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The Nexus of Economic Growth with Macroeconomic Variables and Corruption: Fresh Evidence from Vietnam

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Abstract
Economic growth is the best indicator of whether or not initiatives to reduce poverty and enhance living standards are having the desired effect, specifically in developing countries. Academicians have traditionally considered the growth of Gross Domestic Product (GDP) to be an important question. Poverty rates, rates of development in health, education, and security, and economic growth all suffer when a country's GDP per capita stagnates. Stability in society is aided by a growing economy, another reason of why GDP growth is crucial. Therefore, this study aims to examine the nexus between the economic growth of Vietnam with four selected macroeconomic variables and corruption index over the 24-year period from 1997 to 2020 using annual time series data. The economic growth, as the dependent variable is measured by the GDP growth whilst the four macroeconomic variables, namely Foreign Direct Investment (FDI), Inflation (INF), Exports (EXP), Gross Domestic Investment (GDI) and the Corruption Perception Index (CPI) act as the independent variables (IVs). The descriptive statistics, correlation test and Ordinary Least Squares (OLS) regression based on economic model using the eViews 11 software are applied to analyze the relationships and impacts of IVs on the economic growth. The empirical results indicate that there is no significant relationship between the IVs with the economic growth of Vietnam. However, FDI, EXP and GDI are found to pose positive impacts on the economic growth of the country whilst INF and CPI negatively affect the economic growth. In particular, the findings show FDI, EXP, and GDI support Vietnam economy by 2.67%, 0.08%, and 8.87%, respectively. Apparently, the expansion of the economy is driven by GDI, FDI, and EXP. Increases in domestic investment and FDI are crucial that lead to economic growth in emerging nations. On contrary, high and fluctuating inflation affects economic confidence since businesses are uncertain of future costs and prices. The inflation issue must be tackled by the government to balance the expansion in economy with the cost of living in the country. Despite insignificant negative impact
of corruption Vietnam economy, the policy makers must take heed on the ethics and transparency practices specifically in the public sector so that investors have more confidence on the country. For further research, we propose to test the economic growth with other macroeconomic variables such as industrial production index, money supply and foreign exchange rate together with available indices like human development index and global peace index using other methodologies. To be more meaningful, we propose to make comparisons with other countries in the same region or other continents, developing or developed nations.

**Keywords:** Economic Growth, Macroeconomic Variables, Corruption, Vietnam.

**Introduction to Study**

The term "growth" is commonly used by economists to describe a long-term increase in output. Indeed, growth is a key process in modern economies, based on the development of factors of production, particularly the industrial revolution, access to new mineral and energy resources, and technological advancement. Growth has long-term effects on the demographics and living standards of the societies. Economic growth can serve to reduce poverty. As a result, economic growth has been and continues to be at the focus in terms of assessing a country's well-being or economic performance.

The economic growth is an important condition for countries to achieve high and sustainable economic development. It is regarded as a metric for evaluating the success of the government. Consequently, many academics and policymakers have studied the factors that influence the economic growth in depth (Nguyen, 2017). Apparently, the success of any economy, whether emerging or developed, is influenced by pivotal macroeconomic indicators such as output, investment, national reserve, per capita income, interest rate, exchange rate and price stability or inflation rate, among others.

Previous research indicates that economic growth is the most effective indicator for decreasing poverty and raising living standards in emerging countries. For instance, Aziz (2017) suggested that the GDP growth has always been treated as a current issue that many researchers have studied. Inconsistent growth in GDP per capita within a country will increase the incidence of poverty while also stifling progress in health, education, crime and, eventually, economic growth. In addition, the factors that contribute to GDP growth are relatively important in preventing socio-political instability.

For decades, researchers have been debating the topic of economic growth due to different financial and environmental changes, such as the global financial crisis and natural disasters that have impacts on the country’s economic growth. These factors’ impacts differ from country to country. Some of the factors that influence a country’s economic growth are common to all countries, whether developed or developing countries (Aziz, 2017). Nevertheless, the elements affecting GDP growth are still uncertain. A long list of potential factors or explanatory variables might be used. Hence, identifying specific variables that are strong enough to explain GDP growth is difficult. This could be due to a lack of data, different country’s characteristics, a different historical period, or other factors.

