0.501545	-0.712617	-

Source: Authors calculation

If the research used is panel data, then not all classical assumption tests are carried out, namely only multicollinearity and heteroscedasticity are needed. The normality test is not a basic requirement for BLUE (Best Linear Unbias Estimator) because if the data used is more than 30, then it is considered normally distributed. The autocorrelation test only occurs in time series data, data that are not time series (cross sections or panels) will be meaningless or useless. The linearity test is almost not carried out in linear regression testing (Basuki & Prawoto, 2016). Based on the results of the multicollinearity test above, it shows that the correlation between variables is smaller than 0.8 so it can be said that the data in this study does not have a multicollinearity problem. Table 3 and 4 reports that the heteroscedasticity test result show have passed the test and it can be concluded that there was no heteroscedasticity problem.

Table 3 and 4 reports that in equation 1 have the chi-square cross-section is 12.763 with the probability value of 0.000, as well as in equation 2 have the chi-square cross-section is 4.889 with the probability value of 0.000. It is concluded that the fixed effect model is the best than the common effect in this study. Because in the previous article, we have arrived at the post-chow test stage and the result is choosing a fixed effect, so we just must do a random effect. The Hausman test results from the two equations above, the value of Prob is obtained. is 0.000 smaller than 0.05 which means that the model used in this study is a fixed effect model, but the results of equation 2 there is a difference, where the prib value is 0.4134 greater than 0.05 which means that the model chosen in this study is a random effects model. Because the two equations have differences, the study conducted the lagrangian multiplier (LM) test, the researchers conducted the next test, namely the LM test to determine whether we still choose random effect or common effect.

Table 3 and 4, the p-value of LM test using Breusch-Pagan for equation 1 is 0.0003 smaller than 0.05. This means that the results of the LM test show that the best model used in this study is the random effect model. But for the equation 2, the p-value for Breusch-Pagan is 0.6603 greater than 0.05, which means that the best model used in this study is the common effect model. Therefore, from the test results on the test results on the suitability of the model, the most appropriate for equation 1 is the random effects model and for the equation 2, the most appropriate model used is the common effects model.

Table 3. and 4 reports that the R^2 for equation 1 is 0.764, this implies that variations in the corruption perceptions index, human development index, and population variables can explain the variation in foreign direct investment variables of 76.4 persons. The R^2 for equation 2 is 0.935, implying that variations in the corruption perceptions index, human development index, population, and foreign direct investment variables can explain variations in economic growth variables by 93.5 percent.

Table 3. Regression model results for foreign direct investment

Dependent variable: FDI				
Variables	***Coefficient***	***Std. Error***	***t-Statistic***	***Prob.***
Constant	-27645.98***	7823.107	-3.533888	0.0009
CPI	10.67748	13.37456	0.798343	0.4284
HDI	41390.76***	9859.497	4.198060	0.0001
POP	-4.16E-06	9.30E-06	-0.446594	0.6571
R^2	0.764			
Chow test	12.763**			
Hausman test	22.978***			
LM test	13.336***			
LR test	8.514			

Note: ***, **, and * represents significant at 1%, 5%, and 10% at levels respectively
Source: Authors calculation

The regression results in the first stage were conducted to determine the effect of corruption perceptions index (CPI), human development index (HDI), and population (POP) on foreign direct investment (FDI). This means that the constant coefficient is -27645.98, meaning that if the corruption perceptions index, human development index, and population variables are equal to zero, then the foreign direct investment is 27645.98 million US$.

Table 3 report that relationship between corruption perceptions index and foreign direct investment is insignificat and positive. This implies that if the corruption perceptions index increase by 1 score, will increase foreign direct investment is 10,67748 million US$ in ASEAN-5. According to Quazi (2014) said that corruption in East Asian and South Asian countries hampered the growth of FDI by 14 percent, so that corruption has a major obstacle to the sustainability of FDI in ASEAN-5 countries. In line with what is stated by Karimi & Daiari (2018) argue hat FDI will be negative if a country experiences a high level of corruption, and the impact is significant, as well as in study by Azam & Ahmad (2013) that corruption becomes a a threat to developing countries

because high levels of corruption will have an impact on investment and large companies will always avoid countries with high levels of corruption and some do not want to own companies or invest in developing countries. In addition, several studies have also found that corruption will have a negative impact on investment or FDI inflows, such as study by Nunes (2013); Gilal et al. (2016); and Epaphra (2014). Likewise, study by Kasasbeh et al. (2018) found that FDI has an impact and is a driver for economic growth, and to attract FDI in Jordan the government must take concrete steps in fighting corruption. Study by Kurniawan et al. (2020), where the perception index and the human development index have an influence on economic growth.

