

Macroeconomic Determinants of Inward Foreign Direct Investment in Vietnam: Johansen Cointegration Approach

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Abstract: In this study, the impacts of macroeconomic factors, namely economic growth, trade openness, economic stability (inflation), cost of capital (real interest rate) and VND/USD exchange rate, on inward foreign direct investment (FDI) in Vietnam during the period of 1996 – 2021 have been examined. All relevant data are collected from World Development Indicators of the World Bank. The methodology is an Augmented Dickey-Fuller test for examining integration orders, a Johansen cointegration approach for the long-run relationship and a Granger causality test for the short-run relationship. The findings show that in the long run, GDP growth and trade openness have positive impacts, exchange rate has negative impact on the FDI inflow. Furthermore, trade openness and exchange rate affect the inward FDI in the short run.

Keywords: FDI inflow, economic growth, trade openness, exchange rate, cointegration, Vietnam.

1. INTRODUCTION

1.1. Research Background

Since 1986 when the 6th National Congress of the Communist Party of Vietnam took place, Vietnam has started to liberalise its economy and quickly transformed from a centrally planned Soviet-style model to a market-oriented Western-style economy. In 1987, the Foreign Investment Law was initially enacted as the first legal framework for inward Foreign Direct Investment (FDI). As the Soviet Union and other Eastern European communist regimes collapsed in 1989 – 1991, Vietnam suddenly lost its traditional investors and was forced to find other alternatives. However, the amount of foreign investment did not accelerate until 1995 when Vietnam formally normalised diplomatic relation with its old enemy, the US, and became a full member of the Association of Southeast Asian Nations (ASEAN). As a result, the research will take the sampling period of 1996 onwards into consideration. As can be seen from Figure 1, FDI in Vietnam took a great leap between 2006 – 2007 since Vietnam became the 150th World Trade Organisation (WTO) member in 2007 after 10-year negotiation. FDI inflow experienced a sharp drop between 2008 – 2010 due to the global financial crisis before quickly recovering. The increasing trend suddenly stopped in 2020 because of the economic consequences of the Covid 19 pandemic. According to World Bank (2003), the net inward FDI is estimated at 15.7 billion USD with 1818 investment projects. Out of 121 investing nations, in terms of the FDI accumulation to December 2021, Korea was the largest investor at 18.7% of total investment (General Statistics of Vietnam, 2023). Singapore,

Japan and Taiwan ranked the second, third and fourth positions at 15.9%, 15.3% and 8.5% respectively.

1.2. Research Motivation

The average GDP growth rate of Vietnam is approximately 6.4% between 1996 and 2021, transforming Vietnam from a low income to a low-middle income economy. FDI is assumed as one of the main contributors to that rapid development (Ngo et al., 2020). This also questions which factors motivate FDI inflow in Vietnam. Many studies attempt to explain the underlying relationship between economic factors and FDI; however, they do not fully provide satisfactory answers. Furthermore, few researchers are studying that kind of relationship in Vietnam. Therefore, this research's objective is to find out which economic factors, namely economic development (GDP growth), trade openness (proportion of export and import to total output), macroeconomic stability (inflation), cost of capital financing (real interest rate) and exchange rate, have significant impacts on Vietnam's inward FDI in the short and long terms.

2. LITERATURE REVIEW

The previous literature that studies the factors determining the FDI inflow could be divided into two main groups: microeconomic and macroeconomic-based frameworks. The microeconomic approach emphasises firm-specific determinants to suggest why a company goes global and operates internationally. Some well-known studies in this area are the Product life cycle model (Vernon, 1966), the Diamond model (Porter, 1990) and the Eclectic Paradigm OLI model (Dunning, 1980). The macroeconomic approach, which mainly utilises in this study, focuses on how macroeconomic factors impact the FDI inflow. The research will investigate the underlying impact of five macroeconomic determinants:

