CoMBInES
CONFERENCE ON MANAGEMENT, BUSINESS, INNOVATION, EDUCATION AND SOCIAL SCIENCES

Volume 1 No 1 (2021)

Received : February 01, 2021
Accepted : February 05, 2021
Published : February 24, 2021

Conference on Management, Business, Innovation, Education and Social Science
https://journal.uib.ac.id/index.php/combines

The Dırect Impact Of Corruptıon On Foreıgn Dırect Investment In Brıc Countrıes

Yin-Li Tun[1] and Dharshinie Nalliah[2]
tunyl@utar.edu.my

[1,2] Faculty of Accountancy and Management, Universiti Tunku Abdul Rahman, Selangor, Malaysia

Abstract

This paper investigates the direct impact of corruption to foreign direct investment in BRIC countries, namely Brazil, Russia, India and China, which dates from 1997 to 2019. The estimation method used in this study is Pooled Ordinary Least Square (POLS) method. The estimation of this study reveals that corruption, interest rate and exchange rate have a negative relationship toward foreign direct investment whereas gross domestic product and trade to openness has a positive relationship with foreign direct investment. Moreover, exchange rate and trade to openness is significant to foreign direct investment and corruption, interest rate and gross domestic product is not significant toward foreign direct investment. The insignificant result on corruption to foreign direct investment might hints the researcher where further testing using more advance method is required to obtain accurate and robust result.

Keywords:

Foreign Direct Investment, Corruption, Pooled Ordinary Least Square, BRIC.

Introduction

Corruption is defined as the abuse resources and power for personal benefit or gain (Dong,2011). According to Windsor (2017), corruption is actually "illegal payment under the home country and host country law in any form or level by either domestic or foreign companies to government official and political party, commercial enterprise personnel, and agents. Corruption can be divided into bribe or extortion. Bribe is known as dishonest way of persuading a person to act in favour of the person that is willing give bribe as gift of money or other reward whereas extortion is known as obtaining something like money or other rewards using force or threat (Windsor,2017).

In the 21st century, corruption has become a serious problem around the globe especially in BRIC. Although through Globalization, the countries are growing in all aspect so is corruption. Developed countries like US, UK, Australia and many more are gaining benefits and comparative advantages by venturing into emerging economies but corruption makes think twice before venturing into them so this does not only effect the home but also the host country in many perspective like employment, country growth , cost of production and many more.

As for BRIC (Brazil, Russia, India and China) countries, these countries with large population and low wage labour, are potentially targeted by foreign investors to set up foreign production plants in their boundaries. According to WIR (2020), China, Brazil and India ranked in top ten of the list of popular host country for foreign direct investment (FDI) inflows. They have been ranked at 2nd, 6th and 9th respectively in the list. While Russia is ranked at 15th position. These shows that BRIC countries are an important players receiving FDI and able to make a globally impact to the world economies.

Corruption is given importance in a country when political and economic environment is weak and restricted, loops holes in the legislation and professional ethics and also habit, practice and tradition in that country. When a country has a very stringent economic activity, then there are very high possibility for corruption as investor or individual will be willing to pay corruption to government official in order to get pass the restriction. Moreover, corruption play an important role when the government official are receiving a low salary especially in weak or developing countries. Moreover, when people in higher level of politics is corrupted, people working in other levels and public will be influenced very easily as both the public and people working in other level will think it is not wrong to take bribery as it will become a norm.

Loop holes in legislation and professional ethic also promotes corruption as it could lead to criminal offense, and the prosecution and sanctioning and lack of professional ethics is a particular issue, as the administration requires different amounts of time to develop or change its ethics and professional standards, which is well known in countries that can change the ethics an professional standards overnight and are able to remained the same as in socialism. It is precisely in the transition countries that the "softer" acts of corruption are often considered to be acceptable and justifiable. Habit, practice and tradition is another reason that causes corruption. This is because in some countries corruption is accepted, and in some countries corruption is forbidden. This can be witness in the European countries where the Northern countries forbids corruption and in southern countries corruption is socially acceptable. If corruption is actually practice it will turn into a habit, hence a widely practiced habit will become a tradition as it is in the Southern countries of Europe.