Relationship between human development index and foreign direct investment is positive and significant, this implies that if the human development index variable has increased by 1 rank, will increase foreign direct investment by 41390.76 million US$ in ASEAN-5. The importance of the government's role in improving human quality (human development), namely in order to increase productivity, such as education investment will improve human quality, both human skills and knowledge (Mahroji & Nurkhasanah, 2019). In line with his research (Deshiri et al., 2012), that the Human Development Index and the rule of low have a strong influence and attractiveness on FDI in several developing countries. Due to the lack of skilled and efficient workforce in many countries, investment in them is impossible. With increased investment human development in many areas became possible and this encouraged foreign investors. Not only HDI has an influence on FDI, FDI also has an influence on HDI, such as his research Kaukab & Surwandono (2021).

The average human development index in ASEAN-5 countries in 2010 - 2020 was the highest in Singapore, which was 0.922, while the lowest HDI was in Indonesia, which was 0.690. According to the UNDP, Singapore has an average school year of 11.5 years. This positive trend was followed by other ASEAN countries such as Malaysia, Thailand, Indonesia, and the Philippines, with average academic years of 10.2 years, 7.7 years, and 8.0 years, respectively. ASEAN-5 has an average life expectancy below global standards (72.6 years), which consists of Indonesia (71.5), the Philippines (71.1), other ASEAN countries (Singapore, Malaysia, and Thailand) have an average average life expectancy above global standards. The country with the highest life expectancy in ASEAN is Singapore, which is 83.8 years. The standard of living, better health services make the life expectancy of the people in the Lion Country above other countries in Southeast Asia. Singapore at the global level of life expectancy is ranked third in the world behind Hong Kong and Japan. Under UNDP, the standard of living is measured by Gross National Income per capita. Indonesia is a country with the largest economy in Southeast Asia (ASEAN). However, due to its large population, Indonesia's GDP per capita is USD.11,256 is lower than Singapore (USD.83,793), Malaysia (USD.27,227), and Thailand (USD.16,129). Meanwhile, the Philippines has a GNI per capita by USD.9,540.

The relationship between population and foreign direct investment is insignificant and negative. This implies that if the variable population of increases by 1 person, will decrease foreign direct investment decreases is 4.16E-06 million US$. The results of this study are in line with the results of study by Fauzan & Mahmuddin (2019), finding that population growth has a negative and significant impact on East Java investment. In study by Asongu (2013) found that there is a long-term positive causal relationship from population growth to only public investment. Study by Muharromy & Auwalin (2021) said that population growth and exchange rates have a significant and negative relationship to economic growth, while trade openness and investment have a significant and positive effect. Meanwhile, investment has no significant effect on economic growth in the OIC Country. Such a large increase in population is not supported by large job opportunities, so what happens is unemployment (Oshora et al., 2021). In study by Yang et al. (2021) found that health investment plays an important role in driving economic growth, and there is an inverse U-shaped relationship between population aging and economic growth. In addition, the demographic bonus will gradually weaken and even disappear so that it will slow down economic growth. In research by Heller (2010) argue that the government and policy makers must pay attention to population trends in making infrastructure investment policies, because demographics and population are important. Suanes (2016) argue that population growth is included to control the size of the economy. Bucci et al. (2019) argue that multi-sector growth,

whether population growth or per capita human capital formation, has no correlation to demographics and the economy in the long run.

Table 4. Regression model results for economic growth

Dependent variable: GDP				
Variables	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
Constant	21.65927	14.70498	1.472920	0.1470
CPI	-0.055951*	0.031209	-1.792802	0.0791
FDI	0.000382	0.000255	1.501471	0.1395
HDI	-21.09471	20.01787	-1.053794	0.2970
POP	-6.81E-09	9.31E-09	-0.731677	0.4678
R^2	0,935			
Chow test	4.889**			
Hausman test	3.411***			
LM test	0.193			
LR test	6.366			

Note: ***, **, and * represents significant at 1%, 5%, and 10% at levels respectively
Source: Authors calculation