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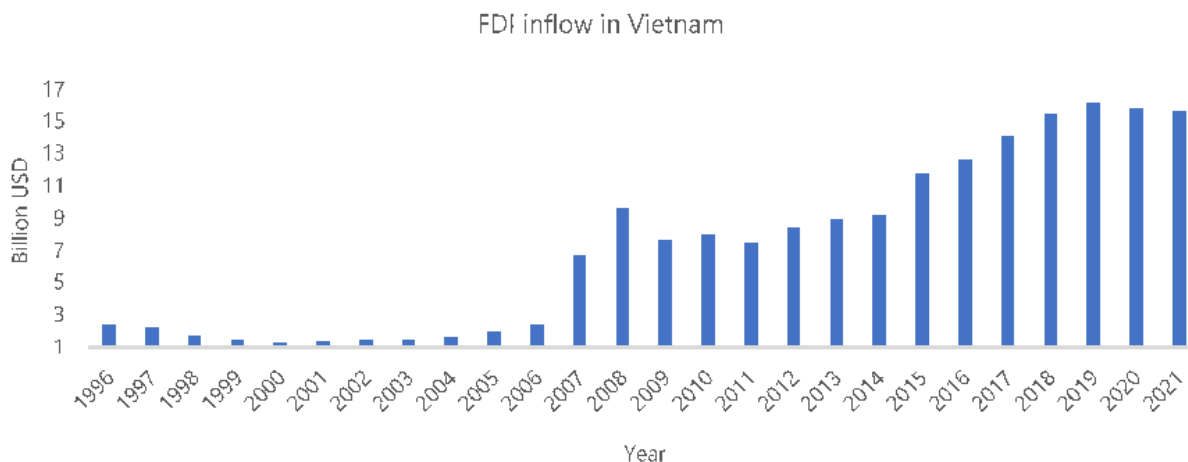


Fig. (1). Inward FDI in Vietnam from 1996 – 2021.

Source: World Bank (2023).

economic growth, trade openness, economic stability, cost of capital and real exchange rate on FDI inflow in Vietnam.

2.1. Economic Growth

According to Thaddeus and Yadirichukwu (2013), as total output grows significantly, the economy needs more capital accumulation, including both domestic and international accumulation, to fuel that growth. This argument is straightforward that output growth would raise better opportunities for more profitable outcomes, which attract more foreign investors. Furthermore, economic growth also triggers market growth, supporting foreign firms to gain more economies of scale (Duarte et al., 2017). Many other studies, such as Ledin and Stromberg (2012) and Oladipo (2010), also confirm the positive impact of economic growth on the amount of FDI inflow.

2.2. Trade Openness

Trade openness indicates the degree to which a market has international trading in goods, services, investment, and intellectual properties, with other markets globally. The indicator of trade openness is measured by the proportion of exports and imports to the total domestic output. Previous studies point out ambiguously mixed effects of openness on FDI inflow. On the one hand, as concluded by Jordaan (2004) or Mudiyansele et al. (2021), trade openness negatively influences FDI. It is argued that a higher tariff rate would lead to lower trade openness but foster foreign investors to access the domestic market through direct investment as a way of tariff jumping. On the other hand, other researchers, such as Mhlanga et al. (2010) and Ngo et al. (2020) support the positive impact of international trade on FDI inflow. It is explained that a higher level of openness implies more economic integration with the global economy; thus, it facilitates the FDI flow for profit-seeking incentives from home countries to host countries.

2.3. Economic Stability

According to Dua and Garg (2015), economic stability implies less risky outcomes for investors and improves their business confidence in host markets. Greater economic in-

stability, represented by inflation rate or price volatility, would curb foreign investment due to uncertain financial outcomes. Faeth (2009) also confirms the negative impact of inflation on FDI inflow in several African countries since the unpredictable inflation would reduce foreign investors' real return on investment. However, other studies, such as Vijayakumar et al. (2010), provide contradictory findings that price volatility does not have significant explanatory power on the FDI inflow since inflation also diminishes the cost of investment in terms of home currency.

2.4. Cost of Capital

The cost of capital or interest rate defines how international businesses want to employ capital in the host economies. If the interest rate in a host market goes lower than in other markets, it will enhance the capital borrowed in the former market and foster resource movement across borders. Therefore, it is expected that the cost of capital has an impact on FDI inflow to some extent. A study by Payaslioglu and Polat (2013) indicates that interest rate has a significantly positive effect on Turkish FDI for the period of 2004 – 2012. However, in the context of the ASEAN region for 1991 – 2009, Hoang and Bui (2015) suggest a contrasting implication that the cost of capital has an adverse impact on inward FDI.