This study is aimed to identify the impact of corruption in BRIC countries. Although FDI inflows to these countries are huge in amount, it is interesting to examine whether corruption greases or harms the economic activities. In this study we will look into both the positive and the negative effect of corruption. Increase transaction cost for investors as international investors are paying bribe to the local government in order to obtain license, permit, security, taxes, utilities as well as commission for politician for a huge contract. All these extra costs increase the cost of the overall foreign direct investment and by implication the returns are reduced. One of the qualitative costs of corruption is loss of a country's reputation in the international business space especially with the current indexing pattern introduced by Transparency International to rank corrupt countries according to the level of corruption found among international business participants and government officials in a country.

Corruption provides quick money which makes processes effective and enables investors to jump legal protocols in businesses. The positive effect of corruption is that corruption improves economic growth in nations where frail legal system exists especially the countries that have remarkable economic liberty. Another benefit of corruption found is that bribes are used to augment low wages and taxes paid to the government are low in order to attract FDI. In the presence of corruption, there is productivity and worrisome government regulations are evaded to enhance quick business decisions. Therefore, corruption comprises an implicit arrangement among companies, pressure groups and citizens who are making effort to satisfy their selfish interests and exploit private benefits by paying bribes, as well as government officials and politicians that also tend to maximize their revenue by unlawful means using their positions and the authority they possess.

Literature Review

The first theory being introduced is the "grabbing hand" theory by Bardhan (1997) which refers to increase transaction cost for investors. The grabbing hand theory explain that international investors are paying bribe to the local government in order to obtain license, permit, security, taxes, utilities as well as commission for politician for a huge contract. All these extra costs increase the cost of the overall foreign direct investment and by implication the returns are reduced. Furthermore, this theory emphasizes that corruption increases the financial cost of FDI and at the same has inherent qualitative costs such as loss of integrity on the part of the country involved and violation of legal procedures of the nation concerned. In contrast, Bardhan (1997) also explains the "helping hand" theory which corruption help in "greasing the wheels of commerce" in an economy where there is a fragile legal system.

One of the famous FDI theory is Dunning's O-L-I paradigm (Dunning, 1998). This paradigm is clearly explained the reason why a firm will invest globally. The O-L-I paradigm is representing the "Ownership", "Locational" and "International" advantages aspects of a firm readiness to go abroad. "Ownership" advantage refers to the possession of specific asset (tangible or intangible) which a firm must has and allowing the firms to continue stay in comparative advantage environment. "Locational" advantage refers to the locational attractiveness of the host country which offer to foreign investors such as resources endowments markets, tax incentives, barrier to trade, international transportation and communication cost, institutional quality, etc. "International" advantage refers to the firm choose to operate by themselves rather than outsourcing to foreign firms in foreign market. This is the best way to have full control power on this own operation and uncertainties (cost of moral hazard, cost of adverse selection, government intervention, etc) are avoidable. When a firm equips with O-L-I advantages, it is matured to go abroad. In this study, we aim to investigate the role of corruption in determining the FDI inflow where corruption is part of the "Locational" advantage as mentioned above. High level of corruption will bring impact to the attractiveness of a country in attracting FDI.

in empirical studies, Omodero (2019) Investigates the effect of corruption on FDI inflows in Nigeria. Ordinary Least Squares (OLS) technique was used to carry out the multiple regression. The findings indicate that corruption has a significant positive influence on FDI. The implication is that the poor legal framework and institutional qualities in Nigeria are helping corruption to thrive in all areas of Nigeria's economy and might ruin the young generation if nothing is done urgently. The study finds support for helping hand theory of corruption and FDI.

