



FOREIGN DIRECT INVESTMENT IN ASIA: ECONOMICS, INSTITUTIONAL, AND SOCIO- CULTURAL DETERMINANTS

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Abstract. This study aims to analyze the economics, institutional, and socio-cultural determinants of Foreign Direct Investments in 18 Asian countries from 2016 – 2020. Economic determinants are represented by exchange rate depreciation and tax revenue growth; institutional determinant is represented by corruption perception; and socio-cultural determinants are represented by population growth, and English proficiency. This study uses quantitative approach and Random Effect Models to analyze the data by using Eviews 12. The results of this study indicate that exchange rate depreciation and corruption perception influence FDI positively. However, tax revenue, population growth, and English proficiency do not influence FDI. Based on the results, economics is the determinant that most influences FDI, followed by institutional determinant. Socio-cultural determinants do not influence FDI in this study. Considering the results of the study, the implication of this research is the need for government to improve economics and institutional aspect by develop policy that decrease additional costs of doing business and continue efforts in improving the integrity and credibility of their administration and transactions to attract more FDI in the future.

Keywords: Corruption Perception, English Proficiency, Exchange Rate, Foreign Direct Investment, Population Growth, Tax Revenue

I. INTRODUCTION

The development of the world is getting stronger and seems to have no boundaries between one country and another. Society around the world can access the same information in other parts of the world in the exact time. This is due to advances in transportation and communication technology that leads to globalization. Globalization is an improvement in economics, social, transportation, social life and other fields among countries across the world so the boundaries between countries become narrow (Ermawan, 2017). Globalization has integrated free market economic systems through fiscal policies and trade agreements that promote international trade.

Globalization which leads to free market economic systems has made it possible for investing capital flows from one country to another through subsidiaries. Therefore, free market economic systems increase global competition between countries across the world to attract Foreign Direct Investment as much as possible. Foreign Direct Investment is one of the most essential determinants to boost economic growth by providing job opportunities, increasing income, improving resident livelihood, and raising tax revenue (Xu & Wu, 2021). For example, China attracted Foreign Direct Investment and witnessed a significant economic

growth after 'opening-door' policy was implemented (Iqbal et al., 2019). China also managed to gain \$181 billion FDI inflows, becoming the second largest recipient country of FDI after United States in 2021. In Asian developing countries, Foreign Direct Investment also increased 19% from \$519 billion to \$619 billion in 2021 (UNCTAD, 2022). This makes Asia becomes the largest recipient of FDI globally, accounting for 40% of global FDI inflows. The FDI inflows globally can be shown in Figure 1 below.