2.5. Exchange Rate

Previous literature also points out mixed results of the potential impact of exchange rate on FDI inflow. On the one hand, Mukhtar et al. (2014) indicate that exchange rate depreciation would improve international firms' purchasing power, thus encouraging foreign investment. Furthermore, the declining value of the host currency reduces wage rates and operating expenses in the home currency, making foreign investment more attractive Qamruzzaman et al. (2019). On the other hand, the study of Thaddeus and Yadirichukwu (2013) provides a contradictory finding that a market with weak currency would not get investors' confidence and a low level of foreign investors. A sharp depreciation of the host currency would deteriorate the rate of return when foreign investors transfer profit back to their home countries.

Table 1. Description of Variables in the Research Model.

Variables	Full name	Data form	Frequency	Time span	Source
<i>FDI</i>	Inward FDI in Vietnam	Natural Logarithm	Annually	1996 - 2021	WDI
<i>GDP_G</i>	GDP growth in Vietnam	Percentage	Annually	1996 - 2021	WDI
<i>OPEN</i>	Trade openness in Vietnam	Percentage	Annually	1996 - 2021	WDI
<i>IR</i>	Real interest rate	Percentage	Annually	1996 - 2021	WDI
<i>EXC</i>	USD/VND official rate (period average)	Natural Logarithm	Annually	1996 - 2021	WDI
<i>INF</i>	Official inflation rate	Percentage	Annually	1996 - 2021	WDI

Note: WDI means World Development Indicators of World Bank (2023) database.

Table 2. Descriptive Statistics.

	FDI	GDP_G	OPEN	IR	EXC	INF
Mean	22.31044	6.371782	4.873267	2.808588	9.772274	5.872838
Median	22.74010	6.556624	4.882248	4.478337	9.721924	4.100828
Maximum	23.50333	9.340017	5.228261	10.49087	10.05227	23.11545
Minimum	20.98409	2.561551	4.529430	-20.49708	9.308608	-1.710337
Std. Dev.	0.968605	1.438539	0.186455	6.205037	0.222483	5.318356
Skewness	-0.204127	-0.912981	-0.171023	-2.265210	-0.325505	1.702901
Kurtosis	1.349375	4.520806	2.272947	8.865476	2.035246	6.341098
Jarque-Bera	3.132172	6.117569	0.699401	59.50589	1.467445	24.65929
Probability	0.208861	0.046945	0.704899	0.000000	0.480118	0.000004
Sum	580.0715	165.6663	126.7049	73.02330	254.0791	152.6938
Sum Sq. Dev.	23.45491	51.73489	0.869140	962.5620	1.237470	707.1228

3. METHODOLOGY

This research has been conducted using a quantitative approach to investigate the underlying impact of macroeconomic factors on FDI inflow in Vietnam between 1996 and 2021. Augmented Dickey-Fuller (ADF) would be used to understand the integration order of all relevant time series. While the Johansen cointegration test is employed to find long-term relationships, Granger causality is utilised to understand economic factors' short-term impact on FDI inflow.

3.1. Data Collection and Description

The study employs the Vietnam time series from a secondary database, the World Development Indicators of World Bank (2023), a reliable and openly published source. The data sample are quoted annually from 1996 (one year after US Vietnam's diplomatic normalisation) to 2021 (the most updated year in the database). The inward FDI (FDI as an abbreviation) is the only dependent factor in this research. GDP growth (GDP_G) is illustrated as the percentage change of annual GDP compared to the previous year. Trade openness (OPEN) is defined as the ratio of total exports and imports to the gross output in the same year. IR is the real interest rate, and INF is the official inflation rate. Both indicators are

quoted in percentages. EXC, which lists in logarithmic form, is defined as the amount of Vietnam dong per one US dollar on yearly average. Details are provided in Table 1 and Table 2.