Helmy (2013) investigates the link between corruption and FDI flows to the Middle East and North Africa (MENA) and assesses whether or not corruption has more importance than other FDI determinants. There were 21 MENA countries used in this study. In both cases, the rise of corruption does not negatively influence FDI.

Alemu (2012) investigates the effects of corruption on FDI inflow from 1995 to 2009 in 16 Asian economies. The empirical result suggests that a 1 percent increase in corruption level triggers an approximately 9.1 percentage point decrease in FDI inflow. Thus, some of the arguments that corruption does not keep FDI out of corrupt countries are either flawed or invalid. The results of this study suggest that some of the countries characterized by a high level of corruption but have remarkable FDI inflows could even double their inward FDI's if they manage to reduce the present pervasive level of corruption.

Bayar and Alakbarov (2016) investigates the interaction between corruption and FDI inflows in 23 emerging market economies during the period 2002-2014. They found that control of corruption and rule of law had no statistically significant impact on attraction of foreign direct investments in overall panel. The results suggested that there was long run relationship among the variables, but both control of corruption and rule of law had no statistically significant impact on FDI inflows in overall panel analysis.

Habib and Zurawicki (2002) examines the impact of corruption on FDI. There were 89 countries used in this study and out of the 89 countries Germany, Italy, Japan, Korea, Spain, UK and the US were included as the home country. The results suggest that foreign investors generally avoid corruption because it is considered wrong and it can create operational inefficiencies. The negative effect of corruption on FDI found in this study suggests that firms do not support corruption. However, the study also found a negative effect due to the difference in corruption levels between the home and host countries. This further suggests that foreign firms are unwilling to deal with the planning and operational pitfalls related to an environment with a different corruption level.

Research Methods

This study consists of 4 countries across This is a panel study and the relationship between corruption and FDI is analyzed by using Pool Ordinary Least Square (POLS). There are plenty of methodology selections for this study, however, only the result of POLS will be presented in this paper. Below is the model specification for this study.

$$FDI_{it} = \beta_0 + \beta_1 COR_{it} + \beta_2 ER_{it} + \beta_3 IR_{it} + \beta_4 GDP_{it} + \beta_5 TTO_{it} + \varepsilon_{it} \qquad \text{Eq(1)}$$

where FDI is measured in percentage of GDP, COR is referring to corruption which measure using corruption perception index, ER represents official exchange rate, IR refers to real interest rate, GDP is real gross domestic production, TTO is trade openness, u is the countries specific effect and ε is the white noise error term. The data are all extracted from World Development Indicator data base except corruption perception index which is collected from Transparency International. The data covers from 1997 to 2019.

Results and Discussion

The analysis will first start with analyzing the descriptive statistic of all the variables. Descriptive Analysis is the term given to the investigation of information that portrays, show or sum up information in an important manner with the end goal that summarize out of the information. Table 6.1 illustrates the descriptive statistic for all variables. For variable GDP, value listed in the table is in billion term. Mean value for GDP would be $ 2.64 billion.

Table 6.1 Descriptive Statistic

Variable	**Mean**	**Std. Dev**	**Min**	**Max**
FDI	2.536	1.243	0.472	5.034
COR	14.679	16.176	2.100	43.000
ER	23.924	22.260	1.078	70.420
IR	-8.168	20.985	-77.616	19.616
GDP	2.640	2.360	0.728	11.500
TTO	2.439	4.368	0.000	12.872

Source: World Developement Indicator and Transperancy International

Table 6.2 shows the estimated result by using POLS estimator. Interestingly, corruption is negative but not significant to FDI. This is not surprising as Habib and Zurawicki (2002) and Bayar and Alakbarov (2016) also found same result. For other control variable, only exchange rate and trade openness show significant results to FDI. However, this result should be interpreted with caution. This is due to the POLS estimator assumes the model is homogeneity and all the country specific effects have been ignored in this estimator. To check the model reliability, four diagnostic tests have been used to check this model. First, the p-value of the Jarque-Bera normality test shows it is failed to reject the null hypothesis. The data is normally distributed. Next, the multicollinearity is tested using the variance inflation factor (VIF) and result shows the model do not possess multicollinearity issue. Wald and Wooldridge test are applied to test heteroscedasticity and serial correlation of the data respectively. However, both tests reject the null hypothesis and conclude that the model exist heteroscedasticity and serial correlation problems.

