

## PalArch's Journal of Archaeology of Egypt / Egyptology

### CORRUPTION, ECONOMIC GROWTH AND FOREIGN DIRECT INVESTMENT IN BRIC COUNTRIES

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**Kehkashan Nizam, Osama Liaquat. Corruption, Economic Growth and Foreign Direct Investment in Bric Countries -- Palarch's Journal of Archaeology of Egypt/Egyptology 19(3), 100-116. ISSN 1567-214x**

**Keywords: Corruption, Investment, Growth, BRIC**

#### ABSTRACT

The objective of this research is to investigate the impact of Corruption, FDI and Investments on Economic Growth (GDP). This study explains the vigorous relation between corruption, FDI and economic growth in BRIC Countries (Brazil, Russia, India, and China). The Secondary data in this study is sourced from Transparency International (Corruption Perception Index) and (World Bank) Statistics database. The data period ranges from 1998 till 2017. This study uses time series to examine the casual relationship, therefore Unit root tests and panel least square regression are applied. The results illustrates that there is a negative and significant relationship between economic growth (GDP) and corruption, which mean that whenever corruption increases, GDP shall be decreased. However, when corruption decreases, the GDP will be increased. The results shows that the relationship between GDP and FDI is positive and significant. The results shows that the relationship between GDP and domestic investment is positive and significant. This research can also be utilized by government representatives to review how corruption and political stability become obstacles for country growth and deters the inflow of investments in a country. This study provides as growing literature to explore the studies regarding the determinants and consequences of corruption driving diverse outcomes.

#### INTRODUCTION

It has been identified from past studies that international participation for economic growth is one of the most Acknowledge and Fundamental phenomenon. Many countries became economically developed through opening their markets for international organizations for investments and development (Gereffi, 2005). As economic growth has been the major challenge for the developing countries around the world, the advancement at Foreign

direct investment (FDI) is being treated as critical growth parameter in low income and developing countries (Epaphra & Massawe, 2017). It has been highlighted in the study of Oumar & Sama (2015) that the tendencies of globalization have amplified the extent of investment, which is directing into different countries around the world. While at the same time, political stability and corruption linger to be core obstacles to social and economic development in these countries. Economic growth indicates the development of the country; when the economy is prosperous; organizations will tend to seize rewards of these positive business circumstances, and will be likely to commence new ventures. This will eventually increase the demand for investment (Levin and Satarov, 2000). The study also reflects that the economy of countries could not create and advance without good economic strategies. The essential point of monetary strategies is to improve to advance the prosperity of the overall population.

As stated by international societies and economists that the most prevailing challenge for the society is the corruption in under developed countries (Getz & Volkema, 2001). As contacts among non-corrupt and corrupt countries intensify since the last decade corruption itself does not prevent FDI in fast-growing economies like Brazil, Thailand, China, and Mexico, who attracts large inflows of FDI despite being perceived highly corrupted (Hsu, 2007). As per World Investment Report, the opportunities for employment, increases in productivity, constant development (long-term) is enhanced by FDI, serve as the main aspect of inflowing of capital for the hosting countries (Inekwe, 2013). Reiter & Steensma (2010) stated in their study that corruption is an absolute complex manifestation. Its effect on economic development and its origins lie in political and bureaucratic institutions. It allows governmental as well as private sector institutions to intervene unnecessarily which undermines their ability to implement policies established for the greater good of the economy.

The growth of the country deters by corruption, thus interfering in the activities of business, by moderating investments, by hampering the functional activities of institutions and by reducing anticipated country economic policies. The economic theory shapes that the high level of corruption startles investors in making an investment in that country (Kwok & Tadesse, 2006). According to the study of Buckley & Ruane (2006), due to the shortage of capital in terms of making the investment and also to acquire needed economic growth developing countries needed capital from external sources, thus foreign direct investment (FDI) assists as an external source of capital thus enhancing economic growth. It has been observed and studied that the developed countries utilize their financial resources in foreign direct investment (FDI).

In recent years, new results and studies by many researchers on the significances and factors of corruption have been conducted and it has been observed that higher levels of corruption have a larger impact on economic outlook to worldwide trade and reliance on natural resources (Larraín & Tavares, 2004). The main aim or the basic problem is to study the vigorous relation among the variables i.e.; Corruption, FDI and economic growth BRIC Countries. The rationale behind opting BRIC Countries for this study is based on the fact these four countries stand alongside the largest growing emerging markets of the

world and their economies are progressing as similar pace of adopting advance economic development. At the same time, all these countries are facing challenges like corruption in their various economic and political sectors. The presence of fragile institutions, lack of procurement activities of Government, the absence of transparency in revenue and system of audit are the main fact for the emergence of corruption (Akramov & Shreedhar, 2012).