3.2. Predicted Estimate and Correlation

Based on the above literature review, the study summarises the potential impacts of five macroeconomic factors, namely GDP growth, trade openness, real interest rate, exchange rate and inflation, on FDI inflow in Vietnam. The predicted impact is formally structured in Table 3, showing clear signs of GDP growth and ambiguous results for the four remaining factors. This would motivate the study to delve extensively into the unclear findings.

Table 4 below shows the results of the correlation between variables, which suggests the statistical relationship, whether they have a causal relationship or not. It is noticeable that FDI has strongly positive relationships with trade openness (0.75), exchange rate (0.85); a mildly positive relationship with GDP growth (0.31); a weakly positive relationship with inflation (0.14); and a negative relationship with interest rate (-0.10).

Table 3. Predicted impact of Macroeconomic Factors on FDI Inflow.

Variable	Expected sign	Previous Literature
GDP_G	+	Thaddeus and Yadirichukwu (2013), Pattayat (2016), Ledin and Stromberg (2012), Oladipo (2010),
OPEN	+ -	Mhlanga et al. (2010), Ngo et al. (2020) Jordaan (2004), Mudiyansele et al. (2021)
IR	+ -	Payaslioglu and Polat (2013) Hoang and Bui (2015)
EXC	- 0	Mukhtar et al. (2014), Qamruzzaman et al. (2019) Thaddeus and Yadirichukwu (2013)
INF	- 0	Dua and Garg (2015), Faeth (2009) Vijayakumar et al. (2010)

Note: +, -, 0 indicate positive, negative and insignificant relationships.

Table 4. Correlation Matrix.

	FDI	GDP_G	OPEN	IR	EXC	INF
FDI	1.000000	0.309882	0.751702	-0.104615	0.854105	0.140990
GDP_G	0.309882	1.000000	-0.365787	-0.008646	-0.424038	-0.006098
OPEN	0.751702	-0.365787	1.000000	-0.077361	0.809715	0.040993
IR	-0.104615	-0.008646	-0.077361	1.000000	-0.110893	-0.570756
EXC	0.854105	-0.424038	0.809715	-0.110893	1.000000	-0.024412
INF	0.140990	-0.006098	0.040993	-0.570756	-0.024412	1.000000

Source: The author's calculation is based on the World Development Indicators database.

3.3. Econometric Model

The study suggests the following econometric model, which covers the underlying impact of macroeconomic factors on inward FDI in Vietnam from 1996 – 2021.

$$FDI = \beta_0 + \beta_1 GDP_G + \beta_2 OPEN + \beta_3 IR + \beta_4 EXC + \beta_5 INF + \varepsilon \quad (\text{Equation 1})$$

In which, FDI stands for inward FDI, GDP_G stands for GDP growth rate, OPEN stands for trade openness, IR stands for real interest rate (cost of capital), EXC stands for exchange rate and INF stands for inflation rate (economic stability). β_0 is abbreviated for the intercept term, $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ stands for the coefficients of explanatory variables. ε stands for the disturbance term.

3.4. Unit Root Test

The study employs the Augmented Dickey-Fuller (1981) test to examine the integration order of time series data. The null hypothesis is $\mu = 1$, or the series has a unit root against the alternative hypothesis of $\mu < 1$, which indicates the stationarity.

With constant: $\Delta x_t = \lambda + \mu x_{t-1} + \sum_{i=1}^n \gamma_i \Delta y_{t-i} + u_t$ (Equation 2)

With constant and trend:

$$\Delta x_t = \lambda + \phi t + \mu x_{t-1} + \sum_{i=1}^n \gamma_i \Delta y_{t-i} + u_t \quad (\text{Equation 3})$$

In which λ is a constant term, ϕt stands for non-stochastic time trend.