**Overview of Vietnam Economy**

After the 20-year Viet Nam War ended in 1975, Vietnam economy was one of the lowest in the world. Nevertheless, today, Vietnam is one of the rising stars of the growing markets with
economic growth rate of 6 to 7 percent, which is comparable to China. It was all started with the economic and political reforms implemented under Doi Moi, which began in 1986 that resulted in rapid economic growth, transforming what was once one of the world’s poorest countries into a lower-middle-income country. Vietnam is becoming one of the most dynamic emerging economies in East Asia. Between 2002 and 2018, the GDP per capita expanded by 2.7 times, reaching over US$2,700 in 2019, lifting over 45 million people out of poverty. Consequently, the poverty rates dropped dramatically from over 70 percent to around 6 percent and the rate of economic growth had risen over 7 percent between 2018 and 2019.

In the last decade, Vietnam has been one of the world's fastest expanding emerging markets, supported by significant foreign direct investment (FDI) inflows into its manufacturing sector. The huge new inflows of FDI along with rapid increase in industrial exports have been important growth drivers for Vietnam, particularly in the textiles and electronics sectors. In 2019, overall electronic and electrical manufacturing exports accounted for 33 percent of total merchandise exports, while textiles, clothes, and footwear accounted for the remaining 19.4 percent. Total FDI inflows reached USD 20.4 billion in 2019, an increase of 6.7 percent year on year, owing to significant investment by multinational corporations in developing new manufacturing production facilities in Vietnam.

The economic success of Vietnam can be attributed to three key factors. First, the country has openly embraced trade liberalization. Second, by deregulating and cutting the cost of doing business, it has complemented external liberalization with domestic changes. Lastly, Vietnam has made significant expenditures in people and physical resources, primarily through public funds (Vanham, 2018). On top of that, O'Neill (2021) stated that Vietnam economy is expanding due to increase in exports, domestic demand, and the industrial sector, as seen by its positive real GDP growth rate. As the economy grows, so does the amount of money spent by Vietnamese consumers.

Unfortunately, Vietnam economic growth dropped to its lowest level in 2020, in at least for the last three decades, as a result of the COVID-19 pandemic and sluggish global economy. The Vietnamese economy increased by 2.9 percent year on year in 2020, compared to 7.1 percent in 2019. This is the lowest rate of economic growth in decades (Nguyen, 2020). In spite of the slowing growth rate, Vietnam was still one of the few industrial economies in the Asia-Pacific region to post positive GDP growth in 2020. Despite the pandemic, disbursed FDI remained strong in 2020, totaling roughly USD 20 billion, down only 2 percent from 2019. Nonetheless, Vietnam economy was back on track to record 6.6 percent growth in 2021 (The World Bank, 2021), showing signs of improvement.

Therefore, it is very crucial to study the nexus between Vietnam economic growths with the major macroeconomic variables and the corruption perception since this currently has been the critical issue and widely debated around the globe.

**Review of Literature and Hypotheses Development**

High and sustainable economic growth is regarded as a success and a fundamental feature in many economies, both developed and developing (Chirwa, 2017). According to Nguyen (2016), export contributes significantly to Vietnam economic development by accelerating the country’s industrialization and modernization. On top of that, Nguyen (2020) noted that foreign factors play a vital part in a country’s socioeconomic growth that constantly taking precedence in both
developing and emerging countries. The study further explained that Vietnam continues to explore effective ways to maintain high economic growth rates through attracting FDI and official development aid, and expanding exports of products and services. The findings were consistent with Tran et al (2019), which suggested that FDI, domestic investment capital, and human resources have positive impacts on the Vietnam economic growth.