In recent years, many researchers explored studies regarding the determinants and consequences of corruption driving diverse outcomes. There are various facts, which are associated with the levels of corruption based on high to low such as high levels of the tariff, reliance on natural resources and low acquaintance to international trade. Despite fact corruption, it has a tendency to reduce the investment and deter economic growth. Regardless of various researches on the relationship on corruption and FDI, the result is still confusing, not showing the exact mechanism of resolutions effecting country prosperity and growth (Haggard & Kaufman, 1995). There are many developing and even developed countries in the world facing challenges of corruption and its adverse impacts on their economy; however, opting BRIC Countries (Brazil, Russia, India, China) for this study is due to the fact that they stand alongside the largest growing emerging markets and their economies are progressing as similar pace of adopting advance economic development. BRIC countries are facing challenges like corruption in their various economic and political sectors. Corruption affects economy and FDI directly by violating the perception of Country's stability and quality of an investment potential, thus it ultimately impacts the country's economic growth. This study uses quantitative research approach. The Secondary data in this study is sourced from Transparency International (Corruption Perception Index) and World Bank Statistics database.

Corruption hampers economic growth as it diverts important resources and capital towards non economical projects and as FDI is one of the direct sources of capital acquisition, the irregular distribution of resources in developing countries restricts the prospective economic growth resulting in erosion of capital and making it difficult for different sectors of economy to attain funds to perform. Corruption directly affects inflows of FDI, which restrict an economic growth being an important source of investment in Country's economy. This study will highlight an impact of corruption on (FDI) and economic outlook which seems to be the major factor affecting the development perceived with the capital formation and business activities in countries' economy.

The study has been organized into 05 chapters which are as follows: The Chapter no. 1 pertains to Introduction. In this chapter we have discussed background of studies, problem statement, research questions, research objective and significance of the study. In Chapter no.2, the literature review, theoretical background, empirical review and conceptual framework is covered. In this chapter we have discussed the theories about variables and their relationships / linkage. The chapter no.3, defines the research purpose, research approach, research design and data collection procedure. In addition to this, statistical techniques are also the part of this chapter. In Chapter No.4, Data

Analysis, its results, and interpretation is performed. This chapter covers the results of analysis performed on collected data. In Chapter No. 5, the conclusion of study and recommendation is made.

## **LITERATURE REVIEW**

### ***Theoretical background***

Various researches have been conducted on economic growth and FDI foreign direct investment but the topic of discussion in our research will be corruption and its impact on the economic growth of BRIC Countries and their foreign direct investments (FDI). The key variables on which our research is mainly based on corruption, economic growth, and foreign direct investment as well as the investment behaviour as these are the main components effecting the economic prosperity and (FDI) foreign direct investment. Previous studies are based on the institutional bases of foreign direct investment (FDI), which include economic freedom and governance. According to the study of Khan (2012), the multinational organisations have progressively turned out to be more vulnerable to the factors based on their efficiency, seeking aspect that is their motivation has been diverted from market and resource seeking.

According to the study of Kepaptsoglou, Karlaftis & Tsamboulas (2010), the best model to study FDI flows is the Gravity Model, which cover source to objective economies. The main aim of the model is to assess the pattern of FDI by focusing on two main factors, first is the distance between the centers of the economies and second is the size of the market of both economies. By measuring the main gravity variable, a various variable can also be segmented in the model considering their impacts. This Gravity Model is appropriate for examining, testing and exploring the FDI flows and bilateral trade. The study of Swaleheen (2011) stated that the proxy for economic growth is the gross domestic product (GDP) and proxy of corruption is the corruption index. The ramifications show that economy cannot develop quickly denied zero resistance to corruption. There are various policies that are helpful in promoting the economic growth relied upon to be supported in lessening corruption and destitution with the goal that the level of monetary development can be moved forward.

### ***Producer Theory and Game Theory:***

This theory is based on the parameter which reflects the corruption level of host countries, which could have been neglected by foreign investors. The multinational companies before ensures to examine the benefits of entering into foreign markets. One of the major advantage which foreign company is looking for while entering into another country's market that it give them an edge over local companies, which they are actually not enjoying at their market of origin. These advantages may include location benefits. The decision of investment in host country is purely based on advantages which multinational companies / investors can force in a country. This theory highlights the impact of corruption, which adversely turns out deterring corporation's ability to get benefited of host country location. The producer theory is based on firm's production function

and behaviour of an individual company, whereas the game theory is used to examine the investment decision of foreign investor in host country, which is solely based on country's political and economic outlook. This theory demonstrates the level of corruption and its impacts on country's economic growth, according to the level of corruption. According to this theory, the corruption has a positive effect on FDI, where the quality of law and order / institutions is good, however at the same time it has a negative effect, where law and order situation / institutional quality is low (Anselm, 2016).

#### ***Kindle Berger Theory:***

According to Kindle Berger (1969) in his theory state that everyone just agrees on one point that FDI will no longer exist in perfect competent market. Thus, if there are no barriers in trade and market perform effective only in this case international trade will work and countries can participate in international market. The theory proposed that foreign direct investment can work in only two scenarios i.e. foreign investment must be viable so that they are allowed to take advantages and market has to be imperfect.

#### ***Classical Economic Theory of Corruption:***

This theory perceives corruption as one way among others of allocating scarce resources, where the rational behaviour of market actors in respect to incentives and rents explicates corruption outcomes (Mishra, 2005). It state that corruption happens when private wealth collapses with public power. It has been established that corruption has negative impact on investment. Corruption is basically a dishonest act conducted by the people in power. It is the successful transaction of money or exchange of power between two or more individuals leaving behind legality or morality to regulate the relation.