Table 4 reports that relationship between corruption perceptions index and economic growth is negative and significant at 10 percent level, this implies that if the corruption perceptions index increases by 1 score, will decreases economic growth is 0.055951 percent. Corruption has a major impact on the development of a country, namely a negative impact, several studies have found that a large amount of corruption will result in less investment and less economic growth. Study by Gründler & Potrafke (2019) found that the effect of corruption on economic growth is mainly seen in autocratic countries and is transmitted to growth by lowering FDI and increasing inflation. Corruption has a negative impact on real GDP per capita in some countries with low levels of investment, where investors avoid countries with high levels of corruption. Study by Ighodaro & Igbinedion (2020) found that corruption and economic growth in West Africa have a direct relationship, which means that the growth of corruption has an effect on economic growth like the U-shaped hypothesis. Likewise, the results of his research Alfada (2019) which show that the impact of corruption shows an adverse effect on growth for provinces with corruption levels below the threshold. Mo (2001), in our usual least squares estimate, we find that a 1 percent increase in the corruption rate reduces the growth rate by about 0.72 percent or, stated differently, a one-unit increase in the corruption index reduces the growth rate by 0.545 percentage points. Silva et al. (2011) the main conclusion is that corruption negatively impacts a country's wealth by reducing the productivity of capital, or its effectiveness. Study by Afonso & Rogrigues (2021) the deleterious effect of corruption on per capita GDP levels and growth, but large governments benefit less from reducing corruption. Meanwhile, study by Karimi & Daiari (2018) found the positive influence of governance indicators such as eradicating corruption on economic performance in several ASEAN countries.

In 2020 the highest score or lowest level of corruption was Singapore, where in 2020 it was 85 and the lowest score or highest corruption index in ASEAN-5 member countries was the Philippines, which was 34. Corruption is also known to distort decision-making processes related to public investment. and affect the composition of government spending. Corruption can cause public officials to allocate less public resources on the basis of public welfare than on the opportunities they provide to extort bribes, such as large infrastructure or defense projects. The results of this study are in line with the results of study by Gründler & Potrafke (2019), namely the long-term cumulative effect of corruption on growth is that real GDP per capita decreases by about 17 percent when the inverse CPI increases by one standard deviation. The effect of corruption on economic growth is especially evident in autocratic countries in 175 countries and is transmitted to growth by lowering FDI and increasing inflation. Likewise, in study by Ahmad et al. (2012), it was found that corruption has a relationship with economic growth both positively and

negatively, where corruption will reduce marginal capital product or investment and corruption and bureaucratic inefficiency both negatively and significantly affect real GDP per year worker.

Relationship between foreign direct investment and economic growth is insignificant and positive. This implies that if the foreign direct investment increased by 1 million US$, will increase economic growth is 0.000382 percent. Several studies have shown that the Human Development Index has an influence on economic growth, as in his research (Iskandar, 2017), that the Human Development Index through special autonomy funds has an influence on economic growth. Study by Ridha & Parwanto (2020), human development and gross fixed capital formation have a positive and significant impact on Indonesia's economic growth both in the long and short term. In study by Elistia & Syahzuni (2018) found that HDI has a significant influence on GDP per capita in 10 ASEAN countries, where the two variables have a causal relationship. Also several studies such as study by Shome & Tondon (2010); and Neamu & Ciobanu (2014) are in line with this study that the Human Development Index has a positive relationship to economic growth. Likewise in study by Pradana & Sumarsono (2018); and Akar et al. (2021), found that the higher the human development index and capital expenditures the greater the rate of economic growth. Study by Ranis (2016) to the extent that greater freedom and capabilities enhance economic performance, human development will have an important effect on growth. Comparison between the human development index and GDP growth of ASEAN-5 member countries, where the highest average ASEAN-5 economic growth in 2010-2020 was the Philippines, which was 4.95 percent with the lowest HDI number 2 from Indonesia, which was 0.693, while for ASEAN-5 member countries with a low average economic growth is Thailand, which is 2.76 percent with an HDI of 0.746, Malaysia's economic growth is 4.34 percent with a HDI of 0.790, Indonesia with an economic growth of 4.74 percent and HDI of 0.690, the operation is with Singapore, where Singapore has the highest HDI level but relatively low growth and from ASEAN-5 member countries how much economic growth is at rank 2 which is 4.04 percent.