3.5. Johansen Cointegration Test

If data is not stationary, the ordinary regression would lead to a spurious problem in which the standard t-test or F-test are no longer valid. Therefore, the study would use a more advanced method, namely Johansen's (1988) cointegration test, to examine the long-run impact of macroeconomic factors on the FDI inflow. The test can be quickly summarised as follows:

$$\Delta x_t = \Pi x_{t-k} + \Gamma_1 \Delta x_{t-1} + \Gamma_2 x_{t-2} + \Gamma_3 x_{t-3} + \dots + \Gamma_{m-1} \Delta x_{t-m+1} + u_t \quad (\text{Equation 4})$$

Equation 4 is a Vector Error Correction Model (VECM) in which vector Π indicates the long-run cointegration, while vector Γ_j indicates the short run the short-run impact of factor x_i . Johansen (1988) provides two related methods (trace and maximum eigenvalue statistics) to determine the number of cointegration vectors in the VECM model.

3.6. Granger Causality Test

After finding cointegration evidence in the Johansen test, the research would use Granger's (1988) causality test to explore the short-run dynamic of VECM or the potential short-run impact of economic factors on FDI inflow.

$$y_t = b_1 + \sum_{i=1}^n \beta_i x_{t-i} + \sum_{j=1}^m \gamma_j y_{t-j} + u_{1t} \quad (\text{Equation 5})$$

$$x_t = b_2 + \sum_{i=1}^n \theta_i y_{t-i} + \sum_{j=1}^m \delta_j x_{t-j} + u_{2t} \quad (\text{Equation 6})$$

The null hypothesis of the Granger test is the joint coefficient of β_i equal to zero; put differently, factor x does not

Table 5. Augmented Dickey Fuller Test Results.

Series	Levels	First Difference	Critical Values			$X_t \sim I(d)$
			10%	5%	1%	
Exogenous: constant						
FDI	-0.235808 (0)	-3.213344 (0)	-2.63	-2.98	-3.72	$I(1)**$
GDP_G	-2.565772 (1)	-4.419760 (1)	-2.63	-2.98	-3.72	$I(1)***$
OPEN	-0.877254 (0)	-3.899687 (0)	-2.63	-2.98	-3.72	$I(1)***$
IR	-2.627010 (0)	-7.970893 (0)	-2.63	-2.98	-3.72	$I(1)***$
EXC	-0.892288 (2)	-4.492542 (1)	-2.63	-2.98	-3.72	$I(1)***$
INF	-2.013997 (0)	-6.163254 (1)	-2.63	-2.98	-3.72	$I(1)***$
Exogenous: constant and linear trend						
FDI	-2.908386 (1)	-4.126191 (0)	-3.24	-3.61	-4.39	$I(1)**$
GDP_G	-2.797821 (1)	-4.168505 (1)	-3.24	-3.61	-4.39	$I(1)**$
OPEN	-2.409616 (4)	-3.780297 (0)	-3.24	-3.61	-4.39	$I(1)**$
IR	-2.506743 (0)	-7.904430 (0)	-3.24	-3.61	-4.39	$I(1)***$
EXC	-2.459941 (1)	-4.316892 (1)	-3.24	-3.61	-4.39	$I(1)**$
INF	-1.117260 (2)	-6.082243 (1)	-3.24	-3.61	-4.39	$I(1)***$

Note: ***, **, * represent the significance level at 1%, 5% and 10% respectively. The null hypothesis is the series has a unit root. I(1) represents that the series are integrated of order one. NC means no conclusion. Optimal lag lengths in parentheses are set by Akaike Information Criterion (AIC). The maximum lag length is set at 5.

Table 6. Lag length Selection.

Lag	LogL	LR	FPE	AIC	SC	HQ
1	-56.38404	NA	9.48e-05	7.698670	9.465751	8.167477
2	20.67862	77.06266*	5.24e-06*	4.276782*	7.810943*	5.214396*

Note: AIC: Akaike information criterion, SC: Schwarz information criterion, HQ: Hannan-Quinn information criterion.

Granger cause factor y . Therefore, the alternative hypothesis of at least one β_i is different from zero indicates no Granger causality from x to y .

4. EMPIRICAL FINDINGS

In this section, the study would analyse deeply the underlying long-run relationship between the inward FDI and other economic determinants (GDP growth, trade openness, interest rate, exchange rate and inflation) and any associated short-run implications. Before running the cointegration test, the research would employ the Augmented Dickey-Fuller test to examine the integration orders. Afterwards, the study would utilise the Johansen cointegration test for finding long-term relationships and the Granger test for checking short-term relationships.