According to the study of Zahra, Pati, & Zhao (2013), the investors are affected by corruption in various ways such as it crafts ambiguity for the corruption that is the involvement of bureaucrats and politicians in the process of requiring the license, cost increases in terms of conducting business in a country, it also boosts the corrupt activities of middlemen/ agent. The threat of legal implication can be embossed on investors if they caught in any illegal activity. The host country and many other potential countries may blacklist them if involved in misbehavior. The image of the company can be harmed by the unethical conduct in front of their clients and customers. The reputation of the company can also be effected in the home country as well, which may affect the finances of the company. Corruption is a type of strategic action. The most common form of corruption is bribery. We can further elaborate corruption as a crime done to achieve economic gain. Our study will explain how corruption has affected our economic growth and FDI. The relationship of economic growth and corruption is always negative as it leads to political instability.

#### ***Empirical Literature***

Corruption is the most challenging aspect of any economy to tackle. As per economist all over the world that corruption is the toughest challenge to deal

with. As corruption is the biggest hurdle to achieve economic growth and prosperity. Corruption is defined as any action against the legal system leading to inappropriate business practices, is widely recognized to affect nearly all aspects of social and economic life (Kaufmann and Kraay, 2007). It directly affects the prosperity of the country by reducing investment and distorting business activity leading to economic inflation.

Quazi, (2014) examined the effect of FDI and corruption in East Asia and South Asia highlighting an impact of corruption on the inflow of FDI. Corruption, FDI, economic freedom, the rate of return, market size, political stability and human capital are factors considered in examining the effects on FDI. The results indicated that corruption has a slightly negative impact on FDI. East Asia as compare to south Asia enjoys a location advantage, even with accounting economic fundamentals, which shows attracting inflows of FDI to this region. Corruption can be in any form abuse of power or administrative corruption, it only worsen the economic wealth of the country. Corruption can be in any form worsen the economic condition of the country.

Our main focus will be to examine the correlation between corruption and economic growth its theoretical existence and empirical review. Whereas we can define economic growth as the increase in the produced amount of goods and services over a period of time per head of the population. Or else we can state that it's the capacity of the economy to produce goods and services in comparison with different time periods. Castro (2013) stated that in order to promote economic growth, globalization plays a vital role in creating opportunities for an organization in terms of investing internationally, thus actively attracting foreign direct investment (FDI). Gross National Product (GNP) and Gross Domestic Product (GDP) are the two components of economic growth.

We can further classify GNP as the total estimated value of products and services made during a given time period within the country. Gross national product is the total monetary value of produced output (nationals living in the country). So any output produced by individual living outside the country must be eliminated. Whereas GDP gross domestic product, is classified as the monetary value of the total net output produced within the country. GDP is the main indicator of the economic condition of the country. It also tells the living standards of individuals living in the country. GDP is the measuring instrument to calculate the economic health of various countries. GDP per capita is a measure of a country's economic output that accounts for its number of people. It divides the country's gross domestic product by its total population. That makes it the best measurement of a country's standard of living. It tells you how prosperous a country feels to each of its citizens.

QUAZI et.al., (2014) studied the impact of corruption on foreign direct investment inflow in Africa using data of 53 countries by analysing a data set for the time period of 1995–2012 period. The research uses Dynamic System Generalized Method of Moments, factors include FDI, government effectiveness, market size, infrastructure and economic freedom. The Study finds the support that corruption facilitates FDI inflow in Africa. This validates

that in Africa overall regulatory environment is weak. While the related factors impact on inflow of FDI significantly which enhance knowledge of FDI dynamics in Africa allowing policy makers in devising pro-FDI strategies. The main important factor for developed and developing countries is FDI, which is measuring the desirability of the state for conducting businesses internationally. In other words, we can say that foreign direct investment is an investment done by individuals or firms in one country into the interest situated in the business in other country. The report published by De Sousa, Hindess & Larmour (2012) stated that there are no such distinctive incentives required in terms of attracting FDI because of the good governance in the country. Bribery is a most common type of corruption in the economic market. Bribery can be divided into two components active bribe and passive bribe. Active bribe is given at the point whereas the passive bribe is the extortion money.

### ***Corruption and Gross Domestic Products (GDP)***

This study is to determine the relationship among economic growth and corruption in short-run and long-run. Growth of any country is defined as the economic health of the country, standard of living of the individuals and the prosperity prevailing in the country. We calculate economic growth by finding GDP per capita. GDP per capita can be defined as the amount of a nation's economic output which accounts for its population. Also, it plays a role in dividing the country's gross internal produce by its entire population. As a result, it becomes one of the good measures of a country's level of living. This can help to measure the well-being of the people in a country. There are large number of surveys developed by different countries and peoples in the early 2017's , in which they show the details that If you want to compare GDP per capita among states, the purchasing power similarity GDP can be useful. This will help to create resemblance, or equivalence, between countries by relating a basket of similar goods. GDP per capita is a key display of economic performance and an important factor to compare the countries through their economic wellbeing and living standards.