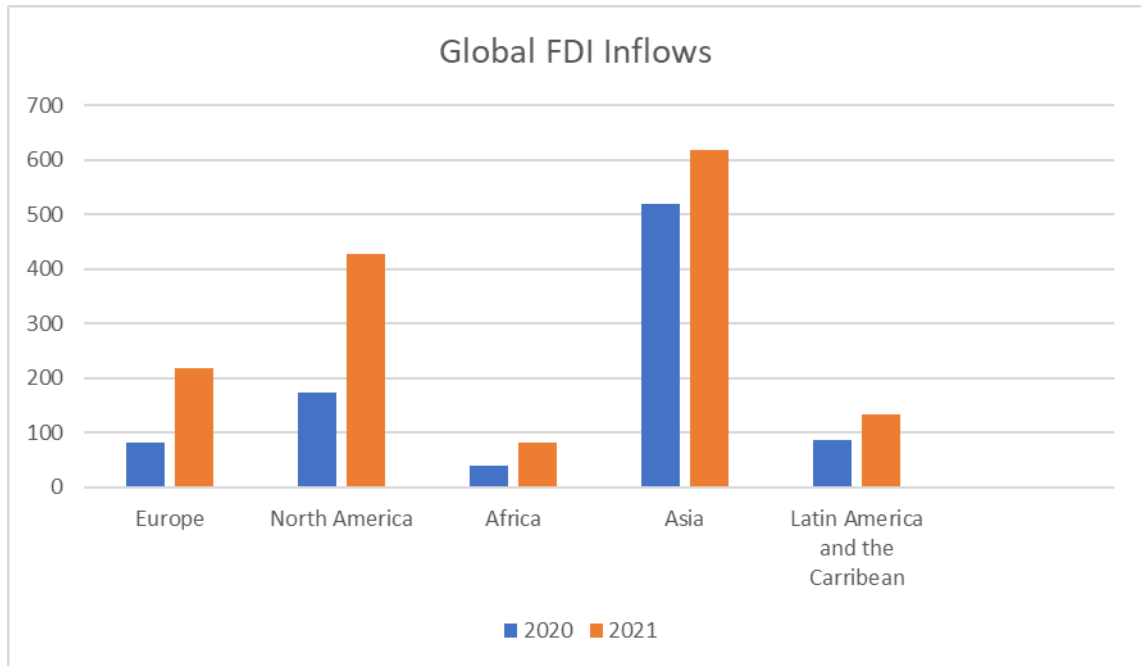


Figure 1. Global FDI Inflows

The flourishing mergers and acquisitions market, as well as the quick expansion of international project financing as a result of infrastructure stimulus measures, are the main drivers of the strong momentum for foreign direct investment. (UNCTAD, 2022). The COVID-19 pandemic is also getting better which makes foreign companies interested to invest. However, Russia-Ukraine War adds major uncertainties to FDI and the direct consequences are the financial strain caused by the war (Kalotay, 2022). FDI from Russia is expected to fall drastically in 2022 which cause developing countries find it difficult to get funds. This surely makes the competition between countries to gain FDI getting tighter.

Policymakers have to facilitate the process of investment and identify the determinants of Foreign Direct Investment to attract more investor (Jadhav, 2012). According to previous research, there are many determinants of Foreign Direct Investment but there is still no consensus among their findings which means there is no general acceptance as the truthful determinants (Nasution, 2020). According to UNCTAD, there are five determinants of FDI, which are government policy, doing business, market-related economic determinants, resources, and efficiency (Nasution, 2020). Then, researchers combine these five determinants into three determinants of FDI inflows, which are:

1. Economics Factor
2. Institutional Factor
3. Socio-cultural Factor

Economics is the main factor which influence the business cycle of investor. Investor will consider the supply and demand that will influence the company profit. Institutions are essential aspect which investor will settle down. The ability of institution is the factor that generates every countries development as it influences investment and economic stability (Fan et al., 2009). Socio-cultural also plays an important role of FDI. Investor will choose host countries that is suitable to market their product. According to the explanation, this research will focus on these three variables to analyze the determinants of FDI in Asia.

Previous research have investigated institutional, economic, and socio-cultural determinants of Foreign Direct Investment (Jadhav, 2012; Nasution, 2020; Xu & Wu, 2021). However, these research didn't specifically focused on FDI in Asia. Jadhav (2012) analyze determinants of FDI in BRICS (Brazil, Russia, India, China and South Africa) and use market size, trade openness, and natural resources as economics determinants. However, this research will be focusing on tax revenue and exchange rate depreciation because international tax competition is getting massive recently and cause "race to the bottom" among countries (Xu & Wu, 2021). Nasution (2020) analyze determinants of FDI in the world and use taxation, institutional, economic, and socio-cultural factors. However, the research period is limited, from 2010 – 2017 so there is a need for further research in the next period to verify the consistency of the research result. Xu & Wu (2021) analyze corporate income tax, trade openness, connectivity, public governance, and level of public goods provisions, and skilled and cheap labor as the determinants of FDI in Asia-Pacific region. However, these variables are not classified as the main three determinants (economics, institutional, and socio-cultural) so it can't be identified what is the most significant determinant in analyzing FDI.

There are a lot of research regarding to Foreign Direct Investment, such as several research which have been described above. However, this research will combine several variables used by previous research and analyze whether with different samples, periods, research object, and locations the result will be consistent or different with previous research. The main purpose of this research is to analyze the determinants of Foreign Direct Investment based on economic, institutional, and socio-cultural aspects in Asia. The implication of this research are expected to provide additional references and comparison for further research regarding to Foreign Direct Investment. Based on the things described above, this research is conducted with the title "Foreign Direct Investment in Asia: Economic, Institutional, and Socio-Cultural Determinants"

II. HYPOTHESIS DEVELOPMENT

A. Foreign Direct Investment

Foreign investment is one of the funding which can boost economy growth of the recipient country. Foreign investment can be done in two forms of investment, namely (Anoraga et al., 2006):

1. Portfolio Investment

Portfolio investment is investment from capital market in the form of securities instruments such as bonds and stocks. Portfolio investment only contribute funds to host countries but do not affect the development of human resource and technology for host countries.