Table 6.2 Estimated result for BRIC using POLS

Variable	**Coeff.**	**Std. Err.**	**P-Value**
Dependent: FDI			
COR	-0.010	0.009	0.232
Log ER	-1.208	0.408	0.004

IR	-0.010	0.009	0.261
Log GDP	0.651	0.628	0.303
Log TTO	1.038	0.445	0.022
CONSTANT	-3.091	8.182	0.707
Number of observations	92	92	92
Number of countries	4	4	4

Conclusions

This paper is aimed to analyse the direct impact of corruption on FDI in BRIC countries. There are few reasons to support corruption is an important factor that able to determine the decision-making process of foreign investors. Firstly, corruption increase the cost of doing business. Secondly, corruption also increase the uncertainty of doing business. Thirdly, corruption might alter the fairness in resources allocation in the economy. By using data coverage from 1997-2019, the result from POLS estimator shows corruption is negative but not significant relationship with FDI. However, this result is subject to doubt because POLS estimator does not consider the countries specific effect in estimation. Therefore, a more advance method is needed to test upon the data, but it is beyond the scope of this paper.

References

Alemu, A. M. (2012). Effects of corruption on FDI inflow in Asian economies. *Seoul Journal of Economics*, *25*(4), 387-412.

Bardhan, P. (1997). Corruption and development: a review of issues. *Journal of economic literature*, *35*(3), 1320-1346.

Bayar, Y., & Alakbarov, N. (2016). Corruption and foreign direct investment inflows in emerging market economies. *Ecoforum Journal*, *5*(2).

Dong, D (2011). *The Causes and Consequences of Corruption.* [Doctoral dissertation, Queensland University of Techonology]. https://eprints.qut.edu.au/44126/1/Bin_Dong_Thesis.pdf

Dunning, J. H. (1998). Location and the Multinational Enterprise: A Neglected Factor?. *Journal of International Business Studies*, 29(1), 45-66.

Habib, M., & Zurawicki, L. (2002). Corruption and foreign direct investment. *Journal of International Business Studies, 33*(2), 291–307.

Helmy, H. E. (2013). The impact of corruption on FDI: is MENA an exception?. *International Review of Applied Economics*, *27*(4), 491-514.

Omodero, C. O. (2019). Effect of corruption on foreign direct investment inflows in Nigeria. *Studia Universitatis „Vasile Goldis" Arad–Economics Series*, *29*(2), 54-66.

Windsor, D. (2017). The role of multinationals in corruption in the Asia-Pacific region. In *The Changing Face of Corruption in the Asia Pacific* (pp. 57-70). Elsevier.

WIR (2020). *World Investment Report: Reforming International Investment Governance.* UNCTAD. https://unctad.org/system/files/official-document/wir2015_en.pdf

World Bank (2020). *Russia's Economy Loses Momentum Amidst COVID-19 Resurgence; Awaits Relief from Vaccine* (Report No.44). The World Bank. https://openknowledge.worldbank.org/bitstream/handle/10986/34950/Russia-Economic-Report-Russias-Economy-Loses-Momentum-Amidst-COVID-19-Resurgence-Awaits-Relief-from-Vaccine.pdf?sequence=7&isAllowed=y

World Bank (2020). *India Development Update.* The World Bank. http://documents.worldbank.org/curated/en/342001596823446299/India-Development-Update

World Bank (2020). *Leaning Forward: COVID-19 and China's Reform Agenda.* The World Bank. http://pubdocs.worldbank.org/en/438251594293079547/ceu-July-2020-en.pdf