4.1. Augmented Dickey-Fuller (ADF) Test

At first, the research will examine whether five variables, namely FDI, GDP_G, OPEN, IR, EXC and INF have a unit root or not by using the Augmented Dickey-Fuller test. The test applies to the original series and their first difference in two different scenarios, including constant term; constant

and linear trend. Table 5 shows that all variables are confirmed as nonstationary at original level, but stationarity at the first difference. Put differently, they are statistically integrated at order one or I(1). If the research still uses these data for running ordinary regression, it would trigger the spurious problem that makes the finding unreliable. Therefore, because of the integration of the same order, it might be a chance that the combination of macroeconomic factors have long-term impact on inward FDI. Johansen cointegration test shall be employed to confirm that possibility.

4.2. Lag Length Selection – Model Specification

Before utilising the multivariate cointegration examination, it is imperative to specify the number of lag lengths in the model. The research only examines up to a maximum of 2 lags because the sampling period is not extensive. There are three criteria for model specification, namely Akaike Information Criterion (AIC) by Akaike (1974), Schwarz Information Criterion (SIC) by Schwarz (1978) and Hannan Quinn Information Criterion (HQC) by Hannan and Quinn (1979). Table 6 provides the results of the model specification. All three criteria, AIC, SIC and HQC, suggest the lag

Table 7. Johansen Cointegration Test.

Rank	Eigenvalue	Trace Statistic	5% Critical Value	P value	Maximum Eigenvalue Statistic	5% Critical Value	P value
0	0.962150	196.4360	95.75366	0.0000	78.57921	40.07757	0.0000
1	0.906988	64.85684	69.81889	0.0623	33.00075	33.87687	0.0724
2	0.728978	60.85603	47.85613	0.0019	31.33334	27.58434	0.0157
3	0.553841	29.52269	29.79707	0.0538	19.36994	21.13162	0.0866
4	0.260610	10.15275	15.49471	0.2692	7.246310	14.26460	0.4604
5	0.114056	2.906443	3.841466	0.0882	2.906443	3.841466	0.0882
6	0.962150	196.4360	95.75366	0.0000	78.57921	40.07757	0.0000

Note: Lag length is set at 2. The critical value is proposed by MacKinnon – Haug Michelis (1999).

Table 8. Normalised Cointegration Vector.

Factors	FDI	GDP_G	OPEN	IR	EXC	INF
Coefficients	1.00000	-0.136281	-1.962960	0.003523	4.275869	0.002934
SE		(0.02776)	(0.30626)	(0.00800)	(0.18942)	(0.00771)
t statistics		-4.9093	-6.4095	0.4404	22.573	0.38054

length at two as the minimised numbers would increase the optimum of estimate accuracy and offset the problem of loss of degree of freedom.

4.3. Johansen Cointegration Test

After selecting the best lag length at two, the research shall utilise the Johansen cointegration test to confirm whether the macroeconomic factors have long-run impacts on the inward FDI. As shown in Table 7, trace and maximum eigenvalue statistics reject the null hypothesis of no cointegration at five per cent statistical significance. Furthermore, two statistics suggest only one cointegration vector in the VECM model. The Johansen cointegration test confirms the long-run relationship between the economic factors and the FDI in Vietnam in the sampling period (1996 – 2021).

4.4. Normalisation of Cointegration Vector

After employing the Johansen test, the research would normalise the cointegration vector to determine the impact of each economic factor on the FDI inflow. Table 8 below provides the finding of the normalised cointegration vector. This can be summarised in Equation 7. To sum up, the research confirms the long-term positive impacts of GDP growth, and trade openness on the FDI inflow, the negative impact of exchange rate, and no significant impacts of interest rate and inflation on the FDI inflow.

$$FDI = 0.14 GDP_G + 1.96 OPEN - 0.004 IR - 4.28 EXC - 0.003 INF + \epsilon \quad (\text{Equation 7})$$

4.5. Model Validity

The research must examine the validity of the model. Table 9 below employs Jarque Bera test to confirm the normal distribution of the residual. Table 10 below uses Portmanteau test to validate no autocorrelation for the residual. Lastly, table

11 also assures there is no problem of heteroskedasticity. All three tests (VEC Residual Normality Test, VEC Residual Portmanteau Test and VEC Residual Heteroskedasticity Test) verify the appropriateness of the chosen model.