The empirical evidences on FDI have been conflicting and there are still gaps in the literature. Most economists and policymakers believe that FDI promotes technological advancement, raises capital stock and boosts employment. On the other hand, some are concerned that FDI would crowd out domestic investment and eliminate competitiveness in local markets (Upreti, 2015). Gutiérrez-Portilla (2019) reported that FDI has a positive influence on economic growth, either directly or indirectly. On contrary, Alvarado (2017) found that FDI has a statistically significant negative impact specifically in lower-middle-income countries, which implies that FDI is not an appropriate strategy for accelerating economic growth, particularly in Latin America. These findings were then supported by (Ouattara, 2018).

The precise relationship between inflation and economic growth remains indecisive despite enormous studies. This is because the results differ by countries and over times. The conflicting results are also influenced by the data set and methodology employed (Odhiambo, 2017). According to Dada (2017), inflation has caused more harmful than beneficial impacts on the Economic Community of West African States (ECOWAS). The finding is later supported by (Anidiobu, 2018). Van (2020) stated that the economy will be adversely affected in the long run if the inflation rate exceeds the pace of economic growth. Ho (2021) found inflation has a significant negative impact on economic growth in short and long runs. Hakim (2021) suggested a short run and significant relationship between economic growth and inflation, where controlling inflation required achieving a proportional level of economic and pricing activity in which the money to income ratio rises steadily in line with financial expansion and macroeconomic stability.

Export is the primary motivator for domestic production as it maximizes the utilization of natural, human and other resources (Nguyen, 2016). Export growth boosts investment, national production and foreign exchange inflows in sectors where a country has competitive edges, which are essential for economic growth (Kalaitzi, 2020). Bakari (2021) found positive bidirectional relationship between exports and economic growth that demonstrate exports are a source of economic growth in Africa. Gozgor and Can (2017) claimed a considerable causal relationship between export diversification and economic growth are only positively connected to upper middle economies. Sultanuzzaman et al (2018) stated exports have a significant positive relationship with economic growth in the short run, where GDP growth will be greatly boosted if exports rise. However, in the long run, there is significant negative relationship if exports expand faster than GDP. Meanwhile, Krit (2017); Mabrouki (2017) concluded that there is no causal relationship between exports and GDP or economic growth.

Domestic investment creates an appropriate climate for economic development and wealth maximization (Bakari, 2017). Domestic investment nature and stability have sparked intense debate in the economics literature, particularly in advanced market nations. According to Kehinde (2018), there is a long-run significant relationship and positive effect of the domestic investment on real GDP. The findings are further supported by Tiba (2019); Kurbanov (2020), who found bidirectional relationships using the Granger causality test. Meanwhile, Bakari (2018) revealed domestic investment causes economic growth in Algeria in the short run. However, hampered by
a number of issues that are directly related to poor management and unimpressive investment strategy, there was emergence of a long-run negative impact of domestic investment on the economic growth. The findings were supported by Bouchoucha and Bakari (2019), who claimed that domestic investment has a long-term negative effect on economic growth in Tunisia. Corruption comprises political, economic, and moral issues that affect both developed and developing countries. There are mixed results of studies on the relationship between corruption and economic growth. By impacting the climate and quality of investment, high levels of corruption slow down the country’s growth in the wake of wasteful public investment and poor money allocation (Domashova & Politova, 2021). Christos et al. (2018) concluded almost all European countries; with the exception of non-European Union (EU) countries in Central and Eastern Europe, have a strong negative relationship between corruption perception and per capita GDP. This implies that the more drops in corruption levels, the higher rates of per capita GDP. Nevertheless, Moiseev et al (2020) found that as a society's wealth grows, so does corruption rather than the other way around. Ekone and Amaghanoyeodiwe (2020) also revealed a long-term association between the extent of corruption and economic growth in Nigeria. Therefore, based on the literatures reviewed, the following hypotheses are developed:

**H1:** There is a positive impact of FDI on Vietnam economic growth.

**H2:** There is a negative impact of INF on Vietnam economic growth.

**H3:** There is a positive impact of EXP and Vietnam economic growth.

**H4:** There is a positive impact of GDI and Vietnam economic growth.

**H5:** There is a negative impact of CPI and Vietnam economic growth.

### Data and Methodology

The time series data used in this study was gathered over a 24-year period, from 1997 to 2020 with a total of 144 observations. This study used five independent variables, namely foreign direct investment (FDI), inflation (INF), exports (EXP), gross domestic investment (GDI) and corruption perception index (CPI) and tested on the dependent variable, namely the gross domestic product (GDP) growth as the proxy for economic growth of the country. The annual secondary data was acquired from The World Bank Data, Trading Economic and CEIC data websites.