Relationship between human development index and eonomic growth is negative and insignificant. This implies that if the human development index increases by 1 million US$, will decreases economic growth is 21.09471 percent. Study by Ridha & Parwanto (2020) found that foreign direct investment and the trade balance had a negative and significant effect on Indonesia's economic growth in the long term, but in the short term it had no significant effect. Likewise, study by Susilo (2020) found that there are 10 sectors that have an impact on economic growth in the United States, of which 10 sectors are the information sector, which is the foreign direct investment has the greatest influence on economic growth, namely 38.3 percent, while the smallest sector that has an impact on economic growth of the 10 investment sectors entering the United States is the Finance sector, which is 1.6 percent. Likewise in study by Khaliq (2015); Hamaudi & Aimer (2017); Argiro (2003); Susic et al. (2017); and Kulu et al. (2021), found that foreign direct investment directly have a positive and significant impact on economic growth, both in the long term and in the short term. The average flows of inward foreign direct investment into ASEAN by source country from ASEAN-5 from 2010-2020 is Singapore, which is USD.1,376.31 million with the lowest economic growth is rank 2 of the ASEAN-5 members. Other, namely 4.04 percent, followed by Malaysia with FDI of 3,009.60 million US$ with economic growth of 4.34 percent, Thailand is USD.2,088.11 million with economic growth of 2.76 percent, Indonesia with FDI of USD.1,794 49 million with an economic growth of 4.74 percent, and what is interesting from this data is that the Philippines has the highest economic growth with a low FDI value, whereas the Philippines' FDI is USD.349.95 million with a growth of 4.95 percent.

Relationship between total population and economic growth is insignificant and negative, this implies that if the population increased by 1 person, will decreases the economic growth in ASEAN-5 is 21,09471 percent. Study by Peterson (2017) argue that countries with high incomes will have an impact on social and economic problems if population growth is low, on the contrary if in low-income countries population growth is an obstacle to human development itself. According to Kuhe (2019) argue that population growth has an impact on economic growth, which means that some countries with small population growth experience quite high growth and in some countries with large population growth also experience low economic growth, in addition to

that in terms of economic results. his research found that both total population growth, urban population growth and rural population growth had a positive and significant impact on economic growth in Nigeria, both in the short and medium term. The results of this study are supported by study by Mahdawi et al. (2021); and Klasen & Lawson (2007) found that population growth has a significant positive effect on Indonesia's economic growth. Likewise in sudy by Mamingi & Perch (2016) found that on the one hand population growth and population density positively and significantly affect economic growth, on the other hand economic growth has a negative and significant effect on population growth. Likewise in study by Somtuchukwu (2020) finding that the rate of population growth has a significant effect on Nigeria's economic growth and development is not rejected. According to World Development Indicators data in 2020, the population of ASEAN-5 is 490.9 million people with the largest population being Indonesia, which is 258.0 million people, while the ASEAN-5 country with the lowest population is Singapore, which is 5,474 million souls. When compared with economic growth, countries with a high population have relatively high economic growth, such as Indonesia with a population (258,067,788 people) first ranked in ASEAN-5 countries and economic growth (4.74%) is second ranked in the ASEAN-5 countries, as well as the Philippines with the highest economic growth (4.95%) of the other ASEAN-5 countries having the number 2 population of other ASEAN-5 countries. On the other hand, relatively low economic growth occurs in countries with a small population, such as Singapore with the lowest population (5,474,939 people) than other ASEAN-5 member countries with the lowest economic growth (4.04%) is ranked second. Thailand with a population of 68,625,664 people has the lowest economic growth, namely 2.76 percent, and Malaysia with a population of 30,287,891 people with an economic growth of 4.34 percent. According to Rochaida (2016), some people say that the population has a positive impact and the economy and development develops if the number of workers is large. Likewise, according to Sukirno (2016) a relatively large population if followed by adequate quality is a driver for a country's economic growth, and vice versa, a high population if not followed by education and low quality, it will be a burden for the economic development of a country.

4. CONCLUSIONS

The level of corruption has an important role in the development of a country, both in terms of future economic development. ASEAN-5 countries are countries with such a large population accompanied by a large average economic growth as well. Corruption will be an obstacle for investors to enter a country, especially ASEAN-5 countries, because corruption corruption has a negative impact on real GDP per capita in some countries with low investment levels, where investors avoid countries with high levels of corruption. Even the results of several studies have found that if the corruption index increases by 1 level, then economic growth will decrease by 0.545 percent. Likewise, the importance of controlling population growth in the process of economic development, in ASEAN-5 countries, because most ASEAN-5 countries are developing countries other than Singapore, developing countries with high growth will be a barrier to development because the country has little income to manage its people which is reflected in by the Human Development Index. To increase the economic growth of ASEAN-5 countries is to increase investment, control population growth, improve or improve the quality of the workforce in terms of education, health, and income no less important is to reduce the level of corruption in a country, so the economic development process runs smoothly without bribes.

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