The study conducted by Lee & Hong (2012) in Asia Pacific Region regarding corruption with respect to the arbitrariness and pervasiveness. By utilising the framework of Rodriguez, Uhlenbruck, and Eden, using the mixed method of research and asking a question regarding the level of economic growth with respect to the level of corruption forcing on various Asian Countries for the economic growth and stagnation. The study concluded that pervasiveness of corruption does not daunt foreign investors, but if the level of arbitrariness is high in a country than investment should not be preferred. Moreover, GDP in any case not a representative of personal income of individuals also comparison between the countries has some weak points. For instance GPD per capita does not show the equal distribution of income in a country. As well as it also comparison that relies on exchange rate based on US dollar doesn't reflect the purchasing power of the individual as well as economic outlook. Similarly, Mauro (1995) who is a major pioneer in the corruption study also analysed and claimed that corruption as a massive negative effect on investment and economic growth. Economic development mostly depends on smooth transition of powers and assets but due to corruption, it badly effects. Corruption was

analyzed by Leff in 1964 when he found a close linkage between economic growth and corruption. Afterward many studies assess an effect of corruption on country's economic prosperity, growth and foreign investments. The studies analysed by Mendez and Sepulveda (2006) looked into the long-run effects of corruption on economy in which it has been highlighted that corruption severely damaging impacts or effects on the growth of the economy.

**H1:** There is an inverse relationship between corruption and GDP.

### ***Foreign Direct Investments (FDI) and Gross Domestic Products (GDP)***

Foreign direct investment has a vital impact to promote economic development of the host country. The host country enjoys lots of benefits from it. The role of FDI on economic growth cannot be denied. The emerging economies needs a huge amount of funds to develop different sectors like banking, infrastructure, health and etc. The developing country needs foreign direct investment to improve the internal structure of the economy (Asiedu, 2002). There is a positive change in the share of GDP as it's increasing day by day as there is a lot of FDI taking place. Foreign direct investment has a very significant participation in the betterment and prosperity of country's economy. The economic growth is effected by FDI as it brings remittance to home land and increasing the living standard.

If the investment coming from the developed countries is utilized in the right manner it will affect the economy positively and the country will progress leading to economic development. The foreign direct investment depends upon the economic stability and political situation of the country. The investor wants to invest in a country that is politically stable so as to avoid any unexpected risk. The study examine that FDI depends greatly on the starting GDP and human capital (Wu & Chiang, 2008); it has been identified that there was a better impact from FDI to local output. As the local output increase it will lead to the increase in export resulting in the economic prosperity and decrease in economic debt. As exports will increase it will help the economy to grow and balance the equilibrium of imports.

The study examined that the usual model of these countries have positive impact between Foreign Direct Investment and GDP while negative impact between Consumer Price Index and GDP (Abbas, 2011). The positive and prosper image of a country convince the investor to invest in foreign countries minimizing the risk of loss as the main motive of the investor is to make maximum profit with the lowest risks. So the more stable the economic and political conditions of the country, the more the investor urge to invest. So the FDI leads to prosper and progressive economy. FDI has a direct relationship with economic growth as foreign direct investment increases the economic condition of the country moves towards betterment. Adam & Tweneboah (2008) economists do a study on the Foreign Direct Investment and development of Stock market examine that foreign direct investment in had a positive impact on economic development.

**H2:** There is a direct relationship between FDI and GDP.



### *Domestic Investments (INV) and Gross Domestic Products (GDP)*

Investment is utilizing money to achieve future benefits, for example, investment can be done in research and development, real estate, etc. It's admitted that investment was considered as a key factor to boost economic growth (Rogmans and Ebbers 2013). Investor thinks twice before investing its money that will it be favourable or unfavourable over time. The motive of the investor is to generate maximum profit out of his investment. The higher the return; the riskier investment. Low risk leads to low returns. The main concern of any investor is the environment and economic condition of the country where he is going to invest. When institutional and foreign investors believe corruption is high, they may be discouraged to invest because corruption generates additional costs to investors (King, 2003).

**H3:** Investment has a positive relationship with Economic Growth (GDP).

### **METHODOLOGY**

Secondary data is utilized in this study to reach to a conclusion of the research problem. It is cost effective, timesaving, and other researchers have already used reliable to further carry out research. The dependent variable is GDP per capita and independent variables are FDI (Foreign direct investment as % of GDP), INV (domestic investment as % of GDP and corruption. The data is collected from World Bank's Statistics Database. Whereas data for corruption is extracted from Transparency International, Corruption Perception Index (COR). This index ranges from 0 to 10, where smaller value denotes higher corruption and vice versa. The data period ranges from 1998 till 2017. This study uses time series to examine the casual relationship, therefore panel least square regression and Unit root tests are applied. With the panel least square, we can identify the significance of independent variables on dependant variable. Whereas, the unit root test is performed to check the stationary of variables at 1<sup>st</sup> level of difference. The model is used for this study is mentioned below:

$$LGDP = \alpha + \beta LFDI + \beta LINV + \beta LCOR + \varepsilon$$

LGDP is GDP per capita is a dependant variable, whereas LINV is domestic investments (% of GDP), LCOR, is corruption index and LFDI is foreign direct investment inflows (as % of GDP) are independent variables. L represents the log and it shows that all variables are converted in log form.