The five independent variables used in this study are FDI, INF, EXP, GDI and CPI. FDI is the sum of equity capital, earnings reinvestment, other long-term capital, and short-term capital as represented in the balance of payments. This dataset divides net inflows from foreign investors in the reporting economy by GDP. INF reflects the annual percentage change in the cost to the average consumer of obtaining a basket of goods and services that may be set or modified at predetermined intervals, such as annually. Theoretically, increased inflation diminishes citizens' purchasing power, lowers their actual income. EXP is the value of all goods and other market services given to the rest of the world. Merchandise, freight, insurance, transportation, travel, royalties, license fees and other services such as communication, construction, financial, information, business, personal and government services are all included. However, employee compensation, investment income (previously known as factor services) and transfer payments are not included.

GDI is explained as the real domestic investment is an outlay made to boost the economy’s overall capital stock. This is accomplished through purchasing additional capital-producing and income-generating assets within the domestic economy. CPI is the index established since 1995 by the
International Non-governmental Transparency International Organization that measures the extent of perceived corruption in the public sector by citizens and specialized groups and it is published in the form of the Corruption Perception Indicator (CPI), which is a composite index. Table 1 summarizes the details of variables used in this study.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Proxy</th>
<th>Units</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable (DV)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Growth</td>
<td>Measured by GDP growth</td>
<td>%</td>
<td>GDP</td>
</tr>
<tr>
<td></td>
<td>(Annual %)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Independent Variables (IVs)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Direct Investment</td>
<td>Net inflows</td>
<td>%</td>
<td>FDI</td>
</tr>
<tr>
<td></td>
<td>(as % of GDP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation</td>
<td>Consumer Price Index</td>
<td>Index</td>
<td>INF</td>
</tr>
<tr>
<td>Exports</td>
<td>Exports of goods and services</td>
<td>%</td>
<td>EXP</td>
</tr>
<tr>
<td></td>
<td>(as % of GDP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Domestic Investment</td>
<td>Measured by gross fixed capital formation</td>
<td>%</td>
<td>GDI</td>
</tr>
<tr>
<td></td>
<td>(as % of GDP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corruption</td>
<td>Corruption Perception Index</td>
<td>Index</td>
<td>CPI</td>
</tr>
</tbody>
</table>

The objectives of this study are to identify the relationship between the variables and the impacts of the five IVs on the DV. Several methods of analysis are used to evaluate the variables and achieve the objectives. First, the descriptive analysis is the statistical interpretation, aggregation and introduction of key structures employed in this study. Under this analysis, we discuss the basic types of central tendency estimations such as minimum, maximum and mean of each variable. Besides, we also look into the standard deviation and skewness to measure the data dispersion.

Next, the correlation technique is applied to analyze if there are any potential relations between variables. A correlation coefficient indicates the direction, strength and significance of a bivariate relationship between all variables measured at the interval or ratio level. A perfect positive correlation is represented by +1.0 or a perfect negative correlation is represented by -1.0 that may exist between two variables. It does not specify which variables cause which, but it does indicate that the two variables are linked or correlated.
Then, we employ the regression analysis to evaluate significance of relationships between the variables. Also, it is used to determine the impacts of IVs on DV and predict how the variables will interact in the future. The following regression model or equation denotes the relationship between the DV and IVs tested in this study.

\[ GDP_t = \beta_0 + \beta_1 FDI_{1t} + \beta_2 INF_{2t} + \beta_3 EXP_{3t} + \beta_4 GDI_{4t} + \beta_5 CPI_{5t} + \epsilon_t \]

Where, \( \beta_0 \) represents the constant or intercept and \( \beta_1 \) to \( \beta_5 \) are the coefficients of the five IVs, respectively. The GDP is the DV, proxy for the economic growth while FDI, INF, EXP, GDI and CPI are the IVs as explained in the Table 1. \( \epsilon \) is the error term and \( t \) constitutes the years from 1997 to 2020.