2. Foreign Direct Investment

Foreign companies make investments through FDI for doing business intention for long-term period. The advantage of FDI are the contribution to technology transfer, the management skills transfer, and the creation of new job opportunities.

Foreign Direct Investment (FDI) is an investment that relates to a long-term relationship and able to reflect long-term interest and control by a resident entity in one economy (foreign direct investor or parent company) (Inriama & Setyowati, 2020). FDI contributes to the introduction of new management and organizational practices which make host country more efficient in productivity and stimulate economic growth (Srinivasan et al., 2011). However, FDI inflows may have a negative impact in a long-term economic growth of recipient countries. If recipient countries too depend on FDI, they have to give their profits to investor in exchange for the investment which make the countries is not financially independent. This capitalism also could cause negative effect for labour and natural resources due to the possibility of exploitation by investor countries (Ram & Zhang, 2002). Many foreign companies is not responsible to their employees and the environment which cause critical damage for recipient countries. Surely, this will be harmful for recipient countries if government does not control the FDI properly.

B. Economics Factor

Economic factors affect investment through fiscal and monetary policy in every recipient countries. Fiscal policy is government's regulation regarding to economic performance through mechanisms of government expenditure and revenue (Ibrahim, 2013). Fiscal policy focus on government spending and taxation which directly affect total demand and price. By reducing government spending and increasing taxes, fiscal policy will help to reduce total demand which able to suppress inflation. Therefore, taxation as a part of fiscal policy plays an important role to attract investor. Foreign investor will choose recipients countries which is more profitable for their companies.

Tax revenue has become one of the investors' consideration in allocating their FDI outflow. Tax revenue is a major source of GDP which contributing directly to public expenditure financing. Tax ratio, which compares tax revenue on GDP, is used to measure how much countries depends on tax revenues. Higher tax ratio shows that countries gains more tax revenue, with one of the taxpayers come from corporate. Previous studies show that lower tax revenue which measured by tax ratio will influence higher FDI inflows in Jordan (Mukhtarov et al., 2020). Data also show that almost all the global economies' Corporate Income Tax Rate have decreased sharply during the past two decades depends on countries' level development to attract FDI (Nasution, 2020). As a result of the explanation above, the following hypothesis can be drawn:

H1 : Tax revenue has a negative effect toward Foreign Direct Investment

In addition to fiscal policy, monetary policy also plays an important role to attract Foreign Direct Investment inflows. Monetary policy is central bank's instrument to control money supply, increase economic growth, and change bank reserve requirements (Brock, 2022). Monetary policy aims to keep the stability of domestic currency. The tools of monetary policy are by controlling Open Market Operations and interest rate which affect exchange

rate. When the money supply rises, the domestic currency declines in value relative to its international counterpart (Brock, 2022). Exchange rates alter the value of domestic currency on the international market, which has an impact on both the real worth of investments made and the revenue transferred (Busse et al., 2010). This also implies that investor will choose recipient countries with stable exchange rate because investors avoid uncertainty.

Exchange rate becomes one of the determinants of FDI inflows. However, the impact of exchange rate on the FDI is interdependent. Chen et al., (2006) find that the impact of exchange rate on the FDI depends on the investment motive. If the investment motive is cost oriented firm which is based on production cost, the depreciation of the exchange rate in recipient country will increase FDI inflows. Otherwise, if the investment motive is market oriented firm which is based on market size, the depreciation of the exchange rate in recipient country will decrease FDI inflows. The impact of exchange rate on the FDI also depends on the favorable or unfavorable FDI environment (Alba et al., 2009). Previous study also prove that exchange rate depreciation will attract higher FDI in short and long run (Babubudjnauth, 2020). FDI inflows were positively impacted by the real appreciation of the Singapore dollar, Malaysian ringgit, and Philippine peso. (Lily et al., 2014). Thus, from the explanation above, the hypothesis that can be concluded is:

H2 : Exchange Rate Depreciation has a positive effect toward Foreign Direct Investment

C. Institutional Factors

Institutional quality is an essential determinant of Foreign Direct Investment. Good country's institution will reflect investor's security of their money, while bad country's institution will make the investment at high risk (Nasution, 2020). The most important institutional factor toward FDI inflow is the institutional corruption control. Corruption control can be measured by Corruption Perceptions Index (CPI). This index rates nations according to how the public perceives public sector corruption based on professional assessments. If CPI is higher, the corruption control is better and vice versa.