### **DATA ANALYSIS**

#### *Regression Analysis*

The analysis is performed using Panel Least Square and Unit Root Test. The results of Descriptive Statistic are shown in table 4.1, whereas the result of Hausman and panel least square regression can be reviewed in table 4.2 & 4.3 respectively. Further, the results of Panel root test are part of table 4.4. The table 4.1 shows descriptive statistics. The total number of sample observations are 80. The mean of (GDP) Gross Domestic Product is 5.3%. GDP standard deviation is 59% which is higher than all variable's standard deviation as results

shows that GDP is highly volatile during the sample period. However, (COR) corruption is low volatile. The results shows that corruption is constant and if any country has corruption then there no solution is provided to resolve that problems.

Var.	Mean	Median	Maximum	Minimum	St. De.	Skewnes	Kurtosis	Obs
GDP	5.3933	6.1844	14.2314	-7.8209	4.0086	-0.5960	3.37954	80
FDI	2.484	2.5611	5.03413	-1.0000	1.3317	-0.2468	2.54659	80
INV	1.4376	1.4187	1.67839	1.17115	0.1556	0.0625	1.6153	80
COR	3.2712	3.4000	4.3000	1.00000	0.6461	-0.7152	3.40507	80

**Note.** Table 4.1 Descriptive Statistics

LGDP is dependant variable, and it represents real GDP per capita. Whereas, LCOR is the index of Corruption, LINV investment (% of DGP) and LFDI denotes foreign direct investment inflows (as % of GDP). L shows that all variables are in log form.

Method	LGDP		LFDI		LCOR		LINV	
	Level	First	Level	First	Level	First	Level	First
LLC	0.1185	0.0000	0.4859	0.0007	0.3651	0.0001	0.2223	0.0007
IPS	0.3016	0.0000	0.5729	0.0015	0.3786	0.0019	0.2710	0.0126
ADF	0.2180	0.0001	0.6386	0.0028	0.1860	0.0035	0.3329	0.0145
PP	0.0019	0.0000	0.4094	0.0000	0.6488	0.0000	0.1309	0.0000

**Note.** Table 4.2 Panel Unit Root

Prob. Value below 5% at Level or First Difference shows that the data is stationary. All results / values in tables are probability Values of each variable and test at level and first-difference.(LLC) represents Levin and Chu test, (LLC, 2002), IPS is (Im, Pesaran) and Shin (IPS, 2003) test, ADF and PP denotes the Fisher-Type test by ADF and PP.

The value of (GDP) in (PP) test at level is below 5%. On the other hand, the value of (GDP) is above 5% means, we cannot reject the null hypothesis. This means that (GDP) at level has unit root and it is non stationary. Similarly, at first difference, the probability value of (GDP) in results of all methods is below 5% level, based on which we can reject the null hypothesis. The results at 1<sup>st</sup> level of difference explains that (GDP) does not have unit root, and it is stationary at 1<sup>st</sup> level of difference. The outcome of variable FDI in all tests at level is above 5% level, based on this outcome we cannot reject the null hypothesis. This illustrates that FDI at level has unit root and it is non stationary. But when we apply all these test at First difference, the outcome / prob. value of FDI is below 5% level, which concludes that we can reject the null hypothesis. Therefore, we can say that at 1<sup>st</sup> level of difference FDI does not have unit root and it is stationary at first difference.

At level, the results of variable COR are above 5% level, which essentially explains that COR has unit root at level and it is non stationary, therefore we cannot reject the null hypothesis. However, at First difference, the probability Value of COR is below 5%, which confirms that the COR does not have unit root and it is stationary at first difference. Similarly, based on outcome we can reject the null hypothesis. In-line with results of table 4.2, the variable INV at level has a prob. value above 5%, which illustrate that INV at level has unit root and it is non stationary. The null hypothesis cannot be rejected, based on results at level. However, if we convert INV into first difference, the results show that the prob. value of all tests are below 5%, which describes that the INV does not have unit root and it is stationary at first difference. Therefore, we can reject the null hypotheses at first difference.

The conclusion of Unit Root Test reflects that variables are integrated to each other in order of one (I (1)), which means that the variables are non-stationary at level, but when we convert them on 1<sup>st</sup> difference, they become stationary. Since stationary of data has been confirmed from panel unit root, therefore we can now apply the panel least square regression test to check the correlation among dependant and independent variables.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	0.663049	0.259369	2.556389	0.0126
INV	17.64637	2.141336	8.240820	0.0000
COR	-1.412163	0.543909	-2.596320	0.0113
C	-17.00351	3.151761	-5.394923	0.0000
R-squared	0.506916	Mean dependent var		5.393340
Adjusted R-squared	0.487452	S.D. dependent var		4.008685
S.E. of regression	2.869916	Akaike info criterion		4.995149
Sum squared resid	625.9677	Schwarz criterion		5.114250
Log likelihood	-195.8060	Hannan-Quinn criter.		5.042900
F-statistic	26.04397	Durbin-Watson stat		1.531334
Prob(F-statistic)	0.000000			

**Note:** Table 4.3 Panel Least Square Regression; LGDPpc is dependant variable and it represents real GDP per capita. Whereas, LCOR is the index of Corruption, LINV investment (% of DGP) and LFDI denotes foreign direct investment inflows (as % of GDP). L is shows that all variables are in log form.