**Results and Discussion**

**Descriptive Analysis**

Table 2

<table>
<thead>
<tr>
<th></th>
<th>GDP</th>
<th>FDI</th>
<th>INF</th>
<th>EXP</th>
<th>GDI</th>
<th>CPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>6.2983</td>
<td>5.6629</td>
<td>6.0493</td>
<td>73.2552</td>
<td>28.0293</td>
<td>28.7500</td>
</tr>
<tr>
<td>Median</td>
<td>6.3720</td>
<td>5.6544</td>
<td>4.1008</td>
<td>70.4273</td>
<td>26.9193</td>
<td>27.0000</td>
</tr>
<tr>
<td>Maximum</td>
<td>8.1521</td>
<td>9.6630</td>
<td>23.1155</td>
<td>106.7955</td>
<td>35.1069</td>
<td>37.0000</td>
</tr>
<tr>
<td>Minimum</td>
<td>2.9058</td>
<td>3.3904</td>
<td>-1.7103</td>
<td>43.1027</td>
<td>23.6443</td>
<td>24.0000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1.0866</td>
<td>1.6736</td>
<td>5.4773</td>
<td>19.9329</td>
<td>3.9873</td>
<td>3.8702</td>
</tr>
<tr>
<td>Skewness</td>
<td>-1.1465</td>
<td>0.5995</td>
<td>1.6163</td>
<td>0.3116</td>
<td>0.3347</td>
<td>0.7085</td>
</tr>
</tbody>
</table>

Table 2 shows the descriptive statistics consisting of the mean, median, maximum, minimum, standard deviation and skewness for the DV and IVs. The average economic growth rate of Vietnam for the 24-year period is approximately 6.30% with the highest growth rate at 8.15% recorded in 1997 and the lowest at 2.91% that was recorded during the pandemic in 2020. The average GDP is slightly lower than the median, 6.40%, which indicates the distribution is slightly negatively-skewed at -1.15%. The standard deviation for the GDP is 1.10% that implies Vietnam economic growth rate, on average, ranges between 5.20 to 7.40% during the 24-year period of study.

The FDI averages at 5.70% of the GDP with the median of 5.65%. This shows the data is slightly positively-skewed, with the skewness of 0.60%. Vietnam reported the highest FDI as % of GDP in 2008 with a 9.66% whilst the lowest of 3.39% in 2005. This indicates Vietnam was not much affected by the Global Financial Crisis (GFC) occurred in 2007 to 2008. The standard deviation of 1.67% could be interpreted that the country’s FDI, on average, ranges between 4.0 to 7.33% to GDP.

The average INF is 6.05% with the median 4.10%, which indicates that the distribution is positively skewed by 1.62%. Vietnam highest INF was at 23.12% in 2008 during the GFC whilst the lowest
was -1.71% in 2000, which is right after the Asian Financial Crisis (AFC) 1997 to 1999. The dispersion of the INF was quite large at +/-5.5%. As for the EXP, the average was 73.25% of the GDP with the median 70.43%. This indicates the distribution is positively skewed at 1.62%. The highest EXP was in 2019 at 106.80% right before the COVID-19 pandemic, whereas the lowest EXP was in 1997 at 43.10% during the AFC. This implies the economic growth of Vietnam more than 70% was contributed by the EXP activities. Meanwhile, the dispersion of EXP, on average, ranges within 53.32 to 93.18% of the GDP.
The GDI averages 28.03% of GDP with the median of 26.92%. This means the distribution is positively-skewed at 0.34%. The highest GDI in Vietnam was in 2007 at 35.11% while the lowest was in 2013 at 23.64%. Looking at the standard deviation, the dispersion of GDI was within 4.0% of the mean. The statistics reveal that approximately one-fourth of Vietnam economic growth was contributed by the GDI. As for the CPI, the average index is 28.75 with the median 27.0 that translate the data set is positively skewed at 0.71. The highest CPI for Vietnam was in 2019 at 37.0 whilst the lowest CPI was in 2002 and 2003 at 24.0. Moreover, the standard deviation for CPI is within 3.87 from the mean. The result shows that the economic growth of Vietnam has risen hand in hand with the improvement in the CPI.