4.6. Granger Causality Test

In the VECM model, Granger (1988) suggests a causality test to investigate the short-run relationship between variables in the model. Table 12 below illustrates the short-run Granger causality between the inward FDI and macroeconomic variables. Specifically, the study only finds out that trade openness and exchange rate have short-run implications on inward FDI. In contrast, GDP growth, interest rate and inflation do not significantly impact the short term. On the reverse side, the FDI only had a short-run effect on the volatility of the exchange rate.

Table 9. VEC Residual Normality Test.

Null Hypothesis: residuals are multivariate normal			
Factor	Jarque-Bera	df	Prob.
1	133.2410	2	0.0000
2	52.66139	2	0.0000
3	0.688267	2	0.7088
4	1.259008	2	0.5329
5	0.674061	2	0.7139
6	3.525787	2	0.1715
Joint	192.0495	12	0.0000

Table 10. VEC Residual Portmanteau Test for Autocorrelation.

Null Hypothesis: no residual autocorrelations up to lag h			
Lags	Adj Q-Stat	Prob.	df
1	14.91648	NA*	NA*
2	47.32371	0.9600	66
3	101.5863	0.4929	102
4	129.9144	0.6759	138
5	155.6182	0.8380	174

Table 11. VEC Residual Heteroskedasticity Tests: No Cross Terms (only Levels and Squares).

Null Hypothesis: Residuals are Homoscedastic		
Joint test:		
Chi-sq	df	Prob.
306.0812	294	0.3019

Table 12. Short-Run Granger Causality between FDI and Macroeconomic Variables.

Null Hypothesis:	Prob.
GDP_G does not → FDI	0.609
FDI does not → GDP_G	0.183
OPEN does not → FDI	0.008
FDI does not → OPEN	0.814
IR does not → FDI	0.868
FDI does not → IR	0.942
EXC does not → FDI	0.081
FDI does not → EXC	0.005
INF does not → FDI	0.922
FDI does not → INF	0.974

5. CONCLUSION AND DISCUSSION

In a nutshell, the study confirms the impact of macroeconomic factors on Vietnam's inward FDI in both the short and long run. In the long run, the research supports other previous literature of Thaddeus and Yadirichukwu (2013), Pattayat (2016), Ledin and Stromberg (2012), and Oladipo (2010) that economic growth has a positive effect on inward FDI because the high rate of Vietnam's output growth triggers capital accumulation from abroad and business expansion for taking advantage of economies of scale. Similar to the empirical findings of Mhlanga et al. (2010), and Ngo et al. (2020), the research finding is that trade openness has a positive impact on FDI. In this circumstance, Vietnam has a high level of trade openness (more than 100% in the last 20 years), facilitating the FDI flow across borders. This study provides contradictory evidence to Payaslioglu and Polat (2013) and Hoang and Bui (2015). Vietnamese financial system has very little influence on the FDI flow as foreign

investors prefer international funding to finance their business in Vietnam. Furthermore, there is a clear signal that USD/VND exchange rate has a long-run negative impact on the inward FDI, as Mukhtar et al. (2014), and Qamruzzaman et al. (2019) suggest. Specifically, currency devaluation makes setting up and operating expenses in Vietnam more inexpensive for foreign investors. The finding partly agrees with Vijayakumar et al. (2010) that the inflation rate has no impact on the FDI inflow. On the one hand, the high level of inflation stimulates the FDI inflow by depreciating the host currency; on the other hand, it also discourages the FDI flow since it signals economic instability.

In the short run, only trade openness and exchange rate have significant impacts on the inward FDI. Firstly, government policies on tariff and non-tariff barriers affect not only the trade flow but also the flow of investment instantly. Secondly, the volatility of the exchange rate will have a direct impact of FDI flow in a short time because this affects the value of foreign investments in terms of home currency.

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CONFLICT OF INTEREST STATEMENT

The author declares that he has no conflict of interest.

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