Table 4.3 shows the results of panel least square regression. The Durbin Watson value is 1.53, as results indicates that there is no auto correlation issue. The adjusted R-Squared value is 48%, results indicates that independent variables are explained 48% by dependent variables. The probability value of (FDI) is 0.0126 and coefficient value is 0.66. The results shows that there is positive and significant correlation between (GDP) and (FDI). The results indicates that if (GDP) increases than (FDI) will also increase, and vice versa.

The probability value of (INV) is 0.00 and coefficient value is 17. The results shows that there is positive and significant relationship between (GDP) and (INV), which means that upon increase of GDP per capita, the domestic

investments will also increase and similarly, when domestic investments increased, it will increase (GDP).

The probability value of (COR) is (0.013) and coefficient value is -1.4. The results shows that there is negative and significant correlation between (GDP) and (COR), which mean that whenever corruption increase, the (GDP) shall be decreased. However, when corruption decreases, the GDP will be increased. This proved the inverse relationship among (GDP) and (FDI).

## DISCUSSION

Corruption and economic growth has inverse relationship as the corruption level increases economic growth decrease. According to the study of Shera (2011), the economies that have weak legal frameworks, corruption have increased their economic growth that is high economic freedom. Economic growth is the determinant of the economic condition of the country, and it is affected by corruption, badly. Corruption creates many hurdles in achieving economic goals set by the government and economist. Due to corruption, the desired projects and developments have been effected by corruption and doesn't complete projects and development on time.

FDI plays a key role in the economic development and prosperity of Country. There are various studies conducted with respect to corruption and (FDI). Most of the studies highlights that countries FDI deter by the high level of corruption in the country. As the corruption increases, the country's impression gets down, which takes away the potential (FDI) (Godinez & Liu, 2015).

Economic instability due to corruption may affect the (FDI), because investors mostly invest in stable and persistent economies. Economic conditions have uncertainty and instability leaves a significant negative effect on (FDI). Corruption impacts foreign investment negatively and results in decrease profitability. Corruption can negatively impact on country's capability to appeal foreign investors, as it works as a tax on profits (Mo, 2001). The study also supports the results of our research in which it is revealed that corruption is major show stopper for FDI, which mean that corruption has negative and significant relationship with (FDI). Whereas, (FDI) being the key factor of economic growth (especially for developing countries / emerging markets) has positive and significant relationship with (GDP). Therefore, (GDP) grows when (FDI) inflows increase and similarly (GDP) decreases, when (FDI) inflow decreases. Corruption also had a disastrous impact on domestic investments, because the investor's confidence went down, when they don't find corruption in institutions, therefore they stop investing, which resulted into the decrease in (GDP). Henceforth, GDP and Domestic Investments are also positively correlated to each other.

The study of Celiksu (2014) explains that economic growth can be promoted by limitations in corruption that in turn lift innovation and deteriorates (monopoly). Hypothetically, loss of reputation and market distortion can be caused by corruption. Therefore it concluded that corruption affects the determining factor of FDI in a negative means, which are economic growth, quality of

infrastructure, healthcare services, education, public investment productivity, etc.

Castro (2013) investigate the impact of corruption on FDI inflows, over the period 1998-2008, in 73 countries. Variables used are FDI for foreign direct investment and COR for corruption, GDP, human capital, trade openness, inflation, government effectiveness, rule of law, and business freedom, etc. with a regression model. Results suggest that the FDI inflows are greater in countries where corruption levels are lower. Hence, it has been concluded that for an increase in FDI, controlling levels of corruption may be a significant strategy.

## CONCLUSION

The study illustrates that country's growth, especially for emerging economies like BRIC Countries is highly dependent on investments. The increase in inflow of Foreign Direct Investment in Country's economy also resulted as increase in Country's GDP. The research shows that whenever, FDI inflow increase the GDP also increases. However, Corruption is dangerous and disastrous factor which not only reduces the FDI and Investment decision in a country, but it also adversely damages the economic outlook of the country.

It is evident from this study that corruption is show stopper for the economic growth in BRIC Countries. The multinational do consider political outlook and corruption level of a country before taking big investment decision in any country's economy. The corruption not only stopping the country's economic growth, but it is also deterring the FDI which is a key for emerging economies likes China, India, Brazil and Russia. The corruption hampers the economic growth and inflow of FDI, which are the key elements of the progress of a country (Ahmed et al, 2014). In order to grow business, organizations look forward for expertise and financial muscles of multinational companies, who can bring in technologies, processes, and funds which would be beneficial and/or required for their institutions to grow. This also creates employment opportunities for their people, which ultimately helps them to improve inflation. The study conducted in India and China by Ravi (2015) also explained that Indian FDI is highly affected by high level of corruption as compared to that of China due to the high level of corruption in India and study also summarizes that FDI inflows are affected by corruption which not only rely on the nature of corruption, but on the level of corruption as well. Thus, there is the high level of corruption in India as compared to that of China, which decreases the inward Flow of FDI into India. Economic instability due to corruption may affect the FDI and push it inward, because investors mostly invest in stable and persistent economies. There is empirical evidence that corruption has a negative impact in several important determinants of FDI as investment (Mauro, 1995; Keefer and Knack, 1996).