Corruption can have both positive and negative effects to FDI. According to 'grabbing hand' theory, corruption increase the uncertainty of the investment which cause additional costs of doing business (Lucke & Eichler, 2016; Abdul et al., 2019). However, according to 'helping hand' theory, corruption acts as a bribing mechanism that speed up procedure, facilitate transactions, and simplify bureaucracy of FDI (Petrou & Thanos, 2013; Jadhav, 2012; Barassi & Zhou, 2012). The reason why the research findings are different may due to levels of corruption, host country restriction, home country restriction, and political stability (Petrou & Thanos, 2013). Thus, this research will test the consistency of previous research so the hypothesis that can be concluded is:

H3 : Corruption Perception has a positive effect toward Foreign Direct Investment

D. Socio-cultural Factors

Social and cultural conditions in the recipient country affect FDI related to the effect on market potential and reduce additional cost (Nasution, 2020). Since social and cultural conditions result from interactions between people, which lead to the development of values and principles that are externalized through behaviors, they become crucial components (Goraieb et al., 2019). Social condition can be represented by various aspects. There are a lot

of research which analyze the relationship between social condition and FDI (Nasution, 2020; Goraieb et al., 2019; Handley-schachler, 2015). One of the social aspect that is very essential to FDI flow is the population of the recipient country because population reflects the market size. Previous research show that large population will attract more FDI (Corcoran & Gillanders, 2021; Lucke & Eichler, 2016). However, Fan et al. (2009) implies that population is not the case of their research. Nasution (2020) also implies that population do not play a role in determining FDI inflows in low and middle-income countries. Thus, this research will test the consistency of previous research so the hypothesis that can be concluded is:

H4: Population Growth has a positive effect toward Foreign Direct Investment

Cultural condition also takes important role of FDI inflow. One of the cultural factors that affect FDI is language. Language is a form of expression to communicate with each other in every condition and period (Noermanzah, 2019). There are more than 7000 language worldwide, so English is chosen to be the international language which able to unite society with different language. However, if the recipient countries do not have profficient English, it may lead to communication misunderstanding which cause new barrier and additional cost. English Profficiency Index is used to measure and rank countries by testing English skills globally which is conducted by English First, the largest English course company.

Previous research show that common native language especially English-speaking countries has a positive impact toward FDI (Feng et al., 2019). However, according to Nasution (2020), language has no influence toward FDI in low and middle-income countries. Thus, this research will test the consistency of previous research so the hypothesis that can be concluded is:

H5 : Language (English profficiency) has a positive effect toward Foreign Direct Investment

III. METHOD

A. Population and Sample

The objective of this study is to ascertain how the independent variable and the dependent variable in the study's sample relate to one another by quantitative method. Panel data—a cross section and time series combination—was employed in this research. The analyzed time period is from 2016 to 2020 and the object research is Asian countries through secondary data.

B. Research Equation

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

Notes:

- Y = Foreign Direct Investment
- X₁ = Tax Revenue Growth
- X₂ = Exchange Rate Depreciation
- X₃ = Corruption Perception
- X₄ = Population Growth
- X₅ = English Profficiency

- α = Constant
 β_1 = Variable Coefficient
 ϵ = Error term

C. Operational Variable

The dependent variable of this research Foreign Direct Investment. The independent variable of this research is Tax Revenue, Exchange Rate Depreciation, Corruption Perception, Population Growth, and English Profficiency. The explanation and the measurement of each variable is described in Table 1.

Table 1. Operational Variable

No	Variable	Measurement	Source
1	Foreign Direct Investment	Foreign direct investment, net inflows (% of GDP)	Worldbank
2	Tax Revenue	Tax revenue (% of GDP)	Worldbank and CEIC Data
3	Exchange Rate Depreciation	(Annual Exchange Rate (current year) - Annual Exchange Rate (previous year)) / Annual Exchange Rate (previous year) x 100%	Worldbank
4	Corruption Perception	Corruption Perception Index	Transparency International
5	Population Growth	(Population (current year) - Population (previous year)) / Population (previous year) x 100%	Worldbank
6	English Profficiency	English Profficiency Index	English First

Three estimate models—the Common Effect Model, the Fixed Effect Model, and the Random Effects Model—will be used to assess the panel data regression model's output. The Chow, Hausman, and Lagrange Multiplier (LM) tests are used to determine the chosen model. The Random Effect Model was used in this investigation because it best matched the data. Additionally, the normality test, multicollinearity test, and heteroscedasticity test are used in this work as classical assumption testing. The results of the paired test to establish the research regression model are shown in Figure 3 below:

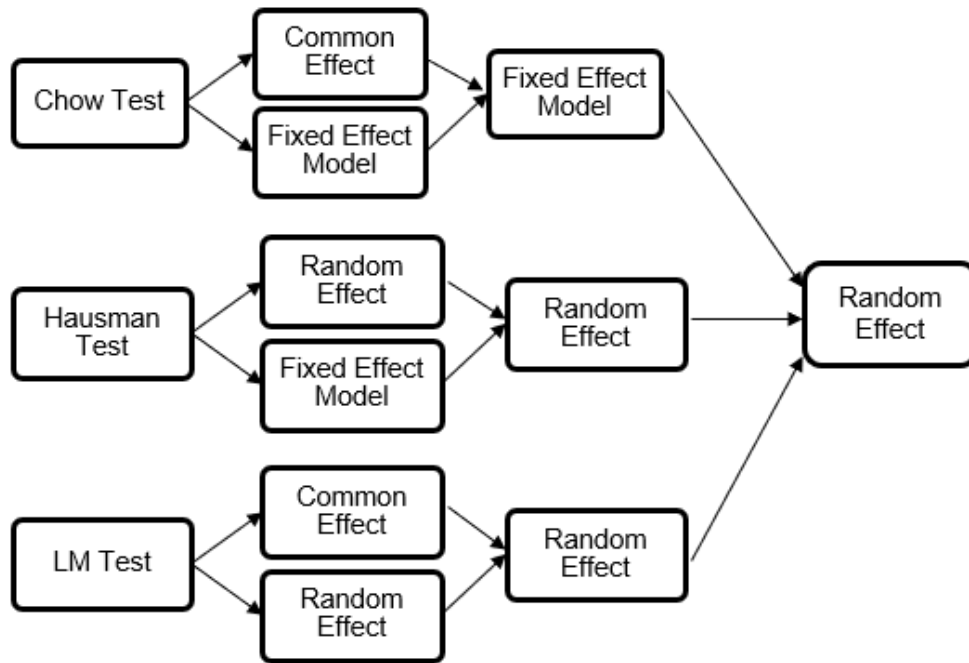


Figure 3. Paired Test Results

IV. RESULTS

Table 5. Regression Estimation Results on Random Effect Model

Dependent Variable: Y
Method: Panel EGLS (Cross-section random effects)
Date: 10/01/22 Time: 12:04
Sample: 2016 2020
Periods included: 5
Cross-sections included: 18
Total panel (balanced) observations: 90
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.785110	1.495485	-1.862370	0.0680
X1	0.077768	0.059690	1.302853	0.1962
X2	34.54462	3.339081	10.34552	0.0000
X3	0.067405	0.025496	2.643732	0.0098
X4	0.515152	0.272543	1.890170	0.0622
X5	0.000849	0.001697	0.500101	0.6183

Effects Specification		S.D.	Rho
Cross-section random		1.512479	0.7427
Idiosyncratic random		0.890261	0.2573

Weighted Statistics			
Root MSE	0.865022	R-squared	0.567844
Mean dependent var	0.458498	Adjusted R-squared	0.541908
S.D. dependent var	1.322917	S.E. of regression	0.895383
Sum squared resid	67.34389	F-statistic	22.05687
Durbin-Watson stat	1.338040	Prob(F-statistic)	0.000000

Unweighted Statistics			
R-squared	0.412195	Mean dependent var	1.793217
Sum squared resid	243.8693	Durbin-Watson stat	0.369495

Based on the regression result in Table 5, it can be concluded:

$$Y = -2.785110 + 0.077768 X_1 + 34.54452 X_2 + 0.067405 X_3 + 0.515152 X_4 + 0.000849 X_5 + \epsilon$$

From the equation, the X1 regression coefficient of 0.077768 indicates that FDI will increase by 0.077768 units for each additional unit of X1 (Tax Revenue). The X2 regression coefficient of 34.54452 indicates that FDI will increase by 34.54452 units for each additional unit of X2 (Exchange Rate Depreciation). The coefficient is higher than others because the data was transformed by square transform. This data transform aims to change the data measurement scale into another form in order to meet the assumptions of the analysis. The X3 regression coefficient of 0.067405 indicates that FDI will increase by 0.067405 units for each additional unit of X3 (Corruption Perception). The X4 regression coefficient of 0.515152 indicates that FDI will increase by 0.515152 units for each additional unit of X4 (Population Growth). The X5 regression coefficient of 0.000849 indicates that FDI will increase by 0.000849 units for each additional unit of X5 (English Proficiency).