**Correlation Analysis**

<table>
<thead>
<tr>
<th>Correlation</th>
<th>GDP</th>
<th>FDI</th>
<th>INF</th>
<th>EXP</th>
<th>GDI</th>
<th>CPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>1.0000</td>
<td>-0.0594</td>
<td>-0.0928</td>
<td>-0.2213</td>
<td>0.3016</td>
<td>-0.2578</td>
</tr>
<tr>
<td>FDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Results from the Table 3 show very weak negative correlations between GDP with FDI and INF at the values -0.0594 and -0.0928, respectively. The results are consistent with Bakari and Sofien (2019), who found FDI has negative relationship with the growth path and supported by Ouattara (2018) that revealed factors other than FDI may have played a role in emerging countries' recent growth and Dinh (2019), who explained the impact of FDI on economic growth is not necessarily positive, since it is related to the quality of the FDI-derived investment, such as type, sector, scope, duration, and the proportion of domestic businesses in the sector.
As for the INF, the finding shows that high and fluctuating inflation is bad for economic confidence, mainly because firms are uncertain of their costs and prices will be in the future. This is consistent with Dada (2017), who concluded INF has done more harm than good in the emerging ECOWAS countries and then supported by Anidiobu (2018), who claimed excessive inflation is harmful to the economy.
Meanwhile, the EXP and CPI shows weak correlations with GDP with coefficients of -0.2213 and -0.2578, respectively. The results are in support of Bakari and Sofien (2019), who evidenced that exports are having a negative impact on the growth path and Sultanuzzaman et al (2018) that
noted in the long run, exports have negative relationship with economic growth if exports grow faster than GDP. The finding on CPI is consistent with Anh (2016), who found that corruption had a negative relationship with economic growth. The result, on the other hand, contradicts Moiseev et al (2020), who stated that as a society's wealth develops, so does corruption. On the other hand, only GDI shows positive but weak correlation with the economic growth of Vietnam at the value of 0.3016. This implies the domestic investment plays crucial role and essential driver of the country's economic growth and cycle. This finding supports Kehinde (2018) and Bakari and Sofien (2019), who also revealed that domestic investment has a positive influence on real GDP or economic growth. The latest study by Kurbanov (2020) using the Granger causality test further confirmed that there is a positive bidirectional relationship between GDP (economic growth) and domestic investment.

Regression Analysis
Table 4
Regression Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>4.4475</td>
<td>6.7146</td>
<td>0.6624</td>
<td>0.5161</td>
</tr>
<tr>
<td>FDI</td>
<td>0.0267</td>
<td>0.1786</td>
<td>0.1495</td>
<td>0.8828</td>
</tr>
<tr>
<td>INF</td>
<td>-0.0441</td>
<td>0.0527</td>
<td>-0.8353</td>
<td>0.4145</td>
</tr>
<tr>
<td>EXP</td>
<td>0.0008</td>
<td>0.0346</td>
<td>0.0231</td>
<td>0.9818</td>
</tr>
<tr>
<td>GDI</td>
<td>0.0887</td>
<td>0.1069</td>
<td>0.8301</td>
<td>0.4174</td>
</tr>
<tr>
<td>CPI</td>
<td>-0.0201</td>
<td>0.2310</td>
<td>-0.0872</td>
<td>0.9315</td>
</tr>
</tbody>
</table>

Based on the coefficient values resulted from the Regression test in Table 4 above, the following equation could be generated:

\[
\text{GDP} = 4.4475 + 0.0267\text{FDI} - 0.0441\text{INF} + 0.0008\text{EXP} + 0.0887\text{GDI} - 0.0201\text{CPI}
\]

Beta coefficient value signifies how much the mean of the DV changes given a one-unit shift in the IV while holding other variables in the model constant. Therefore, the economic growth (GDP) coefficient in the regression equation is 4.4475, which represents the mean increase of economic growth in percentage for every additional 1 percentage point in GDP. If the GDP of Vietnam increases by 1 percentage point, the average economic growth increases by 444.75%.