The main important factor for developed and developing countries is Foreign Direct Investment (FDI), which is measuring the desirability of the state for conducting businesses internationally. During the last two eras, the economies of India and China has mounted at an exceptional stride nonetheless regrettably equal to that of corruption in those countries, which directly affect the resource allocation thus increasing prices and dampen Foreign Direct Investment (FDI)

(Alfaro & Johnson, 2012). The conclusion of this study is very clear that a disease like corruption needs to be taken and monitored very seriously and amicably by BRIC countries. Corruption is a disaster for BRIC country's economy and overall outlook. It doesn't only create negative impression of the country in the world, but it also adversely impacts on economy. The investors always look after the country's political stability, growth and corruption level while taking a major investment decisions. It has been learnt from study that corruption is a major obstacle for FDI inflow in a country and since FDI is positively correlated with GDP, therefore at the end of day it is the key factor for impacting BRIC countries economic growth (GDP). Thus, to improve FDI, it is important for BRIC countries to bring more transparency in their system that will support to reduce corruption and increase FDI, which will be beneficial for their economic growth.

It is imperative that basic pillars likes law and order, minimum corruption and stable political outlook not only appeals FDI invasion but have a significant impact on economic growth also via the potential of investment over-all, as it faces low uncertainty and high returns. Foreign investor takes corruption very negatively and treats it as a major show stopper for investing in host country. FDI will help economic development and therefore policymakers can follow the finding of this study to develop certain checks on corruption enabling them to attract FDI by their policies and investment benefits which are developed to improve investors' attentiveness. Corruption may adversely impact economy and FDI directly without keeping in the perception of country's stability and potential in investment / Returns. Efforts should be taken into consideration towards increasing quality of organizations, which mould support developing economic countries to attract more FDI which turns out as a big support for them to increase GDP per capita and an overall economic situation of Country. This study can be very useful for Senior Executives of multinational organization who are engaged in making big policy and investment decisions in BRIC Countries. By using this study an investor / decision maker can see the growth factor and economic outlook of countries, where at the same time they have the visibility to their corruption level as well, which would be the biggest point to make an investment decision. This research can also be utilized by government representatives to review how the corruption and political stability becomes obstacle for country's growth and deters the inflow of investments in a country. By using this research, the government can identify the key obstacles of economic and develop a strategy to remove or minimize those show stoppers for country's economic growth and bring prosperity in a Country.

The individual investors of BRIC Countries can gain a huge benefit of this study and use it while preparing investment (domestic investments) plans and/or taking investment decision within these countries. This study will give them a complete view of BRIC countries corruption level, economic outlook and FDI (how other foreign investors like multinationals are taking view on BRIC country), which would support to make better investment decisions. This research can be of great use for BRIC counties Finance Ministry, who can actually assess the FDI and other economic trends of their country and by using these statistics they can actually prepare the policy and business environment

that would attract the foreign and local investors, which can result into increase in country's GDP.

It has been learnt from this research that corruption is like a cancer for any country's economy, it destroys the outlook of the country, thus the confidence of investors get dropped which eventually turns out to adversely impact the FDI inflow in country that is one of the biggest factor and requirement for emerging economies growth, therefore it is highly recommended that government should develop mechanism to reduce corruption level of the country and this can only be brought when the countries strengthen their intuitions. The study does not give a deep dive view at institutional level, which actually gives an opportunity to future researchers to extend this research at institutional level to identify the root cause from ground level and figure out the quality of government institutions and key factors to bring improvement in overall corporate governance in BRIC countries. The research can be further limited to specific country and/or extended to developing economies like Asia Pacific, MEA (Middle East and Africa) by using same or additional variables, according to regional dynamics and requirements. We have focused on emerging economies in this study, however future researchers can apply this study on developed countries like United States of America, United Kingdom and/or European Countries.

## REFERENCES

- Adam, Anokye M. & Tweneboah, George, (2008). "Foreign Direct Investment (FDI) and Stock market Development: Ghana Evidence," MPRA Paper 11261, University Library of Munich, Germany.
- Akramov, K. T., & Shreedhar, G. (2012). Economic development, external shocks, and food security in Tajikistan. International Food Policy Research Institute (IFPRI), (1163).
- Alfaro, L., & Johnson, M. S. (2012). Foreign direct investment and growth. In *The evidence and im1.3 Research Questions pact of financial globalization* (pp. 299-309).
- Anselm Komla Abotsi (2016). Theory of Foreign Direct Investment and Corruption: International Journal of Asian Social Science: ISSN (e): 2224-4441/ISSN (p): 2226-5139.
- Asiedu E (2002) On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different? *World Development*, Vol. 30 No. 1, pp. 107-119.
- Azman-Saini, W. N. W., Baharumshah, A. Z., & Law, S. H. (2010). Foreign direct investment, economic freedom and economic growth: International evidence. *Economic Modelling*, 27(5), 1079-1089.
- Buckley, P. J., & Ruane, F. (2006). Foreign direct investment in Ireland: Policy implications for emerging economies. *The World Economy*, 29(11), 1611-1628.
- Castro, C., & Nunes, P. (2013). Does corruption inhibit foreign Direct investment?. *Política: Revista de Ciencia Política*, 51, 61-83.
- Celiksu, S. (2014). *The making of the Padanian Nation: Corruption, Hegemony, Globalization and Legitimacy*. Columbia University.
- Daniel Kaufmann, Aart Kraay & Massimo Mastruzzi (2007). *The Journal of Politics*, Vol. 69, No. 2, May 2007, pp. 555–562.