Based on regression result, the hypothesis will be accepted when the significant value was less than 0.05. Therefore, Hypothesis 2 and Hypothesis 3 were accepted so exchange rate depreciation and corruption index have significant effect toward Foreign Direct Investment while Hypothesis 1, Hypothesis 4, and Hypothesis 5 were rejected so tax revenue, population growth, and English proficiency do not have significant effect toward Foreign Direct Investment.

A. The Effect of Economic Factors on the Foreign Direct Investment

This research finds that tax revenue does not have effect on FDI. It means that foreign companies does not consider the taxation in host countries. Higher tax revenue may increase the development of infrastructure of countries or decrease the investor's intention because the tax expense will be higher. However, from this research prove that tax revenue is an unimportant factor. This may be caused by the different in standard of recognizing tax revenue. Every country has their own method to collect tax revenue so it will cause different result of tax ratio between countries. Therefore, the result of the research is different from Mukhtarov et al., (2020) which implies lower tax revenue which measured by tax ratio will influence higher FDI inflows in Jordan.

This research finds that exchange rate depreciation has positive effect on FDI. The results of this study are consistent with the results of previous studies conducted by Babubudjnauth (2020), Alba et al., (2009), and Chen et al., (2006). The source of FDI is a country with a stronger currency value while weaker currency country will be the recipient or destination country of FDI. Although exchange rate usually has a negative effect on FDI inflows, exchange rate is interdependent factor toward FDI. If the FDI objective is to reexport or reduce cost purpose, exchange rate depreciation will attract higher FDI inflow. Otherwise, if the FDI objective is to serve local market, exchange rate appreciation will attract higher FDI inflow because domestic consumer has higher purchasing power. This means that most Asian countries' investor aims is are cost-oriented so government have to develop policies to decrease additional cost for foreign investor.



B. The Effect of Institutional Factors on the Foreign Direct Investment

This research finds that corruption perception has positive effect on FDI. The results of this study are consistent with the results of previous studies conducted by Lucke & Eichler (2016) and Abdul et al., (2019). This is also consistent with 'grabbing hand' theory which implies corruption increase the uncertainty of the investment which cause additional costs of doing business. Although corruption acts as a bribing mechanism that speed up procedure, facilitate transactions, and simplify bureaucracy of FDI as stated in 'helping hand' theory, it seems most Asian countries' investor still prioritize honesty and integrity. This means that governments need to continue efforts in improving the integrity and credibility of their administration and transactions to attract more FDI in the future.

C. The Effect of Socio-Cultural Factors on the Foreign Direct Investment

This research finds that population growth has no effect on FDI. The results of this study is consistent with the result of previous studies conducted by Fan et al. (2009). Although population reflects the market size, investor also consider other factor which is more dominant. Population also does not reflect the market segment of their company, it only reflects the market size which does not always related. Population itself is not enough to attract FDI if it is not balanced with improvement of human resources, development of infrastructures, labour cost, etc.

This research finds that English profficiency has no effect on FDI. The results of this study are consistent with the result of previous studies conducted by Nasution (2020). Although the recipient countries do not have profficient English may lead to communication misunderstanding which cause new barrier and additional cost, investor consider other factor which is more significant. By using technology, learning English can be done with lower cost and time so language is not a problem anymore.

V. CONCLUSION

This study aims to analyze the economics, institutional, and socio-cultural determinants of Foreign Direct Investments in Asian Countries. Economic determinants are represented by exchange rate depreciation and tax revenue growth; institutional determinant is represented by corruption perception; and socio-cultural determinants are represented by population growth and English profficiency. Based on hypothesis testing, the results of this study indicate that exchange rate depreciation and corruption perception influence FDI positively. However, tax revenue, population growth, and English profficiency do not influence FDI. Based on the results, economics is the determinant that most influences FDI, followed by institutional determinant. Socio-cultural determinants do not influence FDI in this study. Considering the results of the study, the implication of this research is the need for government to improve economics and institutional aspect by develop policy that decrease additional costs of doing business and continue efforts in improving the integrity and credibility of their administration and transactions to attract more FDI in the future.