FDI, EXP and GDI show positive beta coefficients at 0.0267, 0.0008 and 0.0887, respectively. The results suggest that the FDI, EXP and GDI have positive impacts on Vietnam economic growth. In specific we could interpret that when the FDI, EXP and GDI increase by 1% respectively, it will contribute to increase in the country’s economic growth, on average, by 2.67%, 0.08% and 8.87% respectively. Apparently, the GDI has the largest positive impact followed FDI and the lowest by EXP.

We could confirm that GDI is the most essential component that drives the country's economic growth. This finding is supported by Bakari (2017); Tiba (2019), who revealed that domestic
investment had a positive and long run beneficial impact on economic growth. Next, FDI inflows are frequently viewed as a key driver of economic growth in developing countries. So is the case of Vietnam. FDI has a direct beneficial economic growth effect in the country due to its spillover effect and this is consistent with (Mawugnon and Qiang, 2011). In addition, the finding on FDI is supported by Gutiérrez-Portilla et al (2019) that found FDI has a direct positive impact on economic growth. Nonetheless, despite the positive impacts, both GDI and FDI are statistically insignificant factors on the country’s economic growth and the finding is consistent with Bakari (2017); Bilas (2019), respectively. As for the EXP, the result of positive impact on Vietnam economy is consistent with Nguyen (2016); Kalaitzi and Chamberlain (2020); Bakari (2021), which discovered that the impact of EXP on GDP growth is positive. Similarly, the EXP is found statistically insignificant factor and this result is in support of (Mabrouki, 2017; Krit, 2017).

On the other hand, INF is found to have negative impacts on Vietnam economic growth. The results could be interpreted that when the INF increases by 1%, the average economic growth decreases by 4.41%. That is supported by Van (2020), who noted that if the inflation rate surpasses the economic growth rate in the long run, the economy will be harmed by excessive inflation, leading to a downturn. However, the INF is found to have insignificant effect, which is consistent with Aziz and Azmi (2017); Anidiobu et al (2018), who concluded that INF has insignificant impact on GDP growth.

Lastly, CPI is also found to have negative but insignificant impact on Vietnam economic growth. This result indicates for every increase of 1 percentage point in CPI, the average economic growth decreases by 2.01% that implies the more corruption, the less economic growth. Corruption is a predicate crime for money laundering that leads to a decline in the quality of infrastructure, worsening the country’s investment climate (Domashova & Politova, 2021). The finding is also consistent with Anh et al (2016); Christos et al (2018) that came out with same conclusion for the European countries.

Conclusion
This study examined annual time series data from Vietnam over a 24-year from 1997 to 2020. The findings of study revealed that all the IVs were found to have a statistically insignificant relationship with or effect on the DV, namely economic growth. Nevertheless, the positive impacts by FDI, EXP and GDI on the GDP or economic growth cannot be denied. So are the negative impacts of INF and CPI should not be taken lightly. This is because the positive and negative results of the IVs on Vietnam economic growth could be the important basis to predict what could happen in the future.

Therefore, it is advisable to the policymakers to plan and strategize on how to attract more foreign investors to invest in Vietnam particularly in the sectors that the country has competitive advantages such as electronic, electrical and textile. The government also needs to come up with incentives and stimulus packages to encourage more investments from domestic private sectors. The international relationship with foreign countries needs to be enhanced so as to increase the bilateral trade and export activities.

Aside from that, the government authority must formulate necessary policies either fiscal or monetary, to curb excessive inflation from burdening the citizens and creating the market
uncertainty. Public sector integrity and transparency should be a top priority so that the confidence of investors and citizens could be upheld.

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