- De Sousa, L., Hindess, B., & Larmour, P. (Eds.). (2012). *Governments, NGOs and Anti-Corruption: the new integrity warriors*. Routledge.
- Epaphra, M., & Massawe, J. (2017). The Effect of Corruption on Foreign Direct Investment: A Panel Data Study. *Turkish Economic Review*, 4(1), 19.
- Gereffi, G. (2005). The global economy: organization, governance, and development. *The handbook of economic sociology*, 2, 160-182.
- Getz, K. A., & Volkema, R. J. (2001). Culture, perceived corruption, and economics: A model of predictors and outcomes. *Business & society*, 40(1), 7-30.
- Godinez, J. R., & Liu, L. (2015). Corruption distance and FDI flows into Latin America. *International Business Review*, 24(1), 33-42.
- Haggard, S., & Kaufman, R. R. (1995). *The political economy of democratic transitions*. Princeton University Press.
- Hsu, Y. H. (2007). *Is Corruption a Grabbing Hand? A Panel Data Study of FDI*. Graduate Institute of Political Economy, National Cheng Kung University, Taiwan, 1-18.
- Inekwe, J. N. (2013). FDI, employment and economic growth in Nigeria. *African Development Review*, 25(4), 421-433.
- Jyun-Yi, Wu and Hsu Chih-Chiang, (2008) "Does Foreign Direct Investment Promote Economic Growth? Evidence from a Threshold Regression Analysis." *Economics Bulletin*, Vol. 15, No. 12 pp. 1-10.
- Kepaptsoglou, K., Karlaftis, M. G., & Tsamboulas, D. (2010). The gravity model specification for modeling international trade flows and free trade agreement effects: a 10-year review of empirical studies. *open economics journal*, 3(1).
- Khan, H. R. (2012). *Outward Indian FDI—recent trends & emerging issues*. A keynote address delivered at the Bombay Chamber of Commerce and Industry, Mumbai, 2.
- Kindleberger, C.P. (1969) *The Theory of Direct Investment*. In: Kindleberger, C., Ed., *American Business Abroad*, Yale University Press, New Haven.
- Kwok, C. C., & Tadesse, S. (2006). The MNC as an agent of change for host-country institutions: FDI and corruption. *Journal of International Business Studies*, 37(6), 767-785.
- Larraín, B., & Tavares, J. (2004). Does foreign direct investment decrease corruption? *Cuadernos de economía*, 41(123), 199-215.
- Lee, S. H., & Hong, S. J. (2012). Corruption and subsidiary profitability: US MNC subsidiaries in the Asia Pacific region. *Asia Pacific Journal of Management*, 29(4), 949-964.
- Levin & Satarov (2000) Corruption and institutions in Russia, *European Journal of Political Economy* 16 (1), 113–132
- Mo, Pak Hung (2001). Corruption and Economic Growth. *Journal of Comparative Economics* 29, 66–79.
- Natbaniel H. Leff, (1964). "Economic Development Through Bureaucratic Corruption", *The American Behavioural Scientist*.
- Qaiser Abbas, Salman Akbar, Ali Shan Nasir, Hafiz Aman Ullah & Muhammad Akram Naseem (2011). Impact of Foreign Direct Investment on Gross Domestic Product. *Global Journal of Management and Business Research* Volume XI Issue VIII Version 1.



- Oumar, S. B., & Sama, M. C. (2015). International dependency and the economic development of less advanced countries. *International Business Research*, 8(6), 117.
- Quazi, R. M. (2014). Corruption and foreign direct investment in East Asia and South Asia: An econometric study. *International Journal of Economics and Financial Issues*, 4(2), 231.
- Paolo Mauro, *The Quarterly Journal of Economics*, Vol. 110, No. 3 (Aug., 1995), pp. 681-712.
- Ravi, S. P. (2015). Does corruption in a country affect the foreign direct investment? a study of rising economic super powers China and India. *Open Journal of Social Sciences*, 3(07), 99.
- Reiter, S. L., & Steensma, H. K. (2010). Human development and foreign direct investment in developing countries: the influence of FDI policy and corruption. *World development*, 38(12), 1678-1691.
- Rogmans, T., & Ebbers, H. (2013). The determinants of foreign direct investment in the Middle East North Africa region. *International Journal*, 8 (3), 240-257.
- Shera, A. (2011). Corruption and the impact on the economic growth. *Journal of Information Technology and Economic Development*, 2(1), 39.
- Swaleheen, M. (2011). Economic growth with endogenous corruption: an empirical study. *Public Choice*, 146(1-2), 23-41.
- Zahra, S. A., Pati, R. K., & Zhao, L. (2013). How does counterproductive entrepreneurship undermine social wealth creation?. F. Welter, R., Blackburn., L. Ljunggren and BW Amo(Eds), *Entrepreneurial Business and Society: Frontiers in European Entrepreneurship Research*. Cheltenham: Edward Elgar, 11-36.